



Institutionalizing the Healthcare Service Systems in Korea

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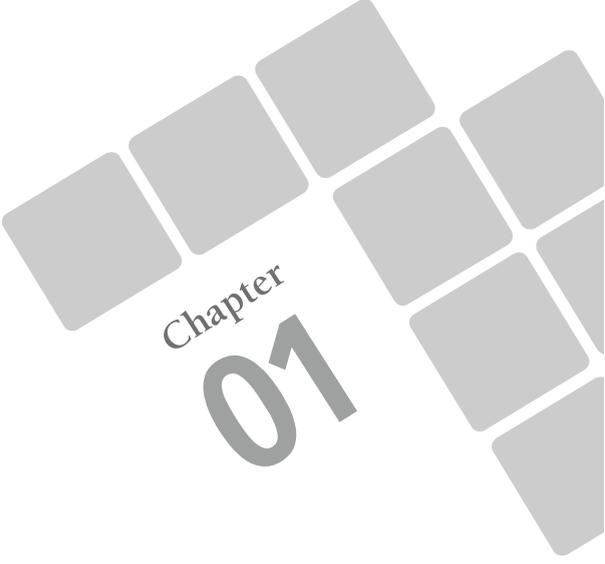
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Chapter

01

Introduction



Chapter 1

Introduction

Section 1. Background and Objectives

As the population is aging, living environments are deteriorating and convenience-oriented lifestyles are spreading, Korea undergoing an epidemiological transition characterized by the prevalence of chronic diseases. Due to a growing trend of chronic diseases, Koreans' medical expenditures are multiplying rapidly, and their demand for healthcare services is growing with the increases in per capital GDP and improvements in living standards.

Yet, disease prevention and health promotion services are currently provided mostly by local health and medical institutions such as community health centers and their branches, and there is no comprehensive service delivery system in place to serve the entire population.

In the meantime, the government has submitted to the National Assembly a bill for the "Healthcare Service Act" to introduce a "healthcare service system," the gist of which is to allow private healthcare service providers and hospital-affiliated institutions to provide healthcare services. This bill, however, is still pending in the National Assembly as the following concern of the public emerges: The commercialization of healthcare services may result in the spread of profit-oriented health care and quasi-medical practices as well as adverse selection by private insurance

companies due to information leakage.

Hence this study aims to look through the institutional designs proposed in the Healthcare Service bill and other efforts as well as find policy alternatives to invigorate the healthcare service system so that it can serve as a comprehensive healthcare service delivery channel for the middle and higher classes as well as the low-income class. For this purpose, this study first intends to set the basic direction for the invigoration of the healthcare service system: Balance between policy goals (market invigoration and support for the low-income class); congruence between the medical delivery system and the healthcare service market; consumers' access to the healthcare service market; and the maximization of the effect of curbing national medical expenditures.

Second, it intends to find policy alternatives to activate the healthcare service market and improve the delivery environment, such as differentiating staffing standards, supporting service providers with education and training, publicizing programs designed to increase customers, providing financial assistance through vouchers, minimizing regulations and supporting initial investments.

Third, it attempts to find ways of boosting the use of services among consumers, such as diversifying voucher programs for the low-income class and introducing a mileage program.

Fourth, it intends to propose ways of managing healthcare service prices, taking into consideration the needs for relieving consumers of the financial burden, boosting demand and leading service providers to participate in the market, while proposing,

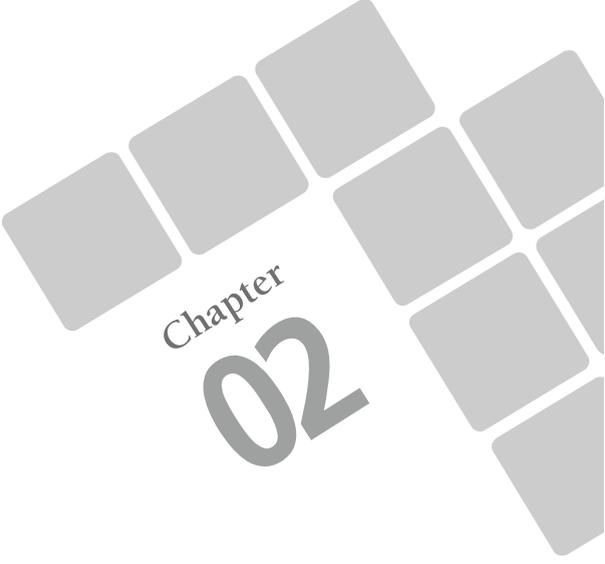
lastly, healthcare service standards and consumer protection measures.

Section 2. Research Approaches

This study was conducted with the following methods: A survey was conducted over a national sample of 1,000 people to collect their opinions about the needs for a healthcare service system, their intent to use healthcare services, how much they were willing to pay (WTP) for the services and how they wanted the government to support them.

Also, in-depth interviews with five major companies currently providing healthcare services were conducted to understand the details of their healthcare services, the size and characteristics of main customers, trends and outlook of the healthcare service market, opinions about the government's approaches to support and future sales strategies as well as insights into how to invigorate the market.

In addition, case studies in Japan were analyzed; expert meetings and consultative meetings were conducted; and data on the Healthcare Services bill was collected and analyzed.



Chapter

02

Market Trends and Practices in Other Countries



Chapter 2

Market Trends and Practices in Other Countries

Section 1. Market Trends and Outlook

Even in the event of the passing of the Healthcare Bill, it is unlikely that the healthcare service market will be invigorated straight away. As long as it considers the healthcare service market as a single delivery channel, the government should take interest in the issue of market invigoration from a policy perspective. Even if the bill is enacted into law and enforced, the market will lose its significance as a comprehensive service delivery channel for the entire population unless services are practically traded in the market. If this happens, it is very likely that only government-supported voucher programs will survive.

The realistic reason why the above issue should be taken into consideration is that there is a big gap between the prices that consumers are willing to pay (WTP) for services and the cost of producing those services. According to some research studies, consumers are willing to pay about KRW 15,643, while the break-even point for service providers was in the range of KRW 50,000-60,000.

Under the voucher pilot project in particular, the unit price is currently set between KRW 60,000 and 70,000, which is far beyond the WTP. For service providers to lower their prices

to the WTP level, demand should be big enough to start business on a large scale from the beginning. However, there may not be enough demand due to high initial prices.

Therefore, we need to analyze the current market trends and future outlook of healthcare services in this section.

Many corporations are said to have been preparing to enter the healthcare service market. It is also known that some companies are striving to develop smart phone applications for healthcare as well as a system that enables people to take care of their health using smart phones and distribute them into global as well as domestic markets.

In the initial stage of market formation, it is highly likely for such companies to choose a strategy of providing services to companies, apartment complexes, local communities and the military, rather than the general public. When it comes to the general public, their awareness of healthcare services is still low, and therefore it is expected to take longer for a customer base willing to pay for required expenses to be formed. However, if a rapidly increasing number of employers start offering healthcare service products as part of employee benefits, the chances are that the market will expand from the beginning.

If healthcare services often offered as part of employee benefits, it may be said, in general, that the WTP surveyed does not carry much significance. If your company pays all or part of the expenses, your WTP may go up. Besides, assuming that salaried workers, especially those working for large corporations, rank mid-to-high on the income scale, their WTP should be higher than the average WTP.

There is a movement among healthcare service specialists and medical institutions to participate in the healthcare service market, but they are expected to have difficulty creating a market initially. As mentioned above, they will focus on salary workers when starting business, which means that the market is likely to be formed initially around the mid-to-high class and above. If the service market is to be vitalized for the middle and lower-income classes, the central or local governments should facilitate market entry further for service providers serving that particular population. They need to support efforts to install and operate a service post such as a healthcare center at an apartment complex or a local community center.

Some of the companies responded that they chose not to join the government's voucher project because target recipients were small in size. They do not have the motivation to participate because they have already secured a customer base of employees of affiliated companies or private insurance policy holders. Major healthcare companies are known to have secured about 200,000 to 300,000 customers, mostly employees of large corporations or preferred customers of insurance companies. They provide services on turnkey-based contracts with large corporations, and the service prices of companies serving employees of some of the conglomerates are said to be in the range of KRW 20,000 and 30,000 a month.

On the other hand, it is expected that there won't be many new companies trying to enter the healthcare service market. Rather, established companies will tend to expand their customer bases that are already built on salaried workers.

For this reason, there may not be many service providers in the initial stages of the system. There is no way of predicting exactly how long the situation will continue, but it is possible that it will last for a considerable period of time. There should be new competition entering the market, which may not be the case. Even if large hospitals or hospital-grade medical institutions enter the healthcare service market, it would take time to recruit a workforce and purchase equipment. It is also expected to take a certain period of time to attract customers after performing checkups.

In the meantime, the authorities need to manage service providers by requiring a license or providing periodic guidance and supervision. Many of the surveyed firms pointed out the absolute necessity of defining service standards. This means that they know through their field experiences that many of the services available could otherwise be of low quality. In this situation, such institutional controls might become an obstacle to market entry, allowing less and less healthcare institutions trying to enter the market.

Also, small companies are expected to form the majority of health care service providers. Currently, the total annual sales of Top 4 or 5 companies are estimated at only about KRW 70 billion to KRW 80 billion. Furthermore, the capital of top-ranking companies turns out to be only about KRW 200 billion to KRW 2 billion. If the majority of services are provided by mid/small-sized companies, there should be many service providers participating in the market to serve residents on a large scale. However, the low margins make it difficult to expect heated

competition to enter the market.

