特集：地域保健医療の政策的動向

The vision of the health care system in Japan

Atsuaki GUNJI

1. Preamble

Facing to graying of the population, the basic policy of Japanese government is to restructure the social system adaptive to this demographic change. Above all, it is the most important target to increase the efficiency of the social security system not sacrificing quality of services. In 1990, the Ministry of Health and Welfare forged "Golden Plan" of the welfare system and this year, publicized "the Vision of Welfare System in Japan". In these plans, caring people in their own home is envisioned as one of the key concepts in the vision and medical care is indispensable resource to successfully pursuit this plan. However, there is yet no vision of health care system openly discussed in this country. It is the responsibility of the present leaders of policy makers, administrators, professional associations and academics to show the future vision on the sector of society, in which they are involved vocationally.

This paper is intended ,1) to evaluate Japanese health care system in terms of its strength and weakness, 2) to discuss why the characteristics have been originated in the history of health policy, and the macrospective economic structure. Then, 3) two regulatory methods to improve the efficiency of the health care system are reviewed very shortly, and 4) lastly, possibilities of restructuring the primary care and the hospital system are deliberated in spite of many difficulties.

(from Department of Health Administration School of Health Sciences and Nursing, Faculty of Medicine, University of Tokyo)

2. The Framework of Evaluation

The health care system is the multi-facet entity and the framework is necessary to evaluate it as a whole.

Many frameworks have been proposed in the past [1][2] but it seems to be a consensus in this arena that the health care system has to be evaluated not only on its effectiveness but also its efficiency and equity. Especially, nowadays, when the utilization of market mechanism has become the major concern in many countries, the trade-off relation between efficiency and equity has emerged as a confutational problem in many countries although they seems to be rather insensitive to this problem in Japan where people are so accustomed to their egalitarian system in terms of accessibility.

As shown in Fig. 1, there are three determinants of effectiveness, which are accessibility, quality and integration.

Accessibility is to be determined by 1) quantity of supply, 2) distribution of resources, 3) economic and cultural barrier against accessing the health care. The meaning of accessibility and the causal relation with its determinants will be self-evident except culture. There are many cultural barriers to hinder the accessibility of people to health care system. One of the examples of this kind is the sex preference of the medical doctor. It is not so rare in the world to see the people to reject to be attended by the doctor of the different sex.

Integration means that the system has to have a function to ensure a patient to be taken care of in the appropriate facilities according to seriousness of

the disease. In other word, it means there is good referral function.

Regarding efficiency, as there is no outcome measure of health care system which is commonly acceptable as a numerator of efficiency, only the denominator that is the spending for medical care is conventionally used to compare the efficiency among countries.

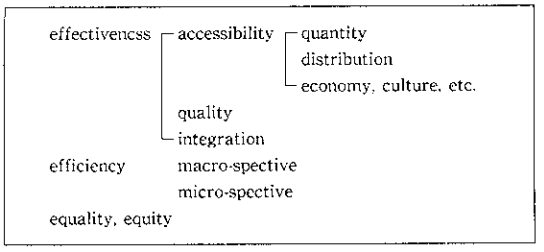


Fig. 1 The Framework of Health Care System

The results of the evaluation of Japanese health care system using this framework, are as follows. Accessibility of Japanese health care system is excellent. The reason is that the quantity of important resources in Japan are abundant. According to an international comparison on the number of hospitals and beds among twenty four OECD member countries [3], Japan is outlying among member countries and the number of beds is also two times more than that of USA. The average size of Japanese hospitals is smaller than any other countries. Many small private hospitals are distributed in the small land. Furthermore, the economic barrier is very low because the universal health insurance scheme covers whole population in Japan. Hence, the accessibility of Japanese health care system is excellent.

Regarding quality, it will be right to say that it is not known because there is no official data on this aspect nor the system which assures the quality of medical care.

Integration is very bad in Japan because there is no explicit referral system. It is very rare for industrialized countries not to have the overt referral system in their health care systems.

Efficiency of Japanese health care system is taken to be fairly well at least macrospectively although there are some extraordinary inefficiencies such as very long average length of stay in hospitals. The OECD publishes the data of the national accounting in standardized rules. According to the data on medical spending, Japan locates at a little lower than the middle as shown in Table 1.

The amount of national spending on medical care of countries is almost linearly proportional to the GDP. The USA is outlying high above the regression line and Japan is below the line. According to our analysis, it seems that the more commitment government have, the more distant below the regressed value [4].

