Economic Perspectives on Healthcare Reform in Japan

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1. Introduction

The sustainability of our social security system has been called into question. According to the "Outlook for benefits and burden under the social security system in Japan (an estimate for 2004)," benefit payments under the current social security system, which are estimated at 86 trillion yen (in 2004 on a budget basis) are expected to amount to 152 trillion yen in 2025 (29% of national income). Meanwhile, the restructuring of public finances is our most pressing need, with the long-term liabilities of national and local governments amounting to more than 775 trillion yen (150% of GDP). Our social security system, which is, in principle, based on a social insurance method, is financially operated on the basis of a combination of insurance contributions and taxes, with an investment of public funds (about 63% of financial sources of social security in FY2002 came from insurance contributions, about 30% from public funds, including national and local funds, and about 7% from asset income) and this massive increase is directly conducive to financial deterioration. Therefore, in the "Integrated Reform of Expenditures and Revenues," the social security system, including a review of its entire system, and restraint on benefit payments, is no exception. We need to make effective use of limited resources to put finances on a sound footing and establish a social security system that does not postpone solving the problem for future generations.

This paper will focus on the healthcare insurance scheme, among social security issues. It has been noted that medical expenses in Japan are comparatively low internationally. Certainly, medical expenses in Japan in 2001 (on an OECD basis) ranked only 17th among 30 OECD countries, with the ratio of medical expenses to GDP standing at 7.8%. (Medical expenses in the U.S.A. ranked first, accounting for 13.9% of GDP, in the same year.) Based on this fact, there is a contention that Japan has been successful in providing a quality medical service at low cost. However, medical expenses have escalated rapidly compared to economic growth in recent years: in particular, medical expenses for the elderly have increased remarkably (Figure 1). It is anticipated that medical expenses will continue to increase in future and the ratio of gross medical expenses (on an OECD basis) to GDP in 2025 will reach 12.5% (9.5% on the basis of national medical expenses) (Table 1). Benefit payments related to medical service under the social security system are expected to rise correspondingly, from 26 trillion yen in 2004 to about 59 trillion yen in 2025, according to the outlook before the healthcare reform scheme was initiated in 2006. In order to establish a social security system that does not impose a burden on future generations, we have to promote the further prioritization and efficiency of benefit payments under the social security system, and to propose an alternative without delay, i.e. the extent of benefits and burden, for national discussion, so that we can make a decision on the level and

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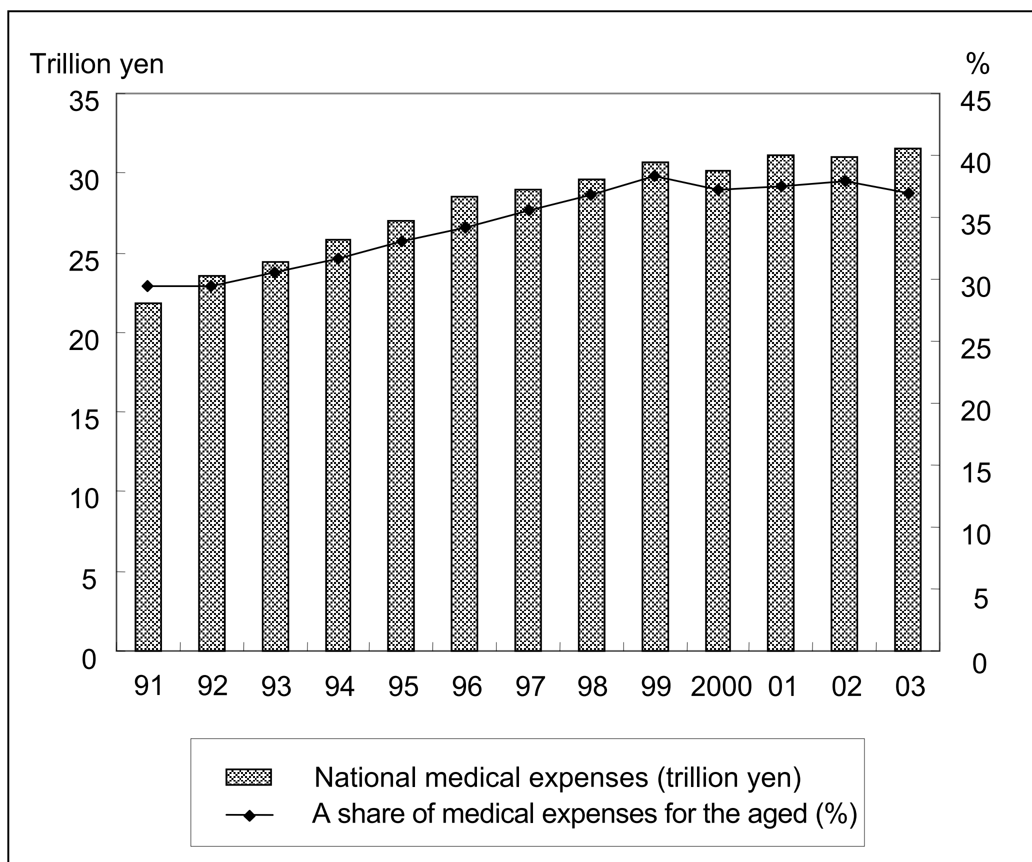
extent of benefit payments under the social security system, as well as on how the burden is to be borne, correspondingly (the Mid-term summary of Integrated Reform of Expenditures and Revenues).



Source: White Paper of the Ministry of Health, Labor and Welfare (for each year)

Figure 1 Changes in Medical Expenses

Table 1 Estimate of Medical Expenses in the Future

		FY2004	FY2010	FY2015	FY2025
Gross medical expenses (on an OECD basis)	Trillion yen	41	53	64	90
	Share in GDP(%)	8	9.5	10.5	12.5
National medical expenses	Trillion yen	32	41	49	69
	Share in GDP(%)	6.5	7	8	9.5

Note: Gross medical expenses include, in addition to national medical expenses, expenses for nursing care, in part, preventive and public health hygiene, operation costs, expenses for normal childbirth and expenses for non-prescription drugs.

Source: “Reform of the Healthcare Scheme” by the Ministry of Health, Labor and Welfare (March 18, 2005)

The 2006 Reform of the Healthcare Scheme aims at "steadfastly maintaining the universal health insurance system and making the healthcare scheme sustainable in the future" and at "promoting efficiency, assurance and a high quality of medical services" (see Table 2). This reform is composed of the following three pillars: The first pillar is to reduce the number of patients with diabetes and other lifestyle-related diseases, as well as potential victims of these diseases, by planning to methodically prevent lifestyle-related diseases to achieve an appropriate level of medical expenses as a medium- and long-term objective. It further aims at shortening the average number of days that patients stay in hospital, which is longer than the international average, by promoting specialization of medical institutions and cooperation among them. The second pillar is to establish a healthcare system for people aged 75 and over, the so-called healthcare plan for the advanced aged. The reasoning is to clarify the burden imposed on the elderly and working generations and make the present plan fair and easy to understand. A marked difference from the conventional elderly healthcare system is that it will collect insurance contributions widely and in reasonable amounts from the aged, who are dependents under the present scheme. Financial resources for medical care under this plan are composed of public funds (50%), contributions, an assistance grant for people aged 75 and over from various medical insurance associations (government-managed insurance associations, national health insurance associations, etc.) targeting people under 75 (about 40%) and contributions from people aged 75 years and older (about 10%), excluding patients' out-of-pocket payments. Contributions from insured people aged 75 years and older are collected by municipalities and the scheme is operated financially by a confederation, in which all municipalities in a prefectural unit take part. The third pillar is to promote the reorganization and integration of insurers, on a prefectural scale. For the national health insurance scheme operated by municipalities, the risk of major medical expenses in each municipal unit will need to be diversified on a prefectural scale. For the government-managed health insurance scheme, a public corporation on a national scale that is separate from the central government is to operate the scheme, to be able to promote the insurers' function, but the scheme will be operated financially on a prefectural scale, in principle. For the corporate health insurance plan, the reform sets out the establishment of region-based corporate health insurance, to possibly take over the business of health insurance associations, which will be reorganized and combined within the same prefecture.