In the meantime, as the focus of the healthcare service market is on the prevention of chronic diseases, vendors of medical information systems, or devices supporting metabolic syndrome screenings and treatment of chronic diseases are expected to provide services in the form of B2G or B2B. Yet, since the ultimate consumer of healthcare services is the individual, the industry is currently at the stage of making vigorous efforts to develop solutions and maintain the infrastructure focusing on B2C or B2B2C services. Starting in 2012, the healthcare service market is expected to see an increase in the number of companies devoted to health support or counseling services integrated with a system or device.

The device market targeting individual consumers is expected to grow rapidly in terms of penetration, especially for activity monitors including blood pressure monitors, body composition monitors and blood sugar gauges. In the area of chronic disease care, health support (biometric data monitoring and analysis) and advice (counseling service) using connected devices are receiving good responses, while support through smart phones is also available. These factors are expected to help increase the membership.

When the penetration of healthcare devices reaches a certain percentage in the future, diverse monitoring devices including those collecting biorhythm or biometric data, such as sleep scanners, are expected to spread more widely through integration with healthcare services.

However, difficulties are expected to arise at the initial

investment stage. While there is no market to speak of yet, investments of related industries to provide healthcare systems and services together or in connection are coming mostly from small/mid-sized companies.

In the medical service field, investments in smart hospitals are expected to grow. Large hospitals in Korea are reported to be developing investment plans to implement "smart hospitals" using digital medical technology. It is said that Seoul National University Hospital is planning to establish an IT-based healthcare company as a joint venture with SK Telecom before the end of 2011, while Sinchon Severance Hospital has signed a memorandum of understanding with KT to build a smart hospital. It was also reported in the press that Seoul St. Mary's Hospital had purchased some land in the Eunpyeong New Town area to build a smart hospital¹⁾.

Unlike healthcare service providers, however, smart hospitals are subject to the "Medical Service Act" in that they include medical services, and the restrictions on remote medical treatment under the Act need to be lifted before anything else. Also, although smart hospitals may choose to provide healthcare services, they will still focus on medical services when integrating medical treatment with healthcare. In this respect, smart hospitals cannot be expected to serve as key healthcare service providers.

1) "A Chip in Your Body Measures Blood Sugar; A Prescription Pops Up on Phone."
Reported by Jeehye Lee, Monday, October 31, 2011, 52nd Edition, the Choson Daily

Section 2. Current State of the Industry

1. Healthmax

Healthmax is participating in the Healthcare Service Voucher Project through its healthcare service program called “Cady.” Healthmax offers services customized to the types of customers who want healthcare, such as individual customers, corporations and government agencies. It enables customers to check on its website their weight, body fat, number of steps taken and blood pressure measured with exclusive devices. The company also provides customized consultation services based on the results.

Its key services and projects include: ① Family healthcare, ② body shaping care, ③ healthcare for customers, ④ healthcare for corporations, ⑤ healthcare for public institutions, ⑥ Metabolic Syndrome Care Project and ⑦ U-Healthcare Voucher Project of the Ministry of Health and Welfare (MHW)

2. Smartcare Project Group

The Smartcare Project Group is participating in MHW's Healthcare Service Voucher Project. The project group measures basic biometrics for people exposed to the risk of disease and provides exercise and nutrition consultations based on biometric measurements and the personal health data that they can measure for themselves. It also maintains the data and provides customized consultation services based on it.

Its key services and projects include: u-Green Care Service, which is designed for healthy people; u-Silver Care Service, which is for the elderly; u-Multicultural Care Service for multicultural families; u-Pregnant Women Care Service; and u-Employee Care Service for salaried workers.

3. 365 Homecare

365 Homecare provides the following services: It helps customers maintain a healthy life through the care of its 365 Homecare medical team (consisting of doctors, oriental medical doctors, nurses, exercise prescription specialists and dieticians) working together with doctors at partner hospitals. If a customer needs medical treatment at a tertiary-care hospital because of a serious disease, the company sends a licensed nurse to accompany him/her to the hospital. It also provides health counseling, hospital reservation and health information provision services.

Its key services and projects include: Comprehensive Healthcare Service, Care Nurse Service, Healthcare Service, Health Check Service and Silver Service.

4. Green Cross Healthcare Corp.

Green Cross Healthcare entered into a business agreement with about 130 large hospitals and health checkup centers taking advantage of its infrastructure (in the fields of pharmacy, insurance, healthcare and checkup) and provides health consultation and hospital escort services through its professionals.

Its key services and projects include: Health consultations, training by visiting nurses, diabetic patient care, health promotion, health care for customers, health care for corporations, health care for families, housing consulting and management for senior citizens and health care systems.

5. Uracle

Uracle provides total healthcare services optimized for individual and corporate customers using its own solutions based on the healthcare devices that it developed. Its key services and projects include: Ribbon Service (u-Healthcare solutions for apartment complex residents) and Hub-Type Service (u-Healthcare service for hotels and u-Healthcare service for local community centers).

Section 3. Case Study: Healthcare Services in Japan

The Japanese examples are significant for Korea on two efforts to introduce a healthcare service system: First, the Japanese healthcare service market is more active than the Korean counterpart; second, the Japanese government outsources healthcare services for the people to the private sector. It should be particularly noted that professional healthcare firms, though not medical institutions, provide healthcare services.

Healthcare services in Japan are termed "Specific Health

Checkup (SHC) and Specific Health Guidance (SHG)." Under this system, each of the health insurers takes responsibility for conducting the services for the insured and their dependents aged between 40 and 74. It was started in 2008 for the purpose of preventing and improving the metabolic syndrome, which is a precursor to lifestyle diseases.

Let us look into Japanese cases focusing on the practices in Itabashi Ward, Tokyo Metropolis. In many cases, local governments add to the basic and detail-level checkup lists defined by the central government. Therefore, it is appropriate to examine the practices of individual local governments.

1. Background of the Introduction of the SHC/SHG System

The Specific Health Checkup and Specific Health Guidance system was pursued as part of medical reform. In Japan, national medical expenditures have been growing dramatically due to rapid population aging and advances in medical technology. As a result, the financial health of health insurance companies has deteriorated.

Under these circumstances, to ensure sustainability for health insurance companies, the Japanese government announced the "Fundamental Framework of Healthcare System Reform" in December 2005. It set the basic direction for reform: ① Secure reliable medical services and emphasize prevention; ② push forward the optimization of medical expenditures in a comprehensive manner; ③ and realize a new medical insurance system in preparation of the super-aged society.

As indicated in the basic direction, the basic policy of the Japanese government is to reduce national medical expenditures by emphasizing prevention and thus seek to stabilize the finances of health insurances.

Consequently, the Specific Health Checkup and Guidance is carried out by health insurers. The Itabashi Ward Health Clinic provides SHC and SHG services in the capacity of a national health insurance provider.

2. Differences from Old Health Examinations

Before the Specific Health Checkup and Guidance system was introduced in 2008, the goal of basic checkups was the early detection and initial treatment of diseases, which is quite general in nature. On the other hand, the goal of Specific Health Checkup was set to prevent lifestyle diseases, focusing on metabolic syndrome, by adopting the "selection and concentration" principle.

Furthermore, basic health checkups were offered to Ward residents aged 35 or older who did not have an opportunity to get a checkup like office workers, but the SHC program benefits the insured and their dependents aged between 40 and 74. In other words, the SHC program includes not only the insured but also their dependents as its beneficiaries because it is implemented as part of health insurance coverage.

The party responsible for implementing the program is the same – Itabashi Ward – but the ward office implements Specific Health Checkups as a national health insurance provider, while it carried out health examinations in the past as a local government

– an administrative organization.

〈Table 1〉 Differences between old Health Examination (Basic Checkup) and Specific Health Checkup

Category	Old Health Examination	Specific Health Examination
Goals	Early detection and treatment of diseases	Prevention of lifestyle diseases with the focus on metabolic syndrome
Target population	Ward residents aged 35 and above without checkup benefits	The insured aged between 40 and 74 (including their dependents)
Implemented by	Local governments	Insurers' obligation (Itabashi Ward's national insurance provider: Itabashi Ward)

Source: Public Health Clinic of Itabashi Ward, Tokyo Metropolis

For reference, salaried workers in the 35-39 age group receive checkups covered by Employees' Health Insurance, whereas people without the coverage are entitled to regular checkups offered by Itabashi Ward.

As for people in the 40-74 age group, Itabashi Ward health insurance subscribers receive Specific Health Checkups carried out by Itabashi Ward, while Health Insurance Union, Health Insurance Association or Mutual Aid Association members are entitled to Specific Health Checkups covered by the Health Insurance Union, Health Insurance Association or Mutual Aid Association. Also, national health insurance subscribers are to receive Specific Health Checkups provided by the National Health Insurance Association.

Senior citizens aged 75 and above as well as those aged 65-74 and qualified as disabled are entitled to the Older-Senior Citizens Medical Checkup services of Itabashi Ward pursuant to the

Older-Senior Citizens Medical Care System.

People aged 65 and above as of the checkup date who are not deemed in need of care or support are entitled to Health Examination for the Healthy (checkups to prevent nursing care).

In short, those aged 40-74 eligible for the Specific Health Checkup are subject to different checkup methods and expenses depending on the types of their insurance coverage. What is suggested herein is based on Itabashi Ward's national health insurance subscribers, who are exempt from paying for checkup expenses regardless of their income levels.

