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JAPAN HOSPITALS

The Journal of Japan Hospital Association

Special Feature

Seeking Ways to Revitalize the Healthcare System
—The Role of National and Local Governments, the Public,
and Individuals in the Healthcare Industry

Shuzo YAMAMOTO

Considering Japanese Healthcare from an Economist's Perspective
Motoshige ITOH

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Japan Hospital Association is committed to contributing to society by enhancing hospital services in Japan.

This journal introduces the activities of the Association and healthcare in Japan to the world.

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FOREWARD

Shuzo YAMAMOTO

President, Japan Hospital Association



Last year, Japan put an end to the one-party dominance of the Liberal Democratic Party and saw the launch of a coalition government centering on The Democratic Party of Japan. Taking inspiration from the success of the Obama campaign, the Japanese people were also able to realize a historical change. Initially, I believed that the change would manifest itself in a step forward for Japanese society and that discussions about increasing the national budget for medical care would lead to higher compensation for medical care providers under a revised national health insurance system. However, I now realize that my view was overly optimistic.

Last June, Democratic Party leader Yukio Hatoyama advocated committing nearly 800 billion yen to increasing the number of physicians and bringing the ratio of healthcare funding to GDP to that of other OECD member nations as a measure to improve the condition of medical care, and his party called for assistance to be given to the ailing system in its much-touted manifest in the run-up to Lower House elections. However, in his policy speech after the party's landslide victory over the Liberal Democrats, Hatoyama was much quieter on the subject of health and welfare than he had been in pre-election debates among party leaders. I was disappointed to see that this ended as a perfunctory speech. In discussions on next year's budget, the new government, and the Ministry of Finance in particular, citing the poor economic outlook and growing calls for budget cuts, offered up a watered-down plan that cut the compensation that medical providers would receive from the national health insurance system for services. Although the Ministry of Health, Labour and Welfare was against this, they backed down and accepted a policy which would include a reduction of drug prices and a review of allocations, and a slight increase in compensation for medical services as a compromise to secure wider support for the new budget. As it now stands, the medical care policies of The Democratic Party and the coalition government are quite unclear.

As healthcare providers, we should come to grips with such political and economic realities and join together as a unified front to push for policies that result in better patient care throughout the nation. We are as yet unsure what compensation the government will set for medical services; however, it is unlikely that any fundamental changes in the current system will take place.

As an association of hospitals, we have made it clear to the government that medical care facilities require a significant increase in basic fees for treatment in order to secure the safety and quality of patient care and financial stability. Providing consistently high-quality, safe care is the fundamental mission of the medical community. Hospitals also require the means to create a satisfying and comfortable working environment for employees, to promote the growth of the medical industry, and to fulfill their individual responsibilities for the revitalization of medical care along with people in regional areas.

The Japan Hospital Association held elections in March 2010, which has brought young and motivated new members into our association's leadership. We look forward to the continuing understanding, support, and unity of our entire membership in order to realize a better future for patient care and the institutions that provide it.

The 2009 International Modern Hospital Show

Seeking Ways to Revitalize the Healthcare System –The Role of National and Local Governments, the Public, and Individuals in the Healthcare Industry



Shuzo Yamamoto
President, Japan Hospital Association

My name is Shuzo Yamamoto, President of the Japan Hospital Association. The theme of the 2009 International Modern Hospital Show is “Healthier Lives!” In keeping with this theme, I would like to talk about the current status of hospitals in Japan with a focus on finding ways to revitalize the healthcare system, and the role of the national and local governments, the public, and healthcare providers. I plan to talk first about the current status of the healthcare system before addressing the healthcare budget and the revision of healthcare service fees, during which I will focus on the service fee revisions scheduled to be carried out in April of next year. Finally, I will talk about the major tasks for healthcare revitalization. Due to the limited amount of time, I will focus on acute-phase treatment.

■ The Current Status of the Healthcare System

● General hospitals and disparities in regional healthcare

(Slide 1) This data is as of October 1st, 2007. The number of general hospitals is 7,785, the number of beds for general patients is 913,234, and both of these numbers have been decreasing. There is other data, such as the average number of patients hospitalized per day, etc. The average number of beds per hospital is 117.3, the

Current Status of General Hospitals

(as of October 1st, 2007)

2007 Survey of Medical Institutions (Hospital Survey)
Edited by the Statistics and Information Department,
Ministry of Health, Labour and Welfare

• Number of general hospitals	7,785	• Average number of beds per hospital	117.3
• Number of beds for general patients	913,234	• Occupancy rate	76.6%
• Average number of inpatients per day	699,357	• Number of full-time physicians per 100 beds	12.1
• Average number of outpatients per day	1,427,772	• Number of nurses per 100 beds	80.4
• Number of physicians at general hospitals	175,369		
Full-time physicians	141,393		
Part-time physicians	33,976		
• Number of nurses at general hospitals	733,856		
Public health nurses	3,463		
Midwives	17,594		
Nurses	573,040		
Practical nurses	139,759		

2007 Hospital Report from the Survey of Medical Institutions (Dynamic Survey)
Edited by the Statistics and Information Department, Ministry of Health,
Labour and Welfare/Health and Welfare Statistics Association

Slide 1

occupancy rate for those beds is 76.6%, and the number of full-time physicians per 100 beds is only 12.1. This is how hospitals stand in Japan.

(Slide 2) What is happening now? First, we have the issue of regional gaps in healthcare services. Looking at the number of beds per 100,000 people by prefecture (I refer here to the number of beds for general patients), Oita has 1,009 beds, which places it at number one in the nation. Next is Kochi, which is followed by Okayama, Hokkaido,

and Kagawa, in descending order. The prefectures that have the lowest number of beds for general patients per 100,000 people are Shizuoka, Aichi, Chiba, Kanagawa, and Saitama. Saitama has the lowest number at 492 beds, which as you can see is less than half of the number in Oita.

How did this situation evolve? Based on the regional healthcare plan, the healthcare system in each prefecture is reviewed once every five years. Each region has done this a total of five times thus far, which means that regional healthcare plans in each prefecture have been reviewed based on the national policies over a 25-year period. Why has it taken so long to identify such significant gaps among prefectures?

(Slide 3) If we take a closer look at the figures for each prefecture, the situation may become clearer. In terms of the national average, the number of physicians per 100 beds is 12.1, the number of physicians per 100,000 people is 143.9, and number of beds per 100,000 people is 714.7. Hokkaido has a significantly higher number of beds per 100,000 people. Okayama and Kochi, as was pointed out, also have a high number of beds per 100,000 people. Kochi has high number of physicians per 100,000 people at 212. Hokkaido also has a slightly higher number of physicians per 100,000 people. On the other hand, the number of beds per 100,000 people in Kanagawa is significantly lower than the average. It also has a lower number of physicians per 100,000 people than the average. However, the number of physicians per 100 beds in Kanagawa, that is, the number of physicians working at hospitals, is 14.5, the highest after Tokyo. Although Hokkaido has a higher number of physicians and beds per 100,000 people, the number of physicians per 100 beds is 8.5. Kochi has 8.6. This shows that there are various regional gaps in different categories.

● Shifts in hospital departments providing services

(Slide 4) We also have shifts in the numbers of hospital departments providing services. A comparison of survey data shows that there were 9,022 general hospitals in 1990, but that this number had shrunk by roughly 1,200 to 7,785 by 2007. In terms of the number of departments, 7,887 hospitals had departments of internal medicine in 1990, a number that had fallen to 7,186 by 2007. When considered in relation to the decrease in the number of hospitals, however, the ratio of departments of internal medicine (7,186) to general

Number of Beds per 100,000 People by Prefecture

• Top 5 Prefectures		• Bottom 5 Prefectures	
1. Oita	1,009.8	5. Shizuoka	588.1
2. Kochi	989.8	4. Aichi	557.6
3. Okayama	981.4	3. Chiba	547.7
4. Hokkaido	979.5	2. Kanagawa	527.7
5. Kagawa	962.0	1. Saitama	492.5

2007 Hospital Report from the Survey of Medical Institutions (Dynamic Survey)
 Edited by the Statistics and Information Department, Ministry of Health, Labour and Welfare/Health and Welfare Statistics Association

Slide 2

Number of Full-Time Physicians and Beds at Hospitals by Prefecture (As of October 2007)

	Number of physicians per 100 beds	Number of physicians per 100,000 people	Number of beds per 100,000 people (for general patients)		Number of physicians per 100 beds	Number of physicians per 100,000 people	Number of beds per 100,000 people (for general patients)
Total	12.1	143.9	714.7	Kyoto	13.2	184.1	877.6
Hokkaido	8.5	155.5	979.5	Osaka	12.8	161.1	750.8
Iwate	9.5	134.7	828.8	Okayama	11.3	177.0	981.4
Fukushima	8.6	121.5	829.3	Tokushima	9.6	184.1	819.3
Saitama	11.2	99.5	492.5	Kochi	8.6	212.1	989.8
Tokyo	18.1	183.8	652.7	Fukuoka	10.6	184.9	857.5
Kanagawa	14.5	121.2	527.7	Miyazaki	8.6	149.7	834.2
Nagano	11.7	134.9	725.6	Okinawa	11.4	163.2	711.0

* Number of physicians per 100 beds/ National average 12.1
 * Number of physicians per 100,000 people/ National average 143.9

Slide 3

Annual Changes in the Numbers of General Hospitals by Hospital Departments (as of October 2007)

	1990	1999	2007		1990	1999	2007
General hospitals	9,022	8,222	7,785	Rehabilitation	3,863	4,520	5,123
Internal Medicine	7,887	7,403	7,186	Cardiovascular Medicine	3,106	3,316	3,802
Pediatrics	4,102	3,528	3,015	Plastic Surgery	629	826	1,063
Surgery	6,298	5,598	5,113	Neurosurgery	2,133	2,269	2,451
Obstetrics	270	203	195	Cardiovascular Surgery	407	677	872
Radiology	3,839	3,649	3,552	Ophthalmology	2,198	2,404	2,513

2007 Hospital Report from the Survey of Medical Institutions (Dynamic Survey)
 Edited by the Statistics and Information Department, Ministry of Health, Labour and Welfare/Health and Welfare Statistics Association

Slide 4

Balance of Payments per 100 Beds
(Unit: 1,000 yen)

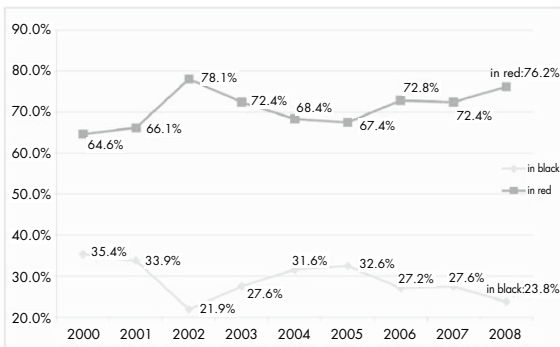
Item	June 2007		June 2008	
Total expenditures	151,350		153,237	
1. Medical expenditures	146,904	100%	148,698	100%
(1) Salary	76,924	52.4	77,913	52.4
(2) Materials	37,149	25.3	36,604	24.6
(3) Costs	22,119	15.1	23,204	15.6
(4) Depreciation	10,712	7.3	10,977	7.4
2. Other expenditures	4,445		4,539	
Total revenues	140,439		139,327	
1. Medical service revenues	137,561	100%	136,089	100%
(1) Inpatients	90,496	65.8	90,630	66.6
(2) Outpatients	41,449	30.1	39,949	29.4
(3) Other	5,616	4.1	5,511	4.1
2. Other revenues	2,879		3,238	
Total revenue – Total expenditures	Δ10,911		Δ13,910	
Medical service revenues – Medical expenditures	Δ9,343		Δ12,609	
Total expenditures/Total revenues x100	107.8%		110.0%	
Medical expenditures/Medical service revenues x100	106.8%		109.3%	
Number of hospitals	1,167		1,180	
Average number beds	280		282	

Slide 5

hospitals (7,785) in 2007 is actually greater than it was in 1990. Of course, given the importance of the department of internal medicine to most hospitals, one would not expect a significant decrease. On the other hand, the number of departments of pediatrics has decreased, as did the number of departments of surgery. The number of departments of obstetrics, which was low to begin with, also decreased. The number of departments of radiology has also dropped slightly. These are our most recent figures.

In contrast, the number of departments of rehabilitation rose from 3,863 to 5,123, the number of departments of cardiovascular disease went from 3,106 to 3,802, and the number of departments of plastic surgery jumped from 629 to 1,063. The number of departments of neurosurgery also increased slightly, possibly due to the influence of TV programs. The number of departments of cardiovascular surgery doubled from 407 to 872. The number of patients being treated at departments of cardiovascular disease and cardiac surgery has increased significantly as a result of advances in medicine and improved treatment, which explains the increase in the number of these departments. There may be some other reasons, as well, but anyway, such changes appear in the numbers.

Graph 1: Changes in Solvency of Hospitals/ Total Number of Hospitals
(operated by local governments, other public organizations, and private organizations)



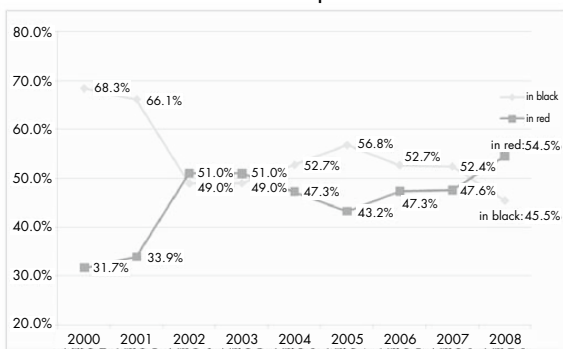
Slide 6

● **The financial status of hospitals**

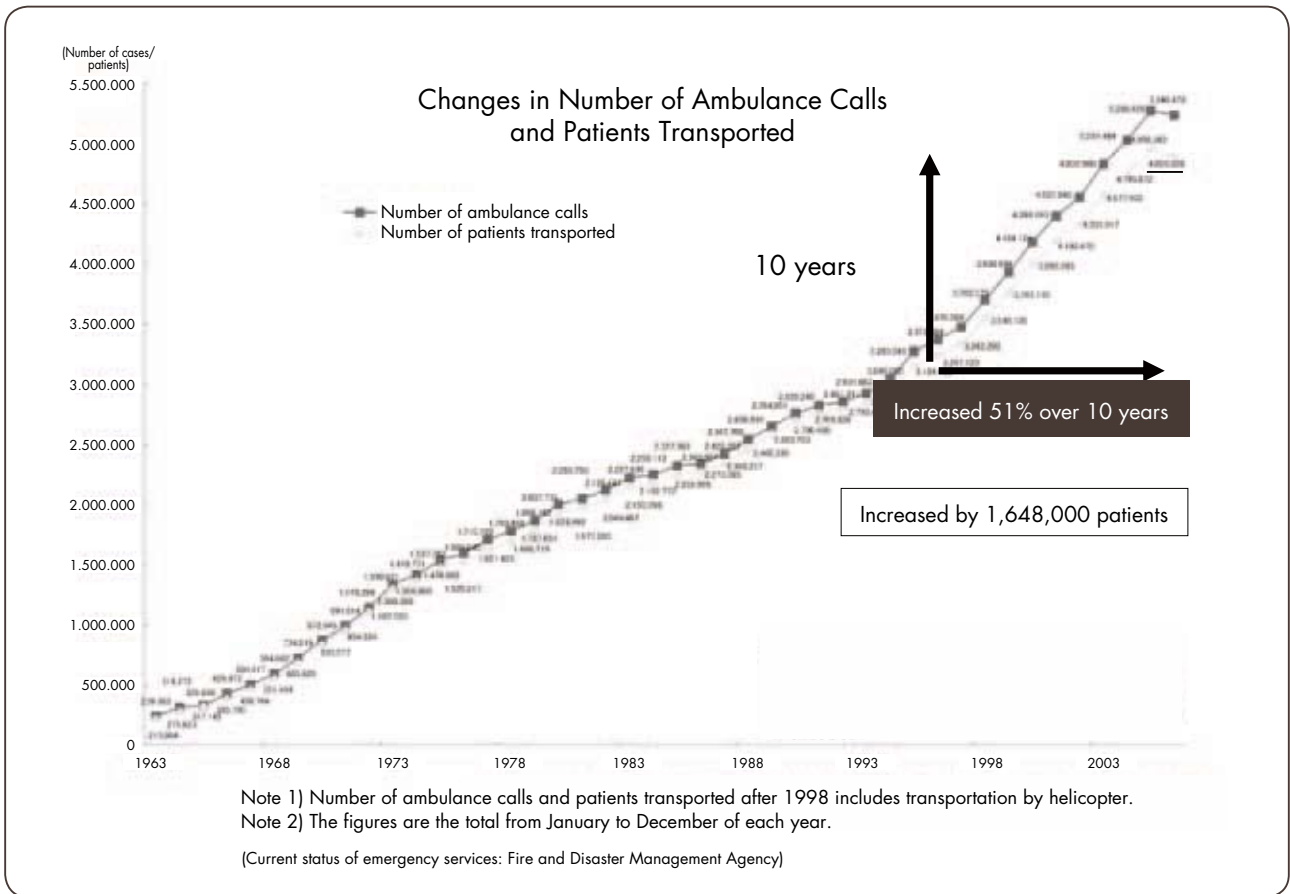
What about the financial status of hospitals? As you see in Slide 5, a comparison between 2007 and 2008 shows that more hospitals were running deficits in 2007.