The following criticisms of this healthcare reform have been raised: a review of government coverage (benefit payments from public funds) is partially complete. The reduction in the number of beds for patients requiring long-term convalescence at nursing homes or care facilities would generate care refugees in the present circumstances, where there are already insufficient facilities.[1] Furthermore, countermeasures to address lifestyle-related diseases, the cost of which is expected to amount to 1.6 trillion yen in 2015, offer no guaranteed effect, because the evaluation of the effect is based on a target figure: the assumption that diabetes would be reduced by 10% by 2015, provided in the "Health Frontier Strategy". The healthcare system for people aged 75 years and older in which contributions collected from subscribers account only for 10% of the benefit paid, is effectively an intergenerational income transfer from younger to older generations, rather than insurance, and it is not clear with whom the responsibility for healthcare for the aged lies (under governance of a confederation of public services set up to cover a prefectural area for administrative collaboration and coordination among themselves and with the prefecture). Even if the reform aims to strengthen and stabilize its financial base by the reorganization and integration of insurers, improvements to the scheme, which would enable it to display insurance functions (evaluation of the outcome of diagnosis and treatment, the recommendation of medical institutions by insurers, etc.), would remain insufficient.

1) The Japan Medical Association estimates that 40% of patients medically classified as Type 1, or about 40,000 patients, would turn into care (medical) refugees who would not be admitted to a hospital. (Asahi Shimbun: October 26, 2006).

Table 2 Gist of the Reform of the Healthcare Scheme in 2006

1. Promotion of comprehensive efforts to achieve an appropriate level and fair sharing of medical expenses
   (1) Development of a plan to achieve an appropriate level of medical expenses in the medium- and long-term: The development of measures to address lifestyle-related diseases, a reduction in the length of hospital admission, etc. (April 2008)
   (2) Detailed review of the amount and coverage of insurance, etc.
      - An increase in individual payments by the aged who earn the same level of income as the working generation, from 20% to 30%, and a review of meal and other living expenses for elderly patients (October 2006);
      - A review of individual payments by elderly people of 70 to 74 years of age, from 10% to 20%, and an increase in the coverage of reduced medical expense payments for infants (20%) from the current up-to-3-years-old, to preschool age (April 2008)
   (3) The abolition of nursing and medical care facilities (April 2012)
2. The establishment of a new healthcare scheme for the aged (April 2008)
   (1) The establishment of a new healthcare scheme for the advanced elderly (75 years and over)
   (2) The establishment of a financial adjustment system for medical expenses for people of 65 to 74 years old
3. The recognition and integration of insurers on a prefectural basis
   (1) Continued implementation of measures to strengthen the financial base of the national health insurance system (April 2006), a joint project for the stabilization of insurance finance (October 2006)
   (2) The incorporation of government-managed health insurance systems as a public corporation (October 2008)
   (3) The establishment of regional health insurance systems (October 2006)

This paper will consider problems in our public healthcare system from the perspective of economics and policy assessment. It is necessary to promote efficiency, both from macro and micro perspectives, to provide necessary and proper healthcare and to ensure sustainability of the system. In the next section, I will discuss how to realize macro efficiency that achieves an appropriate level of medical expenses, how to curb the growth of total medical expenses, and how to improve micro efficiency, which is efficiency of resource allocation. The former imposes budgetary constraints on the entire public healthcare system, while the latter demands optimization of the allocation of medical resources under such constraints. It is worth emphasizing that these are complementary to each other; efficient resource distribution facilitates management of the total medical expenses. It goes without saying that in addition to efficiency, fairness is essential. Fairness includes a fair cost burden as well as fair access to healthcare. In Section 3, I will provide an overview of ongoing discussions on how medical expenses ought to be charged. Because functions or a policy goal of insurance (risk diversification) and mutual assistance (welfare and reallocation) are mixed in a social insurance system, including medical care, discussions on the character of contributions and the sense of impartiality between benefits received and burden, have been confusing. I would like to point out that views on designing the financial system, that is, whether it is more desirable for contributions to be based on benefit or on the ability to pay, differ in insurance and welfare.

For developing a sustainable system, it is necessary to ensure credibility of the system from the public viewpoint, in other words, it must be politically supported, in addition to having financial soundness, meaning macro efficiency. Policy assessment needs thorough accountability in order to increase public support for the policies and the system. What is important here is to construct a policy system that is theoretically consistent. For instance, in order to achieve a policy objective, it is necessary to use effective policy instruments, which means that there is a clear cause-and-effect relationship, theoretically and numerically (Azuma (2005)). Furthermore, the policy objective itself must be clear; otherwise, there might be a need to provide a sound explanation later: we may have to devise a reasonable explanation about causes after the results have been released. As a result, accountability would not be enhanced and a policy review would not be promoted. In Section 4, I will verify the effectiveness of measures to achieve an appropriate level of medical expenses as a mid- and long-term objective from a policy evaluation perspective, and make some suggestions on how to design a system that fulfills accountability.

Efforts to ensure a fair allocation of medical resources, including public health promotion, require trial and error. It is also necessary to consider who is responsible for the consequences of a policy, as well as being accountable for it. In Section 5, I will focus on insurers and prefectural governments (local autonomous bodies) as I assume that they are the entities who reflect trial-and-error efforts in their policymaking and business, which consequently promotes overall efficiency. A key consideration is governance of the medical care system: governance that includes how insurers and local governments ought to share authority and responsibility. In my paper, I consider prefectural government as a sponsor that reinforces the insurers' functions, including examination of medical institutions, etc., and that monitors insurers.

2. Economics of the Efforts to Achieve an Appropriate Level and Fair Sharing of Medical Expenses

Macro Efficiency and Micro Efficiency

According to the Reform of the Healthcare Scheme, an assertion is made to set some kind of management target, or macro target, which links the growth rate of healthcare benefits with the actual economic scale in order to adjust the level of benefits and contributions to a realistic level, when compared with the national economy. One example of such a target may be the GDP adjusted according to the aging of the population (a nominal GDP growth rate + a population growth rate of those aged sixty-five years and older / the total population). There is, however, a counterargument against such a macro index: An increase in healthcare expenses is expected due to the aging of the population and technological progress, etc. and it is not appropriate to restrain its size solely on the basis of a macro measure that is not directly related to these factors. Furthermore, it is difficult to conduct a review that would result in possible suspension of the provision of necessary services and the imposition of an excessive financial burden on patients (comments by the Ministry of Health, Labor and Welfare). Certainly, an unreasonable constraint on medical benefits may bring about circumstances whereby necessary medical care services are not provided. It is widely known that there is already a shortage of pediatricians, gynecologists and medical institutions that provide home care.

In the context of the healthcare system, I would like to draw a distinction between micro efficiency and macro efficiency. The former represents the realization of productive efficiency (the maximum production with the prescribed inputs), or allocation efficiency (allocation of resources according to needs and minimization of expenses), within the framework of the prescribed constraints of resources (the total medical expenses available). The shortage of socially important medical services, such as the above-mentioned pediatricians and the treatment of cancers, is an issue that must be remedied by an improvement in micro efficiency, in other words by efforts to achieve the appropriate allocation of medical resources. In the first place, the current allocation of medical expenses is not necessarily essential and

appropriate: it is often pointed out that the average number of days patients stay in hospital in Japan is longer than the international average.[2)] There is also an empirical study of interregional disparities in medical expenses that cannot be explained merely by a difference in environments and disease structure (Study Meeting on Regional Disparities (2001)).[3)] Moreover, the ratio of medical expenses required per person for the aged to those for younger people, reached 4.9 to 1 in Japan in 1997, compared to 2.68 to 1 in Germany in 1994. If the distribution and use of medical resources are inefficient and, more specifically, say due to unnecessary tests and ineffective treatment, it would not be impossible to reduce expenses without reducing the quality of medical services and attain higher results for the same cost.

On the other hand, macro efficiency strives for appropriateness of the overall level of medical expenses in relation to an economic scale (the GDP) and its sustainability (a long-term balance between fiscal revenue and expenditure).[4)] As long as the market mechanism functions ideally, the choices made by each economic unit, such as households or enterprises at a micro level, and the allocation of resources, quantity of production and consumption within the price mechanism, should be an appropriate scale, and therefore sustainable (feasible), from a macro economy perspective. However, information available to medical institutions and insurers/insured (patients) is asymmetrical and in the circumstances of a divergence between benefits and burden, there is no guarantee that total medical expenses are sufficient to meet the needs of citizens. This is because asymmetrical information is likely to boost physician-induced demands and a disparity between benefits and burden may induce patients to get over-treated; this is called an ex-post moral hazard.