However, people falling into the following categories are excluded from Specific Health Checkup and Guidance: ① Residents who moved in or out of Itabashi Ward's national health insurance plans during the year; ② pregnant women; ③ patients who have been in hospitals or clinics for six months or longer; and ④ people admitted to self-sufficiency support facilities for the disabled, a nursing home, a special nursing home, welfare facilities for the aged with nursing care services, medical facilities with nursing care services or a chargeable nursing home for senior citizens (nursing-care medical facilities).

Meanwhile, local governments are required to come up with a plan to carry out Specific Health Checkups and Guidance pursuant to the "Securing Health Care for the Elderly Act"²⁾, so the Ward Office set target rates for the execution of Specific Health Checkup and Guidance for five years from 2008 to 2012

2) See "Specific Health Checkup Plans under the Itabashi Ward National Health Insurance Scheme" in the Appendix.

based on the results of an analysis of state-defined reference targets as well as the past checkup records of Itabashi Ward.

If the planned goals fail to be achieved, the subsidy for older senior citizens is to be either increased or decreased within the limit of 10 percent. To take the example of Itabashi Ward's national health insurance, if the goals fail to be achieved, 10% (JPY 700 million) should be added to the subsidy for older senior citizens (JPY 7 billion). As a result, a total of JPY 7.7 billion should be paid.

However, it is said that this subsidy increase/decrease policy for older senior citizens may not be enforced after all.

Measures to increase the execution rates of Specific Health Checkup and reduce the number of people with metabolic syndrome as well as people at risk are taken under the responsibility of the individual insurers.

3. Itabashi Ward's Specific Health Checkup and Guidance

1) Specific Health Checkup

① Contents of checkup

Itabashi Ward mails checkup slips to its national health insurance subscribers entitled to the Specific Health Checkup, which is free of charge, regardless of their income levels.

Specific Health Checkup consists of state-assigned items and those added by Itabashi Ward. The state-assigned items are divided into basic and detail-level items. The basic items include history taking, physical measurement (height, weight, body mass index

(BMI), waist), blood pressure measurement, physical check (e.g., physical examination), urinalysis (glucose, protein) and blood test (neutral fat, HDL cholesterol, LDL cholesterol, GOT, GPT, γ -GTP, fasting blood glucose, hemoglobin A1c).

Detailed items include electrocardiogram, funduscopy and anemia work-up (red blood cell count, hemoglobin level, hematocrit value).

〈Table 2〉 Itabashi Ward's Specific Health Checkup items

Category		Checkup Items
a	Basic items	History-taking, physical measurement (height, weight, BMI, waist), blood pressure measurement, physical check (e.g., physical examination), urinalysis (glucose, protein), blood test (neutral fat, HDL cholesterol, LDL cholesterol, GOT, GPT, γ -GTP, fasting blood glucose, hemoglobin A1c).
b	Detailed items	Electrocardiogram, funduscopy, anemia work-up (red blood cell count, hemoglobin level, hematocrit value) ※ To be carried out when deemed necessary by the doctor based on certain criteria.
National health insurance of Itabashi Ward		a, b and the following additional items: Electrocardiogram, funduscopy, anemia work-up (red blood cell count, hemoglobin level, hematocrit value, white blood cell count, platelet count), urinalysis (occult blood), chest X-ray examination, blood test (creatinine, uric acid) ※ Items performed for detail checkup are not added.

Source: Public Health Clinic of Itabashi Ward, Tokyo Metropolis

Itabashi Ward's national health insurance adds the following tests to the state-assigned check up items: Electrocardiogram, funduscopy, anemia work-up (red blood cell count, hemoglobin level, hematocrit value, white blood cell count, platelet count), urinalysis (occult blood), chest X-ray examination and blood test (creatinine, uric acid).

However, even if you are entitled to the Specific Health Checkup, you are subject to different checkup items depending on the type of your health insurance, and the items suggested here are applicable to Itabashi Ward's NHI subscribers. However, the state-assigned basic (a) and detailed (b) items apply the same to all health insurance plans.

② Checkup period

In Itabashi Ward, the period of time during which a subscriber can get a checkup is five months from June until October each year, and checkup slips are sent to eligible subscribers.

③ Performing institution

Health examinations are performed by the medical institutions that belong to the Itabashi Ward Doctors' Association or the Nerima Ward Doctors' Association.

2) Specific Health Guidance

If your checkup results show that your waist and BMI measurements are at or above certain levels, you are classified into one of the following three categories depending on how many risk factors (blood pressure, blood sugar and neutral fat or HDL cholesterol levels) you have and given a Specific Health Guidance service accordingly: “Information Provision”, “Motivational Support” and “Active Support.”

Those classified as in need of “motivational support” or “active support” are given individual or group SHG services. They can get advice from specialists (doctors, public health nurses, administrative dieticians, etc.) on setting or executing their

healthcare goals.

① Period of time: June-March, each year

② Performing institutions: Itabashi Ward Doctors' Association (at medical institutions), business operators (selected based on proposals, performed at the Ward Gymnasium meeting room)

3) SHC and SHG Execution Rates

Itabashi Ward's SHC execution targets were set at 40.0% for 2008 and 45% for 2009, but the actual results were 41.6% and 43.1%, respectively – a little short of the targets.

The SHG targets were 20.0% for 2008 and 25.0% for 2009, while the actual participation rates were 2.2% and 10.1%, respectively, which are far lower than the targets.

〈Table 3〉 Itabashi Ward's SHE and SHG rates

(In %)

Category	Specific Health Checkup		Specific Health Guidance	
	Planned	Reported (Statutory)	Planned	Reported (Statutory)
2008	40.0	41.6	20.0	2.2
2009	45.0	43.1	25.0	10.1

Source: Public Health Clinic of Itabashi Ward, Tokyo Metropolis

4) SHC and SHG Procedures

Once you get a Specific Health Checkup, you will be classified as requiring low, medium, or high level treatment in terms of the need for changing lifestyle habits based on the examination results. Those classified as requiring low level treatment are

given a doctor's instructions and recommended to maintain their current health status. Those classified as medium are given Motivational Support, one of the SHG services, while Active Support is provided to those classified as high. Those in need of treatment are recommended to get a medical checkup at a medical institution.

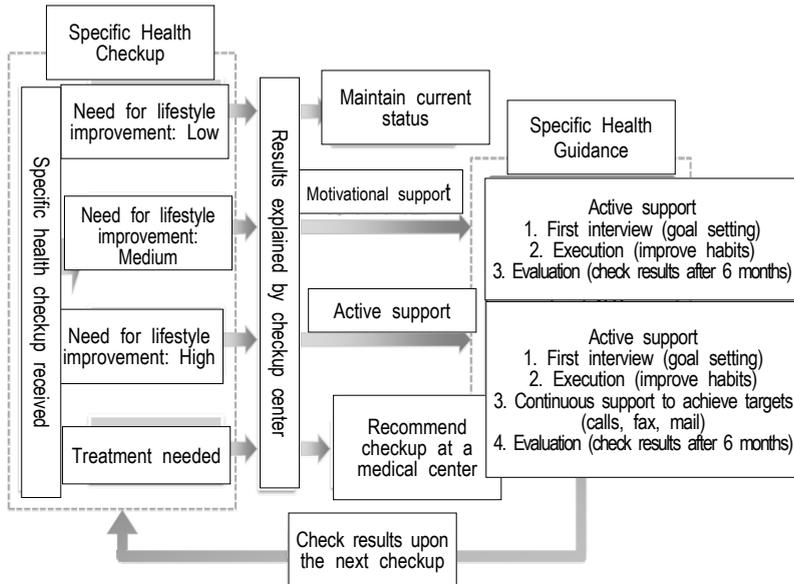
Motivational Support ① helps an individual to set targets to improve living habits through an initial interview; ② ensures that the individual takes steps to improve his/her living habits; and ③ checks results after six months.

Active Support ① helps an individual to set targets to improve living habits through an initial interview; ② ensures that the individual takes steps to improve his/her living habits; ③ provides continuous support to help him/her achieve the targets; and ④ checks results after six months.

After the Specific Health Guidance process is completed, results are confirmed through the next Specific Health Checkup. If a problem is detected as a result of the checkup, the SHG process is repeated.

In the case of Korea, there is a limit to the period of time for which assistance is available under the Healthcare Service Voucher system, but the Japanese system provides support continuously as long as an individual is found to have metabolic syndrome.

[Figure 1] SHE and SHG procedures (Itabashi Ward)



5) Criteria for Specific Health Guidance

Itabashi Ward's national health insurance subscribers who have undergone a Specific Health Checkup are sent a report with the examination results in it. The report includes results of metabolic syndrome diagnosis.

The metabolic syndrome criteria are classified into common and additional criteria. The common criteria are used to check obesity by measuring your waist circumference just above the navel. You are considered obese if you have a measurement of 85cm and above for men or 90cm and above for women, which indicates a visceral fat area of 100cm² or bigger.

Additional criteria are designed to diagnose pre-hyperlipemia, pre-hypertension and pre-diabetes. Pre-hyperlipemia refers to the case in which neutral fats are measured at or above 150mg/dl, with less than 40mg/dl of HDL cholesterol. Pre-hypertension indicates blood pressure readings equal to/greater than 130mmHg systolic and 85mmHg diastolic. Pre-diabetics have a fasting blood sugar level of 110mg/dl or more.

If two or more of the additional criteria as well as the common criteria apply to you, you are classified as having the metabolic syndrome. If one of the additional criteria as well as the common criteria apply to you, you are classified into the pre-metabolic syndrome group.