(Slide 6) The rate of the hospitals reporting deficits in June 2007 was 72%; however, this rate increased to 76% in June 2008. Looking at all hospitals, including those running deficits as well as those running surpluses, and I include hospitals operated by local governments as well as other public and private organizations, 76.2% hospitals had a deficit and 23.8% hospitals had a surplus in 2008. Although there does not seem to be a significant difference in the changes, the number of hospitals reporting a surplus had decreased considerably compared with the rates in 2000 when we look at changes in private hospitals (Slide 7). The rate of private hospitals running deficits in 2000 was 31.7%, which increased temporarily before returning to the same level; however, the rate increased to 54.5% in 2007 and 2008. This is a significant change, which shows that private hospitals that have worked for better financial results started giving up. They are facing a very severe situation.

Graph 2: Changes in Solvency of Hospitals/ Private Hospitals



Slide 7

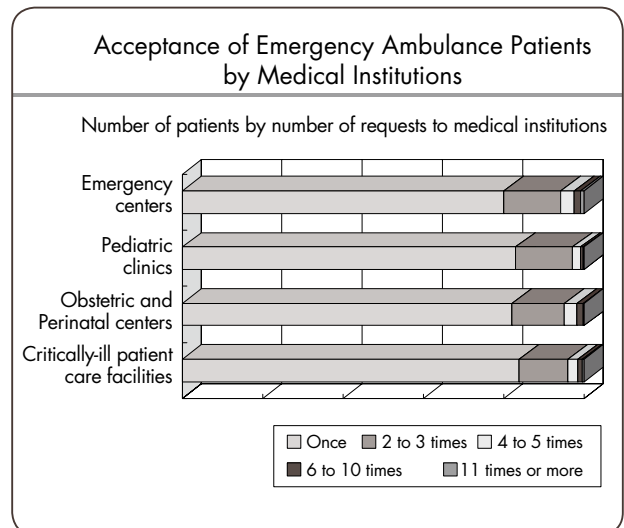


Slide 8

● Emergency medical services

(Slide 8) Next, I would like to move on to the issue of emergency medical services. We seem to read story after story in the newspapers about patients being rejected by several hospitals. In actuality, while the number of ambulance calls increased 51% within a period of 10 years to a rate of 5 million calls annually, greater than 90% of the patients transported were admitted to the first or second facility contacted. Let me remind you that this figure includes emergency centers, pediatric clinics, obstetric and perinatal centers, and critically-ill patient care facilities (Slide 9). There are, in fact, cases in which it was necessary to contact four, six, or as many as eleven hospitals before a bed was located (Slide 9). Such cases were reported in media as emergency patients being rejected by hospitals.

(Slide 10) Where is it, then, that we find such patients? This is not seen in rural areas such as Hokkaido, Aomori, Iwate, and Akita. When it does happen, it happens in urban areas such as Tokyo, Saitama, Kanagawa, Chiba, Ibaraki, Osaka, and Nara. In such areas, there are many hospitals to choose from, a situation which increases the likelihood



Slide 9

of having to contact multiple facilities before finding one able to accept a given patient. To improve the situation, the Fire and Disaster Management Agency is seriously considering emergency medical care policies.

The problems in emergency medical care are shown in Slide 11: Emergency transportation of adults for mild cases has increased (The green bar graph is 2006 and

Acceptance of Emergency Ambulance Patients by Medical Institutions

Prefectures exceeding the national average ratio of patients accepted after requests to more than 4 medical institutions: Critically ill patients



Prefectures	Number of Cases	Ratio
Nara	527	12.7%
Tokyo	4,769	11.2%
Osaka	975	10.1%
Saitama	1,661	7.8%
Chiba	979	6.3%
Miyagi	509	6.2%
Kanagawa	1,358	5.7%
Hyogo	641	5.7%
Ibaraki	459	5.1%
Tochigi	281	4.4%
National average	14,387	3.9%

Slide 10

the gray bar graph is 1996.); the number of moderate cases also increased and such cases are sent to tertiary emergency care facilities, which is a significant problem. Additionally, the number of elderly individuals being transported to tertiary emergency care facilities for both mild and moderate cases has increased.

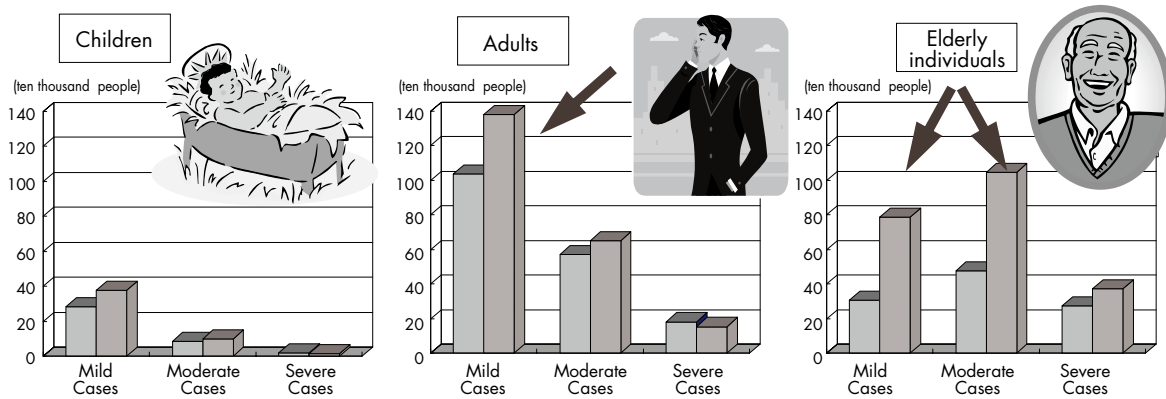
● Shortage of nurses

(Slide 12) How do we stand in terms of nursing coverage? Let me show the Japanese Nursing Association's figures on changes in nursing staff in 2005 and 2006. Hospitals employed 819,000 in 2005 and 832,000 in 2006, which indicates an increase of 13,000 nurses for that year. The number of new graduates was 46,000 and 69,000 nurses found reemployment after leaving their previous employer. These two groups of nurses total 115,000. Meanwhile, however, the turnover rate was 12.4%, meaning that 102,000 nurses left the job. The Japan Nursing Association faces the significantly important task of considering measures reduce or prevent the loss of nursing staff. Only four-year universities are attracting sufficient numbers of students to fill their programs.

● Increase of various social issues

In addition, there is the issue of uncollected fees for medical service. The majority of Japanese might be considered to fall within the middle class, and while this means not having so many wealthy individuals, it also means not having so many poor people. Even so, looking at Slide 13, data from 2000 shows "physical and psychological disorders/ anxiety" and "poverty" on the horizontal axis, and "social rejection and friction" and "social isolation" on the vertical axis, revealing the increase of various problems in modern society. At one point, the number of suicides rose to 30,000 per year, a figure that has not come down at all. This is one of the many significant problems in our society. The year 2000 saw a slight increase in the number of middle-aged and older individuals falling victim to corporate restructuring or becoming part-time workers; however, the prevalence of such social problems has rapidly increased to become a significant issue in the continuing economic recession.

Number of Patients Transported over 10 Years (by age/ degree of severity)



In 1996

Total	Children	Adults	Elderly Individuals
Severe Cases	22,000	183,000	275,000
Moderate Cases	87,000	572,000	476,000
Mild Cases	284,000	1,036,000	308,000

This analysis is based on the data on Emergency Care (by Fire and Disaster Management Agency)

In 2006

Total	Children (Younger than 18)	Adults (18 - 64)	Elderly Individuals (65 or older)
Severe Cases	16,000 -6,000 -27%	155,000 -28,000 -15%	372,000 -97,000 +35%
Moderate Cases	102,000 +17,000 +19%	652,000 +80,000 +14%	1,044,000 +568,000 +119%
Mild Cases	378,000 +94,000 +33%	1,381,000 +345,000 +33%	788,000 +480,000 +156%

Slide 11

Changes in Number of Nurses at Hospitals (estimates by the Japanese Nursing Association)

• At the end of 2005 At the end of 2006

↓ Substantial increase of 13,000 ↓

819,000 832,000

New graduates Reemployment Turnover (12.4%)

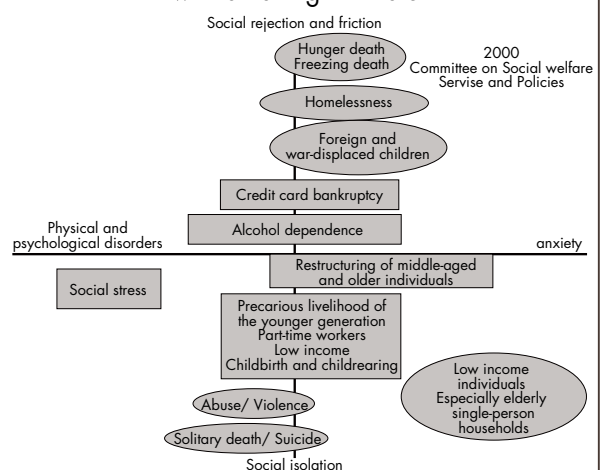
46,000 69,000 102,000

Potential nurses: 550,000 – 650,000

Only four-year universities are attracting sufficient applicants to fill their programs. Other schools are all falling below the quota.

Slide 12

Various Issues in Social Welfare of the Modern Society in Addition to the Issue of Aging Society with a Falling Birthrate

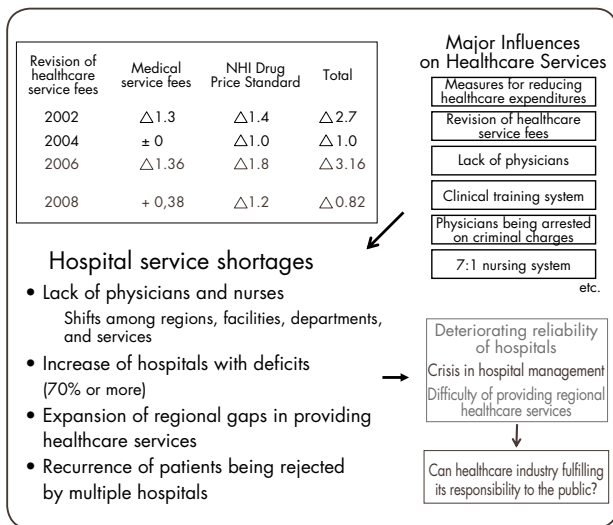


Slide 13

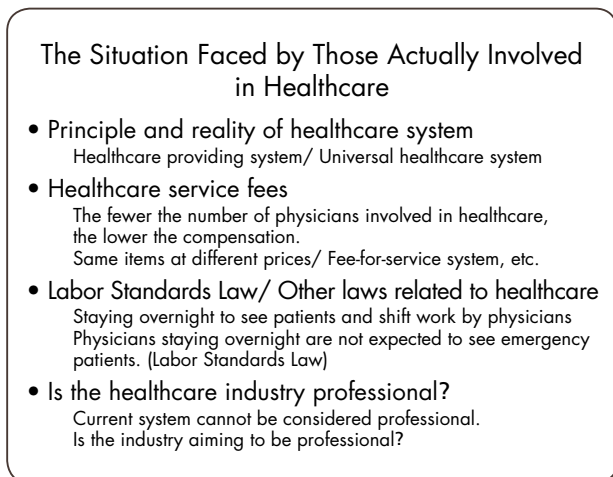
● Dysfunctional Japanese healthcare system

Based on the understanding of such issues, I summarized the current Japanese healthcare system in Slide 14. Major influencing factors for hospital healthcare services are shown in the slide.

Medical service fee has been revised downward three times. In 2008, it was revised upward by 0.38%; however, as was pointed out earlier, the number of hospitals running deficits in that year was also up.



Slide 14



Slide 15

As a result, hospitals have become insolvent. The number of physicians and nurses has dropped, deficit has increased, regional gaps in healthcare services have widened, and patients are being passed from hospital to hospital. The reliability of hospitals has deteriorated, causing a crisis in hospital management and increasing the difficulty of providing regional healthcare services. In short, the healthcare industry cannot carry out its responsibility to the public. This is the current situation facing the Japanese healthcare system.

Both politicians and the government have racked their brains finding ways to respond to the crisis that the Japanese healthcare system has been facing over the past 10 or 20 years. And while those actually involved in the provision of healthcare have worked hard to institute various measures, the depressing situation continues.

● The situation faced by those actually involved in healthcare

Slide 15 is the summary of situation facing the individuals actually involved in healthcare. It is the time for us to take a fresh look at the cause of these conditions.

For example, the universal healthcare system was implemented for the purpose of providing healthcare to anyone, anytime and anywhere. However, the results were as mentioned above. Although the government's goal was a world-class system of universal healthcare delivered equitably and effectively throughout the nation, the system is failing in the eyes of the people actually involved in healthcare. In regard to the healthcare service fees, the fewer the number of physicians involved in healthcare, the lower the compensation, and physicians in each region rightfully feel sensitive about this. The number of hospitals has decreased, and patients seek treatment at the remaining hospitals. With fewer physicians, the number of patients per physician increases and compensation drops by 10%. Such things are happening, and many physicians are complaining about it. They also feel that the Labor Standards Law and other laws related to healthcare are not being appropriately applied. Fewer physicians means longer hours as hospitals remain open throughout the night to see patients in need of medical care. Such conditions violate the Labor Standards Law, leading to complaints and deterioration in morale that leads to the health insurance fraud that occurred in Nara. What do those actually delivering healthcare think? Some call for the implementation of rotating shifts, but this is impossible now because we do not have enough physicians. If we try to observe the Labor Standards Law, what we can say is "We will implement the rotating shifts, but we cannot see emergency patients." I believe that physicians feel strongly about these issues. It is important for the healthcare industry to deal with such problems.

Is the healthcare industry professional? There are some problems that are difficult to handle. I will talk about them later.

(Slide 16) Healthcare has progressed to evidence based medicine. Treatment has diversified, and the results have improved as healthcare has moved from invasive to non-invasive procedures. It has also specialized, and has improved significantly. However, while healthcare has become safer and more secure, public trust in healthcare has deteriorated, which is a problem.

Modern Healthcare

- Healthcare delivered through the progress of evidence-based medicine
 - Diversification of diagnostics and treatment
 - From invasive to non-invasive healthcare
 - Segmentalization of specializations
 - Standardization and globalization of healthcare standards
 - Cooperation in healthcare and team-based medicine
 - From cure to social rehabilitation
 - Promotion of healthcare safety
 - Public- and patient participation-based healthcare
- Healthcare has progressed and delivers safe and secure service; however, public confidence in healthcare has deteriorated.

Slide 16

Vision of a Safe and Desirable Healthcare System

June 2008 Ministry of Health, Labour and Welfare

3 Pillars for the Achievement of a Safe and Desirable Healthcare System

1. The number and roles of individuals involved in healthcare
 2. The promotion of regionally supported healthcare
 3. The promotion of communication among the individuals involved in healthcare, patients, and their families
1. The number and roles of individuals involved in healthcare
 - (1) Increase of physicians
 - (2) Improvement of work environment for physicians
 - (3) Improvement of balance in healthcare service fees, etc.
 - (4) Cooperation among different professions/ Improvement of team-based medicine
 2. The promotion of regionally supported healthcare
 - (1) Promotion of planning for improved emergency care
 - (2) Promotion of region-based care
 - (3) Promotion of home care
 - (4) Improvement of regional healthcare/ Promotion of remote care
 3. The promotion of communication among the individuals involved in healthcare, patients, and their families
 - (1) Necessity of mutual understanding
 - (2) Recognition of the public nature of healthcare
 - (3) Enhancing patient and family understanding of healthcare

Slide 17

■ Budgets Related to Healthcare and the Revision of Healthcare Service Fees

● Current movements

(Slide 17) In order to solve such problems, the national government drafted its “Vision of Securing Safe and Desirable Healthcare System” in June 2008. They indicated three pillars for the achievement of the safe and desirable healthcare system: 1. The number and roles of individuals involved in healthcare; 2. The promotion of regionally supported healthcare; and 3. The promotion of communication among the individuals involved in healthcare, patients, and their families. A vision that also includes an increase in the number of physicians can be considered as constructive and good. However, reading the vision does not give me the impression of change from the existing system.