Some consider that if the government behaves rationally and with a long-term perspective, it would be trying to autonomously curb the total amount of healthcare benefits, to make the healthcare system sustainable and meet the tight constraints in the government's budget, including social security funds, and therefore management of the aggregate amount is not necessary in principle. However, the government cannot, in reality, be that rational and it has no knowledge, in advance, of the means of achieving an appropriate level of medical expenses. (Measures against lifestyle-related diseases referred to in the following section are nothing more than trials to achieve an appropriate level of medical expenses.) As a matter of course, the scale of resources that the economy should invest as a whole into healthcare services, being the ratio of appropriate medical expenses to GDP, will entail a value judgment and require social consensus. What is important here is how to maintain a scale that has obtained consensus, or is considered to be reasonable.

It may be said that, while Japan has been operating an excellent medical care system in terms of macro efficiency, because it has maintained its medical expenses at an internationally low level, its system has been inferior in terms of micro efficiency, because we see disparities in quality, malpractices and insufficient disclosure of information, including patients' medical charts. As means of improving micro efficiency, consideration should be given to the following: revising the current fee-for-service system that gives medical institutions an incentive for overdiagnosis to a prospective payment system based on Diagnosis Related Group (DGR), the promotion of use of generic medicines and the review of the regulation of hospital beds, which is liable to become a vested interest in hospitals. While the central government decides the standard medical fee payment system, prefectural government should possibly be able to set up their own standard medical fee payment system, based on the actual circumstances in the region (Fundamental Framework of Healthcare System Reform). Promotion of Evidence-Based Medicine (EBM)

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2) The average number of days that general patients stayed in hospital in Japan was 20.7 days in 2003, compared to 11.6 days in Germany, 13.5 days in France, 8.3 days in the U.K., and 6.7 days in the U.S.A. (in 2001 for all the countries). (The Health Care of Japan)

3) As for the national health insurance system by municipalities, a regional disparity between the highest and lowest medical expenses per person amounted to 4 to 1 on a municipal level and to 1.7 to 1 on a prefectural level (2002). A regional disparity in medical expenses for the aged, per person, was more or less 1.5 to 1 on a prefectural level (2002). Study Meeting on Regional Disparities (2001) showed via empirical analysis that such a disparity in medical expenses comes from the level of administration of medicines, the attributes of medical institutions, the behavior of patients and doctor-induced demand, and not from differences in the structure of diseases.

4) "Medical expenses" could mean medical benefits paid under the public medical insurance system, or national healthcare expenses including the portion paid by individual patients, but I will use the term based on the former.

and standardization of medical services will accelerate efforts to achieve the appropriate allocation of medical resources. Such efforts also include promotion of use of information technology for medical services, such as an electronic medical chart system, an electronic authentication system to access patient information and the electronic processing of medical receipts to promote the sharing of patients' medical history and other medical information among hospitals and clinics, towards solidarity of the regional healthcare system (Draft of Healthcare System Reform). Ineffective medical services result from asymmetric information that exists between those who work in the medical services field, and patients/insurers. Such asymmetric information can be corrected by promoting information disclosure, so that actual medical services may be compared with standard medical services and evaluated. It is, however, difficult for individual patients to collect and analyze information on medical practice that requires advanced professional knowledge. It is for this reason that an insurer's monitoring ability as an agent of the insured needs to be strengthened (see Section 5).

In addition to information disclosure, decentralization that provides medical institutions, insurers and local governments with authority to distribute medical resources, so as to meet the needs of regions and patients, will contribute to an improvement in micro efficiency. This is because decentralization allows various insurers and local governments to discover the best measures by experimenting with, and making a comparative assessment of, various policies, including specialization of functions and cooperation among medical institutions, health promotion, medical fee schedules, evaluation methods of medical institutions, etc. Micro-efficient allocation of medical resources cannot be planned by the state or by bureaucracy, but is rather created through trial-and-error policy experiments.[5)]

It is necessary to use a trial-and-error approach to improve micro efficiency, but macro efficiency is not necessarily guaranteed in its course. To take an example, let us suppose the case of the government adopting a policy to promote competition among medical institutions. In this case, if physician-induced demands are aroused or competition in quality, not price, i.e. the purchase of expensive medical equipment such as MRI, occurs in circumstances where asymmetry of information remains uncorrected, medical expenses may even increase. Demands for medical services do not necessarily reflect the proper needs of the public and when finances of the state and local governments investing public funds in the medical service are declining, management of total medical expenses (management of the ratio of public medical expenses to GDP, or management of the growth rate, etc.), from a macro perspective, is the second-best measure to ensure sustainability of the system and equity between generations (OECD (1995), Schut and Van de Ven (2005)).

To make macro management more effective and achieve a long-term balance between revenue and expenditure, it is necessary to set a rule in advance on the measures to be taken if the actual outcome differs from the numerical target (the process from Check to Act in the PDCA cycle).[6)] If we discuss which measures to choose, or in other words, start a political game, to deal with such problems after the deviation occurs – whether to reduce payment for medical treatment, increase the patient's share of expenses, including an exemption system that requires a patient to pay a basic fee plus the prescribed ratio of the remaining fee under the insurance system, exclude some treatments and medicines from coverage by public health insurance, raise contributions to the social insurance system, or make additional investments in public funds – then institutional uncertainty, or risk, for stakeholders such as insurers, the insured and medical institutions, could actually be increased. Postponing the problems without reaching a compromise would pass the burden on to future generations. An effective macro management strategy may be to close the gap to a certain level at least, by revising medical fee payments. As a matter of fact, our medical fee payment system does not sum up

5) It is difficult to conduct a policy experiment in a centralized manner. First of all, experimenting with new institutions and policies on a uniform basis throughout the country may turn out to be too costly in the event of policy failure. Secondly, if a trial is unsuccessful, it would be difficult to prove that the policy was wrong because there will not be sufficient cases to compare. Therefore, it would be difficult to correct an incorrect policy.

6) Here, what is called for in macro management, is not to bring the budget into balance for every period or to make medical expenses meet a target value.

individual medical expenses. Rather, the growth rate of the entire medical fee payment is fixed at first (reduced by 3.2% in FY2006, for example) and then individual points of medical fee payments are determined correspondingly. Therefore, this measure for revising medical fee payments is considered feasible. Different measures may be taken, depending on medical expense factors, such as aging and technological progress, taking into account intergenerational equity. If an increase in medical expenses results from increased public needs for medical treatment, in other words, if the public demand a higher quality of treatment, a raise in contributions to the social insurance system may be an alternative. We should at least not pass the burden on to future generations by additional disbursement from public funds, thereby increasing the financial deficit.

Micro Efficiency and Macro Efficiency – The Mutually Complementary Relationship

There is concern that macro management does not consider regional disparity, or impedes important medical practice, such as pediatrics. It is indispensable in improving micro efficiency, or in implementing an effective micro policy, not to impede the provision of necessary and appropriate medical services. Even if the total medical fee payments should be reduced to a lower level (as reduced by 3.2% in FY2006), we can distribute higher medical fee points, at a micro level, in domains such as pediatrics, obstetrics, anesthesiology, and emergency medical care, where the quality of medical treatment must be secured. These domains are recognized as being areas where we should place higher priority in the Basic Policy of the Revision of Medical Fee Payment System (2006). Furthermore, the change in the current medical fee payment system to a comprehensive payment system, may give room for medical institutions to reduce costs while still securing income. (Under the fee-for-service system, the effort to increase efficiency, such as reducing unnecessary examinations or medication, leads directly to an income decrease.) Needless to say, information disclosure and screening, or monitoring, by insurers and local governments must be enhanced to prevent medical institutions from securing profits by lowering the quality of medical services. I will emphasize the obstacles to the achievement of numerical targets for improving efficiency without ex-post monitoring in the next section.

I would like to explain the complementary relationship between micro efficiency and macro efficiency, using a simple figure (Figure 2). I will consider the case of allocating a fixed budget for medical expenses (the total amount of medical fee payments) to two uses of X, for example, pediatric services, and Y, for example, non-pediatric services. For the sake of simplicity, the prices of X and Y will be standardized as 1. Initial expenses are equal to OD. Let us assume that medical expenses have increased to OF due to an aging population and technological progress, and medical expenses after this increase are allocated at Point A. Social welfare (social benefit arising from the entire healthcare system) which is then realized equals u^{o}. Point A is evidently not micro efficient because resources are not allocated to maximize social welfare under a fixed budget constraint. Now let us assume that the total budget has been reduced to OE to achieve an appropriate level of medical expenses. If the allocation ratio between X and Y remains unchanged, which means an inflexible budgetary allocation, resources will be allocated at Point B subsequent to this reduction, and the level of welfare would decline to u^{1}. However, if micro efficiency were improved so as to provide medical services that meet the needs and maximize social welfare, resource allocation would be optimized within the budgetary framework of OE, resulting in the attainment of Point C. It would be possible to secure the initial welfare level u^{0}.