Specific Health Guidance recipients are selected based on the extent of needs for changing lifestyle habits, which is determined by considering the number of metabolic syndrome risk factors, smoking habits and age all together.

Both obesity and risk factor criteria are applied to the diagnosis. First, obesity is determined based on waist circumference and BMI. The waist circumference cutoff is 85cm for men and 90cm for women, while that of BMI is 25 for both. For risk factors, blood pressure, blood sugar, lipids and smoking history are checked. The blood pressure cutoff readings are 130mmHg systolic and 85mmHg diastolic.

As for blood sugar, it is 100 mg/dl on an empty stomach or 5.2% in hemoglobin A1c. The cutoff for lipids is 150mg/dl in neutral fats with less than 40mg/dl of HDL cholesterol. When it comes to smoking, they check whether you have smoked at all in the past and also in the past month.

〈Table 4〉 Criteria for the metabolic syndrome

Common Criteria	Additional Criteria	
Waist circumference (measured just above the navel) Men: 85cm or above Women: 90cm or above ⇒ Visceral fat area: 100cm ² or above	Pre-hyperlipidemia	Neutral fat: 150mg/dl or above, HDL cholesterol: Less than 40mg/dl
	Pre-hypertension	Blood pressure cutoff: 130mmHg systolic and 85mmHg diastolic
	Pre-diabetes	Fasting blood glucose: 110mg/dl * Not on an empty stomach: Hemoglobin A1c 5.5% or above

Metabolic syndrome: All of the common criteria and two or more of the additional criteria

Pre-metabolic syndrome: All of the common criteria and one of the additional criteria

Source: Public Health Clinic of Itabashi Ward, Tokyo Metropolis

〈Table 5〉 Itabashi Ward's criteria for selecting SHG recipients

Obesity	Waist circumference	Men: 85cm or above Women: 90cm or above		
	BMI	25		
Risk factors	① Blood pressure	At or above 130mmHg systolic and 85mmHg diastolic		
	② Blood glucose	Fasting blood glucose is at/above 100mg/dl or hemoglobin A1c is at/above 5.2%.		
	③ Lipids	Neutral fat of 150mg/dl or more and HDL cholesterol of less than 40mg/dl		
	④ Smoking history	Smoked in the past years and in the past month		
	Risk Factors		Health Guidance Levels	
Obesity	① Blood pressure ② Blood sugar ③ Lipids	④ Smoking history	Aged 40-64	Aged 65-74
	2 or more		Active Support	Motivational Support
Waist Circumference falls under the range	1	Yes	Active Support	Motivational Support

	Risk Factors		Health Guidance Levels	
			No	Motivational Support
	Not applicable		Information Provision	
In addition to the above, BMI falls under the range.	3		Active Support	Motivational Support
	2	Yes	Active Support	Motivational Support
		No	Motivational Support	Motivational Support
	1		Motivational Support	Motivational Support
	Not applicable		Information Provision	Information Provision
Both waist and BMI: Normal			Information Provision	Information Provision

Source: Itabashi Ward's Public Health Clinic

If you fall into the described range of waist measurement and two or all of the three risk factors apply to you, you are given Active Support, if you are 40-64 years old, or Motivational Support, if 65-74 years old.

If you fall into the described range of waist measurement and one of the three risk factors apply to you, you are checked for smoking history. If you have smoked before, you are given Active Support (40-64 years old) or Motivational Support (65-74 years old). If you have no smoking history under the same conditions, you are given Motivational Support regardless of age.

If your waist measurement falls into the range but none of the three criteria (blood pressure, blood sugar and lipids) apply to you, you will only be given information.

Next, if you belong not to the risky range of waist measurement but to the BMI category described above, you will get different

types of support depending on how many of the three risk factors you come under. If your measurements of blood pressure, blood sugar and lipids all fall into the risky ranges, you will be given Active Support (40-64 years old) or Motivational Support (65-74 years old) regardless of smoking history.

If you have a risky BMI level and two of the three risk factors apply to you, you will be given different support depending on your smoking history. If you have smoked before, you receive Active Support (40-64 years of age) or Motivational Support (65-74). If you have no history of smoking, you are given Motivational Support regardless of age.

If you have a risky BMI level and one of the three risk factors applies to you, you are given Motivational Support regardless of age and smoking history.

If you fall into the described BMI category but none of the three risk factors apply to you, you are given Motivational Support regardless of age and smoking history.

Lastly, if your waist and BMI measurements are both normal, you will only be given information.

When you get to receive a Specific Health Guidance service, specialists (doctors, public health nurses and administrative dieticians) advise you, based on your examination results, on detailed and personalized methods to get rid of metabolic syndrome. They develop a six-month plan for you in the first interview and give you advice through interviews, phone calls or e-mail. However, the way the Specific Health Guidance program is implemented varies with health insurers.

4. Lessons Learned

The Specific Health Checkup and Specific Health Guidance program of Japan has several characteristics: ① The focus is on the prevention of metabolic syndrome. ② The provision of healthcare services is outsourced to private healthcare providers. ③ The main provider of services is the insurers. ④ Although the target age group is 40-74, Active Support is available only for those aged 40-64, while those aged 65-74 are given Motivational Support or only information, which indicates that the focus is on the 40-64 age group. ⑤ Specific Health Checkup and Guidance services are free of charge. ⑥ Support is available regardless of income level. And ⑦ support is continuous, without a limit to the number of times, as long as metabolic syndrome is found.

Recognizing increasing lifestyle diseases due to population aging as the biggest problem in public health, Japan lays emphasis on metabolic syndrome, a precursor to lifestyle diseases, according to the selection and concentration rule. Consequently, Specific Health Checkup consists of the items designed to check for metabolic syndrome. It is also the case with Korea that the main purpose of healthcare services is to prevent chronic diseases. Therefore, it is necessary to turn to those at high risk of chronic diseases as the main target of healthcare services.

The stabilization of the finances of health insurance is an important policy issue for both Korea and Japan. In the case of Japan, however, health insurance funds are used to pay for the expenses of Specific Health Checkup and Guidance services,

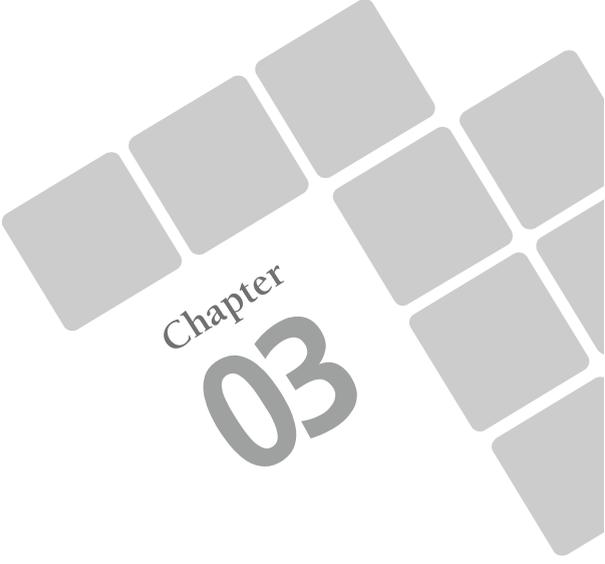
whereas Korea is not in a position to use health insurance funds for such expenditures. Some may argue that outlays from the health insurance funds can be reduced if healthcare services are provided in a well-structured manner and that therefore the health insurer should share the expenses as in Japan. Yet others may argue that healthcare services are one of the government's fundamental responsibilities and that therefore the expenses should be taken out of the national treasury. According to the latter argument, the savings of health insurance finances, together with the savings of the nation's overall medical expenditures, can be seen as collateral benefits.

With regard to the fact that Specific Health Checkup and Guidance services are available free of charge, regardless of income level, it may not be justifiable in Japan to differentiate amounts to be collected according to income levels. There may arise the issue of fairness in benefit distribution because the services are supported by health insurance funds originating from insurance premiums. In the case of Korea where financing comes from the national treasury, it would be justifiable to cover the expenses in full for the low-income group, while collecting payments from the none-poor.

With respect to the fact that the target age group of the Japanese system is 40-74 but its focus is on the 40-64 group, it is considered desirable not to place an age limit in Korea. It seems that Japan is concentrating on an age group that will prove highly effective for the amount of support provided, considering the limitations of health insurance funds. In Korea, however, the population to be supported is only the low-income class, so an age limit

is considered unnecessary.

Also, while Japan provides support continuously, regardless of how many times a person is diagnosed with metabolic syndrome, it is considered desirable to set a certain limit in Korea, taking into consideration financial constraints, moral hazards and effectiveness of the program. It should also be considered that, once users accumulate knowledge and information in the course of using healthcare services, they will be able to take care of their own health for themselves.



Chapter

03

Plan for Invigorating the Healthcare Service System



Chapter 3

Plan for Invigoration the Healthcare Service System

Section 1. Basic Direction

1. Harmony between Policy Goals: Market Invigoration and Support for the Low-income Class

There still exists the argument that providing medical and healthcare services through the market will limit access for low-income earners. Medical services are available within the institutional framework including the Automatic Designation System of the National Health Insurance Corporation (NHIC) applicable to medical institutions; restrictions on for-profit corporations to establish and operate a medical institution; compulsory subscription to the National Health Insurance (NHI); and the application of NHIC's reimbursement rates. On the other hand, healthcare services are available through private operators in the market without such institutional restrictions. This is why some people contend that the low-income class will have limited access to services due to rising service prices and their limited ability to pay. For this reason, some argue that healthcare services should also be offered through medical institutions within the framework of health insurance.