(Slide 18) The Report of the Conference on Realizing a Safe Society, published by the Cabinet Office in June 2009, includes a section entitled “For a Safe and Vibrant Japan,” which addresses the “Continual Guarantee of Safety throughout Life.” This section addresses “safety” rather than “security”, and Section 4 covers “Safety in Health and Healthcare.” In this section we read, “It was good to provide an environment in which people can obtain healthcare easily. However, in spite of the provision of such care at 8.1% of GDP, there were not enough physicians for the system, which resulted in failed hospital management and the spread of uncertainty regarding

Cabinet Office: The Report of the Conference on Realizing a Safe Society (June 2009)

For a Safe and Vibrant Japan II. Continual Guarantee of Safety throughout Life

4. Safety in Health and Healthcare

Expenditures for healthcare were 8.1% of GDP (OECD average in 2005 was 9%.) Compared with other countries, Japan has a better environment for access to healthcare services. However, the lack of physicians at acute-phase hospitals has become serious, hospital failures in regions have increased, and safety in health and healthcare has rapidly deteriorated.

It is necessary to facilitate the allocation of physicians and nurses to emergency care facilities as quick as possible. Along with this, hospital consortiums should be organized at secondary care facilities and promote the distribution of services and integration of medical institutions to respond to healthcare needs in regions. In secondary care facilities, emergency systems, especially for departments of obstetrics and pediatrics, should be secured. It is also required to rapidly promote the introduction of IT systems, such as online prescription management, and promote effective healthcare based on data.

Furthermore, in order to realize the security of life and basic human rights (the right of self-determination and the right to high-quality healthcare), it is necessary to promote the establishment basic laws that clearly stipulate such policies within the next two years.

Slide 18

safety.” I agree with this. It continued to explain what the Conference felt should be done about emergency care facilities. One important consideration that was included was the need “to realize the security of life and basic human rights.” In order to realize these, the section continues, “It is necessary to promote the establishment of a basic law that clearly stipulates such policies within next two years.” These are the matters discussed during the Conference for Realizing a Safe Society held in June 2009.

● Budgets based on emergency measures have become available

(Slide 19) Taking these matters into consideration, a FY 2009 budget and an additional budget were introduced.

The FY 2009 budget included a 69% increase over the 2008 budget in funding to secure physicians, and funding for emergency care increased to double its previous amount.

According to the emergency care budget for FY 2009 (Slide 20), the 10 billion yen budgeted in FY 2008 was doubled to 20.5 billion yen, assistance for physicians involved in emergency care climbed to 2.1 billion yen, reinforcement of emergency care was set at 5.1 billion yen. Other items are shown in this slide.

(Slide 21) A meeting of intellectuals aimed at resolving the economic crisis was held on March 21st as part of the government's measures for economic revitalization. More than ten intellectuals in the field of social security were invited to the Cabinet Office and given three minutes to provide suggestions for resolving the economic crisis to a panel of three politicians, including Prime Minister Aso. A total of two and a half hours were scheduled; however, when it came around to me, only 10 minutes remained.

I talked about what we should do. First was the seismic upgrading of hospital buildings to protect against damage in the event of an earthquake, especially for old private hospitals which had been built in accordance with the old standards and needed to be upgraded to the current standards. It has not progressed, so that it is necessary to promote it with the national budget. Next was support for

the renewal or new implementation of medical devices. We would like to purchase better devices; however, this is very difficult to manage financially, making help from the national budget necessary. Third was the introduction of IT to hospitals with support from the

Outline of the 2009 Health Policy Bureau Budget (draft)

	FY 2008	FY 2009	Rate of Increase
Total	196.77 billion yen	213.26 billion yen	8.4%
Securing physicians	16.1 billion yen	27.2 billion yen	69%
Emergency care	10.0 billion yen	20.5 billion yen	105%

Slide 19

Ministry of Health, Labour and Welfare FY 2009 Budget for Emergency Care Policies (draft)

- FY 2008 budget 10.0 billion yen
⇒ FY 2009 budget (draft) 20.5 billion yen
- (1) Assistance for physicians involved in emergency care 2.1 billion yen
- (2) Reinforcement of emergency care 5.1 billion yen
- (3) Assistance for emergency care facilities that function as control centers 5.4 billion yen
- (4) Reinforcement of medevac helicopter implementation 21 billion yen
- (5) Reinforcement of perinatal care

Slide 20

A Meeting of Intellectuals Aimed at Resolving the Economic Crisis Social Security Division/ Saturday, March 21

- Mitsuo Okubo: Realization of an 8020 society
- Yoshihito Karasawa: Improvement of work environment for individuals involved in healthcare/ Creation of employment
- Takanobu Kyogoku: Economic effect of social security/ New Deal
- Takashi Kodama: Family pharmacy/ Self medication
- Nami Takenaka: Basic laws for coexistence and mutual assistance/ Disability-related concerns
- Kiyoshi Nakata: Deposition of 200,000 individuals awaiting admission/ Facility improvement/ New employment
- Setsuko Hisatsune: Nurse employment/ Countermeasures for the declining birthrate
- Shigeaki Hinohara: Skill mix/ Medical schools
- Tsutomu Hotta: Preferential treatment for facilities investing in elderly care/ Free education for individuals involved in welfare
- Yoshio Yazaki: Measures for physicians employed at facilities/ Renovation of hospitals/ Promotion of clinical trials
- Shuzo Yamamoto: Quality and safety of healthcare/ Employment/ Promotion of research and development
- Makoto Yuasa: Securing housing/ Meeting the cost of living/ Measures to fight poverty

- Shuzo Yamamoto (Japan Hospital Association)
- 1. From the viewpoint of quality and safety assurance for healthcare
 - (1) Promotion of seismic upgrading of hospital facilities
 - (2) Assistance for renewal or new implementation of medical devices
 - (3) Promotion of introduction of IT to hospitals
- Standardization of platforms
- 2. From the viewpoint of employment
 - Assistance for the employment of medical secretaries
- 3. Emergency investment in research and technical development related to medicine and healthcare
 - So as not to fall behind the measures being implemented by the Obama administration in the U.S.

All these suggestions were included in the measures (A).

Slide 21

national budget. Last was emergency investment into research and technical development related to medicine and healthcare so as not to fall behind the measures being implemented by the Obama administration in the U.S. President Bush, who had pressure from conservative Christian groups, did not support budget expenditures for research and experimentation on the clinical application in regenerative medicine due to ethical reasons although a budget had been passed by the House. Because of this, no advancements were made during his administration. As soon as Mr. Obama took office, he signed a large budget designed to bring science back to the direction of research. They have already started projects. That is why I mentioned the necessity of emergency investment.

(Slide 22) As a result, economic measures that included 15 trillion yen in increased public spending and actual expenditures of 57 trillion yen were proposed. What we had proposed was considered as measures for the regeneration of regional healthcare and 310 billion yen was allocated. The breakdown of the budget was 10 billion yen × 10 locations and 2.5 billion yen × 84 locations, which would total 310 billion yen. All 47 prefectures are required to submit two plans to receive funding. I guess, each prefecture is now trying hard to

Economic Measures (April 10th, 2009)

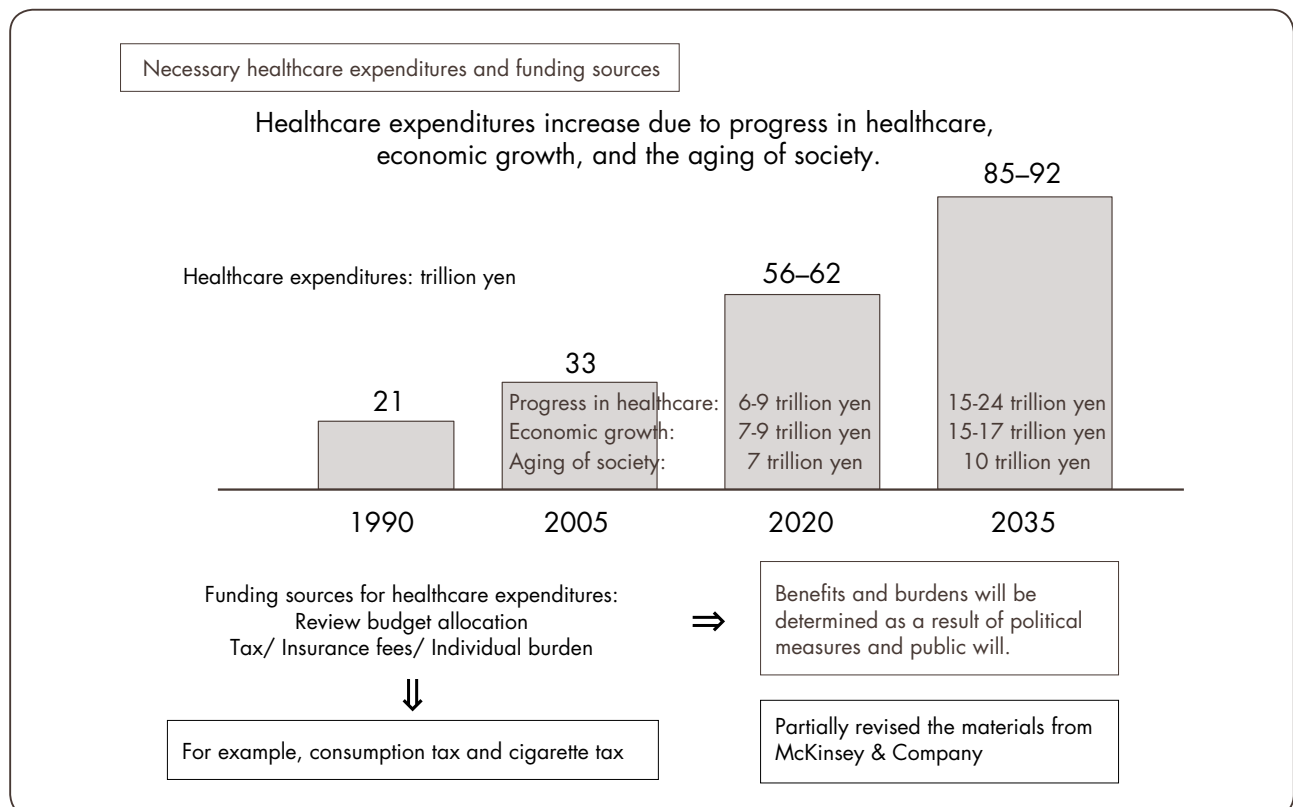
- Scale of the measures 57 trillion yen
 (Public spending) 15 trillion yen

Measures related to healthcare
 Foundation of subsidy for the revitalization of regional healthcare
 310.0 billion yen
 (10.0 billion yen × 10 locations/ 2.5 billion yen × 84 locations)
 Assistance for cutting-edge technology research & development, and
 dispatching personnel
 abroad
 300.0 billion yen
 Implementation of seismic upgrades, other

Slide 22

make plans. 300 billion yen was allocated for research and development of cutting-edge technologies, and funds were also allocated for the implementation of seismic upgrades.

Thus funding is being provided for these important necessities; however, this funding is in reality only subsidies that will be provided only for a certain period of time. Long-term finance sustainability will require that we consider healthcare service fees. Therefore, healthcare service fees are significantly important items in the improvement of the fundamental system.



Slide 23

● Measures in preparation for increased expenditures for healthcare

(Slide 23) How much will healthcare spending increase in the future? The estimates are between 6 and 9 trillion yen as a result of advances in treatment, between 7 and 9 trillion yen as a result of economic growth (this was calculated before the recession so it may not be expected to increase much.), and 7 trillion yen as a result of the aging of the population. We really have to consider how to secure such a large amount of money, how much the public will bear and what benefits it will receive from the government. These are political issues, but I believe the benefits and burdens will be determined as a result of political measures and public will.

● Looking at the revision of healthcare service fees next year

Although the budget was allocated as a subsidy, it is necessary to secure funding through healthcare service fees to ensure a sustainable system. Therefore, it is very important to consider the new fee system scheduled to be introduced in April of next year. We are now carefully examining the contents.

(Slide 24) There is a group called the Japan Hospital Council, whose basic principles include the eight items shown in this slide. Among these, the most important items relate to inpatient care and basic inpatient fees. There are more complicated matters, of course, but the main function of hospitals is inpatient care. Discussions are moving forward with a focus on increasing inpatient basic fees.

We have data on hospital management from around 1957 that shows basic inpatient fees as 44% and surgical service fees as 31% of total hospital revenues. This is, we think, what the figures should be.

Currently, healthcare operates on a fee-for-service basis, by which drugs and tests are charged separately. As a result, basic inpatient fees decreased more and more over time. Surgical service fees were lowered along with a variety of other fees whose specific content was not clear. Therefore, it is necessary to review these fees.

● The platform of each political group for the next nationwide election

(Slide 25) With healthcare costs at the center of public concern, the decision has been made to dissolve the Diet,

Principles of Healthcare and Nursing Care Provision System and Healthcare Service Fee System (Japan Hospital Council)

1. Inpatient care (Function distribution)
Advanced ward, Acute-phase ward, Regional general ward, Recovery-phase rehabilitation ward, Chronic-phase ward
2. Psychiatric care
3. Nursing care facilities
4. Outpatient care
Outpatient fees, Acute-phase outpatient care and chronic-phase outpatient care, Healthcare at nursing care facilities
5. Inpatient basic fees
Concept of basic inpatient fees
6. Segregation of duties of healthcare professionals
Skill mix
7. Rehabilitation
8. DPC

Slide 24

Draft of Platform of Each Political Group for the Next Nationwide Election of the House of Representatives

- | | |
|--|--|
| <p>Liberal Democratic Party
Platform (under consideration)</p> <ul style="list-style-type: none"> • Establishment of a National Assembly for Social Security System Reform (tentative name) • Planning to declare push for a positive revision of healthcare fees (Medifax 5678) | <p>Democratic Party of Japan
Platform (under consideration)</p> <ul style="list-style-type: none"> • 20% increase in inpatient fees for hospitals operating unprofitable departments • (10 yen per point ⇒12 yen) • 10 yen per point for hospital outpatient departments and independent physicians • 30% patient fee burden ⇒25% • Giving shape to designation standards for subject hospitals • Maintaining the option of choosing 11 yen per point
(July 7th issue of Asahi Newspaper) |
|--|--|

Slide 25

and nationwide elections are scheduled to be held on August 30th.

The Liberal Democratic Party (LDP) is considering its platform. The Medifax 5678 issue reported that the LDP is planning to establish a National Assembly for Social Security System Reform (Which strikes me as meaningless) and has declared that they will push for a positive revision of healthcare fees, though this may simply be rhetoric designed to win the election. According to Asahi Newspaper's July 7th edition, the Democratic Party of Japan (DPJ) is still considering its platform; however, they are reported to be eyeing a 20% increase in inpatient fees and a 10 yen increase per point, to 12 yen, for hospitals operating unprofitable departments. This surprised me because it does not seem realistic. On the

other hand, the DPJ is considering maintaining the 10 yen per point rate for outpatient departments and independent physicians, decreasing the 30% patient fee burden to 25%, giving shape to designation standards for subject hospitals, and maintaining the option of raising to 11 yen per point instead of 12 yen. These would be significant changes from the current system. I would like to review their platform well when it is made public.

In any case, dealing with these issues requires careful consideration of the nation's economy and public opinion. The healthcare industry's problems cannot be solved by simply asking the government to give it more money.

■ Major Tasks for the Revitalization of the Healthcare System

(Slide 26) What should we do to open the way for the revitalization of the healthcare system in this political confusion and economic recession? Of course, the most important thing is to revitalize hospitals, but the revitalization of regional healthcare is also very important.

(Slide 27) The number of physicians in each region is insufficient. Unfortunately, however, we have not accurately understood regional healthcare needs, and this has interfered with our ability to effectively allocate

How do we open the way for the revitalization of the healthcare system in this political confusion and economic recession?

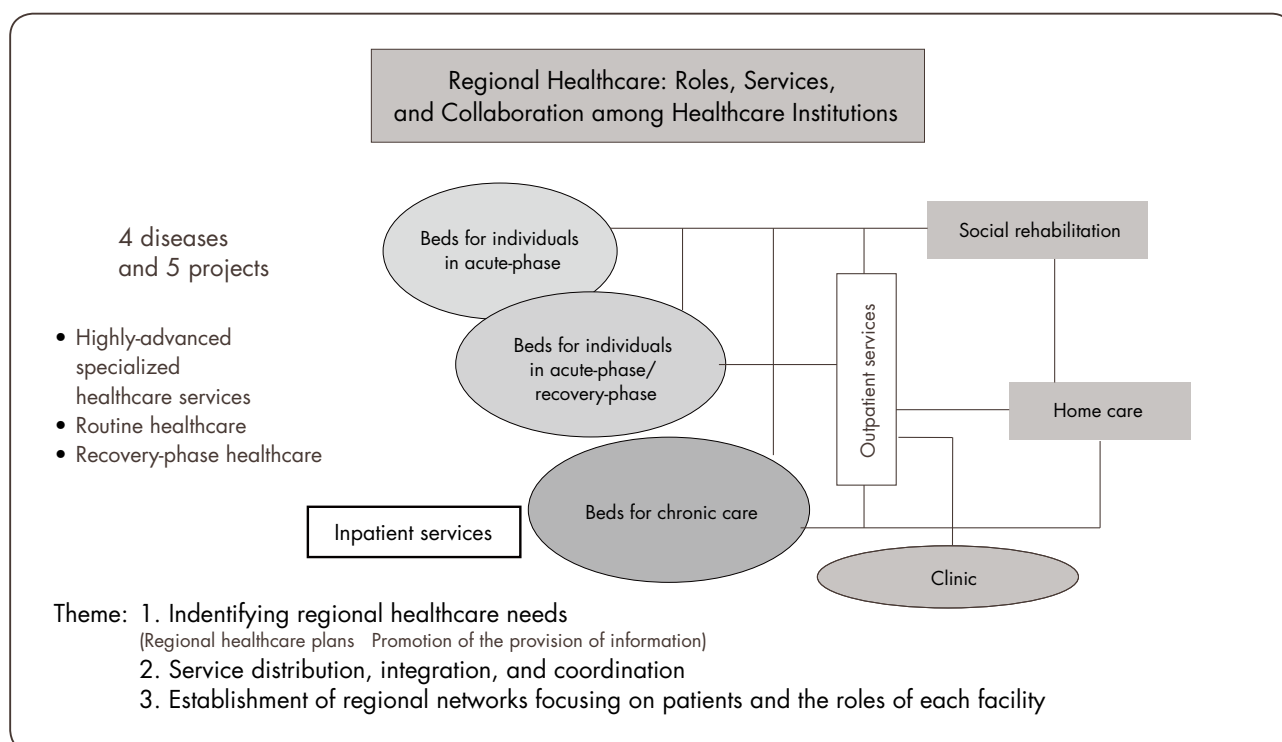
Collapse of the healthcare system equals the collapse of hospital management.
 Collapse of the regional healthcare started from the collapse of hospital management.
 The most important key for revitalizing the healthcare system is to revitalize hospital management.