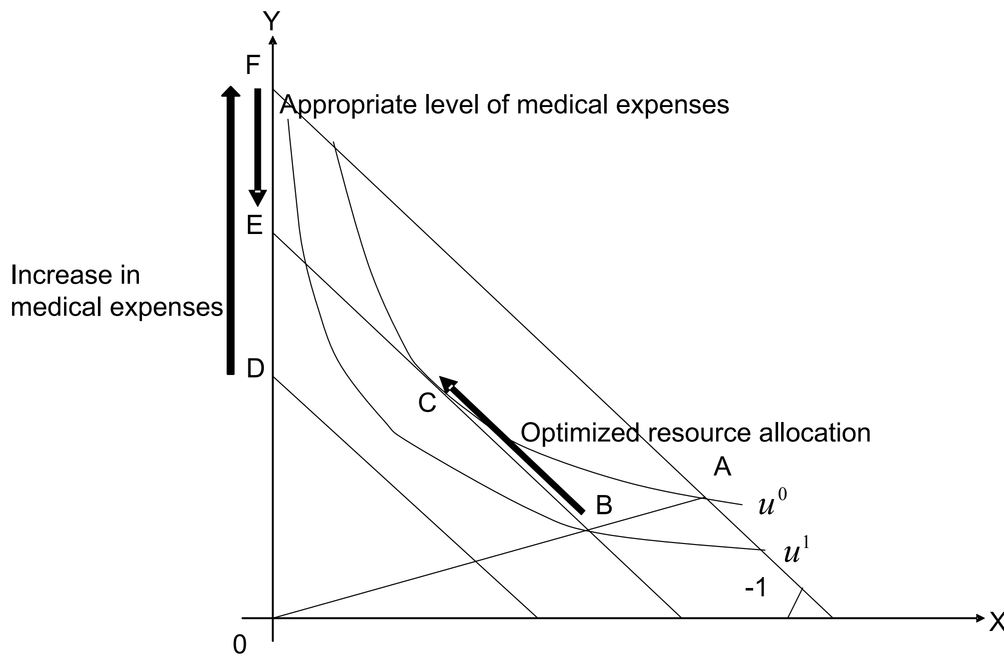

Figure 2 Macro Efficiency and Micro Efficiency

It is often argued that there is a tradeoff between a reduction in medical expenses and the quality of medical services. This is based on an assumption that micro efficiency is autonomously achieved, with costs being minimized. Under the current healthcare system, where there is no responsible management or competition among insurers and local governments, this assumption is not always valid. Increasing efficiency in resource allocation would facilitate achieving an appropriate level of the sum of medical expenses and secure macro efficiency. Promotion of micro efficiency is considered to contribute to ensuring that increased demand for medical services will be compatible with a macro budget constraint on medical services (OECD (1995)). However, if a mechanism has been established that helps to correct over-treatment and a moral hazard, and achieves the minimization of medical expenses and resource allocation that meets the needs of patients, it is desirable to gradually relax these containment measures.

3. Welfare or Insurance?

As efficiency can be divided into macro efficiency and micro efficiency, so too is the concept of equity multifaceted. Two principles of assistance (welfare) and risk diversification (insurance) coexist in the financing of current medical expenses. From the perspective of the former, the mechanism of bearing the cost according to one's ability while receiving benefits according to one's needs would be fair, based on the idea of mutual assistance and social solidarity of the nation. More specifically, a means of procuring financial resources that realizes redistribution of income, such as a progressive income tax or income-based social insurance contributions according to one's ability to pay, is fair. On the other hand, as insurance, bearing costs that match benefits received (insurance benefits received) may be regarded as fair, in terms of insurance contributions being actuarially fair. Although the present public health insurance system emphasizes the relationship between benefits and payments, it is effectively a transfer of income between generations, as is the case with a pay-as-you-go pension plan, in the circumstances where contributions paid by younger people

are spent mostly on the aged. Suzuki (2000) verifies intergenerational inequity that the net ratio of medical benefits (the ratio of benefits received minus the ratio of the insurance contribution rate over the lifetime) becomes negative in corporate health insurance and government-managed health insurance systems among men of the cohorts of 1965 and after, although according to the principle of assistance, "discussing the social security system from the perspective of profit and loss would be essentially incompatible with the principle" (White Paper of the Ministry of Health, Labor and Welfare, 2002). Hiroi (1998) contends that redistribution among generations through the pay-as-you-go health insurance system and generalization of nursing care and other welfare services, have made the difference between social insurance and welfare ambiguous (a more indistinct demarcation).

What matters is that when one system (here I mean the healthcare system) employs different principles, assistance and insurance, accountability for the system may be undermined. When contributions paid by younger people are increased, the principle of insurance is emphasized, while the disparity between a burden borne and benefits received would be justified, simply on the principle of assistance. This may result in a loss of confidence in the system itself. On the other hand, deviation from contributions based on benefits will, in reality, change the character of social insurance contributions into taxes. As income tax, the tax levied on salaries/wages distorts the employment system, reduces the employees' incentive to work, or induces tax saving and tax evasion, so social insurance contributions would distort decision-making by economic units such as employers and employees. We cannot merely assume that individuals become altruistic once the principle of welfare is asserted in the social security system, whereas the insurance principle makes them selfish. Rather, careful consideration should be given to the incentive of individuals to behave according to their self-interests, when contributions involve income redistribution.

Hiroi (1997) contends that, with an intention to match the institutional principles with actual functions, we should work on the healthcare system for the aged from the perspective of welfare or income compensation, since healthcare for the aged has the marked character of being redistributional and is incompatible with pure insurance due to the insured's high health risk. Specifically, he contends that it is desirable to first integrate healthcare for the elderly, nursing care and the basic pension system into a unified system for the aged, and then convert the method of securing the financial resources into a method of taxation. For the younger generation, on the other hand, he proposes promoting efficiency of medical service based on the principle of choice and competition, or managed competition, when enhancing the insurers' function, as mentioned in Section 4.

Iwamoto (1998), on the other hand, contends that we should divide the change in medical expenses into foreseeable risks, namely the change in the demographic structure such as aging and unforeseeable risks such as technological progress, and only cope with the latter by risk-sharing between the generations (intergenerational distribution). For the former, he contends that we should consolidate the system and make use of the principle of insurance. Iwamoto addresses that, more practically, based on the premise of independence of insurers such as the national health insurance system, government-managed insurance systems and corporate health insurance systems, we should make risk adjustments for factors in medical costs that cannot be changed by the self-supporting efforts of each insurance system, such as the age structure and income level of the insured. He proposes funded long-term health insurance that saves the prospective present value of lifetime medical expenses in advance, by contributing the best measures to encourage self-supporting efforts by individuals (Iwamoto, 2006). This is a sort of compulsory saving system for future medical expenses and does not, in principle, entail income transfer or risk diversification among individuals. The idea of such a form of funded health insurance, which is practically a medical savings account, is also proposed by Nishimura (1997) and Kawabuchi (2002), from the perspective of promoting self-support by individuals.[7)]

Whether healthcare for the elderly or an unexpected increase of medical expenses, we need social

7) However, it would be difficult to save in advance for an unexpected increase in medical expenses (Iwamoto, 2002). Furthermore, as pointed out in the private account of a defined contributions pension plan, such as 401K, its operation may involve financial risks.

consensus on the scope of the principle of assistance or intergenerational reallocation. Furthermore, we need to establish a system whereby the functions of insurance and welfare are separated, with coverage of each function clearly defined, in order to enhance transparency of the system and to be accountable for the uninsured, particularly the younger generation.[8)] I would like to give a full account of the merits of a separation of functions (separation of policy goals) in the next section.[9)]

4. Perspectives on Policy Evaluation

The Effectiveness of Policy Instruments

The current reform of the healthcare system includes efforts to prevent lifestyle-related diseases as one of its central pillars. More specifically, the government will formulate a five-year plan, starting in FY2008, to achieve an appropriate level of medical expenses. This will set forth policy objectives as numerical targets, which include reducing patients with lifestyle-related diseases and potential patients by 25% from FY2008 to FY2015. This plan will also require, or unify, insurers becoming the sole body implementing medical examination and health guidance for insurance subscribers aged 40 and over, starting in FY2008.