The OECD prepares not only GDP purchasing power parity but also medical ppp. The medical ppp means a kind of unit price although it is an aggregated price of many items of selected services. Therefore, the total amount of spending divided by medical ppp will mean the total volume of services purchased by the people. The Table 2 shows the result of our calculation from OECD data, which says that the volume of medical services consumed in Japan is more than that of USA. The reason why the total spending seems to be lower in Japan than in USA is simply because the prices of the services are cheeper in Japan than in USA. This finding corresponds with the results of the reports which shows that some prices of physician's services are much cheeper in Japan compared with other countries including USA (Newhouse 1993, Ishikawa 1993). It is well known fact that the size of the market of pharmaceuticals in Japan is about the same with that of USA and the aggregated amount of the Europe. As the number of population in USA almost 2.5 times more than Japan, it entails that the Japanese citizen are consuming pharmaceuticals more than two times of Americans. Therefore, the

Table 1 Per Capita Health Sending in OECD Member Countries

	1985	1986	1987	1988	1989	1990	1991	compound annual rate of grouth
United States	1711	1824	1962	2146	2362	2601	2869	9
Canada	1244	1364	1461	1558	1666	1811	1915	7.5
Switzerland	1224	1267	1332	1435	1498	1640	1713	5.8
Germany	1175	1215	1287	1409	1412	1522	1659	5.9
France	1083	1135	1193	1295	1415	1528	1650	7.3
Luxembourg	930	978	1135	1219	1267	1392	1494	8.2
Austria	984	1046	4409	1191	1298	1383	1448	6.7
Iceland	889	1073	1220	1331	1373	1379	1447	8.5
Sweden	1150	1165	1240	1303	1390	455	1443	3.9
Finland	855	911	979	1044	1147	1391	1426	8.9
Italy	814	849	955	1058	1150	1296	1408	9.6
Australia	998	1072	1112	1171	1225	1310	1407	5.9
Belgium	879	931	992	1081	1153	1242	1377	7.8
Netherlands	931	990	1046	1101	1176	1286	1360	6.5
Japan	792	839	916	992	1092	1119	1307	8.7
Norway	846	1066	1043	1112	1128	1193	1305	7.5
Denmark	807	818	890	972	1013	1051	1151	6.1
New Zealand	747	806	871	900	954	995	1047	5.8
United Kingdom	685	739	795	858	912	985	1043	7.3
Spain	452	472	522	598	682	774	848	11.1
Ireland	572	580	596	620	651	748	845	6.7
Portugal	398	389	434	493	548	554	624	7.8
Greece	282	323	321	334	384	400	404	6.2
Turkey	66	89	100	110	118	133	142	13.6
OECD average	855	914	980	1055	1126	1212	1305	7.6

Sources:OECD Health Systems: Facts and Trends; and S. Letsch et al., "National Health Expenditures, 1991," Health Care Financing Review(Winter 1992).

Note: National currency units are converted to U.S. dollars using gross domestic product purchasing power parities. Revised from Schieber 1991.

Table 2 Comparison of Health Spending per Capita between USA and Japan

	USA	Japan
Exchange rate	$2,600	$1,582
GDP-PPP	$2,600	$1,175
Medical-PPP	$2,600	$2,828

total spending adjusted by the GDP-ppp has also to be carefully understood.

3. The Origin of Characteristics of Japanese Health Care System

The origin of these characteristics of Japanese health care system resides in its history [5].

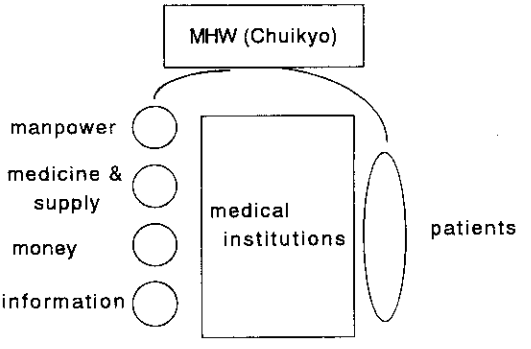
Firstly, the reason why in Japan, accessibility has become so well and integration has lost, is as follows. Japan have been swinging between two alternative ideas in terms of the sector to which medical services should have belonged; one is the idea that the medical care should basically be delivered by the private sector, and the other is that it should be the public service. Soon after the Meiji Restoration, the pendulum swung towards the public sector. Many hospitals were constructed by local governments. However, this trend came up against the opposition of the medical profession. Gradually they got a greater say, and public and nonprofit hospitals could not be dominant in Japanese health care system although the Red Cross and the Benevolent Society constructed many hospitals.