Slide 26

resources. We've had various figures, such as the number of patients, a count based on the number of prescriptions issued; however, more detailed analysis, such as the number of patients requiring which treatment in which regions or the number of physicians required to provide such treatment in those regions has not been carried out. Improving regional healthcare requires us to consider the system in such ways. In other words, it is of great importance for us to identify regional healthcare needs.

● The medical services information system

In the 5th Regional Healthcare Plan, a framework for a medical services information system has been established.



Slide 27

Future Regional Healthcare Plan
(Article 30, Paragraph 4, Medical Service Law)

Determination of medical districts
 Calculation of the standard number of beds
 Setting goals for improving regional healthcare support hospitals
 Establishment of goals and healthcare collaboration systems for 4 diseases and 5 projects
 Promotion of the provision of information related to healthcare services
 Securing home healthcare services
 Securing the safety of healthcare
 Securing healthcare professionals (physicians, etc.)
 Securing other systems for providing healthcare services

3 tasks

1. From quantitative management to quality management
2. Creating healthcare plans that are easy to understand for citizens and patients
3. Creating healthcare plans with specific numeric goals that can be evaluated

Slide 28

Dr. Oi, Vice-President of the Japan Hospital Association, was a member of the committee which considered the system. As this framework advances, we will be able to more effectively identify regional healthcare needs. In March of this year, a medical services information system to be used by healthcare facilities was set up in each prefecture to enable healthcare providers to access and understand which hospitals provide which services.

(Slide 29) What each hospital is asked to report is shown in this slide.

This is for hospitals and there are three categories of information: 1. Matters regarding management, operation, services, and amenities; 2. Matters regarding the provision of services and medical institution systems; and 3. Matters regarding healthcare achievements and results. Medical institutions are asked to report this information responsibly, and each prefecture is asked to disclose this information on the Internet so that it can be accessed by the public.

Matters regarding healthcare achievements and results include 13 items, which will gradually increase and, in the near future, hospitals will be asked to provide more detailed information, such as how many cases of stomach cancer are treated and what the fatality rate is, as is done in the advanced countries. The provision of such detailed information has the potential of changing various things.

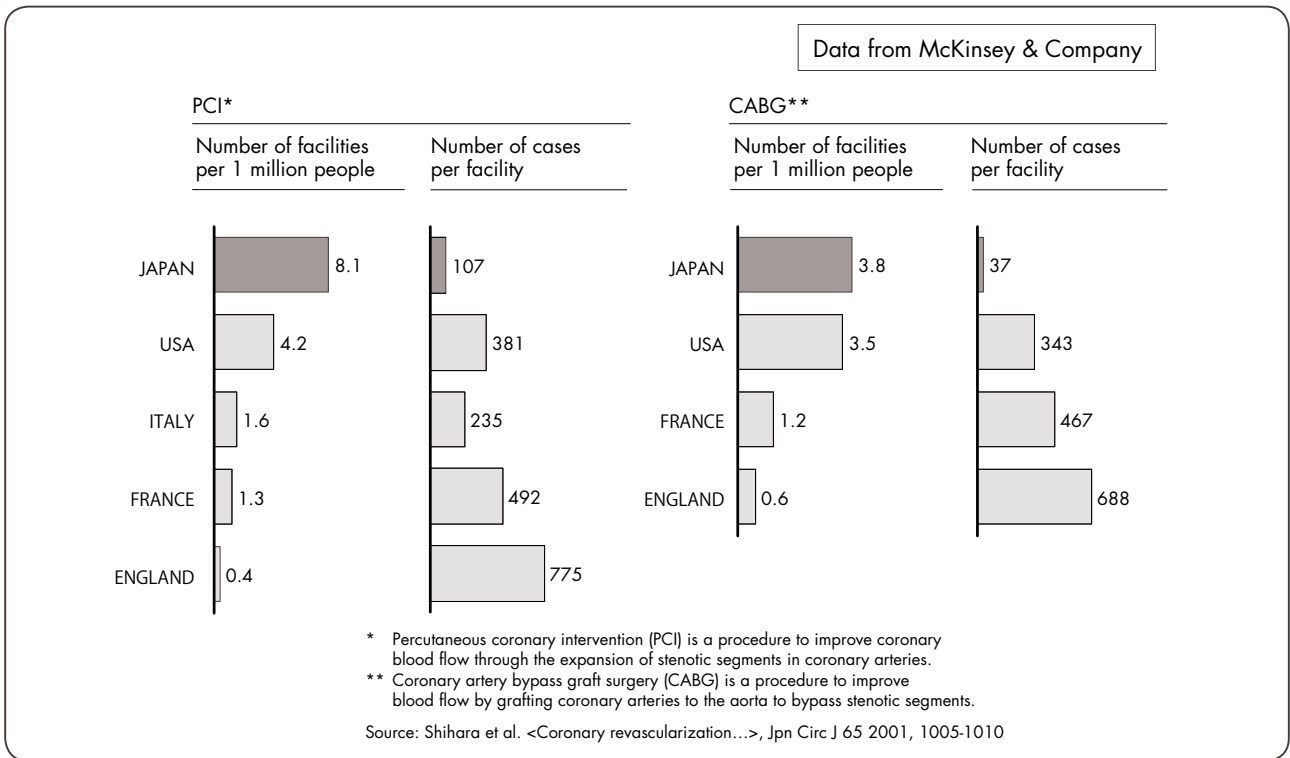
● **The concentration, differentiation and coordination of medical services**

(Slide 30) The importance of concentrating, differentiating, and coordinating medical services is being discussed in each region. According to the data, the number of hospitals that perform percutaneous coronary intervention (PCI)

Obligation of Prefectures to Provide Medical Information
Information related to Healthcare Services at Hospitals

<p>1. Matters regarding management, operation, services, and amenities</p> <p>(1) Basic information 9 items</p> <p>(2) Accessibility to the hospital 8 items</p> <p>(3) In-hospital services/ amenities 9 items</p> <p>(4) Burden of payment, etc. 5 items</p>	<p>1. Name of the institution, Explicator, Location, Departments, Access to the facility, Parking, Website, Outpatient registration hours, Appointments, Visiting hours, Medical consultation, In-hospital/ out-of-hospital prescriptions, Languages spoken, Optional care/ Advanced care, Clinical trials, etc.</p>
<p>2. Matters regarding the provision of services and medical institution systems</p> <p>(1) Diagnostics content/ Available insurance, healthcare, and nursing services 13 items</p>	<p>2. Medical specialists, Healthcare equipment, Diseases that can be treated/ Available treatment, Short-stay surgery, Specialized outpatient departments, Comprehensive medical examinations, Second opinions, Regional coordination, etc.</p>
<p>3. Matters regarding healthcare achievements and result 13 items</p>	<p>3. Personnel allocation, Nurse allocation, Safety management in healthcare services, Critical paths, Information management, Information disclosure, Grand rounds, Average number of days of hospitalization, Survey of patient satisfaction, etc.</p>

Slide 29



Slide 30

per million residents is 8.1 in Japan, while the number in the U.S. is only about half at 4.2. The number of cases handled per facility is 107 in Japan, while the number in the U.S. is 381, more than three times the number in Japan.

What this shows us is that treating cases at a central location makes it possible to improve performance and lower the fatality rate. This is the same for coronary artery bypass graft surgery (CABG). The number of cases handled per facility is totally different in Japan and in other advanced countries. This is a well known fact for people who have been to the U.S. For example, Dr. Sakai, Vice-

President of the Japan Hospital Association, has worked as a brain surgeon in the U.S. and mentioned that they treat more cases in three years in the U.S. than we do in 10 years in Japan. This makes a great difference in the quality of physicians. Although difficult in reality to achieve so quickly, it is necessary to consider concentrating, differentiating, and coordinating medical services.

● **Healthcare as common social capital**

Taking such matters into consideration, we follow Hirofumi Uzawa in seeing *healthcare as common social capital* and as something for which we should all cooperate

Healthcare as Common Social Capital
Hirofumi Uzawa

- Common social capital comprises a natural environment and social infrastructure that allow a country or a specific region to provide an affluent life and culture, and maintain an attractive, stable and sustainable society.
- Common social capital should be managed and operated through specialized knowledge and a professional sense of ethics of specialists working with individual segments of that common social capital, not by the market or bureaucratic standards

Slide 31

What is Required for Clinical Physicians?

- Sense of morality and professional ethics
- Continual acquisition of professional knowledge
- Acquisition and improvement of professional skill
- Passing down professional knowledge and skill
- Intention to engage in clinical research
- Sociability

Renewal system of certification

Medical education ⇒ Clinical training ⇒ Medical specialist system

The fostering of good clinical physicians is the foundation of quality management in healthcare

Slide 32

in order to reach the same goal (Slide 31). Dr. Uzawa mentioned that common social capital should be managed by the professionals involved based on their knowledge and sense of ethics. He meant that healthcare should be managed by the healthcare providers themselves. This, I believe, is a seriously important consideration.

● What is required for clinical physicians?

(Slide 32) There are a number of things that clinical physicians are required. They need to have a sense of morality and professional ethics. They need to continually acquire professional knowledge and skill, and they need to improve and pass down such knowledge and skill, perform research, and develop their sociability. To assure that physicians are able to meet these important requirements, it is necessary to have a consistent system of education from medical school to clinical training and specialization. Furthermore, it is also necessary to have an effective renewal system for certification. The foundation of quality management in healthcare is the fostering of good clinical physicians through such systems, and it is thus necessary to visualize such systems.

● Introducing complex thinking into the healthcare system

In spite of the fact that the public, national government, and we all did our best in accordance with predetermined policies, the healthcare system has collapsed. How did this happen?

Now, when faced with a problem, there are sometimes paradigms that we can apply in our search for a solution. In some cases, however, we have to face the fact that the existing paradigms may not provide a solution. In such cases we are forced to change our approach, the way we look at the problem we are facing.

(Slide 33) While healthcare is a complex system, many treat its problems as if it were not. For example, thinking that the resident physician system is causing a shortage of physicians at universities, administrators call for a revision of the one program as a solution. In another example, administrators allocate one nurse for every seven patients in a department suffering from staffing shortages. However, their suggestion to implement such a policy throughout the hospital is met with resistance by department heads who feel that such a policy would force

Healthcare is a complex system.

- Key factors for healthcare revitalization
 - Healthcare expenditure reduction policy
 - Healthcare service fee system
 - Lack of physicians at hospitals/ Shift of physicians
 - Clinical training system
 - Arrest of physicians/ Professional negligence resulting in bodily injury
 - Allocating 1 nurse to 7 patients, etc
- Healthcare is a complex system
 - Butterfly Theory
 - Order Parameters
 - Securing healthcare funding
 - Quality control in healthcare system

Characteristics of a complex system: Open structure/ Nonlinear nature/ Self-assembly
Changes in a single element cause unexpected impacts on the entire situation.
Framework in which the functioning of important elements allows the system to grow

Slide 33

**A Way to Revitalize Hospital Healthcare
Order Parameters for Healthcare Providers**

- Framework of quality control in the healthcare system
 - Fostering good physicians
(Uniformity in medical education, clinical training, and medical specialist system)
 - Appropriate allocation of physicians/ Regulations for healthcare professionals
- Creating the Accreditation Council for Graduate Medical Education (ACGME) to provide reliable healthcare
- Creating the Japan Council for Quality Health Care (JCAHO) to provide adequate healthcare

ACGME: The Accreditation Council for Graduate Medical Education
JCAHO: Joint commission on Accreditation of Healthcare Organization

Slide 34

each department to compete for nurses, a situation, they say, that would adversely impact hospital operations. Such thinking, however, creates difficulties and interferes with the progress of the entire organization. In a complex system if we concentrate too closely on individual elements, we interfere with the system as a whole. A complex system is characterized by its open structure and nonlinear nature, and the individuals operating within such a system must become comfortable with these characteristics so that it may function successfully. But I still don't understand what self-assembly is.

A researcher in the U.S. came up with what is referred to as the Butterfly Theory, which postulates that a butterfly fluttering its wings in Africa causes a tornado in Florida. In other words, it is a single element that impacts the entire situation. In a complex system, however, we should not focus obsessively on each individual element. Rather, we should focus on order parameters, which concern important elements only. Focusing on order parameters allows us to see the operation of the entire system. Focusing on each individual element, on the other hand, blocks our view of the whole system.

The United States has adopted the idea that politics,

healthcare, and economics are all complex systems. In doing so they do not stick to small elements, but have chosen what they consider to be the important elements only.

● Using the healthcare quality as an order parameter

One order parameter is money, an element that is always very important for any system. Another parameter is quality control (Slide 34) because the more good physicians we have, the higher the quality of healthcare. This also increases the degree of flexibility that physicians have in their work and that hospitals have in employing them, and exerts a positive influence on the further development of the system. In a complex system, if overseers, such as those in national government ultimately in charge of or responsible for the system, determine every detail, the organization cannot function well. For this reason the individuals that oversee a system should concentrate on developing a general framework within which those handling the practical administration of the system can move freely in response to situations and needs. It is important to create a framework that respects the will of the people who are actually present at the site of operations and allows them to move freely. This is an important concept. I believe that the degree of freedom at the workplace is a critical element, one that requires us to give the greatest weight to decisions made by those who are actually performing the work.

Quality control requires an effective system of regulation. An example of such a system is the Accreditation Council for Graduate Medical Education (ACGME), an organization that accredits post-M.D. medical training programs in the United States. We have a similar organization in Japan; however, it needs to be enhanced to bring it to the level of such organizations in advanced countries. We also have the Japan Council for Quality Health Care, which is on a par with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The proper use of such organizations will make it possible to achieve effective quality control throughout the healthcare system.

Basic Tasks for the Revitalization of the Healthcare System

- Basic laws on healthcare:
Laws on principles/ Laws on patients' rights
 - Funding sources for medical expenditures:
Public burdens and benefits
 - Review of medical statistics:
Statistics from hospital discharge summaries
 - Promotion of introduction of IT:
Standardization of platforms
 - Policies for elderly healthcare:
As a pathfinder for aging societies in the world
 - Review on the tightening or loosening of regulations:
Reinforcement of on-site efficiency
 - Quality control in healthcare:
Fostering good physicians
 - Transparency of healthcare processes:
Information provision/Accountability/Gaining the understanding of the public
 - Range of healthcare:
Coordination among different services
- (Issues of issues: Too many details/ Interests of various stakeholders)
Principle: If you agree with the plan in general, you will not focus on details.

Slide 35

■ Suggesting Tasks at Various Places

● Basic tasks for the revitalization of the healthcare system

(Slide 35) Next, I would like to talk about the basic tasks required for the revitalization of the healthcare system. We all know that there are various laws, such as the Medical Practitioners Law, the Medical Service Law, and the Act on Public Health Nurses, Midwives, and Nurses, that govern certain aspects of healthcare. The Medical Service Law, for example, covers medical facilities, and the Medical Practitioners Law and the Act on Public Health Nurses, Midwives, and Nurses covers individual healthcare providers. What is missing, however, is a law that actually defines the institution of healthcare and its place in Japanese society. In order to curb the idea of leaving healthcare to market-oriented economy, which has been suggested by some, it is important for the national government and the public to establish a basic concept of healthcare as a principle and as a system that reflects the importance of patients' rights. This will, I believe, be one of the biggest tasks from now.