A rough cost estimate of reduction efforts to achieve a fairer level of medical expenses by enforcement of countermeasures against lifestyle-related diseases is over 2.8 trillion yen in FY2025, according to the Ministry of Health, Labor and Welfare (see Table 3). However, its effectiveness is unclear. Although the plan intends to increase the consultation rate of a health checkup by concentrating on a few checkup items that are considered more important, based on scientific grounds, reinforced efforts towards accurate management of health checkups, and intends to promote management and dissemination of effective methods on scientific grounds in healthcare programs, including post-checkup guidance, there is no consensus on the issue of scientific grounds. Even if the government verifies efforts that show certain achievement of reducing patients and potential patients of diseases such as diabetes by 25%, the generality and universality of such effects are not guaranteed, unless failures are verified, in addition to individual successes. In the first place, the incentive for the insured is not clear: it is very vague as to what incentives a health guidance program will provide for the insured to improve their health in everyday life.[10)] The above-mentioned 2.8 trillion yen is not an objective forecast of the effects of the measures taken to address lifestyle-related diseases; it is only a numerical policy target. Even if prefectures set up a target for a reduction rate in patients and potential diabetic patients, etc. as well as a target for a rate of conducting medical checkups and health guidance to achieve such targets, and promote cooperation among medical insurers, prefectural governments and municipalities, the establishment of specific methods, such as effective health checkups and lifestyle guidance, is still undergoing trial and error.

8) Insurance involves the ex-post transfer of income, if medical risk has been actualized. According to the veil of ignorance, we would find welfare bearing the role of insurance, such as risk sharing between generations. What is separated here, is policy goals and not policy effects. Policy evaluation, mentioned later, is required to be based on initial policy objectives, not on policy effects.

9) If contributions are charged according to health risk, with a full application of the principle of insurance, there may be criticism, such as the practice being unfair, or contrary to an ability-to-pay principle, for people in a lower income group. If so, the state or local governments will just have to prepare subsidized contributions to support them, from the perspective of welfare. In this paper, my stance is to add a policy instrument that pursues different goals (in this paper, assistance for people on a low income) rather than to cram more than one objective into one policy or system.

10) It is widely known that insurance impairs one's incentive to evade risk, or specifically, to prevent diseases. This is called an ex-ante moral hazard. In order to correct this moral hazard, we must enhance the insured's incentive by: (1) increasing individual payments if they consult a doctor; (2) raising taxes on goods and services (for example, tobacco and liquor) that cause lifestyle-related diseases; and (3) introducing a refund system that allows a portion of contributions to be refunded to the insured when they refrain from consulting a doctor for a certain period.

Table 3 A Rough Estimate of the Effects of Achieving an Appropriate Level of Medical Expenses

		FY2015	FY2025
Estimated amount of the outlook for benefits and burden (2004)	National medical expenses (ratio to national income)	49 trillion yen (11%)	69 trillion yen (13%)
	Payments for benefits (ratio to national income)	41 trillion yen (9%)	59 trillion yen (11%)
(1) Measures against lifestyle-related diseases		1.6 trillion yen (approx.)	2.8 trillion yen (approx.)
(2) Reduction in the average length of hospital stay		1.7 trillion yen (approx.)	4.9 trillion yen (approx.)
Total amount of the effects of achieving an appropriate level of medical expenses (1)+(2)		3.3 trillion yen (approx.)	7.7 trillion yen (approx.)
Medical benefits reduced		2.8 trillion yen (approx.)	6.5 trillion yen (approx.)

Source: Materials on the Draft of the Structural Reform of the Healthcare System, prepared by the Ministry of Health, Labor and Welfare (October 26, 2005)

A reduction in the average duration of hospital stay has the same problem. The suggested method to reduce the average duration is a specialization of medical functions and cooperation among medical institutions. The aim is to promote specialization and cooperation of medical functions at a regional level, with the aim of providing a continuous service, from hospital care to home care, and to review the details of specialization and cooperation of medical functions under the health service plans prepared by prefectural governments in order to provide patient-centered medical services. It also aims to clarify functions in accordance with the area of expertise of each medical institution (Draft of the Structural Reform of the Healthcare System). However, a prefectural government is not authorized, for example, to select medical institutions or issue licenses to them. Even if a critical path of regional cooperation is proposed, it may not prevail unless there are measures to make it mandatory, or to provide preferable treatment (special additional remuneration) to medical institutions that adopt it. In the first place, even if the average duration of hospital stay were reduced, medical expenses paid per hospitalization would not be reduced, as long as it is accompanied by intensive medical treatment.

While efforts to achieve an appropriate level of medical expenses in the mid- and long term under the 2006 Healthcare Reform sets a numerical target for health promotion (for example, decreasing the incidence of diabetes by 20%) as part of the Health Frontier Campaign (2005 - 2014), or for the average duration of hospital stay, we lack a theoretical model, the establishment of a cause-and-effect relationship of policy instruments, and results.[11] Concrete measures such as the preparation and execution of the Health Promotion Plan and the Medical Plan must be implemented by prefectural governments, and the feasibility of achieving numerical targets is not guaranteed. It is also not clear whether a coverage rate of a health checkup and a rate for conducting a lifestyle-guidance program can be expanded by enhancing public awareness or providing information, which is an instrumental variable, a policy tool that can be controlled directly by

11) In order to evaluate the effectiveness of policy instruments, it is necessary to set up policy objectives and numerical targets in advance, on an outcome basis (health promotion). It is also necessary to clarify the quantitative scale and qualitative details of such policy instruments and specify external factors that may affect policy objectives. Additionally, quantitative and qualitative correlation among policy objectives, policy instruments and external factors must be clear (Hayashi (in 2004)).

autonomous bodies and insurers.[12)]

Certainly, health promotion and the establishment of a regional medical network will improve micro efficiency because this promotes a proper distribution of medical resources. However, a policy instrument directed towards the realization of this is still being developed. Taking into account an increase in expenses that is difficult to foresee, such as those arising from technological progress, it is not clear whether efforts to achieve an appropriate level of medical expenses, or macro efficiency, will be realized on a macro level, as tentatively estimated. We must therefore consider cost-effectiveness. There is a preliminary calculation that the payments for benefits that can be saved are no higher than 1,090 yen (270 yen for an individual payment) even if we increase expenditure on the healthcare program by 10,000 yen per person (Kono, 2004). Even if payments for medical benefits are reduced, it is meaningless from the perspective of achieving an appropriate level of costs, if expenses invested in the medical service as a whole increase.

In order to make the healthcare system sustainable over the years, it is desirable to ensure that the system is self-contained. In order to maintain macro efficiency, as explained in the previous section, we should prepare measures, or Plan B, as a rule, in case the measures against lifestyle-related diseases fail to achieve an appropriate level of medical expenses, as initially intended. At least, we should not depend on wishful expectations, such as an economic boost or an unearned increment in tax revenue. If not, stakeholders such as the state, local governments, insurers and medical institutions will do nothing but cast the blame for overpayment of medical expenses on each other, thereby delaying reform to achieve an appropriate expense level and the fair sharing of medical expenses. This may endanger the stability of the system itself.

Clear Policy Objectives and Responsibility

As outlined in the previous section, different policy goals (functions), such as risk diversification (insurance) and assistance (welfare), coexist in the social security system. Not only social security, but other public policies, including public projects (infrastructure, economy-boosting measures and employment creation in sparsely-populated areas) and education (personal development, accumulation of human capital (enhancement of labor productivity), promotion of equal opportunities and reduction in disparity), have diversified policy goals. It is known in public economics that, if there are an equal number of policy objects (promoting the efficiency of resource allocation, securing of equity, stabilization of economics, etc.) and policy instruments (supply of public goods and related regulations, welfare, economic-boosting measures, etc.), it becomes possible to assign a sole policy objective to a policy instrument ("Tinbergen's Theory"). However, if only the second best option is available, with only a limited number of policy instruments available, we have no choice but to pursue more than one objective for one policy. As a consequence, a trade-off arises among different objectives, such as efficient resource allocation and fair income distribution. According to normative public economics, it is desirable that multiple policy goals, such as equity and efficiency, are totaled into the sole social welfare function and that the policy system is designed to maximize it. The importance to be placed on policy objectives that should be incorporated in the social welfare function is determined according to value evaluation and social consensus.