Under the current or prospective financial circumstances of

the NHIC, however, there are limits to reimbursing expenses for disease prevention or healthcare services. Therefore, healthcare services not only require a separate delivery system but also need to be made available through the market so as to contribute to fostering the service industry and creating jobs.

It is important to set the right direction for policy that helps such conflicting aspects find a point of contact and come into harmony. More than anything else, it should be ensured that the market prices of healthcare services will be formed at affordable levels even for ordinary people and, for the low-income class, measures to subsidize healthcare through government assistance need to be put in place. In addition to such demand-boosting measures, efforts to improve the service delivery environment should also be made. In this respect, although it is desirable to minimize direct government intervention in healthcare service pricing, it is necessary to define pricing guidelines at least for government-supported voucher-based services.

2. Congruence between Medical Delivery System and Healthcare Service Market

As medical and healthcare services are on a continuous spectrum, it is desirable for healthcare services to be connected with medical services. But while medical services are under the institutional framework of health insurance, healthcare services are available in the market. This makes it necessary to look into potential problems in terms of service quality or finances.

Congruence between the medical delivery system and the healthcare service market should be secured particularly in terms of service quality, service delivery effectiveness, finances, service pricing and market shares.

3. User Access in Healthcare Service Market

Currently, healthcare services are available mostly at local medical institutions in the public sector such as public health centers. However, their role as providers is less than comprehensive in that their main customers are low-income earners. In this respect, the introduction of a health care service system carries the significance that a more comprehensive delivery system will be constructed for healthcare services.

For a healthcare service program to serve as a national delivery system, consumer access should be secured before anything else. This gives rise to the issue of how a certain level of access should be guaranteed, with possible government intervention in the market in mind. The most desirable approach would be to provide support for consumers without intervention in pricing but, even in this case, the market prices of the services need to be taken into consideration in order to develop consumer support guidelines.

When it comes to market pricing, such mechanisms as self-regulated pricing, fee-for-service model and price ceiling can be considered first. In Japan, under the Specific Health Checkup and Guidance system, a unit price is set for each service group, and the expenses are reimbursed in full by health insurers.

Australia applies pricing guidelines, while self-regulated market pricing is adopted in the U.S.

The adoption of the autonomous market pricing mechanism may contribute to the invigoration of the healthcare services market, but it may cause an excessive burden on the low-income class and also dilute the significance of voucher-based assistance. On the other hand, the fee-for-service model allows you to enforce reimbursement rates or apply recommended prices but will likely increase administrative costs for price management and result in low service quality relative to given prices. The price ceiling system is likely to hinder market invigoration or discourage providers from participating in the market if price ceilings are set unreasonably.

Considering these circumstances, the following approach is considered desirable for Korea: Define pricing guidelines for reimbursements on a fee-for-service-area basis, for example, and enforce them on government-subsidized voucher services, while using them as recommended prices for the rest of services.

4. Maximization of the Effect of Holding Down Increasing National Medical Expenditures

One of the most fundamental purposes of introducing a health care service system is to prevent diseases and reduce national medical expenditures by invigorating healthcare in everyday life. To make sure that healthcare services will actually lead to savings in national medical expenditures, the quality of services available should be guaranteed.

To this end, standards for the content and quality of services should be defined for each service model. Service models suited to the characteristics of individuals need to be developed, and individuals should be allowed to select a model that they need the most. In real life, there may be obstacles to this: For example, even individuals capable of taking care of their health on their own can be induced to use services at a healthcare institution; inappropriate services may be provided to individuals; more services than needed may be offered. Therefore, institutional arrangements are needed to control such occurrences reasonably.

Section 2. Market Invigoration and Service Delivery Environment Improvement

Currently there are only a few companies providing systematic healthcare services, and most of the existing companies show a lukewarm response to participating in the government-led pilot voucher project. They cite three reasons. First, the voucher project is not big in size. Because the project is not big, the overall profit size is not big either, so they cannot afford to go out aggressively to recruit a workforce or invest in facilities or equipment required to do the business.

Second, existing companies engaged in healthcare-related services are running their business on the strength of their stable customer bases, which gives them little motivation to take part in the government's voucher project.

Third, for a service provider to participate in the voucher

project, it should have a staff equipped with various certificates on its payroll. Not only the direct costs involved in bringing such resources on board but also the staffing requirements themselves work as regulatory constraints.

This will apply the same to new entrants in the future. If things stay the same, few companies would want to enter the market. Therefore, to invigorate the healthcare service market at an early date, support measures are required to relieve such factors.

Market forecasts in particular indicate a possible formation of blocs in the market along income levels. As for the low-income class, the government's voucher assistance will be expanded incrementally, as a result of which a market will be formed to meet the needs. In the meantime, existing healthcare service companies will possibly expand the market rapidly concentrating on employees and directors of large corporations. A market segment targeting the upper class is forecast to grow gradually as established healthcare providers develop and offer high-cost service products.

Low-income groups will receive government support in the form of vouchers, while it is highly likely that healthcare services for employees of large corporations will be covered in full or in part by the company as part of employee benefits. Consequently, the service market will grow first in these areas.

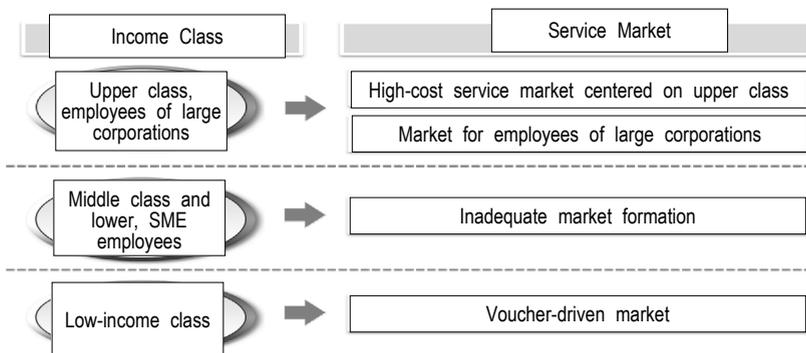
However, efforts to create an active market for middle and lower-income groups, other than those eligible for voucher assistance, are expected to face many obstacles. As for this particular customer segment, it is predicted that there will not

be active market participation not only because their WTP values are low but also profit margins for service providers are small.

Therefore, this income class requires support measures to vitalize service providers' market participation as well as support to boost demand. The possibility of demand to grow in this class over the mid to long term is not high without such support. The market is likely to be formed to a limited extent, mostly for the chronically ill or high-risk people with metabolic syndrome.

But there is an external factor that can affect all this: Provision of healthcare services in connection with health examination results. In other words, if a medical institution recommends healthcare services based on checkup results, consumers can be influenced by the results and choose to take healthcare services even if their WTP usually is low. That is, health checkups will highly likely serve as a gateway for consumers to start using healthcare services in that healthcare services should by nature be connected with health checkup results.

[Figure 2] Market outlook: Markets to be formed along income lines



A comprehensive look at what has been discussed so far leads us to believe that there should also be indirect support for service providers to invigorate the market for people in the middle and lower-income brackets. Support for service providers can be summarized as follows: ① Differentiate staffing requirements; ② support education and training for the service staff; ③ publicize institutional programs designed to increase customers; ④ reimburse expenses through vouchers; and ⑤ provide financial support for initial investments.

1. Deliberating Efficient Staffing Requirements

It may be inefficient to list professionals including doctors, nurses, dieticians and exercise prescription specialists in the law and require them to be hired as a package to set up and operate a healthcare company. Staffing requirements need to be differentiated so that a service provider may bring on board only the resources that it needs to provide the services to be actually offered. Suppose a business firm wants to provide services specializing in weight control or nutrition consultation. This firm then has only to be equipped with the manpower, facilities and equipment required to provide the said services. It may be necessary to have all relevant resources available to secure quality in a wide range of services but, if it becomes compulsory to arrange even the resources that are not very likely to be utilized, it will cause an unnecessary increase in expenses.

2. Giving Support to Education and Training

To secure the kinds of knowledge and skills that consulting resources should be equipped with in addition to health-related knowledge, such as consulting know-how, separate education and training needs to be provided for them. You may be an expert with a number of certificates but, to be able to counsel a client about health problems in a specialized and comprehensive manner, you still need education and training in consultation skills. Some companies put in efforts to ensure this by inviting professional instructors once a month for training, but it is worth considering to develop and run a public training program offering counseling skills courses.

In this respect, it is necessary to develop a case-based reasoning (CBR) database and model and make it available for counselors or consulting staffs. It will be useful not only for healthcare service institutions but also the public sector.

3. Publicizing Programs for Increasing Customers / or for Public Awareness of Healthcare Services(or SVCs)

One of the biggest problems with the healthcare services industry pointed out by healthcare service providers is that public awareness of healthcare services is low. Most of the Koreans do not recognize what healthcare services are, what kinds of services are available, who provide such services and what programs the government is planning. If healthcare services should be left to the self-regulation of the market, the government might

not have the obligation to try to publicize the system. However, if they are to be institutionalized, the government does need to introduce and publicize its programs and regulations.

Therefore, if healthcare service laws are enacted, the first thing that should be done is to publicize them to the public. If the infrastructure required to provide services is not yet sufficient, information should be provided about when the public can start using such services.

4. Improving the Accessibility to Healthcare Services Through Vouchers

Vouchers are a means of assisting users, but they are significant also as a means to create an initial market. As mentioned earlier, the government needs to expand the user base for healthcare services through a variety of support differentiated according to consumers' income levels.