I have talked about sources of financial revenue; however, there are many other problems to be considered. Medical statistics in Japan need to be reviewed. The introduction of IT should also be promoted. Healthcare

Three Major Tasks in Healthcare Policies To vitalize Japan through the revitalization of the healthcare system

1. Securing stable financial resources and investing in acute-phase treatment
2. Establishing an independent system of medical specialists to improve the quality and safety of healthcare
3. Making the policymaking processes transparent and establishing a framework that broadly reflects public opinion

(From the Health Policy National Forum/
Health Policy Institute, Japan)

Slide 36

Individual Roles

- Individuals involved in healthcare
 - Establishment of professional autonomy
 - Achievement of accountability and the transparency of the healthcare process
- The public and patients
 - Building cooperative relationships with healthcare providers
 - Active access to information
- Journalists
 - Serving as a bridge between specialists and the public
 - Reporting both events that attract attention and matters related to structural problems
- Individuals involved in politics and administration
 - Clarifying what burdens and benefits the public can expect and securing funding for healthcare
 - Measures for revitalizing the healthcare system

Slide 37

Health Sector Council New ways of providing healthcare

1. Establishment of basic healthcare laws
2. Shifting the focus of the healthcare system to the regions
3. Financial issues
4. Making information transparent and sharing information
5. Enhancement of specialization
6. Building partnerships within the healthcare system

Slide 38

for the elderly is also an important issue. Added to these, there are certain regulations that need tightening and others that need to be eased. Because the national government does not trust the healthcare industry, the

politicians tend to make all the rules and then ask us to do our best within the range of those rules. Those actually involved in healthcare cannot move freely within such a predetermined framework. For example, there are differences between Labor Standards Law and laws on night work in the healthcare industry. We need to eliminate confusing or unnecessary laws. In advanced countries, there are no regulations that stipulate the number of physicians required for hospitals. As the individuals who are actually involved in healthcare, we need to push for the elimination of such meaningless regulations. I already talked about quality management in healthcare. One of the biggest reasons that people don't trust the healthcare system is that it is hard for patients and their families to know what is going on during treatment. In order to gain public trust, it is necessary to provide relevant information and easy-to-understand explanations. When Japan updated its Organ Transplant Bill – Plan A, I asked several people in my office (the Japan Hospital Association) if they knew what brain death really meant. To my surprise, nobody could tell me. Some thought that a vegetative state and brain death were the same. Some thought that brain death simply meant that the brain was dead. This indicates the level of understanding among the general public. This is a big problem. I feel our responsibility as professionals is to provide the public with more information and better explanations. After that, the range of healthcare can be reconsidered from the viewpoint of skill mix.

● Three major tasks in healthcare policies

(Slide 36) At a meeting of the Health Policy National Forum, 60 individuals, including individuals in the healthcare industry, intellectuals, business community representatives, university teachers, patient representatives, and members of the media, discussed ways to change the current healthcare system and the things we should ask for in the next election. We came up with three important tasks related to Health Policy that we would ask the LDP and DPJ about.

The first task is to secure stable financial resources and to invest in acute-phase treatment. The second is to establish an independent system of specialists to improve the quality and safety of healthcare. Being independent is significantly important. Third is to make the policymaking processes transparent and assure that they broadly reflect

Responsibilities of the Healthcare Industry are
Making healthcare processes visible and
achieving accountability

- Basics: Healthcare is common social capital
Requiring cooperative support from everyone
Healthcare is a complex system
We should not focus too closely on individual elements.
- It is necessary to establish a framework in which
individuals involved in healthcare can fulfill their
responsibilities to meet the needs of patients.

Slide 39

public opinion, something which is often mentioned by people outside of the healthcare industry. They say that they want a structure that allows them to see the process. In order to achieve this, they want to participate in the processes of establishing healthcare policy.

● Individual roles

(Slide 37) There are some matters that should not be left to the healthcare industry. Such matters must include a wide range of input from a variety of perspectives. For example, even if you are a healthcare provider, you may become a patient and receive healthcare. As an individual that has been undergoing medical treatment for a number of years, I am an example of this. I summarize the individual roles in this slide.

Individuals involved in healthcare should establish professional autonomy, achieve accountability, and promote the visualization of the healthcare process. The public and patients should build cooperative relationships with healthcare providers and actively access information. Journalists should serve as a bridge between specialists and the public. I would like to ask journalists to report not only the events that attract attention, but also the matters related to structural problems. This is of great importance. Individuals involved in politics and administration should clarify what burdens and benefits the public can expect and secure funding for healthcare, which means that both the LDP and DPJ should publish platforms that clarify healthcare costs, the burden to be borne by the public, and benefit that we can receive from the government. I want them to consider measures for revitalizing the healthcare

system that are not too restrictive and that do not involve the creation of too many rules. It is not enough simply to allocate 10 billion yen for regional revitalization. It is necessary to increase the degree of freedom of the people working in those regions and to promote the expansion of their organizations.

● Suggestions to other industries

(Slide 38) There is another group called the Health Sector Council. We spent three days and two nights in Hakone to discuss the healthcare system. We published a summary of our discussions and made it available to other industries such as the political and business worlds. We came to the conclusion that basic healthcare laws were necessary and that the focus of the healthcare system should shift to the regions. In order to promote this, it is important to secure funding, make information transparent and accessible, enhance specializations, and build partnerships within the healthcare system.

We asked both parties to consider individual roles from a national perspective and include these in their platforms.

● Responsibility of healthcare industry

(Slide 39) Those of us involved in healthcare are required to do whatever we can to improve the system. However, our most important responsibilities are making the healthcare process visible and achieving accountability. Although we feel we have explained things sufficiently to the public, from the perspective of the public some things may remain unclear. Visibility and accountability are the biggest themes.

Basically, we should consider healthcare as common social capital requiring cooperative support from everyone. It is also a complex system in which we should not focus too closely on individual elements. Additionally, we must continually consider ways to make it possible for the individuals actually involved in healthcare work comfortably and strive to improve the workplace environment.

We should stop being dependent on others and try to improve the system from our side. In order to do so, the people involved in the healthcare industry should cooperate with one another more. While there are many organizations, including the Japan Hospital Association, the Japan Hospital Council, the Japanese

Nursing Association, as well as various academic associations and educational institutions, that could pool their talents, we have thus far failed to confer and agree on a common direction. Now is the time for all of us to consider establishing a framework to meet our individual responsibility to support patients.

Japan's economy is expected to remain bad for the foreseeable future and the direction of the politics will remain uncertain until after the election. It's safe to say that any way we look at it, our situation will continue to be rough. In such circumstances, those of us involved in the healthcare industry are required to take action that is based on thorough consideration. Today, I mentioned various tasks we have before us. Let us work together to accomplish them in order to improve the healthcare system. Time is up, so I will end my talk now.

■ Questions and Answers

● Clarifying the complex system mentioned in the presentation

Questioner: I think what you meant is that we should cooperate and act together, otherwise the whole structure and system may collapse and fail. I would like you to further clarify the complex system you spoke about.

Yamamoto: It is difficult to explain the complex system. When I talked about it before, physicians operating within complex systems mentioned the importance of letting those systems function. For example, as you already know, the American healthcare system has extremely complex problems. They don't have a national insurance system; therefore, for individuals with low incomes, it is difficult to afford. And they also have various other problems such as long wait times in emergency rooms for patients with non-critical illnesses or injuries.

Why, then, do people consider clinical care in the U.S. to be the best in the world and go to study it? When I talked about this, a Japanese physician who had worked in the American healthcare system for 30 years before returning to Japan told me, and I quote, "I am a neurologist and am familiar with healthcare system issues, but what the American government focuses on is simply fostering good clinical physicians. Such good physicians manage to keep the American healthcare system afloat."

It is hard for me to explain more than that, but I just think the old Aristotelian methods can no longer

provide solutions. In other words, it is necessary to consider solutions with a focus on the individuals who are actually involved in healthcare. Controls from the top should be loose enough to allow such individuals to move freely. For example, physicians are now considered full-time employees and not allowed to work outside the organization. If conditions prevent them from working at a different organization, the degree of freedom should be increased to enhance efficiency. We need to establish an environment that allows them to work once or twice a week at a different organization. In order to do so, we also need to change rules. Currently we have various rules that stipulate the number of physicians at each organization, or various requirements for certification as a specific facility, etc. If we maintain such rules, we will never be able to escape such a closed situation. Including these factors, I call the healthcare a complex system.

● Providing information to the public at various opportunities

Questioner: My name is Kambara from Shizuoka. Thank you so much for a presentation that was very easy to understand. Yesterday, I had a meeting for core hospitals for cancer care in Shizuoka. Some of the participants are members of a support organization for cancer patients. And some of these said that they did not know exactly what the core hospitals for cancer care are.

I also had an opportunity to write a series on healthcare for a local newspaper. I received many comments from well-informed readers who wrote that although they thought they had understood the system, it turned out that they did not know it at all. It hit me then that the majority of the general public probably did not understand the healthcare system. Lots of information is provided to those involved in healthcare; however, I am very anxious about how much such information is provided to the public. I would like to ask you, Dr. Yamamoto, to use your position to promote opportunities to provide information to the public.

Yamamoto: Thank you. Making information available to the public is a very important factor. There is a hospital organization called the Japan Hospital Federation, which holds a National Assembly for Healthcare every year. The meeting includes symposiums and seminars targeting the general public. Another way is to provide information through the mass media. We have used mass media in

the past; however, it has not worked well. When using the mass media as a means of providing information, it is probably best to talk directly to the public. I am looking for ways to do that. Thank you so much for your good suggestion.

●Is social security safe in an aging society?

Questioner: My name is Yoshioka and I come from Miyazaki. In relation to the aging of society, I think the urgent issues are pensions and universal health insurance. We are hoping that our national insurance system can survive until the population graph returns to a pot-like spread. However, mass media often imply that the system will inevitably collapse. I just want to know if the potential exists that the system will indeed survive.

Yamamoto: I did not talk about issues related to the elderly due to the lack of time; however, it will be the biggest issue that Japan will face in the near future. First of all, it is necessary to understand this issue as a very serious problem for all of us, young and old alike. By 2020 or 2030, we will be faced with the reality that two people in the workforce will be supporting one retired person; therefore, we should be working now to find solutions. There are various articles with proposed solutions; however, none of these are realistic because, in the end, the suggested solutions simply turn out to involve increasing the burden on individual taxpayers. In relation to this issue, the Death with Dignity Law in Germany finally passed after a six-year debate. Several countries in the EU, such as Sweden and Switzerland, have already approved euthanasia. I read an article in a newspaper that included the frightening comment that it was necessary to promote the right to die to prepare for the aging of society. Japan is the world's first country to experience a rapidly aging society. We need to strive to consider solutions for other countries that will experience this in the future. It is an urgent issue for us. However, I do not have any good solutions yet.

Time is almost up. We would like to finish this session. Thank you for listening.

Grand Conference Seminar

Considering Japanese Healthcare from an Economist's Perspective



Motoshige Itoh

Dean, Graduate School of Economics and Faculty of Economics, The University of Tokyo
President, National Institute for Research Advancement (NIRA)

Yamamoto: I'm sure everyone here already knows Motoshige Itoh, Professor and Dean of the Graduate School of Economics of the University of Tokyo. He is also Dean of the Faculty of Economics of the University of Tokyo, and he is active as an economic commentator for the newspapers.

Professor Itoh graduated from the University of Tokyo, Faculty of Economics in March 1974, and finished his coursework for the Doctoral Program at the University of Rochester, Graduate School of Economics in the U.S. in July 1978. That same year, he accepted the post of Assistant Professor in the Department of Economics at the University of Houston, and the following year, in 1979, received his doctorate in Economics from the University of Rochester. In April 1982, after returning to Japan, he was offered the post of Assistant Professor by the Faculty of Economics, University of Tokyo. In December 1993, he was promoted to Professor. I had the opportunity to interview Professor Itoh and was greatly impressed with his insight in the field of economics. It was easy to see why his opinion is so respected by such a large number of people. Because he has a deep interest in the area of healthcare, we have invited him here today to ask him for his thoughts on future healthcare.

From 2007, he also assumed the position of President of the National Institute for Research Advancement (NIRA), and participates in a wide variety of activities, including serving as a member of the Tax Commission of the Cabinet Office, and working closely with both the Ministry of Finance and the Ministry of Foreign Affairs. Hiroshi Yoshikawa, an economist and professor at the University of Tokyo, was Professor Itoh's classmate at the University of Tokyo, Faculty of Economics. And now

without further ado, please welcome Professor Motoshige Itoh.

Itoh: Thank you very much, Mr. Yamamoto for your wonderful introduction, and thank you, everyone, for having me here today. I am a little bit anxious because I have never talked about healthcare issues in front of so many people before, and I am afraid it may be difficult to live up to such a glowing introduction. Mr. Yamamoto mentioned my being Director of the National Institute for Research Advancement (NIRA), a think tank which was privatized in January 2008. At NIRA, our task is to gather information on and discuss measures related to various public issues, one of which is healthcare. Although this is an area of great concern to most people, the common perception is that the issues involved are complex and difficult to understand.

However, the complexity of the issues should not become a convenient excuse for leaving the examination of this difficult challenge to specialists to handle. At NIRA, we decided to approach the issues from the viewpoint of the actual individuals who use the healthcare system. I conducted interviews with a number of professionals involved in the delivery of healthcare, 12 or 13 of which I have summarized, including interviews with Director Chikayuki Ochiai at Kanto Medical Center in Gotanda, Ryoza Nagai, the former Director of the University of Tokyo Hospital, Kiyoshi Kurokawa at the University of Tokyo Hospital, and Yoshihiro Ishikawa at the Yokohama City University School of Medicine. I invite you to visit the NIRA website, if you have the time, to read the gist of these interviews. We also interviewed Association President Yamamoto.

During the approximately one year that I spent interviewing these knowledgeable professionals, I

had the opportunity to consider many things, and it is my intention to share some of these with you today. I apologize in advance if what I say strikes you as too frank or too provocative, and ask your forgiveness if anything I say appears as impolite.

The title of my talk is “Considering Japanese Healthcare from an Economist’s Perspective.” However, because I do not represent all Japanese economists, and because I am far from being an expert on Japanese healthcare, I would like to speak from the perspective of an individual who exists outside of the system.

As dean at the university, I probably realize more than other people that we, for example, in the field of economics, or in the world of academic research, are the target of criticism from the public. Some of this criticism is well founded and deserved, while other criticism may, we feel, be less well-deserved. However, even criticisms that we feel are off the mark may sometimes be more deserved than we first think if we take a step back and consider them from a slightly different perspective. With this in mind let me express my honest feelings about healthcare in Japan.

■ Considered from the Viewpoint of Economics, Healthcare is Significant due to its Scale

The issue of healthcare is significant because of its importance in our lives. Beyond this, or perhaps even because of this, however, its scale makes it an important factor within the economy. There are of course various ways of looking at the statistics, but when we hear about national expenditures for healthcare, the number 40 trillion yen is often brought up. This figure may or may not include out-of-pocket payments for dental treatment or other services not covered by public insurance, but 40 trillion yen would account for only 8% of Japan’s 500 trillion yen GDP, which seems like an awfully small amount considering its importance. But is this correct?

Looking at food production, which is often included in discussions about the economy, Japan’s agricultural production is 1.4% of its GDP. While this also seems like a small percentage, it is in fact actually higher than America, whose agricultural production accounts for 1.0% of its GDP. Of course the reason for this may be that Japanese agricultural product prices are higher than those of the U.S. These numbers, however, give us a better feel

for the amount of money being spent on healthcare in Japan, which as it turns out, is significant after all.

Considering the human resources, money, and various other economic resources that such a figure translates into, 8% of a nation’s GDP represents significant economic activity. It is, therefore, of great importance that such a large segment of economic activity is managed in a way that provides maximum benefit to the entire population. Considering Japanese healthcare from the perspective of economics is to examine whether or not such human resources, money, and equipment are being used effectively. In the field of economics we refer to this as resource allocation.

Because of its scale, it may be easier for understanding to divide healthcare into two areas: macro-economic, which views healthcare issues in the larger sense to determine, for example, what the desirable scale of the healthcare system might be or the most effective means of procuring and managing financial resources; and micro-economic, which views individual issues in healthcare, for example, hospital refusal to accept patients brought by ambulance, the appropriateness of Japanese drug prices, the number of physicians and other healthcare professionals such as nurses and technicians, the allocation of human resources, etc.

■ The Financial Aspect of Japanese Healthcare

It goes without saying that the macro-economic issues facing the Japanese healthcare system are extremely serious, and it is an unfortunate fact that facilities which offer healthcare are suffering from severe financial problems throughout the nation. If Japanese society continues aging at its current fast pace, the cost of healthcare will increase along with the need to provide ever more services, and securing the financial resources to cover this increase will be an issue.

Statistics help us to understand the facts we face, and one of those facts is that Japan commits significantly fewer financial resources to healthcare than other developed countries do.

The United States spends 17% of its GDP on healthcare. However, because the U.S. has problems unique to its circumstances, a simple comparison between the two systems may not be appropriate. Spending in Europe, in countries such as Germany and France, is about 10 to 12%

of the GDP, and England's spending is similar to Japan's.