However, this does not mean that a social welfare function is being pursued in the actual process of policymaking. In the first place, there is no social consensus on the sole criterion of value for the entire public policy. As far as multiple objectives are pursued with one policy instrument, a comprehensive evaluation of its outcome is necessary. We are, however, liable to assess the outcome discretionally, or just to confirm the present status. To give an example, even if a public project seems useless and non-productive, the project may be approved because it may create employment (a safety net) in local regions. Earmarked funds for road improvement are immune to a radical review by expanding its objective (the wider use of funds). Local

12) Under the project for preventive nursing care, which started in April 2006, authorities reach less than 1% of old people aged 65 and over, as the aged who would potentially need nursing service in the near future. The period is from April to August. (A target is set for 2-3% for each government.) The ratio of participation of the aged in Preventive Nursing Care Seminars remains at only 30% (Asahi Shimbun, October 29, 2006).

allocation grants (intergovernmental transfers) that have been increasingly criticized as compensation for local governments – making up the difference between annual expenditures and revenue – can remain unchanged as a system for adopting a new slogan of driving local motivation (assessed as an incentive for administrative reform). Measures to counteract the falling birthrate, such as the expansion of childcare centers and an increase in the child allowance, are not always clear as to whether the measures are intended to raise the birthrate of society as a whole or improve the environment for child-raising (for families with children or, particularly, dual-income families). Even if there is no rise in the birthrate in the future, social benefits may be emphasized in terms of child raising. As far as one can find a purpose that justifies the outcome of a policy (enforcement of a policy and a project), accountability for the policy is not established and a review of the system and the policy would not be promoted.

As for measures against lifestyle-related diseases, a reduction to 7.7 trillion yen in FY2025 is expected (6.5 trillion yen on the basis of benefits paid for medical services), together with reducing the average length of a hospital stay – diffusion of health checkups and lifestyle-guidance programs themselves (provided that they have actually been diffused) may be emphasized as an outcome, if it is found difficult to achieve an appropriate level of medical expenses as a mid- and long-term objective. As a matter of course, if patients with lifestyle-related diseases are reduced, micro efficiency is improved, in the sense that quality of life (QOL) increases. However, the important thing in evaluating policies is cost-effectiveness, from the perspective of the initial purpose (efforts to achieve an appropriate level of medical expenses).[13)] If health promotion itself were a policy objective, there might have been no rationale to invest public funds, for instance, as a subsidy for health checkups to prevent lifestyle-related diseases. (For municipally-operated national healthcare insurance, national and prefectural governments grant a subsidy covering one-third of the expenses.)

In order to enhance accountability, it is desirable to build up a policy system that allows policy instruments to correspond with one policy goal. Shifting the basic pension scheme to a pay-as-you-go financing plan, while applying the funded plan to earning related pensions fully (or privatization of the operation), may be considered to be a part of the separation of functions or policy objectives. This allocates the welfare (assistance) function of the public pension system to the former, and its insurance function to the latter. In this case, policy evaluation of the basic pension can be done from the perspective of assistance and mutual help, and earning-related pensions only from the perspective of insurance (risk diversification). Under the public medical insurance system in the Netherlands, the insured pay social insurance contributions (based on revenue) to the social security funds (central funds) and pay a nominal premium (based on an insurance plan) to the insurance company with which they take out insurance. The former is the fiscal resource of risk-adjusted premiums, mentioned below, and assumes the function of social solidarity (redistribution). On the other hand, the latter is, in principle, determined so as to reflect management efficiency (efforts to achieve an appropriate level of medical expenses) by insurance companies. In the Netherlands, where people can choose an insurance company at their option, this nominal premium serves to stimulate price competition. If measures against lifestyle-related diseases have the purpose of promoting the health of citizens, thereby trying to promote healthcare (Article 1 of the Law on Promotion of Health), we should make health promotion the only policy objective (that is to say, assess the effectiveness of a policy by the degree of attainment of health promotion) and apply other policy instruments (macro index. etc.), to restrain healthcare benefits on a macro level.

Not only clarity of where accountability lies, but also clarity of where responsibility for consequences lies, should be considered. Even if to secure high-quality and efficient medical services, we aim to provide high-quality and efficient medical services to the residents of a region with the cooperation of those concerned, such as insurers, medical institutions and local public bodies, without a clear assignment of authority and responsibility between a prefecture in charge of formulating medical plans and health

13) Even if the health promotion plan itself contributes to the constraint of medical expenses, we do not conclude that the plan is the driver of achievement of a fairer level of medical expenses as a whole, if it is offset by other factors.

promotion projects, and an insurer made responsible for health checkups and healthcare projects, they will cast the blame on each other for the failure to provide such medical services. In the case of the healthcare system for the aged of 75 years and older, a system with 50% of its financial sources deriving from public funds, if contributions escalated, each of the parties may be able to exculpate themselves from such an increase in contribution, pleading either that the efforts towards efficiency by a confederation of public services as an operator of the healthcare system was insufficient, or that the financial support they received from central government was lacking. This may finally result in a situation where those concerned and others, namely, prefectures and insurers, or the central government and local governments, all shirk responsibility, rather than share it. In this situation, a review of the policy (in case of the healthcare system for the advanced aged, efforts to achieve an appropriate level and fair sharing of medical expenses for the elderly and the financial support system of the state) formulated on the basis of assessment, will not be promoted.

In addition, the parties concerned must be given the authority they need to review a policy. For example, if the policy objective of securing medical service of high quality has been assessed as insufficiently attained, it would be necessary to effectively expel a medical institution of low quality that does not obey prefectural orders to improve from the area, for example, by canceling the license authorizing it to operate facilities in the area.

Numerical targets and monitoring

Numerical targets and result-oriented assessment systems based on these are being increasingly criticized. Illegal exemption of contributions practiced by national social security offices to increase their collection rate of national pension contributions and false reports submitted to the Boards of Education by schools concerning the number of bullying cases that have taken place in their schools, are typical examples of evil practices caused by numerical targets. For numerical targets to be of use, there must be a mechanism to examine whether they are true or not, in addition to setting targets and requesting a report of what they have achieved. The above-mentioned cases were caused by the absence of inspection of reports on performance (ex-post monitoring) or an insufficient inspecting ability by superior organizations (the Ministry of Health, Labor and Welfare for national pensions and the Boards of Education for the number of bullying cases). Policy evaluation should not assume that human nature is fundamentally good, based on the presupposition that a report submitted ought to be true and correct. It is indispensable to inspect the evaluation itself, in the process from “Check to Act” in the PDCA cycle. If not, then from the perspective of economics, an incentive to embellish performance of numerical objectives may arise.[14)] It would be an appropriate policy proposal to request reinforced monitoring to make numerical targets effective and not to discuss the rights and wrongs of numerical targets, on the given condition of the absence of ex-post monitoring.

As a matter of course, the incentive of a unit (organization) itself that is responsible for conducting an inspection must be taken into account. If it is an actor that always supervises an executing organization (an agent), it may be involved in false reporting to escape its supervising responsibility. There is a risk that their monitoring itself may become self-benefiting. It would be desirable to make use of a third-party (outside) organization that is equivalent to the Board of Audit.

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14) The relationship of conflicting interests between an agent taking upon itself the job of executing a policy (for example, a social insurance office) and a principal assigning execution of the policy (for example, the Ministry of Health, Labor and Welfare) is known as an agency problem.

5. Supporter of Efficiency

Governance and the Insurer's Function

Current healthcare reform has as its aim the operation of insurance by the body that brings the insurers' function into full play, together with the aim of reorganizing insurers. It is specifically proposed that reorganized insurers should further strengthen their efforts to check medical receipts, etc. and promote a joint operation among insurers of counseling the insured, the provision of information on medical services in the region, etc., and a painstakingly implemented healthcare scheme on a prefectural scale (a fundamental principle concerning the medical insurance plan system and medical fee schedule).