Let us assume that M is the maximum monthly amount that consumers are willing to pay for healthcare considering their household expenditures and that F is the monthly fee for a service. If $M < F$, people would generally not want to use the service. Now, let us say that the government offers a voucher worth S a month. If $(M + S) > F$, people will be inclined to using the service; if it's the other way around, they will not be willing to use it. Yet, even in the case that $(M + S) < F$, if the difference, that is $F - (M + S)$, is not big, it is possible that a segment of a class may feel like using the service by increasing M . In other words, even among the class that gives up using a service

because of the far higher price (M) than their WTP (M), a subclass may arise that is willing to use the service if the government subsidizes part of the difference, even if the subsidy is not big enough to cover the difference. As illustrated, vouchers are expected to help bring down consumers' psychological threshold.

5. The Needs for Minimizing Regulations

It is imperative to draw up measures to maintain the quality of services offered by healthcare service providers at a certain level because it is one of the fundamental purposes of institutionalizing healthcare services. Nevertheless, it is desirable to minimize other regulations including the diverse restrictions of the medical laws enforced on medical institutions.

Also, although remote medical treatment is not allowed, clear-cut guidelines for ubiquitous healthcare ("u-Healthcare") services - separate from remote medical treatment - should be established. Along with this, it is necessary to allow healthcare institutions to run other health-related businesses, such as medical or healthcare equipment production, in parallel with healthcare services.

Furthermore, healthcare companies will be allowed to work for profit, but there is an issue about whether a healthcare service institution affiliated with a medical institution should be allowed to pursue profits. In other words, hospitals can be divided into private and corporate hospitals, the latter of which are all non-profit entities as they belong to a medical corporation, school corporation or social welfare corporation. Now if such a non-profit corporate hospital operates a healthcare service institution, an issue arises about

whether it can be allowed to seek profits. In this case, we need to apply the concept of "incidental business" that hospitals are allowed to engage in, for example, funeral homes or parking lots.

6. Financial Support for Initial Investments

Most of the existing healthcare companies are small with a capital of about KRW 200 million to 2 billion. Human resources, facilities and u-Healthcare equipment are major investment items. Raising funds for such initial investments need to be facilitated through financial support.

Section 3. Invigorating Service Consumption

Individuals or households have the obligation to pay health insurance premiums, but healthcare expenditures are entirely up to consumers' own choice, which is why healthcare may likely be low on the priority list of household expenditures. Besides, although the public has recently become more aware of healthcare, their actual WTP is relatively not very high.

The consumer research conducted as part of this study reflects such a tendency. This study surveyed consumers regarding whether they were willing to use healthcare service programs and how much they were willing to pay for the services.

According to the results, 85.7% of 1,000 respondents answered positively about the necessity of a system in which somebody kept checking and managing the health of individual Koreans.

〈Table 6〉 Perceptions about the necessity of a system that keeps checking and managing individuals' health

(In %)

Total	Necessary	Not Necessary
100.0	85.7	14.3
1,000 (respondents)	827	173

About the necessity of introducing a healthcare service system, 53.7% responded that they "strongly agree" or "agree."

〈Table 7〉 Perceptions about the necessity of a healthcare service system

(In %)

Total	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
100.0	13.7	40.0	31.3	10.7	4.3
1,000 (respondents)	137	400	313	107	43

As shown above, a large percentage of the respondents generally perceived that they needed continuous healthcare and that a healthcare service system needed to be introduced, but when asked whether they would use healthcare services if the system was actually introduced, a relatively low percentage (59.4%) said "yes."

The reasons cited by the people who responded negatively to the use of healthcare services included expenses as well as their belief that they could take care of their own health.

The respondents who gave a positive response were asked further about how much they were willing to pay for the services. Their WTP values were surveyed separately for basic services

and additional services. Basic services include a checkup on the health status of an individual; consultation and education for improving lifestyle habits; and personalized nutrition and exercise program designing and instructions. Also, body mass and blood pressure measurement as well as exercise monitoring are performed with u-Healthcare devices based on which information is provided, and daily healthcare practices are guided through phone calls, SMS and e-mails.

According to the survey, the WTP for basic services is KRW 18,393 on average, which is a little higher than the results of another survey conducted by Korea Health Industry Development Institute (KRW 15,643)³).

The WTP for additional services such as home visits turns out to be KRW 32,097. In the case of home visit services, there is a gap between the WTP and the service price because the labor cost is bigger than for the services using u-Healthcare equipment.

On the other hand, although the WTP of the respondents selected from the general public for this study was KRW 18,393 on average, if part of the amount payable by the user is shared by the company as employee benefits, the WTP can increase. That is, it is highly possible that people may become healthcare service customers if the out-of-pocket portion of the payment

3) KRW 15,643, as reasonable monthly spending amount for healthcare services, is based on the results of a survey conducted by Korea Health Industry Development Institute with men and women at the age of 20 years and above nationwide on demand for healthcare services (telephone survey). The amount is based on the answers given by 238 (35.3%) respondents who were willing to pay for healthcare services out of 647 who were willing to use the services.

is covered in full or in part by the employer.

The challenge is with ordinary people in the mid/lower-income brackets who have no such benefits. To induce them into the customer base of healthcare services, various strategies are required. The issue that needs to be addressed first is pricing. Rather than having healthcare service prices formed uniformly, it may be better to make it possible for individuals to choose the kinds of services that they need and pay only for the ones that they choose. This will help reduce overall spending. That is, expenses can be reduced through a cafeteria approach in which individuals choose only the services that they need rather than a package of services.

After all, such a market environment will have to be created through the efforts of service providers, and it is the government's role to provide an institutional framework for supporting service providers' strategies to develop such products.

In this respect, the government needs to take the following actions: ① Develop a variety of service standards; ② set pricing guidelines; ③ diversify voucher assistance approaches for the low-income class; ④ consider the introduction of incentives, such as a mileage program; and ⑤ provide support to promote group services within local communities.

Of the actions listed above, the development of service standards and the establishment of pricing guidelines are addressed in the following sections. This section will discuss the diversification of voucher assistance approaches, the introduction of incentives such as a mileage program and support to promote group services within local communities.

1. Attempting Diverse Voucher Assistance Approaches

The current pilot project classifies the population into people eligible for voucher assistance and people ineligible, but it needs to be considered to differentiate voucher assistance values according to income levels. That is, voucher recipients should be divided into three categories (high, middle, low) according to their income levels, and different amounts should be assigned to different categories. This is expected to bring about change on the part of both providers and users. Providers will try to secure customers by developing diverse products that fit the voucher values, whereas users will try using services either with a voucher only or by paying an extra amount on top of a voucher. This is not only significant in that it will help diversity support for the low-income class but it will also contribute to the creation of an initial market.

In this case, there may arise a conflict between subsidy amounts and the content of services wanted. That is, a person may belong to the “high” category and consequently have a lower-value voucher but needs home-visit healthcare, a high-cost service. Even in this case, however, it is considered better to apply only the income criteria. The reason is that, if services wanted are also taken into consideration, guidelines for assessing the details and extent of services required will also need to be established. Besides, it may give rise to the issue of fairness in terms of income-linked benefits.

On the other hand, consideration should be given to the government’s budget constraints and the need for expanding target

recipients. In other words, it is not recommended to attract more target recipients by lowering the unit prices of subsidized services just to stay within the limits of the voucher budget. Of course, unit prices should be brought down if costs go down due to changes in the service production environment; otherwise, it is not desirable to lower subsidy unit prices to increase the recipient base without increasing the budget. If this approach is taken nonetheless, it is very likely to cause an obstacle to the initial invigoration of the market.

It should also be considered how long voucher assistance should be continued for a recipient. That is, should it be continued only until a certain point in time, or indefinitely? In the case of Japan's Specific Health Checkup and Guidance Program, expenses are reimbursed in full by health insurers regardless of income levels as long as the requirements are met, such as age or having metabolic syndrome. Checkups are offered every year, and support continues as long as a person is found to have metabolic syndrome in the yearly checkup.

In the case of Korea, however, there is a limit to what the National Health Insurance can do to support its subscribers for healthcare service expenses, considering its financial circumstances. This is why a realistic alternative is to use government budgets. If support is to be given continuously without a time limit, both the recipient base and the required budget are likely to grow rapidly due to population aging. Therefore, to reduce the budgetary burden realistically, we need to consider providing voucher assistance for a certain period of time (e.g., two years), imposing a grace period (e.g., two years) and then

awarding vouchers again if the eligibility criteria are met.

A grace period is worth considering not only because of budget constraints but also because people can equip themselves with capabilities to take care of their own health as they accumulate knowledge and information about their health status as well as healthcare methods in the course of receiving healthcare services for a certain period of time. After the grace period, stricter eligibility criteria should be applied in terms of income levels, diagnosed diseases or symptoms.

2. Considering Incentives such as a Mileage Program

Strategies to expand healthcare services to the middle class should be developed aggressively. Compared with high-income countries like Japan and the U.S., Korea cannot expect to gain immediate profits from healthcare service operations yet. Results of healthcare tend to become tangible, not immediately but over the mid-to-long term, which is why consumers are not motivated enough to spend money on healthcare services right now. There are a considerable number of pay health information sites in Japan, but most of the sites in Korea are free of charge, with only a few pay sites.

Consequently, to increase healthcare service users in the middle class, an incentive plan should be considered to create a market initially. With regard to voucher assistance, eligible income levels should be adjusted upwards, and deductibles should be adjusted upwards accordingly.

At the same time, a mileage program is worth considering.