What explains this gap among the various countries? The usual culprit is, as experts often point out, finance. Of course, any system of healthcare operating within a public framework requires financial support, and such support is dependent upon tax revenues being large enough to allow the funding of public medical insurance. As everyone already knows, however, Japanese public finance is close to collapse.

Japan's annual financial deficit over the last 10 years has run 25 to 30 trillion yen. Running a financial deficit means that expenditures exceed revenue, and a 25 to 30 trillion yen deficit means that each year, we run short by approximately 5% of our GDP (500 trillion yen). While we swing back and forth between hope and despair during economic upturns and downturns when the growth rate rises or falls by 1%, Japan has been running this huge deficit for 10 years, limping along on injections of stimulants. I once mentioned tongue in cheek that the economy had become hooked on drugs, but the reality is that our economy needs an injection of 5% of the nation's GDP every year in order to stay alive.

And now, even more drugs are needed to treat the economy because of the recession. Although it is not directly related to healthcare, as a result of this situation, the lack of financial support also forces the healthcare system to bear a significant burden.

Ultimately, due to the difficulties involved in increasing fees for healthcare, it will become necessary to reduce drug prices, limit remuneration to doctors and hospitals for their medical services, or limit other expenditures for care.

● Three solutions

The aging of society will continue as time passes and the public's expectations for healthcare will naturally grow along with the advancement of technology. Speaking frankly, under such circumstances there are really only three options for easing the public financial burden for healthcare.

The first option would be to reduce the fees charged for treatment. Doing so, however, would risk deterioration in the quality of care, though we might expect healthcare providers to try their best to work with what they have to maintain high standards of care in the face of dwindling revenue. The second option would be to secure financial resources in some way to manage or improve the existing

system while extending the scale of healthcare. The third choice would be to create a system that would augment government support by securing funding for healthcare from private organizations. Of course, it is hard to imagine private organizations completely replacing the role of government as a source of funding. This third choice would certainly cause controversy, but I think these three choices are within the realm of reason; moving toward the reduction of fees, expanding the scale of the system through the creation of a financial support system through the government, or considering ways of acquiring funding from private organizations to compensate for the limitations of the government. If there are other ways, I would like to hear about them, too.

● Why aren't people happy about increases in healthcare costs?

When I talk about social security to my students, I often ask them a funny question. "Which would you choose if you had to, losing your life or losing half of your property?" Of course, no one wants either one. However, it is of course better to lose half of your property than to lose your life.

There is definitely a need for healthcare; however, the public is not pleased with the increasing cost of that care. This is, in a way, a mysterious phenomenon. Take the housing industry as an example. An increase in demand for housing contributes to the expansion of the industry, increasing employment, and the expansion of production, all of which leads to the expansion of the market. However, even if an increase in the demand for healthcare leads to an expansion of services and improved quality, which would be beneficial to the public, people are fearful that the increasing cost of an expanded service and improved quality would increase their financial burden under the current system. This is what differentiates healthcare from other industries. And as I stated before, using money from private organizations to fund healthcare should be thoroughly discussed for the future.

● Anxiety leads to a lack of domestic demand

Needless to say, economic problems are not limited to the healthcare industry. The fear of economic collapse that Japanese society is facing is causing anxiety throughout the nation.

NIRA, the organization that I mentioned previously released a report last fall that was taken very seriously. Although based on rough calculations, the report showed that middle-aged and older individuals in Japan hold 100 to 150 trillion yen in excess savings. For example, people in Japan have financial assets that average four times their net assets. When I mention this, some people become depressed about not having that much and feel they are not keeping up. But remember, the figure is just an average. The report also revealed that the average for these groups in Germany and France is two times, and three times in the U.S. and England. Although I am not sure if this international comparison has meaning, people in Japan, at least, have a higher percentage of financial assets to net assets than people in other major developed countries.

We saw this as a result of the Japanese public's anxiety. They are unsure about how much healthcare will cost. And as society ages, people worry about pensions, about how much they can rely on their children for support, etc. As a result, they tend to save as much as possible and do their best to increase those savings. Unfortunately, as is often the case, most of these diligent savers will die without spending that money.

This is what the mass media call a lack of domestic demand; that is, saving without spending. This works against the economy, which in turn causes even more anxiety, which then frightens people into trying to save even more. This anxiety among the Japanese about not having enough money is, I believe, one of the reasons that the Japanese economy has been deteriorating steadily. Now, because the U.S. has long been importing products from all over the world, Japan has enjoyed a steady market there. This reality has kept Japan's lack of domestic demand from rising to the surface. Once the U.S. wakes up and stops importing so much, however, Japan's weakness will be quickly exposed. In their report, NIRA warned that this situation must be considered and plans made to cope with this very real possibility.

This is not an issue that can be easily resolved. In the end, however, the discussion will have to focus on how we can help people feel safer and more secure about their future, and you can rest assured that this issue will be a part of future policy discussions.

● People begin to consider using consumption tax

Prime Minister Hatoyama invited 88 intellectuals to a series of meetings to hear what they had to say. Mr. Yamamoto was also asked to attend, as was Iwao Nakatani, who wrote about his mistake in pushing neoliberal policies. What he talked about was very interesting, but I was especially impressed with the way he spoke to us, like a teacher talking to his students.

He talked about refunding the consumption tax collected each year by the government, an idea that has been discussed by various people. How much would such a refund be? Well, assuming a consumption tax rate of 20%, such as is common in Europe, the government would take in about 50 trillion yen in revenue. Given a population of 125 million people, each of us would receive about 400,000 yen. A family of four would receive 1.6 million yen. The concept behind this idea is that raising the consumption tax to 20% would allow the government to return 1.6 million yen to each family of four every year. Of course, this refund would not be deposited into private bank accounts. Instead, the revenue would be refunded to society in the form of support for necessary programs, such as healthcare, pensions, education, childcare, and nursing care. I'm sure the systems in Northern Europe are not so simple, but if we simplify such systems, we may see that this idea of a consumption tax refund has real merit. Actually, while I have not carried out a survey, it is clear that this idea has been gaining momentum. When you consider the political situation in Japan, and the situation facing such a rapidly aging society, I think it is important to consider things flexibly, such as this idea of a consumption tax refund, to meet the needs of society.

● Considering the role of private organizations on the supply-side

What worries me is that this kind of discussion often tends to be interpreted as criticism of Takenaka and Koizumi. The Japanese mass media, and I am also guilty, tend to discuss matters based on an idea of all-or-nothing. For example that the government did during the Koizumi administration in cooperation with Takenaka was all bad and the government should change everything back to the way it was. Nakatani wrote about neoliberalism and social democracy, systems that were hotly debated at schools 30 to 40 years ago. It was the kind of a discussion we used to

have back when we were students, but of course the world isn't quite that simple. A year ago, Asashoryu, the famous sumo wrestler from Mongolia, got himself caught up in a scandal. The mass media at the time jumped all over him, calling him a bad apple and excluding the possibility that there was any hope of him changing his ways. However, if you step back and think about it, you realize that the situation is not so simple. Asashoryu is human just like the rest of us and has both good and bad points.

By the way, in regard to the consumption tax refund, it is necessary to think about who will implement the increase in consumption tax to provide financial support for healthcare, nursing care, pensions, and education. This is certain to be the major point in the discussion. Is passing all the money collected to the Ministry of Health, Labour and Welfare, the Social Insurance Agency, and local governments without changing existing regulations a good idea? There are various issues that require careful discussion and we are far from absolute answers, but I wrote in my recent book that it is necessary to consider whether the supply-side should handle the private funding along with the increase in the importance of the public role on the demand side.

At any rate, funding is a significant issue. It may not be directly related to our day-to-day lives; however, this is the biggest issue in the discussion of Japanese healthcare. We should consider which direction to move in and how we should address this issue.

● Who will bear the cost of care for the elderly?

Another serious macro-economic issue is healthcare for the elderly in response to the aging of society. After collecting data, I realized anew that the cost of healthcare for individuals 75 years of age or older exceeds 10 trillion yen. This amount is equivalent to Japan's defense budget. At the current rate, the cost of healthcare for the elderly will increase steadily. As you already know, according to the data, the cost of healthcare for an individual 65 years of age or older is four to five times as much as for individuals under 65 years of age. It is natural that the older the individual, the more the demand for such care increases; however, the problem is who will bear the cost.

This is not the only issue I worry about. The cost of most Japanese systems means forcing subsequent

generations to shoulder financial responsibility for the problems we have created. Our budget deficit is one of them. Increases in the deficit will have to be paid for by subsequent generations in the form of higher taxes. There are various situations that are similar. If it becomes difficult to ask somebody else other than the younger generations to bear the cost of healthcare for the elderly, we may need to consider bold reform.

● Securing healthcare for the elderly through an inheritance tax

An idea I wrote about for a newspaper piece prompted a wave of criticism. As I stated before, from a macro-economic perspective, elderly Japanese have a lot of money (of course, there are many among the elderly who unfortunately do not have so much money). Individual financial assets in Japan are estimated to be 1,500 trillion yen, and 75% of that is held by individuals who are 60 years of age or older. Considering past data, few of these individuals will use up their financial assets before they pass away. Assets left after their death are inherited. However, 93% of the people who receive an inheritance pay no tax, thanks to laws that allow individuals to deduct up to 50 million yen, and in some cases the deductions are even greater. Is this really acceptable when we are paying a 5% consumption tax?

When we buy a 100 yen piece of chocolate, we pay 5 yen in tax. However, when we receive 20 or 30 million yen in inheritance, we do not need to pay tax at all.

It is controversial, but I think we should impose, for example, a 5% or 10% tax on inheritance regardless of whether the inheritance is 1, 10, 20, or 30 million yen. In regard to larger inheritances, I think the existing system of progressive taxation is appropriate.

This would be a significant amount of tax revenue. What about committing the entire amount to covering the cost of healthcare for individuals who are 75 years of age or older? When I mention this, some say, "This is another way of taxing the elderly." But, this is not about taxing the elderly. Taxing inheritance is taxing assets no longer being used by the elderly. It is taxing those who inherit assets, individuals that normally do not depend on these assets. Popular or not, if we do not at least consider measures such as this, we will be leaving our bills to the next generation.

For those who are firmly against increasing revenue

through a stricter tax on inheritance, raising the consumption tax may start looking like a better alternative. Regardless of age, sex, or location, the individual who consumes pays.

At the beginning, I touched upon the issue of financial resources for healthcare in general and for the late-stage elderly in particular. I firmly believe in the need to consider taxation in some form as a means of procuring the revenue needed to cover the increasing costs of care for our rapidly aging society and save the next generation from having to pay for expenses we have incurred.

■ Healthcare is a Complex Field with Many Difficult Problems

I would now like to talk about micro-economic issues related to healthcare. As I mentioned above, I interviewed a number of healthcare professionals and heard numerous interesting stories. Summaries of these are, as I said earlier, posted on the NIRA website. Actually, because I found them so interesting, I decided to publish them in book form. To prepare an introduction for the book, I have looked into the issues surrounding the healthcare industry.

Because of my work, I have become familiar with a number of industries over the years. When I am trying to understand an industry, I attempt to find the issues that have been brought up in the various discussions that take place in the public arena and make a chart. About a year ago, we considered the aviation industry with the goal of understanding the industry within the context of Japan. In the process we also had the chance to identify various issues related to other industries, including the healthcare industry. I was quite surprised to discover that the healthcare industry was facing five to ten times as many problems as the other industries we looked at, problems with emergency services, a lack of physicians, drug prices, etc. At the time, two things became quickly clear to me. One is that healthcare is a complex and difficult area, and the other is that the healthcare industry is facing a great number of serious problems.

● Current healthcare services are not keeping pace with changes in the world

I worked to understand the problems and their causes more deeply and came to the conclusion that the problems being faced by the industry were rooted in its having failed to keep pace with the significant changes that have occurred

in the world. In spite of such changes, measures relating to healthcare have not changed over the past 30 to 50 years. In the meantime, society has aged, and as it has aged the cost of caring for it has increased. There have been great advancements in medical technologies and in the various fields of specialization. I have high blood pressure. When I was reading about my problem, I found out that there was a time when blood pressure was measured by actually cutting into an artery. There were discussions then about treating blood pressure pharmacologically. Nowadays, such treatment has become a reality with the availability of excellent medicines. We should push to ensure that healthcare is adjusted to the advancements that take place over time. Then, there are the significant changes that informatization has brought about. This is also true in other areas. In politics, education, mass media, distribution, and finance, highly-advanced IT systems have had a great impact, sometimes for the good and sometimes for the bad. There is internationalization, with people working and traveling beyond national borders in much greater numbers. We can seek treatment overseas and people from abroad are coming to Japan with the same goal. For example, when I was involved in negotiations related to the Free Trade Agreement with Thailand, I was asked to help establish a system that would enable Japanese to receive treatment in Thailand using their Japanese insurance. I discussed this a great deal with the people at the Thai Foreign Ministry and was surprised to learn that 75,000 Japanese receive medical treatment in Thailand each year. About half of these might be Japanese nationals and their dependants stationed there, but the other half is Japanese who have gone to Thailand for the specific purpose of seeking medical treatment. It shows the need to establish systems that can accommodate the growing internationalization of care.

■ Market and Government Failure

Considering these problems, we can see a significant discrepancy between the policy created at the national level and the actual situation of, in other words, the gap between existing systems and what is actually happening in the world. Economically, we would consider this as both a market failure and a failure of government. Markets and government do make mistakes.

Healthcare is, however, a special case because we cannot leave it to market mechanisms as we usually

do in many other industries. There is a big difference between the amount of information that physicians and patients have. In addition, if we offer healthcare services supported by insurance, it is necessary to have a firm design before implementing any new system. For regional emergency care, there is the need for public financial support. However, I am worried that both the market and the government will fail to meet these needs.

● A case of failure — why don't we utilize the economy of scale?

I'm not sure if this is a government failure, but I would like to mention a case of failure which is obviously not a market failure. If you have more details about this case, please talk to me later. There is a famous cardiac surgeon whose name is Kazutomo Minami. He has worked in Germany. I was very interested to learn about his situation.

After his move to Germany, he worked over 20 years at the world's largest institute for heart disease. This institute handles 6,000 cardiac surgeries each year. There have even been some Japanese patients who have undergone heart transplants there. The average number of cardiac surgeries per year at individual medical facilities in Germany is 1,400 per facility, a total of 6,000 surgeries, a significant number.

According to a survey he conducted after returning to Japan, there are at least 500 cardiac surgery facilities in Japan, but the average number of cardiac surgeries per year per institution is only 80. This means that there are only two surgeries or fewer per week at each facility.

I am not a healthcare professional so I do not know the reality, but I would worry about undergoing a heart operation at a hospital that performs only two surgeries a week. It is true that the number of surgeries performed is not always the most important factor in improving skill, but it is also true that surgeons gain experience with every surgery they perform and can improve their skill every chance they have to work with or watch other surgeons during surgery. It may not be a very sensitive way of phrasing it, but this is what we in economics call the economy of scale.

There were many sword smiths throughout the country during the Edo Era, and they improved their skill at the forges that peppered the nation. As the technologies developed and their capability to forge products increased, such factories merged into larger facilities. Processing

metal at larger facilities allowed them to produce high quality products and achieve good cost performance. This is a trend of economies. Of course, we cannot say that the economy of scale exists in every area of economic activity, but generally speaking, operations that lack a balanced economy of scale are eventually eliminated, merged, or absorbed by natural selection.

Why is this not happening in Japan? I might hazard a guess or two. Every local government, it seems, even in small villages, operates a hospital. Of course, all university medical colleges have their own hospital too. There are other types of hospitals as well, such as Koseikai (Social Welfare) hospitals, Saiseikai Group hospitals, Rosai (Labor Insurance) hospitals, and municipal hospitals. The Defense Agency, not surprisingly, has its own hospital. Each organization has its hospital and each puts up significant resistance to the idea of being integrated with others. This is a systemic framework, and there may not be an easy mechanism for integration; however, as healthcare progresses, I wonder if the systems should be left as they are.

Setting regional gaps aside for the moment, what if we integrate emergency hospitals into one-third the current number and assign three times as many healthcare professionals to each location? Because access to healthcare is a problem in rural areas, integration would only be practical in major cities. Some might say that nothing would change because reducing the number of facilities to one-third would simply triple the number of cases to be handled by each hospital. However, the more staff assigned to one location, the easier it becomes to allocate staff for the night shift and the more effectively labor can be divided.

Although the current system once had significant meaning, it may lose its meaning along with the advancement of healthcare technology. As time passes, it will be necessary to establish a system for the division of labor and specialization of work appropriate to that advancement. But who will establish such a system? It might be impolite to mention to someone from the Ministry of Health, Labour and Welfare, but what is very interesting about government-regulated systems in Japan is that although it looks like the bureaucracy controls and regulates systems in effect, in fact, it does nothing. While such a system, it is impossible for them to aggregate or restructure as needed.

● A case of market failure in healthcare in the U.S.