While the reform sets out the reinforced functions of insurers that include their integrated relationship with the insured in their health management, as well as setting the level of contribution in conformity with efforts to achieve an appropriate level and fair sharing of medical expenses, insurers themselves cannot choose medical institutions or negotiate with them individually on medical fees or the quality of health services under the current system.[15] Insurers do not enter directly into contract with medical institutions, but the latter are appointed by the Director of the Regional Social Insurance Bureau, in accordance with an application filed by medical institutions. Medical institutions authorized to treat patients with health insurance coverage and health insurance doctors are under the direction and supervision of the Minister of Health, Labor and Welfare, or Directors of Regional Social Insurance Bureaus, or governors of prefectures, in accordance with the provisions of the Health Insurance Law, etc. The laws and ordinances provide that, for services involving the exercise of governmental authority, such as designation, guidance and auditing, the state must continue to provide these on its own responsibility from the standpoint of securing stable and sound operation of services in the entire medical insurance system (concerning administrative services such as the designation of medical institutions authorized to treat patients with health insurance coverage). Even if insurers take a duty or a responsibility upon themselves, they cannot attempt to achieve an appropriate level of medical expenses, unless they are given authority, for instance, to enforce discipline on medical institutions. Properly, responsibility and the authority as measures with which to fulfill it should be distributed as one. Governance (an operating body and one with whom management responsibility rests) of integrated and reorganized insurers (associations of municipally-operated national healthcare insurance that are reorganized to cover a wide area, region-based health insurance associations and incorporated government-managed health insurance associations), must also be considered. Without clear assignment of responsibility for consequences of insurance operation, as mentioned above, the fiscal discipline of insurers themselves will not be maintained.[16]

In recent years, reinforced insurers' functions have been expected to bring efficiency (a guarantee of low costs and high quality) in the healthcare system (Hiroi (1998), Yamazaki, Ogata (2002)). As a matter of course, there are arguments for and against the adoption of managed care, including direct contracting with medical institutions and drastic system reform. Party capacity (management capacity) of insurers must be considered. Nevertheless, it is considered feasible to give insurers the authority indispensable to controlling medical expenses and enhancing their efficiency, such as the collection and analysis of information on medical institutions by insurers, recommendations of medical institutions and direct negotiations with medical institutions, by revising part of the system and amending notices (Takiguchi (1999)). It is desirable,

15) However, in and after 2002, for inspection and payment service by health insurance associations etc., it has become possible for health insurance associations to undertake inspections and payment services themselves, or consign these services to entrepreneurs, other than the payment of funds, in agreement with specific medical institutions authorized to treat patients with health insurance coverage.

16) There is vertical support (measures to reinforce the financial base of the national health insurance scheme) by the central government and prefectures to associations of national health insurance operated by municipalities. For the healthcare system for the aged of 75 years and older, as well, the central government and prefectures are jointly responsible for reducing financial risk of a confederation of public services set up to cover a prefectural area. Such financial support is designed to stabilize the financial base of insurers, but is liable to make it unclear where financial responsibility lies.

for the time being, to promote the provision of medical information to insurers and to enhance the inspecting ability of insurers, such as the ability to inspect medical receipts and then proceed to the stage where insurers and medical institutions enter into direct contracts, or insurers and medical institutions strengthen cooperation with each other in health checkups and prevention of diseases (Council on Fiscal and Economic Policy, Basic Policies (generally called a "big-boned" policy) 2001).

It is insurers who play an important role in managed competition, which was proposed by Enthoven (in 1999) and which provided a guiding principle for healthcare reform in Europe, including in the Netherlands. Managed competition aims at creating social solidarity (access to mutual assistance and equitable healthcare), consistent with efficiency (proper distribution of medical resources), by the government's construction of a regulatory framework that is complementary to the market function, such as risk-adjusted premiums. There, insurers are given authority (managed care) to make a choice between medical institutions and to contract individually for medical fees.[17] Insurers with reinforced functions are regulated by competition among insurers (choice of the insurers by the insured).

Several conditions must be satisfied over the medium and long term (about 10 years) in order to urge insurers to reinforce their functions and to encourage managed competition. Firstly, the information gap existing between those engaging in healthcare services and patients must be filled, and information must be disclosed by each medical institution to facilitate the sharing of information among them. Measures to be taken for this could be to promote computerization of medical services, including the use of electronic medical charts and medical receipts, while making it compulsory to use ICD (International Classification of Diseases) coding, converting these into numbers by DRG, and making such information available to the public (Kawabuchi (2002)). It is also necessary to standardize medical services through medical treatment based on scientific grounds (EBM). It may not be possible to make standardized medical practice compulsory for all medical institutions, but insurers may be able to assess the performance of medical institutions and the details of medical services actually provided, using this as a benchmark.

Secondly, it is necessary to take measures to remedy an imbalance of burdens on insurers, not caused by managerial efforts, but reflecting different risk groups. The current healthcare reform plans to establish a mechanism where the imbalance of burdens that insurers bear, due to the uneven distribution of people of 65 to 74 years of age among the insurers, will be adjusted according to the number of insured (under 75 years of age) in each insurer's scheme, while younger people of 65 to 74 years of age, remain as subscribers in the previous schemes of national insurance, or employee's health insurance. Such financial adjustment among insurers has the nature of ex-post compensation for the loss (imbalance of a burden) incurred by insurers, and the mechanism is not in place to afford an incentive to constraints on medical expenses, or to promote their efficiency.

A risk-adjusted premium has been introduced in Germany and the Netherlands as a system to correct the disparity that exists among insurers, in disease and age structure.[18] When a risk-adjusted premium was introduced in the Netherlands in 1993, only (i) sex and (ii) age were considered as risk factors, but efforts have since been made to improve accuracy (conformity with the true risk of an insured) as follows: In and after 1995, in addition to sex and age, (iii) place of residence and (iv) whether an insured has a physical disability (this has been changed to whether an insured is a beneficiary of employment and social insurance) have been added. In 2002, (v) prescription of drugs (adjustment of risk based on chronic diseases and medical treatment received as an outpatient) were added and in 2004, (vi) previous diseases (DRG) (adjustment of risk of hospital treatment) were incorporated as risk elements (Van de Ven et al. (2004)). The ratio of compensation for loss paid to insurers has been reduced accordingly, from 97% in 1993 to 50% in 2006 and

17) In the Netherlands, in and after 2005, 10% of hospital expenses have been subject to individual negotiation between insures and medical institutions (Schut and Van de Ven (2005)).
18) For details on risk adjusted premium, refer to Van de Ven and Ellis (2002). The Dutch risk-adjusted premium has a social insurance contribution (based on income) paid to the Central Funds as financial resources. In addition, the insured pay the uniform premium to the insurer in which they are subscribers. On the other hand, insurers make a financial adjustment "horizontally" among themselves without acting through an organization such as Central Funds.

their budgets have tightened. Such financial adjustment is, in principle, conducted on a comprehensive payment system, and not made to medical expenses actually paid. It is accordingly expected that this will provide an incentive to insurers i.e. Sickness Funds in Germany and private insurance companies in the Netherlands since 2006, to achieve an appropriate level of medical expenses.

It goes without saying that even if the authority and function of an insurer are strengthened, it does not necessarily follow that it exercises its authority thus strengthened to suit the interests of the insured. There is no guarantee that an insurer acts as a perfect agent on behalf of an insured. Competition among insurers may be an insufficient imposer of discipline on them, unless the insurer has disclosed necessary and appropriate information (medical service covered by insurance, additional benefits, contribution, etc.) to an insured. A mechanism of monitoring an insurer that monitors a medical institution (to monitor a monitor) is needed. This is the role played by the under-mentioned sponsor.