After the world war II, the American mission for reform of social security strongly advised that Japan should have the network of public hospitals and abolish the private practice. The Ministry of Health and Welfare followed this advise and made a plan to construct the network through out the country. Actually, some hospitals were constructed following to this plan, but the program had not progressed as fast as it was intended because the government and the local governments could not afford financially.

Then, the Japanese economy took off after the Korean war and Japan had succeeded to implement the universal health insurance scheme. It improved accessibility to medical care and monetary stock was cumulated in medical facilities. Again the voice to swing back to private sector got a greater say, and in 1962, the amendment of the Medical Care Act had passed the diet. The amendment set a numerical upper limit only to the public beds when the area had already more beds than the limit. After that, the private facilities continued to construct beds and many clinics had grown up to hospitals, most of which were small private hospitals. Then, Japan succeeded to construct beds quickly not spending public fund. So, there established the current Japanese hospital system, majority of which are small private ones and hence accessibility had become excellent. They had been competitive in the market and they were unwilling to refer their patients to their competitors. Hence, the integration of Japanese health care system was lost.

Secondly, the reason why the volume of consumption is so large in Japan, is as follows. The macro-structure of health economy in Japan is shown in Fig. 2.

All the medical institutions are competing for patients in the market. They procure resources



○ means the location of market.

Fig. 2 The Macro-spective Economic Structure of Medical Care System in Japan

which are necessary for their practice such as nurses and other staffs, medicine, devices, information and monetary resource through each free market. On the other hand, their revenue side is substantially controlled by the government through the points of the fee-for-service payment system. The prices of Japanese fee-for-service system are itemized quite in detail and for instance, each medicine has the price decided by the Ministry. The Ministry seems at least ostensibly to control successfully the total health expenditure. However, when the government try to push down prices in order to control the total health expenditure, institutions are given the incentive to increase profit by increasing volume of services. Therefore, this system does not eventually attain efficiency and is threatening to endanger quality of medical care.

4. Methods to Improve Efficiency

The methods to improve efficiency of the health care system will be classified into two categories, which are to utilize market mechanism and to use the regulatory power of the government, and the mixture of those.

The health care system is already controlled by so many rules and regulations that it may seem that the easiest way for improvement is to add another rule or to tinker the rules which already exist. However, there is no theory nor principle which guaranties optimum efficiency by regulation.

On the other hand, it is well known fact that market fails to worked between patients and care suppliers. The major causes of market failure are as follows.

Firstly, inequity of information exists between patients and care suppliers. Patients are usually amateurs and suppliers are specialists. The gap of information can never be overcome. It is characteristic to medical care that the supplier substantially decides the demand of the principal and the principal is very difficult to judge the quality of services the agent has done for the principal. It entails that moral hazard is inevitable according to the theory of principal and agency. The theory teaches us that the only way to circumvent the problem is to charge "incentive constraint" onto the agent. The incentive of the fee-for-service system works just towards opposite direction.

Secondly, all the industrialized countries have some health insurance scheme to cope with unpredictable nature of diseases and catastrophic expense for it. However, it inevitably causes excessive demand for medical care, which is also a kind of moral hazard of demand side. In order to cut back the excess demand, to increase copayment is usally taken up as a policy measure but it inexorably sacrifices accessibility and equity. Therefore, when market mechanism is intended to be utilized to increase efficiency, the trade-off relation between efficiency and equity comes up as a difficult policy dilemma.

Thirdly, the market mechanism usually does not work when actual demand has occurred because the demand may be so urgent that there is no time to single an appropriate supplier, or by some other reasons such as geographical or of particular nature of diseases, the patient may not have freedom to choose a supplier. These are the reasons why the supplier of medical care is monopolistic in the market.

Therefore, it is necessary to regulate in some way for the market mechanism to work in the health care system, that is to mix regulation and market mechanism. How to attain this is now deliberated in many countries in the world.

5. Some Examples of Health Reform

There are going actual reforms in some countries such as USA, UK, Holland and so forth. They are interesting because they are theoretically reasonable in the light of theories and evidences of health economics.

The basic idea of UK's reform is symbolized by the word "internal market" [6]. That means to build market between hospitals and GPs. Hospitals are encouraged to become financially self-supporting. Formerly, GPs have to refer their patients to the community hospital. However, in the new system, GPs are budget holders which mean that the GPs are responsible and accountable to how to use the annual budget to care the people who have registered to the GPs. It is up to GPs to choose the hospital which they think is most cost-efficient for caring the case of their concern. From the view point of principal agent theory, this reform is reasonable because in the new internal market, the principal is the GP who is not an amateur but specialist compared with the patient and is to be expected to be able to judge the work of the agent.