There are many cases of market failure. One of these is healthcare in the U.S. In the U.S., they do not have a national insurance system, but several private insurance companies offer their own coverage. Because of the massive management costs, healthcare expenditures in the U.S. have grown to 17% of the country's GDP. Of course, there are merits and demerits to paying so much for healthcare. However, according to various sources, management costs are extremely large. Because of this, I think it is very important to maintain the national insurance system that Japan has. Now, let me talk about the market failure.

I heard President Obama speak the other day and was interested in what he had to say. He said, "America should not be afraid of healthcare expenditures growing to 20% of the GDP." I interpreted this to mean using 17% of the GDP for individuals who are relatively well off and the rest on the poor. There are different healthcare systems for retired individuals aged 65 and older and individuals who are below the poverty line. Therefore, the government is trying to leave the private insurance systems as they are rather than scaling them down or destroying them. But in order to cover the individuals who do not have medical insurance in U.S., the government is looking to spend an additional 3 or 4 % of the GDP. At least this is how the message sounded to me.

The U.S. government has its own way of handling the medical insurance issue so we should not criticize the increase in healthcare costs that such systems promote. However, I believe that it was problematic to have left it to private insurance systems. Solving the market and government failures is the main issue for discussion within the U.S. government.

■ Considering Healthcare as an Industry

What I would like to talk about today will be found on page 25 of the material given to you. I want to consider healthcare from a more industrial point of view.

Of course, I certainly understand that leaving everything to market mechanisms is not a good idea. However, I think that the Japanese healthcare system should use market strengths to a greater extent. Indeed, I think that by not having used them, various problems might have occurred.

● One example — The market promotes the development of pharmaceutical products

One such problem is related to pharmaceuticals. In the interviews I mentioned earlier, some people talked about this. Although we need to gather more information before coming to a final conclusion, it is a fact that the price of Japanese pharmaceuticals has been dropping, which sparks the prediction that there will not by any revolutionary drugs being developed in Japan in the near future. This is because major Japanese pharmaceutical manufacturers, such as Takeda, Daiichi, and Sankyo, have moved to the U.S., where expenditures for healthcare and drug prices are higher and the incentive to develop drugs is much greater.

There may be some other reasons. For example, Japanese clinical trials are difficult, etc. Of course, I know it may be an exaggeration, but I am worried that the Japanese drug market will come as unproductive as the markets in Africa. Although it may be different because Japan needs to pay for patent rights, we are manufacturing drugs that are developed overseas and, therefore, cheaper instead of developing them by ourselves. I believe we really have to examine and improve the current pharmaceutical situation. Every industry needs not only to provide better products in the most effective way using the technologies and resources that it has, but also needs to develop new technologies and products for the next generation. We must all be aware of the importance of this sequence of progress. Therefore, in areas such as healthcare, where technological and scientific advances are rapid, it is important to have the financial resources to invest for the future. But, who will do it? We need to seriously reconsider drug prices, medical device prices, etc. which means considering healthcare as an industry. Although the degree to which such consideration is related to the actual practice of medicine is another issue altogether, considering healthcare as an industry is something that I as an economist find very appealing.

If we can vitalize industries in such ways, we can also create jobs and contribute to the flow of industrial activity. Before the domestic importance of the export industries that have supported the Japanese economy decreases, it is of considerable importance to review, from an industrial perspective, how and in which industries Japan will produce national income and how Japan can create sustainable industries for the future.

● Establishment of a framework effectively utilizing incentives

What I would like to mention here, and what I often mention to students sitting in economics classes, is that humankind is an animal controlled by incentive. Therefore, the benefit provided by the system is a very important key factor. Of course, we pay a fee for insurance; however, if there was no cost, we would be inclined to overuse the services. After having dinner at an all-you-can-eat buffet, I always regret it because I invariably eat too much. We pay only 2,000 yen, but we tend to eat more because we are greedy and want to get more than we pay for. If I were allowed to bring my lunch box, I would be tempted to take some food home with me. Healthcare may be the same for us. For example, if the government, realizing how important rice is to our diet, decides to use tax revenue to provide free rice for everyone, then everyone would eat more and more rice. Therefore, such a system does not always work well.

Incentive in the case of healthcare, however, may create a moral hazard. It might be a different story if we can consider our options wisely before taking action, but if not, solutions to the health insurance issue will be hard to find. There are various opinions about how we should pay for insurance, including using a deductible system in which individuals pay up to a certain fixed amount out of pocket before insurance kicks in, or maintaining the existing system in which each patient pays a flat 30% of the total cost of healthcare. It is very important to discuss the differences of such systems well before coming to a decision.

Whenever these questions are discussed, however, it seems that polarized opinion gets in the way of finding solutions. During a meeting last year, a famous physician spoke out that encouraging people to see a doctor whenever they feel the need is important because it increases the chance of early diagnosis and successful treatment. He continued that implementing a deductible system for insurance would discourage people from going to the hospital. Instead, he claimed, they would tend to rely on self-diagnosis and over-the-counter drugs when they were feeling under the weather, which is not good. I understand what he meant, but I don't think it should lead directly to the conclusion that a deductible system for insurance is not good at all.

I think that some people might try to reduce visits

to the doctor to save money if a deductible system is introduced and they have to pay 30%, and other people would prefer paying the flat 30%. We should also consider some options for the elderly or individuals with low incomes who might choose to stay home if they have to pay a deductible 30%.

There was another opinion brought up in a discussion on an unpopular system called the Medical Aid System for the late-stage elderly. If we think it is better for the elderly to see a doctor whenever they feel sick, we need to consider a system that allows them to visit hospitals freely after they pay a certain amount per year.

At any rate, it is not a good idea for a layman like me to talk more about this issue, so I'll defer to the experts. What I wanted to say is that if humans are animals controlled by incentives, we should not focus on the pursuit of profit or profitability, but focus on utilizing incentives and move healthcare services in a more favorable direction for people. This is in fact a very important issue.

When we consider future healthcare, it is important to consider preventive medicine as well as treatment. As Mr. Kurokawa mentioned, when the government implemented the Universal Health Insurance System, they were dealing with an overwhelming number of cases of infectious disease. The system made it possible for doctors to administer antibiotics for diseases such as tuberculosis, and it produced good results. However, we are now seeing more cases of lifestyle diseases, myself included. We eat too much meat, drink too much alcohol, and smoke too much. Making matters worse, we are not eating enough vegetables or getting enough exercise. This explosive combination sets us up for high blood pressure and an increased risk of heart attack and stroke. We see the doctor looking to treat the problem with medicine, which is not wise at all. What will be more important in the future is prevention or early treatment to prevent a worsening of the condition. This will be a major social issue. For example, the cost of treatment for patients with early-stage diabetes is low; however, once they need insulin, the cost increases, and if they get worse and require dialysis, the cost of the treatment shoots up significantly.

Because humans are animals driven by incentives, we need to consider incentives for implementing new systems. For example, if there is a potential for smoking to cause disease, the government should tax cigarettes or charge higher insurance rates for people who smoke.

When I mentioned this previously, a smoker became very upset. But this is what I think the system should be. It may be necessary to consider incentives to reduce the number of people who suffer from metabolic syndrome.

I know it is not easy to resolve such issues. But, if we don't take a hard look at them, we stand little chance of improving and sustaining healthcare for the future. People tell me that an economist has no business commenting on these problems. As an economist, however, I believe that all social issues eventually come down to economics.

● Goals are not enough—We must consider what private organizations can do

To fight against global warming, what is Japan doing about CO₂ emissions? Various industries set goals and strive to reduce emissions. But if success is simply a matter of industries setting goals, making plans, and exerting effort, socialism could achieve the same results. In reality, it is impossible. Although I am outside of the industrial sector, I think it is difficult to achieve good results unless the government institutes measures, such as the carbon tax, to make people firmly understand the cost of CO₂ emissions.

It is the same for healthcare. Because it covers the entire population at one time or another, its scale is massive. And in order to encourage such a tremendous number of people to become actively motivated to live as healthy a life as possible to reduce the cost of healthcare in Japan, I believe that incentives are important. What is important here is that the government should also bring in private organizations to carry out health promotions, check-ups, etc. There are many aspects of healthcare that private organizations can handle and allowing them to do so would contribute to the revitalization of industries, as I stated earlier.

■ Provision of Medical Information

Now, I would like to talk about computerization of prescriptions and medical records, a major political issue now. Through my interviews with healthcare professionals, I found that there are some issues that we need to discuss in light of what is currently happening overseas. One of these is the provision of medical information.

For example, in the United States, you can find information on physicians, such as their CVs, skills,

and number and type of surgeries they have performed. Whether it is good or not to post individual physicians' names is a separate issue. You can also find complete information on almost any disease. Take liver cancer as an example. Information available online includes the three stages of liver cancer, the number of cases treated nationwide, the age and sex of patients, treatment, and status one year after surgery, etc. Such statistics are also available to healthcare professionals to analyze, which leads to an increase in the quality of care they provide. Or when new drugs are developed and placed on the market, information on these drugs, such as the number of cases for which the drug was administered, the condition of patients following one month, six months, and one year, is immediately available for anyone who needs or wants it. Information drives positive change in the world, and I personally think it would be a problem if we did not have access to such information. We still purchase magazines about good physicians in a specific town or hospitals that people recommend. This is fine, but don't you think it is unfortunate that we should check articles in weekly magazines to choose hospitals and physicians? Most of such information is probably very inaccurate, which also makes everyone, both readers and physicians, uncomfortable. In the world of research, professionals evaluate one another, which is called peer review, and people outside the field can also see such reviews. I know there are many opinions about the computerization of medical prescriptions, but one thing is clear: we should take the informatization issue seriously by considering how to deal with it throughout society. It is a very important issue.

I have talked provocatively, but I would appreciate it if you visit the NIRA website and read the interviews of your acquaintances or other healthcare professionals. Thank you for your kind attention.

■ Questions and Answers

Yamamoto: Thank you so much Mr. Itoh for your wonderful speech. Mr. Itoh analyzed healthcare issues divided into micro- and macro-economic aspects from the perspective of an economist. He pointed out some very important matters. We have some time to ask him a few questions. Is there anyone who would like to ask him a question, for example, about how to consider incentives for patients in this economic recession?

Saito: My name is Saito, Director of Social Insurance Chuo General Hospital. I appreciated today's speech, which included very clear and interesting topics. What I was the most interested in was about incentives and humankind: Humankind is controlled by incentives. When we pay 2,000 yen for a buffet, we tend to eat more than enough due to the function of incentive.

I agree with this idea. We can apply it to healthcare. According to the current situation, as the economy falls into depression, the number of patients decreases. It is not realistic to say, however, that a person's financial situation does not influence the decision to visit the doctor.

Then, what the patients need is healthcare that satisfies their needs. I believe patients have an incentive to have their needs satisfied at hospitals. However, patients do not know exactly what those needs are, which is the biggest problem in healthcare. At a buffet, you eat whatever strikes your fancy. And if you eat too much, you have a stomach ache to take home with you. In this case the incentive and negative effects are very clear. But, when you see patients placed in a black box and you have to consider their incentives, it is difficult to know. So I would like to ask you if you could clarify this for us.

Itoh: It is a serious problem that hospitals face. With the economic recession, the number of patients being seen at hospitals is decreasing. How should we look at this situation? Two things come to mind. One is that a downturn in the economy causes many unfavorable circumstances. This is not limited to the field of healthcare, so the same applies to other fields too. For example, although it may not be as serious as healthcare, research and development expenditures at companies have decreased drastically in Japan. As the old saying goes, "Near is my shirt, but nearer is my skin." It is a serious problem for the future of Japan.

If individuals with relatively low income react to such incentives when the economy becomes especially bad, what should we do about it? I think it is more effective not to consider this as a healthcare issue, but to consider it as a safety net issue. In that sense, healthcare is an easy-to-understand example. If we can show what is happening in the practice of healthcare, reforms will focus on such issues.

Another problem is that healthcare is an economic phenomenon. Healthcare services are also, in a sense, limited resources; therefore, it is impossible to achieve accessibility, quality, and cost performance at the same

time. If we improve the quality of healthcare with better accessibility, the cost increases. In order to maintain quality of healthcare without increasing the costs, we need to limit the accessibility.

It is important not to put all the issues of healthcare in Japan into one bag, but reconsider them after dividing them into smaller categories such as advanced medical care, emergency medical care, or family physicians. For example, access should be limited. When we feel sick, we should go to a local hospital. But the costs should be low. After a physician sees you, he or she may refer you to a specialist. In order to make the system ideal for people, we need to set some limitations. In order to do so, we must establish a system which allows us to visit specialized medical institutions if needed while maintaining a system in which we can visit hospitals easily when we feel sick. Establishing a healthcare system that contributes to holding healthcare costs down is not impossible. Of course there we also need to reach a national consensus of opinion and gain the understanding of individuals involved in healthcare, and I really hope to have such a system in the near future.

● Market mechanism and health screening for metabolic syndrome, cigarette tax, advertising tax.

Nara: My name is Nara, Director of the Japan Society of Ningen Dock. The time of preventive healthcare has come. Comprehensive medical examination can be regarded as advanced preventive healthcare, and the health check-up for Metabolic Syndrome can be regarded as the compulsory check-up for those who enrolled in the National Health Insurance. Did you know that it was Kanehiro Takagi who first called for the treatment of metabolic syndrome? He was the surgeon general of the Japanese Navy, the founder of Jikei University, and the first man in the world to begin comparative testing and dietary treatment. The market mechanism is accepted to some extent, and the people who can afford it are allowed to undergo CT, MRI, or PET scan, etc. as part of a preventive healthcare program. Although it is unfortunate that cancer screening is not a part of the standard general health checkup, health screening for metabolic syndrome is scheduled to be included in the general health checkup. In fact, measures for lifestyle diseases such as health screening for metabolic syndrome have roots in Kanehiro

Takagi's efforts to eradicate beriberi from the Japanese navy through the improvement of diet. Due to such achievements, a promontory in the South Pole was named after him.

Another thing is the call for a significant increase in cigarette prices by the Japan Hospital Association about 10 years ago. Then, Tetsuya Chikushi mentioned that it was preying on the weak. I replied that, quite the contrary, it was protecting the weak. I still believe that we should increase the price significantly to something like 500 or even 1,000 yen per pack. I also think that an advertising tax should be levied and that it should also be high. When you read newspapers, it is not uncommon to find two-page advertisement spreads. I think they are just a waste of resources, so that a tax of 2 or 3% of the advertisement fees should be levied, which would bring in a significant amount of revenue. Systems that do not suit the present situation and make it difficult to utilize the economy of scale.

Ishii: Mr. Itoh mentioned that existing systems came to be ill-suited to the current situation. I agree with him. I mentioned at a meeting that what they call healthcare disruption is really systematic fatigue of the healthcare system. In that sense, I think new systems should be designed with due consideration given to larger historical, such as the aging of the population, advancement of healthcare technology, and informatization. At the end of the reference materials for Mr. Itoh's speech, we find the question, "Why don't we utilize the merit of scale?" I wondered to whom this question is being asked because I thought that everything written here was explainable. That is, all questions have economic explanations.

Medical delivery systems are basically controlled by market mechanisms within a large systematic framework.

In this sense, the economy of scale consists of various factors, which have come to be ill-suited to the current situation. From our perspective, business owners in the area of healthcare would like to utilize the economy of scale, but cannot. I think we should analyze the system based on the fact that it cannot be utilized well. I would like to have your opinion on this.

Itoh: What I meant was a simple question that came out through my interviews with healthcare professionals within a limited time of about one year. Including what you mentioned, how to change the system will be the next step, I think. However, in regard to the economy of scale, it

is, in the end, not only a healthcare issue, but also an issue of social systems and the issues of regions or systems, for example, how to reestablish bankrupt hospitals. So it will probably require patient discussions from now.

When I was listening to a speech by the former Administrative Vice-Minister of the Ministry of Health, Labour and Welfare, he made a very symbolic statement. He said that it is impossible to improve regional healthcare systems because the regions have already collapsed. Therefore, in order to prevent the disruption of regional healthcare, he thinks we should examine the issue of disruption and regions together. What he said was very symbolic. But because healthcare is such an important issue, it is often expressed like that. Some say that we cannot consider healthcare macro-economically without considering financial issues, some say that we cannot consider healthcare issues in relation to the poor without considering other issues in relation to the poor, and some say that we cannot consider healthcare issues in relation to the elderly without considering other issues in relation to the elderly. It is the same in regard to the economy of scale. Unfortunately, I just presented a simple question, so I hope this will be a good chance for everyone to consider such issues in greater detail, and I would also like to know more about them.

Yamamoto: Thank you, Mr. Itoh. The next question will be the last. Mr. Uzawa, please.

● It is difficult to reestablish a healthcare system that has collapsed

Uzawa: I am also an economist, but I have a different opinion from Mr. Itoh. Mr. Itoh talked about various issues, considering healthcare issues as one of them. However, I believe that healthcare is the most important issue.