If your medical expenditures fall below your average medical expenditures of the past few years as a result of getting healthcare services, you may be given certain incentives. Also worth considering is the idea of offering some of the chargeable items of a national health screening test free of charge.

In addition, the healthcare service authorities can work together with government-operated smoking cessation clinics. Healthcare service coupons can be offered as an incentive for volunteers who successfully quit smoking. This will help increase the effect of smoking cessation and stimulate clinic clients to change their behaviors.

3. Supporting for Group Services within Communities

It is recommended to come up with direct and indirect ways of supporting healthcare services at a community level, such as an apartment complex, a townhouse complex or a business site. In terms of expenses and benefits, the unit price of healthcare services per individual can be lowered if services are provided to families rather than individuals or to a community such as an apartment or townhouse complex. Some companies indicate that they can offer services to families or an apartment complex community just for KRW 15,000 a month.

Therefore, when a new apartment complex is constructed or an old complex is remodeled, the local government should give support to allow the construction company to build integration with a healthcare service provider so that a built-in health care system can be constructed for the residents. In addition, indirect

support from the Ministry of Employment and Labor and other relevant authorities is also needed to have healthcare systems built at work places.

Section 4. Healthcare Service Price Control

With regard to healthcare service pricing guidelines, there may be different opinions about whether government intervention into pricing is desirable for the vitalization of the market, and there may be doubt about what significance guidelines may have.

Fundamentally speaking, government intervention in market prices may bring about various side-effects. On the other hand, in the healthcare service field there exist information asymmetry or market failure factors, as is the case with medical services. Consumers do not have enough knowledge or information with which they can judge the quality of services such as health counseling or healthy lifestyle guidance. Prices formed under these circumstances are very likely to be higher than the market prices under normal circumstances.

For this reason, it is considered necessary to propose guides - recommended prices by nature - for healthcare services, though not controlled prices like NHIC's reimbursement rates for medical services that must be followed. Rather than as price controls for providers, the guides are meaningful as references for consumers when deciding on reasonable healthcare services and selecting services.

As mentioned in the Service Standards section, price guidelines

are better to be applied to the services available under the government voucher program rather than all service providers.

When it comes to the voucher program, it is desirable to control price increases within a certain range in accordance with pricing guidelines. The payment for a voucher-subsidized service is divided into what is covered by the voucher and what the recipient should pay out of pocket. If voucher values do not reflect service price increases flexibly, there is concern that out-of-pocket payments by recipients will increase. On the other hand, it is not easy to absorb service price changes in full into the voucher value.

As a way of controlling price increases, it may be considered to exclude service providers who demand consumers of a higher out-of-pocket payment than a certain level from the list of the voucher project partners.

On the contrary, the diverse service products that service providers develop and offer, other than those listed under the voucher project, should be left to the market so that prices will be formed autonomously.

There still remains the issue of how pricing guidelines should be established. The simplest method would be to calculate and use the average service prices of existing service providers. However, there are only a limited number of service providers who can currently provide healthcare services systematically, and their customer sizes are also very limited. Therefore, if pricing standards are to be set based on them, there is a fundamental limitation that the prices will be too high. There is also a limit to adequately reflecting production cost fluctuations according to changing customer sizes, particularly because the production

costs of healthcare services vary with demand and the size of customers. Furthermore, in the process of determining price guides, there is a possibility that providers report higher production costs than actual.

Therefore, it needs to be considered to calculate expenses based on the size of manpower, facilities and equipment required to produce services and then determine prices considering the size of customers eligible for voucher assistance. Even in this case, there is a possibility that service providers may report exaggerated information about the prices of manpower and equipment used for production. In this case, labor costs and equipment purchase costs in other areas than healthcare services can be applied.

Since service production manpower (Ex) and facilities and equipment (Eq) requirements vary with the size of target customers (Cl), the problem may occur that expenses of the resources required cannot be calculated independently of the size of customers. To find an approximate value, the following method can be considered. That is, assuming that a certain level of manpower ($Ex0$) and facilities and equipment ($Eq0$) are given, we can determine the maximum services ($Hcs0$) that can be produced with the given resources as well as the maximum customer size ($Cl0$). After that, we can determine a price guideline ($P0$) taking into consideration the labor cost (w), facility and equipment cost (r) and a reasonable profit margin (II).

$$\begin{aligned} Hcs0 &= Cl0 \times t = f(Ex0, Eq0) \\ t &= Hcs0 / Cl0 \end{aligned}$$

$$Cost0 = (Ex0 \times w) + (Eq0 \times r)$$

$$P0 = (Cost0 + II) / Cl0$$

If the number of customers to be served (Clx) exceeds $Cl0$, more resources (manpower, facilities and equipment) should be put in. In this case, we can determine the maximum customer size (CII) and price (PI) assuming the size of new manpower ($Ex1$) as well as the facilities and equipment ($Eq1$). If $Cl0 < Clx \leq CII$, prices can be set as follows:

$$R = (CII - Clx) / (CII - Cl0)$$

$$Px = PI \times (1 - R)$$

If not $Clx \leq CII$, we can determine the price by assuming another manpower size ($Ex2$) and another facility/equipment size ($Eq2$) and thus inducing a bigger $Cl2$ than Clx .

In this context, as reasonable prices for individuals, some of the healthcare service companies suggest that the base price of the u-Healthcare system for self care should be set at KRW 35,000 and that KRW 33,000 should be added for a separate customized consultation service.

On the other hand, services can be provided at an apartment complex or a community center where u-Healthcare equipment can be deployed. Some companies believe that they can charge KRW 20,000 a month for the first two years after starting services and KRW 20,000 a year after that and still make profits.

If service providers reduce production costs by introducing such a group service delivery model, it may lead to another

issue: Should the same voucher amount be awarded for group services as for individual consumers? If the contents and quality of services for groups are not different from those for individual consumers, the same voucher amount as that under the individual approach should be applied. The extra profits gained through cost savings are a benefit that should go back to the healthcare service provider.

Section 5. Quality Management and Consumer Protection

1. The Necessity for Diverse Service Standards

To develop standards for a variety of healthcare services, the contents of services that should be ensured need to be identified for each service, such as nutrition consultation, smoking cessation and provision of information about moderate drinking. One of the greatest significances of enacting Healthcare Service laws is that it helps manage service quality systematically. Therefore, standards for the contents of services should be defined in detail and in a well-structured manner.

Since there exists a great variety of services, it will be efficient to group services similar in nature into distinct types and define the contents of services within the category of each type.

Realistically speaking, however, we have to deal with the issue of whether such service standards should be applied uniformly

to all service providers or not. In the case of medical services, there is no regulation on the quality of service defined at an individual activity level; nor is it possible to regulate it administratively. The fundamental purpose of assessments performed by Health Insurance Review and Assessment Service is to regulate inappropriate and excessive services; it is not to assess the quality of service itself. As a policy instrument to boost the service quality of medical institutions, a service assessment and certification system is in place, but it is not meant to evaluate the quality of individual medical services.

Therefore, in the healthcare service area, it is better to apply the standards on the services provided under the government's voucher project rather than all service providers. As for the services made available by other service providers, the matter is best left to the judgment and choice of consumers.

In other respects, healthcare services can be offered as a package with services less directly connected to healthcare like doctor's appointment booking. This type of service is available at some of the existing companies. For example, some companies schedule an appointment with a doctor, if necessary, together with their counseling services. In case such practices will become widespread, it is necessary to stipulate the definition, types and kinds of healthcare services in more detail including where healthcare services start and end.

What is particularly noteworthy is that service firms sometimes provide healthcare services combined with other services and set a single price for them. For example, they may sell a package of weight control information and consultation services bundled

with a fitness center membership. If healthcare services are bundled with other services, service providers should be required to indicate clearly to consumers how much of the price is for the healthcare services.

2. Designing a Reasonable System for Issuing Health Request to Patients

For patients who need healthcare, there should be an institutional instrument in place that requires a doctor to issue a request to a healthcare institution. To this end, the following should be reviewed: In what cases should a healthcare request be issued; how should the issuance of the request be compensated for; and what should be written on the request?

First of all, regarding the issue of when a healthcare request should be issued, it should basically be issued at the patient's own request. A request should be issued only if the patient agrees to the issuance of a request, of his/her own accord, based on the doctor's advice that he/she should take systematic healthcare.

In this context, it is necessary to compensate doctors for the issuance of a request, for otherwise they do not have the motivation to insist on issuing a request. On the other hand, compensations can motivate doctors to issue as many requests as possible. It may be desirable to let doctors issue many requests for the purpose of encouraging systematic healthcare. But there is no reason for insisting upon issuing a request even for patients who can carry out healthcare activities on their own. This is why healthcare requests need to be issued according to patients' wishes.

Second, with regard to how compensations for request issuance should be made, it is desirable to set the cost at a very low level (e.g., KRW 1,000) and let patients pay for it. This will work as a control against excessive issuances by doctors, but the expense charged should not be too big to place a big burden on patients. If request issuance expenses are to be covered not by patients but other sources, it is likely to cause problems in many aspects. Aside from there being no mechanism to control excessive issuances, there is no good alternative, even if it is decided that other public sources will be used to cover the expenses. Funding by the Health Promotion Fund or the National Treasury would give rise to the issue of fairness between people who take care of their health on their own and who do not. If the NHI budget is to be used, it will cause a financial balance problem as well as the issue of fairness.

Lastly, regarding details to be included in a request, the doctor should be required to write the specifics of healthcare that the patient needs as well as cautions that should be taken in the course of healthcare. If all that is written on the request is that healthcare is requested, from the patient's point of view, there is no need to get a request at his/her expense. The patient can find a healthcare institution and use its services without a doctor's request as long as he/she has information about healthcare institutions.