It is not known yet whether this arrangement works as it is intended. We need time and evidences before doing judgment although some pessimistic views are already expressed [7].

The key concept of the Clinton's reform [8] is " managed competition" which is proposed by US health economist Enthoven [9]. Managed competition literally means that the market mechanism in health care has to be managed in order to make it work. What he proposed is to promote the competition among large organizations such as HMOs, PPOs and the alike. They are already proved to be more efficient than the traditional "guild-free choice" system.

6. Towards the Vision of Health Care System in Japan

Now, it is clear that the optimum efficiency can not be attained only by the control of unit prices of the services and if the government dears to push the policy to curb medical spending, two problems can be predicted to occur; one is that there will occur bankruptcy of many medical institutions, especially of consciencious ones, and the other will be deterioration of quality of care. Especially, it has to be kept in mind that in Japan, The Act of Medical Care stipulate that the director (Inchou) of the medical institutions must be the medical doctor and the owner (Kaisetusha) of the medical institutions is recommended to become the director of the institution by the Medical Care Act. That means the single person who is the medical doctor, is responsible for both medical care and financial management. This structure maybe problematic because when financial management of a institution becomes very difficult, the easiest way to redress the balance is to change the care, for instance, by increasing volume of services and in a small organization, the intent of the management can easily influence to the staff.

The basic policy which has been implemented for these years, has aimed at curbing rapid rise of medical expenditure. While the national economy had been growing rapidly, the medical expenditure had also kept soaring. Coming into 1980s, the rate of increase has successfully been controlled in almost the same level with the growth of national economy. In order to attain this, various measures were taken.

In 1982, The Act for the Health of the Elderly was enacted. The Act succeeded to separate the fund for the medical insurance for the elderly from the National Health Insurance and to get 70% of the fund from other health insurance organizations. In 1984, the Health Insurance Act was amended and 10% of co-payment became mandatory for the insured of Social Health Insurance scheme, who had substantially been free to get health services. By these measures, not only equality of sharing the cost of medical care had promoted but also the burden to pay for medical care had shifted from national budget to the insured.

In 1985, the amendment of the Medical Care Act mandated for the governors of the prefectures to make "Health Plan". The name disguises the real content. It introduced the limit to the number of

beds including private beds in the region named " Iryouken" which literally means a medical region, where all levels of medical care from primary to tertiary can be supplied. The back ground idea is that supply induces demand of medical care, and too many beds have already built in Japan. In 1992, the Medical Care Act was amended and introduced two kinds of hospital, which were long term care beds and the hospital of specific factions which purport the institutions of high functions such as university hospitals and national centers for specific diseases. This series of legislation aimed at stopping increasing the number of bed and inducing small private acute beds to long term care beds.

The Japanese fee-for-service payment system has other flaws. Major ones are 1) there is no valuation about the proficiency of medical professions. A freshman doctor gets paid same amount of points with a fully fledged doctor. 2) there is also no difference in payment according to the area of practice even though the practice cost differs very much from area to area. The practitioner practicing in the middle of metropolitan area is paid in the same rate with the doctors who are practicing in a rural area.

Coming into the era when the policy to promote caring people in their own homes just has commenced, one of the important functions in the community that is primary care in their vicinity is dwindling now in Japan, especially in large cities. The major symptom of this deterioration is aging of practitioners. The practitioners in 10 big cities are older than 65 years old in average. The majority of them belongs to this age group and in five years, they will inevitably become in their 70s. According to our investigation, the main reason why young doctors won't go into practice is simply because they cannot expect reasonable income. The rental cost for the space of the clinic is crucial to the profitability of practice. This is the actual reason why there is so few young doctors who begin their practice in these areas.

The way of practice in this country has salient characteristics as follows. Firstly, the clinic is heavily equipped by such as X-ray devices, ECG, and sometimes even CT. This panoply is taken necessary to attract patient competing even with hospitals but this kind of arrangement inevitably pushes up the cost of the clinic.

Secondly, solo practice is still the major mode of practice. In other countries such as UK and USA, group practice has become the major pattern of practice by various reasons, for instance, in order to be ready to meet medical need for 24 hours a day. It is impossible for a solo practitioner.

Thirdly, the practitioner is to be responsible for not only medical care of their patients but also financial management. There is not substantially any privilege to get public support to set out private practice.