Prefectural Government as a Sponsor

In Japan, decentralization is also being promoted in the healthcare system. A plan has already been made to reduce the national government's contribution to national health insurance operated by municipalities and to increase the financial burden on prefectures, as a part of the Three Pillar Reform Package (for the reform of the state subsidy system, the transfer of tax sources, and the reform of local allocation tax). This package itself aims at increasing the ratio that local governments pay, on their own authority and responsibility, as well as with their resources and at constructing a simple and efficient administrative and financial system at national and local levels (Basic Policy Direction of 2004). Specifically, a decision has been made to reduce subsidies for financial adjustment by the central government and to establish subsidies paid to a prefecture for financial adjustment instead. Furthermore, subsidies by the state paid to the Project to Support Financial Stabilization, a project that was designed to strengthen the financial base of the national health insurance scheme, has been abolished and the ratio of the burden imposed on prefectures has been raised. In addition to financial support for the national health insurance scheme, prefectures are expected to play their roles in preventive measures against lifestyle-related diseases and healthcare programs (improvement of the medical delivery system, including the promotion of cooperation among medical institutions, tie-ups with nursing care and the promotion of home care). In the above-mentioned plan to achieve an appropriate level of medical expenses (a five-year plan), the central government provides support for the implementation of the project, while prefectures, in their health promotion projects, make plans for and implement activities, including the following: setting targets for a ratio of giving guidance in physical exercise and diet, of medical examinations and health guidance, etc., the provision of guidance to insurers in their operation (guidance in health checkups and insurance), the promotion of specialization and cooperation of medical functions, and the promotion of home care. Thus, the purport of the plan is to strengthen the roles prefectures play as the first step taken to achieve an appropriate level of medical expenses and a more extensive insurance operation. The following are justifications for this assertion: 1) Operation on a prefectural scale is required to standardize contributions and stabilize insurance finance; 2) A patient's act of consulting a doctor does not, generally speaking, extend over the sphere of a prefecture (the tertiary medical sphere); 3) The distinguishing regional features of medical care (disease structure, patient's behavior when undergoing a medical examination, etc.) differ widely from prefecture to prefecture, and therefore, 4) Based on these, prefectures can play their roles in the national health insurance service, by striving to operate a medical plan, by supporting plans for the nursing care insurance scheme, and by supporting the health promotion plan, in alignment with the health insurance scheme (on the reorganization and integration of the national health insurance scheme). However, as for efforts to achieve an appropriate level of medical expenses there is a counterargument: "As a matter of course, the central government should be responsible for this and we, the prefectures, consider it unacceptable that we are made to set a numerical target and are held responsible for the consequences that ensue" (National Governor's

Association: "View on healthcare reform").

Table 4 The Sharing of Roles

		Function (example)
Sponsor	Central Government	Standard medical fee, preparation of guidelines for plans for medical services and for health promotion
	Local Government (prefectures)	- Licensing and screening of medical institutions and insurers, disclosure of information - Preparation of a guideline for medical fees, according to region - Preparation of a plan for medical service and for health promotion
Insurer		- Screening and monitoring of medical institutions, provision of information - Direct negotiations with medical institutions concerning details of the practice of diagnosis and treatment, and remuneration for medical treatment

Under the current system, the central government and local governments are, at once, the entities responsible for regulating the system, such as licensing or auditing, and parties interested in the healthcare system as the main operator of insurers (the central government is an operator of the government-managed health insurance scheme and municipalities are operators of the national health insurance scheme) and as the main operator of medical institutions (municipal hospitals, etc.). They "show up as a lordly player," and not as a "referee" who plays the role of a coordinator of the entire healthcare system (Ogata (2005)). However, it is desirable, from the viewpoint of managed competition, that public organizations such as the central government or local governments should play the function of a sponsor that supervises and manages market competition, such as competition among insurers, and competition among hospitals. The sponsor determines, as the main body representing the interests of the insured and patients, coverage of public medical benefits, a standard medical fee schedule, etc. and promotes disclosure of information concerning insurers and medical institutions. Based on the current system, the formulation of a medical plan for prefectures falls under the function of the sponsor. However, if managed competition is to be practiced invariably, the specification of additional medical benefits (including health insurance treatment combined with private treatment) and medical fees should be left to individual negotiations between an insurer and a medical institution. It is also necessary to convert municipally-operated national insurance associations into an agency (or privatize them) (in continuation of the conversion of government-managed health insurance associations into a public corporation), separating them from administrative organizations, to specialize in insurance operations, or excluding political considerations insofar as possible.

Some of the criticisms expressed on the introduction of a principle of competition, such as managed competition, are that the insured are not in possession of sufficient information about health services and insurers, and medical institutions are liable to be affected by false information or image strategy. As is applicable to anything other than health service, a market in which the main body concerned does not have sufficient information available to it, is sure to fail. It is the function of the sponsor to monitor insurers and medical institutions, to see whether fair access to health service is guaranteed, whether guidelines on medical

treatment, management of what is provided to a patient in a medical examination and treatment, guidelines on prevention of diseases, etc. are appropriately reviewed on the basis of reasonable medical grounds, and that insurers do not set a monetary incentive that promotes a doctor's refusal to see a patient whose examination and treatment would be costly and would involve high risk (Table 4). Sato (2006) considers the possibility of managed competition in Japan, which includes the sharing of roles by the central government and local governments, or prefectures, as a sponsor. Making information available to the public to approve the participation of a rating organization that evaluates insurers and medical institutions is under consideration. In fact, in the U.S.A., the National Committee for Quality Assurance (NCQA), as an organization that evaluates and certifies the quality of insurers and insurance products, monitors the excessive exercising of an insurer's functions, performed by private insurance (including HMO) that displays an insurer's functions (Matsubara (in 2002)).

6. Conclusion

In this paper, I proposed the adoption of macro management (securing of macro efficiency) (that sets a rule in advance for measures to be taken to correct deviation from objectives) that is effective in healthcare benefits, while trying to make effective use of limited resources (improve micro efficiency) by stimulating medical treatment that meets the needs of patients and encouraging efforts to achieve an appropriate level of medical expenses. By reinforcing an insurer's functions, as well as by decentralization, insurers and local governments can be made responsible for minimizing and promoting the efficiency of allocating expenses required for the provision of healthcare services. Prefectures, as sponsors, are expected to work towards the promotion of a tie-up with healthcare and nursing care services, as well as with public health services (health promotion). (The establishment of a critical path of regional cooperation that takes into account a wide range of patients, from those in acute stages to those in convalescent and chronic stages.) Needless to say, the operating ability (party capacity) of insurers and local governments must be considered. In order to promote such ability (capacity), an improved infrastructure, such as the disclosure and sharing of medical information, and comparative assessments (through standards in medical treatment), is indispensable. It is necessary to implement a system of ex-ante risk adjustment for compensation, other than loss, among insurers.

Efforts to achieve an appropriate level of medical expenses and efficiency of healthcare may be just empty words, but methods to achieve this can be found only through trial and error (policy and measure experiments). For that very reason, we cannot depend on measures against lifestyle-related diseases, specialization and cooperation of medical functions, the specific measures of which are left to local governments and insurers to devise, in order to achieve an appropriate level of medical expenses on a macro level. Needless to say, the authority of insurers, local governments, parties concerned in trial and error of health promotion and healthcare services must be extended to match their responsibility. It is also necessary to perform policy evaluation on the effectiveness and outcome of the policy and service, and to urge their review and improvement from time to time. Nevertheless, a policy with unclear objectives and aims cannot be evaluated. I have emphasized, in Section 3, that the principles of assistance and insurance coexist in social security. Measures against lifestyle-related diseases may be considered to have been successful upon reflection of its health-promotion-related outcome (a decreased incidence of diabetics) and whether it has served to achieve an appropriate level of medical expenses as a medium- and long-term objective may not come into question. It is necessary to clarify the aim of a policy and the system, or to separate functions by allocating more than one aim, such as insurance and assistance, to different systems and policies, and leave no room for later vindication. If not, accountability for a policy and the system will not be improved.[19)]

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19) The Board of Audit is called upon to examine, in their auditing of effectiveness, not only what outcome a policy has produced (for example, the health promotion of an insured in the case of measures against lifestyle-related diseases) but whether a policy has produced an

There is some concern that a revision to reduce medical fee payments and a reduction in the number of beds for patients requiring long-term convalescence, might cause hospital management to deteriorate and generate many medical refugees who cannot find a hospital to admit them. The shortage of doctors in such important healthcare fields as pediatrics and emergency medical care has long been a social issue. The credibility of secure and high-quality healthcare services in Japan has been undermined. On the other hand, the escalation of medical expenses beyond an affordable level, compared with its economic scale (growth), could jeopardize the sustainability of the public healthcare system. Japan faces the difficult political issue of promoting the provision of necessary and appropriate healthcare services, while keeping medical expenses at an economically-permissible level and establishing a social security system that does not impose a burden on future generations. What is required is not a balancing of political games where interested parties, like the central government, local governments and medical institutions, force an obligation such as the revision of medical fees, increasing an individual's share of expenses and contributions, and investment from public funds (taxes) on each other on an ad hoc basis, but rather, reform that represents system design (ground design) based on a hard look on what the future public healthcare of Japan with its aging population ought to be, and a schedule designed to cover a period of 10-20 years.

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outcome that corresponds to the initial aim and objective (the achievement of an appropriate level of medical expenses in an amount of about 2.8 trillion yen, in 2025).

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