3. Preventing Solicitation and Brokerage

It is highly likely that health examinations will be the main

channel through which general customers enter the healthcare service market. Unless consumers seek healthcare services on their own judgment, the direct motivation for a patient will very likely come from the doctor's recommendation; for a non-patient, it will be checkup results.

In this respect, measures need to be taken to prevent checkup service providers from referring customers or send requests to a particular healthcare institution and to allow consumers to select healthcare institutions on their own initiative. Otherwise, circumstances leading to market failure may arise. It is particularly likely to happen that a checkup service provider that belongs to a hospital may refer customers to a healthcare institution affiliated or in partnership with the same hospital, which may lead to the excessive use of healthcare services.

At this point, there may be a different view about the excessive use of healthcare services. From the perspective that, unlike medical services, you cannot use too many healthcare services, some may wonder if there is any such concept as excessive health care service consumption. But this can be said only on the premise that there are no expenses incurred. Under any circumstances, it is recommended to be thorough about taking care of your health on your own, but you should not be induced to use unnecessary services from a healthcare company at your expense.

Since it is very likely for healthcare companies or healthcare institutions affiliated with medical institutions to employ a sales strategy to secure customers by tying themselves with medical institutions, such linkage needs to be blocked. However, checkup

centers should be allowed to provide information about healthcare operators if consumers want the information.

For this purpose, the authorities need to enforce guidance and supervision by checking if people who have received a checkup from a certain institution are concentrated into a particular health care center. On the part of patients, however, they need to exchange with their medical doctors information on any activity done at a healthcare service facility. When a doctor treats a patient, they should be able to reference such information as how the patient has done in nutritional care and weight control.

4. Consumer Protection

To protect consumers under the healthcare service system, the following measures should be taken: Build a service evaluation system; establish procedures for disclosing service quality and certifying high-performance institutions; enact regulations; protect privacy; and develop an investigation and supervision system for field investigation and check.

A service evaluation system should include service evaluation by users as well as service process evaluation and service quality evaluation for service providers.

With regard to service quality disclosure and certification of excellence, measures should be devised to allow high-performance institutions to use a certification mark and offer incentives, such as running a web page to provide information and publicize certified institutions.

Also, regulations should be laid out with the focus on obliging

service providers to explain pricing and service details, disclose prices and protect personal information.

An investigation and supervision system should be established to conduct a field investigation and check on healthcare service providers. This will lay the foundation for enabling the authorities to take action if they provide services outside of the healthcare service area or poor services falling short of the standards.

On the other hand, it is important to build an information system that can help consumers choose healthcare services as well as service providers. Information available through the system should be integrated with service evaluation results of healthcare service providers. To provide information about service evaluation results, the information network should be operated by the public sector. In this respect, it is better to make use of an existing network in the public sector rather than to build a new information system.

Section 6. Funding for Government Assistance

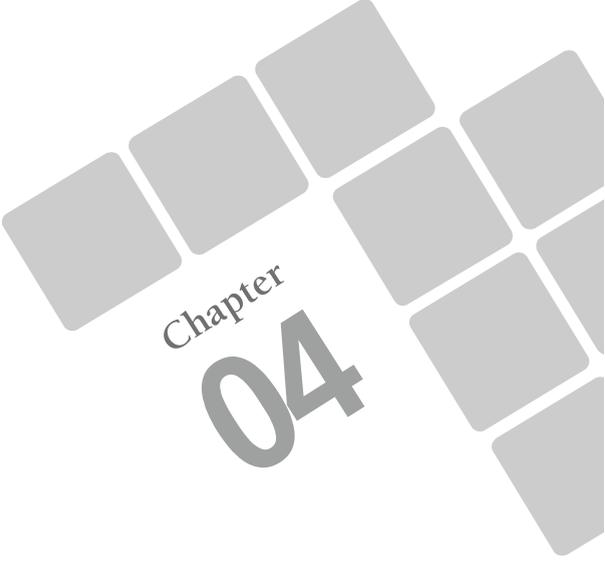
As a source for the government's voucher project budget, the Korea Health Promotion Fund (KHPF), the National Treasury, the Medicaid budget or the budget for NHIC subscriber support projects may be considered. Among them, the KHPF is likely to run into an obstacle in the course of pursuing a phased expansion of target recipients due to its limited funds available and its dependence on tobacco price increases. We should remember that, even if the income criteria for eligibility will be pegged at the same levels as in the current pilot project, the population

eligible for voucher assistance will increase greatly as the elderly population, the high-risk population and the chronically ill continue to grow. Furthermore, if the income criteria are eased up, required budgets will increase more rapidly. Given the continued growth of the target population, it may happen that the KHPF will not be able to finance the program sufficiently, which may in turn put a big damper on its proper projects.

If the Medicaid budget is to be used, problems may occur due to inconsistency between Medicaid eligibility criteria and healthcare service support criteria. Besides, the required Medicaid budget will increase so much that it may become an obstacle to the efficient financial management of the central and local governments.

Even the budget for NHI subscriber support projects will very likely have a limit to the amount that can be appropriated for healthcare services.

Therefore, considering the fact that supporting the low-income class for healthcare services is one of the government's fundamental responsibilities as well as the needs for phasing up the target population and the contents of services offered, funding the assistance program from the national coffers is believed to be the most desirable alternative.



Chapter

04

Conclusion and Policy Proposals



Chapter 4

Conclusion and Policy Proposals

Under the healthcare service system, it is considered desirable to introduce a voucher model as a way of supporting the low-income class. A voucher system itself has many advantages and disadvantages. Advantages include: First, it can promote public welfare by awarding vouchers to a class alienated from enjoying certain services. Second, it can help strengthen administrative supervision over local and private organizations by using vouchers as a way of paying for social services. Third, since vouchers give beneficiaries a wide choice of services, competition will be triggered among the market players to secure more users, which can help improve service quality. Fourth, as private organizations provide services, they enter the social service area. This will lead to the formation of a social service market. Lastly, a voucher system may produce the effects of administrative cost and budget savings.

Disadvantages include: First, while vouchers can help reduce public expenditures, they can cause additional expenses to be incurred to administer and manage vouchers as well as new regulations that have not been necessary in the past.

Second, because voucher users can use only the services designated on the voucher, it may happen that they cannot get the kinds of services that they want when they want them. Third, vouchers are given directly to users. This may boost

cost-effectiveness, but competition may be less effective due to high transaction expenses.

Fourth, competition may be distorted as service providers focus on marketing activities to attract consumers rather than enhancing service quality. This can cause damage to small-sized service providers. Lastly, the issue of fairness in terms of access and service quality between regions that have many service providers accepting vouchers and regions that do not.

Purchasing services with vouchers has various advantages as described above. The prerequisite for maximizing the effects of the advantages of vouchers and the “purchase of service” model is that there should be an active healthcare service market as in advanced countries.

However, the healthcare service market is not very active yet in Korea. Under these circumstances, there may be doubt on whether the purchase-of-service approach is justifiable. However, other than that, there are only a very limited choice of alternatives in reality, such as the expansion of services through the public sector or the provision of services through a wide range of contracts with private service providers.

Expanding services through the public sector is not very realistic, as mentioned above, nor is it cost-effective. If the population to be served is limited to the low-income class, it may be worthwhile to attempt to expand the delivery of services through the public sector. However, if healthcare services are to be expanded to the entire population including the middle and high class, there is a limit to what the public sector can do to expand its facilities and workforce.

Likewise, it is also impossible, in reality, to provide healthcare services to the whole population through contracts between the government and private service providers. It will not only require an enormous budget but also give rise to the issue that the government will end up supporting healthcare even for people in the middle and higher-income brackets. Besides, this will create a relationship of principal and agent between the government and healthcare companies, which will very likely produce inefficiency.

Therefore, as for the middle and high-income classes, it is recommended to let them use healthcare services at their own expenses according to the "Beneficiary Pays Principle," while making services available for the low-income class by assisting people financially to purchase services in the market.

If a healthcare service system is to be introduced according to the basic direction as described above, the prerequisite for making the purchase-of-service model work efficiently is that there should be a well-developed service market. However, Korea has two burdens to bear as it has no healthcare service market to speak of yet: It has to come up with plans for activating the market and supporting the low-income class at the same time.

These two policy tasks are not independent of each other but connected together. Therefore, the government has to design the system taking this complication into consideration.

However, the current design of the system is centered on assistance for the low-income class and lacking in plans for activating the healthcare service market.

As the current institutional design is also based on the premise of service purchases in the market, policy efforts to invigorate the market should take priority. Although a healthcare service system is enacted into law at this point, there is no market yet where all Koreans can use healthcare services as they want.

In this context, as a precondition for the successful execution of the healthcare service system, policy measures should be devised to increase service providers' participation in the market and invigorating consumers' use of services.

To this end, the voucher model of the current pilot project should be differentiated according to income levels, and incentives should be offered to recipients who achieve good results from healthcare efforts, while various efforts should be made to support consumers' use of services, such as promoting the availability of group services among local communities.

On the other hand, it is also necessary to take measures to promote providers' market participation, such as differentiating staffing requirements, providing support for educating and training service resources, publicizing programs and minimizing regulations.

Furthermore, institutional instruments should be prepared to maintain service prices at reasonable levels, manage service quality and protect consumers. A market environment in which consumers can use healthcare services freely should be created through such policy efforts at the earliest date possible.

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