Therefore, the future image of practice is to be 1) simply attired, 2) group practice and 3) rationally managed. If the clinic has not many equipments and facilities, there should be functional support from other medical institutions such as hospitals, laboratory centers and so forth. That means improvement of integration between primary care and secondary care is indispensable.

However, the functions of clinics and hospitals have not been differentiated in Japan because the majority of private hospitals had formerly been private clinics and grown up to hospitals during the period of rapid economic growth of the country. All the hospitals of this country are actively engaging in ambulatory care and they are competing with clinics. Therefore, it would be very difficult to build mutually supportive relationship.

According to our analyses on the cost by the sections of hospitals, the balance of inpatient section is deficit and that of the clinic section has a little surplus which is prone to compensate the red of the inpatient section. Furthermore, hospitals have

to collect profitable patients at their clinic because these patients are not referred from other medical facilities such as clinics. Therefore, the present Japanese medical system gives negative incentive for medical institutions to differentiate into primary care and secondary care, and to improve integration.

If the competition among hospitals and clinics goes on, hospitals will be in a stronger position because, firstly, fee-for-service payment system essentially tends to value substantial items of services such as medication, organ imaging examinations rather than non-substantial services such as care for patients, explanation and education of patients. As hospitals have more facilities, they have more chance to raise more profit than clinics. Secondly, The patients have very scarce information about the appropriate institution where they should visit, it is well known fact that they tend to decide the institution they go depending on the size of the facility and/or reputation.

Therefore, it is an important policy decision whether the policy is to promote private clinics for basic structure of primary car, or to acquiesce to discard them from the health care system of this country.

However, it seems to be very difficult to expect to hospitals all the 'factions of the family doctor' which was forged by the Commission on the Family Doctor to the Minister of MHW in 1986. Although the committee could not succeed to give birth to family doctor in this country, it stipulated 'the functions of the family doctor'. Other than proficiency to deal common diseases, it enlisted many functions which are expected to be well carried by the family doctor, such as continuity and comprehensiveness of care, coordinative functions between other professional services, easy contact when necessary and so forth. The hospital would not be impossible but would be difficult to satisfy all these requirements. Furthermore, it can easily be imagined that hospital services tend to be more costly than those of clinics although there is no official data about this comparison.

The fee-for-service payment system has to be changed in any way into a new payment system in order to improve efficiency. Then, what kind of requirements are expected for a putative payment system in the future?

First of all, the payment system for primary care has to be different from the current system. That means the system has to count, 1) the responsibility for care of the patient, 2) the time the doctor spends for care, 3) the level of expertise of doctors and 4) quality and quantity of services. The cost difference among places of practice has to be compensated by some means but there would be many ways other than including it into the payment system. The importance of the responsibility for care has to be stressed, because the most serious problem the patient cared at home has is anxiety for the case something serious may happen. The only way to solve this anxiety is that someone takes responsibility. Now, in Japan when the patient steps into the medical institution, they are responsible to take care the patient. However, there is nobody who is ultimately responsible for the patient who is at home.

The new payment system has to have an incentive constraint for the doctor to become 'a complete agency' of the patient by fulfilling the functions listed above.

Further than that, it should be the system to induce differentiation of clinics and hospitals.

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地域保健医療の政策的動向

郡 司 篤 晃

(要 旨)

医療システムの評価には評価の尺度 (framework) が必要である．現在，その評価には，医療の効果だけではなく，効率と平等性が重要である．効果を決定する要素はさらに，接近性 (accessibility)，質 (quality)，統合性 (integration) がある．このような尺度で我が国の医療システムを評価すると，接近性は良いが，質はデータがなく，統合性は悪い．その原因は，歴史的の中にある．第二次対戦後，私的セクターで行う政策転換をしたため，政府は財政的負担なく短期間で多くの病床を築くことに成功した．したがって，我が国の医療システムは接近性は良くなったが，統合性をうしなった．今後，高齢化時代を迎え，医療の効率化を促進するためには，政府の統制と市場機構の活用が重要である．我が国の医療費は比較的安くすんでいると思われているが，注意深い分析によれば，我が国の医療は単価は安いが量 (volume) はアメリカよりも多くを消費しており決して効率的とは言い難い．現在の出来高払い制度でサーヴィスごとの点数を制御するだけのシステムの必然的な結果である．今後，真の効率を向上させるためには，医療経済学の知見を生かして，新たな支払制度を構築すべきである．その際は，高齢化を迎える我が国では，プライマリーケアのための支払制度が必要である．