In Japan, we call it the time of Keynes, but in Britain, they call it the time of Keynes and Beveridge. There is a famous report known as the Beveridge Report, which contributed to establishing the basic principles of postwar society. When William Beveridge was assigned as chairman of this committee, he asked Keynes for advice and called in James Meade, who was one of Keynes' disciples and who had been awarded the Nobel Prize in Economics, as his assistant. Meade helped Beveridge write the great Beveridge Report, which is well known as having introduced the concept of care "from cradle to grave." Meade had a heated discussion with Hubert

Henderson, the British economist and Treasury advisor, who insisted on a balanced budget. Meade finally won out and established the basis of the children's pension, widow's pension, and healthcare systems using tax revenue, based on the concept of care "from cradle to grave." This led to the implementation of the National Health Service system in 1948, which allowed everyone in the country including individuals from abroad to see physicians free of charge.

However, the Exchequer completely ignored this policy. He failed to implement any new technologies that were available or build any new hospitals. He even reduced physician's salaries to very low levels and treated them as public servants. Prime Minister Margaret Thatcher delivered the final blow. Ms. Thatcher privatized the post office, national railways, and the telephone and telegraph system. However, it was impossible to change the National Health Service system, which was very popular among the people. In her third term as the Prime Minister, she called an economist from the U.S., Alain C. Enthoven, and implemented the Internal Market system. She used market mechanisms and brought the police force into the field of healthcare. Her actions resulted in a significant scaling down of healthcare, the discharge of a large number of physicians, and a reduction in the number of hospitals.

When Prime Minister Tony Blair of the Labour Party reformed the National Health Service in 2000, there were nearly 1.3 million patients waiting for hospitalization, which was an unacceptable situation. After that Mr. Blair set the goal of increasing the national healthcare budget by 50% within five years; however, this was not realistic. Currently, they are working on a plan to double the healthcare budget and increase the number of physicians by 50% in 10 years. But it is very difficult to reestablish a healthcare system, social capital held in common, which has collapsed.

A similar situation has occurred in Germany. Although not as much as what Japan is doing, measures for reducing healthcare expenditures were implemented about 10 years ago. Jörg Hoppe, Professor of Digestive Surgery and the President of the German Medical Association, has expressed criticism of the healthcare system through large-scale demonstrations and strikes. His point was "Liberal practice, not outside control." He employs the idea that physicians should be wholeheartedly engaged in healthcare following Hippocrates' teaching and the notion

that healthcare should not be controlled by bureaucrats.

Compared to these countries, Japanese healthcare is the worst among the developed countries. Therefore, I really feel that I must strongly disagree with Mr. Itoh's speech.

Yamamoto: Thank you, Mr. Uzawa. Mr. Uzawa always offers important points, and today we had a great chance of hearing from Mr. Itoh. Today's meeting was, I think, very meaningful for all of us.

■ Reference Materials Delivered at the Meeting

● Considering healthcare from the viewpoint of economics – Distortion of resource allocation

- Activities using Japanese economic resources equivalent to 8% of GDP (40 trillion yen)
- Actual status of resource allocation under various regulations and supervision
- Training of physicians, medical service fees, drug prices, involvement of local governments in healthcare
- Adjustment of healthcare systems to the falling birthrate and the aging population, internationalization, advancement of healthcare, and progress of information technologies

● Considering healthcare as an industry

- Developing healthcare as a fundamental industry of Japan
- Making healthcare systems sustainable through development as an industry
- How to bring innovation to healthcare: Is making cheap pharmaceutical products enough?

● Market failure and government failure

- Market fails; therefore, we need to have regulations. However, government also fails. Therefore, regulations sometimes worsen the situations. What is important is an appropriate balance between market and government.
- Universal Health Insurance: It is an important system; however, is it simply good? Various insurance systems implemented overseas What is required to satisfy various needs?
- How to reestablish the government failure in healthcare caused by the limitation of the supply of physicians
- Human kind is controlled by incentives. We probably can utilize methods used in the market.

● Considering Japanese healthcare from the financial perspective

- Cost of Japanese healthcare is too low. — Deteriorated healthcare bound by finance
- Healthcare expenditures for individuals who are 75 years of age or older reached double the amount of defense expenditures. — It will increase three or four times current levels in the future.
- Expansion of financial support is important, but we also need to consider measures to bring the money from users directly into the healthcare systems. : Limitation of public finance, Use of public finance 8% or less in other countries
- How to secure the financial resources for healthcare for the elderly — We should choose either reducing expenditures or securing revenues.
- Reducing expenditures — Consideration of a deductible system, Balance between the establishment of preventive measures and cost reduction
- Who will bear the cost of healthcare for the elderly? — We need to avoid shifting the responsibility to young generations
- Utilization of consumption tax — Northern European type welfare society
- Utilization of inheritance taxes — Using assets of the elderly to cover the cost of healthcare for the elderly

● Designing systems carefully

- Deductible system for medical insurance — How to prevent moral hazard
- How to consider the discussion that if everyone has self-pay burden, the poor or the elderly will not visit hospitals, which may result in making it difficult to diagnose serious disease
- It is impossible to cover everything in one system.
- The system should be more flexible. For example, we should provide special medical support for the poor, and special checkups and support for the elderly to allow them to pay their medical service fees in one lump-sum per year.

● **Why do not we utilize the merit of scale?**

- From Kazutomo Minami's website — More than 6,000 cardiac surgeries are performed per year at the Heart and Diabetes Center North Rhine-Westfalia (NRW) in Bad Oeynhausen, 1,400 surgeries are performed per year at one facility in Germany
- There are more than 500 facilities for cardiac surgery in Japan; 60 surgeries are performed per year at one facility.
- Market mechanisms function in other industries utilizing the merit of scale.
- Is it possible to increase the number of surgeries through the integration of emergency facilities?
- Current status of Japanese healthcare with a significantly large number of medical devices such as CT scans
- Advancement of internationalization of healthcare services

The Global Trend in International Accreditation of Hospitals and the Kameda Experience



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Ten years ago in *The Journal of the Japan Hospital Association*, Serial Number 18, July 1999, I authored an article entitled “Hospital Accreditation in Japan Long Overdue?” In that article, I lamented the slow progress here in Japan in establishing an effective third party independent evaluation of hospitals. I strongly recommend to readers to obtain a copy of that article in order to comprehend the background of hospital accrediting activities in Japan. Some activity began prior to Dr. Hirobumi Kawakita’s official visit to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) as it was known in 1991 at the time of his visit to the United States. Actually, fledgling efforts to promote effective evaluations began in 1987 by the Tokyo JCAHO Research Group which led to the formation of the Japan Hospital Quality Assurance Society (JHQAS) in 1990. Prior to this, hospitals completed a self assessment in 1987 which seemed very subjective (to me) using a Ministry of Health and Welfare checklist. My hospital, the Kameda Medical Center was among the approximately sixty initial JHQAS member hospitals in 1990 that desired evaluation by an external entity. In 1995, the Ministry of Health and Welfare joined with the Japan Hospital Association and the Japan Medical Association to form the Japan Council for Quality Health Care (JCQHC). The JCQHC is the only authorized accrediting body for hospitals in Japan, and in 1999 when I wrote my article, a total of 186 hospitals had undergone accreditation, including Kameda Medical Center. In May of 2005, ten years after formation of the JCQHC and eight years after accrediting activities were conducted by them, approximately 1500 of the 9,239 hospitals in

Japan were surveyed and accredited, which represented about 16% of hospitals in Japan. According to the JCQHC website as this is written, a total of 2,556 hospitals out of a total of 8,766 hospitals have been accredited, which is certainly an expansion and progress, but regrettably, it is still less than 30% of Japanese hospitals. Of course the introduction of DPC reimbursement in 2003 for highly advanced treatment hospitals may have motivated the better hospitals to undergo accreditation, and most are today. Also, the percentage is a bit higher because there are fewer hospitals in Japan today compared to the year 2005.

In the decade since my article appeared in this journal, much progress has been made, but it has been agonizingly slow in my opinion. It was true ten years ago and is true today that it is a myth that quality in healthcare cannot be measured. It may not be a perfect measurement, but there are many evidence based tools to evaluate quality. Some hospitals in Japan have taken additional steps to improve the quality and safety of the care delivered. Kameda Medical Center, among others, has embraced the International Standards Organization (ISO) certification, specifically ISO9001. Other certifications achieved at my hospital are the United Kingdom Accreditation Services (UKAS), British Standards Institute (BSI), Japan Accrediting Board (JAB), and we were in compliance with the Privacy Mark standards (E880049 (01)) until we requested removal. We feel a strong moral and ethical obligation to obtain the highest standards possible, above and beyond the minimal requirements. Improving the

quality of care and the safety of care are two of several imperatives that just cannot be compromised. And for readers who might not be completely familiar with the term “accreditation” and who may think it is something like an audit, an inspection, or an examination, I would like to provide a brief definition. Accreditation is a process in which usually a third party independent entity, which is separate and distinct from the health care organization(s) being evaluated, assesses the health care organization to determine if it meets a set of requirements (standards) designed to improve the safety and quality of care. It is normally not related to the government, but it could be related. Accreditation is usually and ideally voluntary. However, it could be mandated. Accreditation standards are usually regarded as optimal and achievable. Successful accreditation provides a visible commitment by an organization to improve the safety and quality of patient care, ensures a safe care environment, and continually works to reduce risks to patients and staff. Accreditation has gained worldwide attention as an effective quality evaluation and management tool in most developed countries, and Japan is no exception.

Many of my colleagues here in Japan and abroad probably are aware that from 3 – 7 August of this year (2009), the Kameda Medical Center, which includes the Kameda Hospital and Kameda Clinic, underwent a very successful accreditation survey by the Joint Commission International (JCI). We received a full three year accreditation without any follow up requirement other than a Strategic Implementation Plan to improve areas identified as needing improvement. We were evaluated against 349 standards and 1030 measurable and scored elements in fourteen major areas. We are the first hospital in Japan to be accredited by the Joint Commission International, and at the time of this writing, we are the only hospital in Japan to become accredited by the Joint Commission International. We will always be able to claim to be the first, but it is my hope that other hospitals in Japan will consider accreditation using global standards in addition to local/domestic standards. It needs to be made clear that in no way am I advocating that JCI replace local accrediting by the JCQHC. I want to share with readers why Kameda Medical Center sought Joint Commission International accreditation and to discuss the long road in preparing for this accomplishment.

Fourteen years ago, I approached the JCAHO to ask whether or not Kameda Medical Center could undergo accreditation by them. Our Kameda Clinic was built and occupied in 1995, and a new replacement tower was on the drawing board. We had a very sophisticated electronic medical record system established, and I felt the timing was right for us to consider attempting accreditation of our Kameda Clinic against the JCAHO ambulatory care standards. To that end, in the summer of 1996, I accepted a summer intern from the University of Iowa’s Graduate Program in Healthcare Administration (A three month summer internship for selected students in this program began in 1992 and continues today). The student I selected was given the task of evaluating and predicting whether or not our newly built Kameda Clinic could successfully pass JCAHO accreditation using the then current ambulatory care standards, and we were hearing rumors of an international version being considered. Prior to the student’s arrival in Japan, Kameda arranged for the student to attend a one week orientation for JCAHO surveyors in Chicago, Illinois in the United States. During the three month period that the student was at Kameda, she evaluated our ability to be in compliance with the JCAHO standards for outpatient care, and where there were difficulties in complying with the standards, she made recommendations on what would be required to comply with them. To make a long story short, with few exceptions, she felt that with a significant effort to document the structure, processes and outcomes accomplished by the Kameda Clinic, that it could successfully become accredited. By the end of the year in 1996, the Joint Commission International had still not been established, and JCAHO was still self-restricted to accrediting healthcare organizations in North America and U. S. Military healthcare organizations outside the United States. I was told that we were not eligible under their charter and that they could not make an exception for Kameda. By 1997, the rumors of an international version of JCAHO were widespread and confirmed unofficially by JCAHO staff.

In 1998 the Joint Commission International was formed and Dr. Yuuji Imanaka M. D. and I officially reviewed version one of the new international standards for them and opined that with very few exceptions, some Japanese hospitals could prepare and successfully become accredited. The decisional thinking at the time was

whether or not to proceed with an accreditation attempt for the Kameda Clinic, since JCI was now established, or to wait for completion of the new Kameda inpatient building known as K-Tower which in 1998 was on the drawing board but had not actually started construction. To avoid two surveys done separately, it was considered in Kameda's best interest to consolidate the Kameda Hospital and the Kameda Clinic under one survey known collectively as the Kameda Medical Center after K-Tower was completed and occupied. Kameda was scheduled for JCQHC reaccreditation in 1999 and was successfully reaccredited. In the meantime, Kameda staff worked diligently in garnering the ISO 9001 certification that was to prove most helpful in documenting our processes of care as well as outcomes. Preparations were also underway for the UKAS, JAB and Privacy Mark certifications, and by the time the millennium arrived in the year 2000, Kameda was successfully reaccredited the year before by JCQHC and the aforementioned certifications were obtained. All that remained then was construction of the new K-Tower and that was progressing smoothly. The decision to wait more than ten years was not taken lightly. Like any major undertaking, there were many points of view to be considered. Consensus was that completion of the K-Tower and renovation of two older inpatient buildings was essential in giving Kameda the best chance of becoming JCI accredited and the risk of failure was considered too great if we moved too quickly towards accreditation without sufficient preparation. Not only would failure be embarrassing, but it would no doubt discourage others from making a similar attempt. The bottom line was that we were not ready.

Again making a long story short, K-Tower was completed in 2004, and Kameda was once again successfully reaccredited by the JCQHC in that year. Mandatory two year rotating internships for all newly graduated and licensed physicians was implemented that year as well as Kameda's participation in the new DPC reimbursement scheme. A separate PET-CT facility was completed in 2005, and Kameda entered into a contractual agreement to manage a failing Japan Medical Association hospital in the city of Tateyama about 40km south of the medical center (2007). It seemed that every time we looked at the best window of opportunity for scheduling a JCI accreditation, we were in the midst of expansion. However, the question

of JCI accreditation was never one of if, but one of when.

The magic date of May 2007 was decided by consensus as the date to begin concrete plans to undergo JCI accreditation for the Kameda Medical Center. This was the month and year Severance Hospital (Yonsei University) in Seoul became the first hospital in South Korea to become JCI accredited. Their accomplishment acted as an inspiration. Additionally, a 24 month plan would coincide with reaccreditation by the JCQHC in 2009, and we could prepare for both simultaneously. The road to successful accreditation by JCI had begun. The first year of preparation was mostly discussion between Kameda leadership and Joint Commission International as to costs, timing, and logistical/technical questions.

A legitimate question, always present, was the one of why Kameda decided to become accredited by the JCI in light of the fact that since JCI's inception in 1998, no other hospital in Japan appeared to be interested? After all, Kameda had achieved very successful JCHQC accreditation in 1999 and 2004 and had other quality credentials. This is the key question I want to answer for readers of this journal.

To clear up one myth that has appeared in the media concerning Kameda, the reason Kameda pursued JCI accreditation had nothing to do with so called 'medical tourism' or seeking affluent patients from China or other countries. In other words, JCI accreditation never was and is not a purposeful marketing strategy for Kameda. I did feel however, that achieving this recognition would result in a global recognition of our medical center and one positive side effect of accreditation by JCI might be that international patients might seek care at Kameda. I have long felt at Kameda that we needed to grow internationally in stature and become more globally focused if we are to be a world class medical institution. Also, my informal feedback from foreign friends and colleagues living and/or working in Japan was that they were generally dissatisfied with healthcare encounters in Japan and tended to return to their home country at any sign of what might be a serious medical condition. In the year 2000, I published *Nippon no Byoin* (in Japanese) with the cover theme stated as "Why are Japanese hospitals so bad?" based on my insider's perception of healthcare in Japan

and feedback from foreign residents. The major problem for foreign residents is that there is simply not enough information about hospitals in Japan for them to make informed choices. Things have improved since then but foreign residents in Japan have yet to be fully satisfied with healthcare encounters although the long term foreign resident is more accepting and tolerant. Having achieved a global standard that approximates the quality and safety of the best hospitals in foreign countries, all things considered, should increase the confidence of the foreign resident in Japan and at least give them another choice in their healthcare decisions. In this sense, foreign patients may value JCI accreditation in their decisions and foreign patients from within Japan may increase at Kameda. Only time will tell how strong this side effect will be for Kameda.

Another contributing factor in our decision was the global trend, particularly in Asia, to achieve JCI accreditation. Virtually all government and private hospitals in Singapore are JCI accredited. Severance Hospital in Seoul was joined by Korea University Anam Hospital this past July. Clifford Hospital in China was first accredited by JCI in 2003, reaccredited in 2006 and a total of five Chinese hospitals are now accredited. Three hospitals in Malaysia are accredited, two in the Philippines, nine in Taiwan and nine in Thailand are accredited. With the very best hospitals in Asia seeking and obtaining JCI accreditation, I felt that the great hospitals in Japan were missing the opportunity to be recognized along with these prestigious healthcare institutions and while they grew in international esteem, Kameda and other Japanese hospitals were seen as remaining domestically and inwardly focused. Call it pride or embarrassment, or a combination of both, but someone had to come forward and be the leader, the pioneer, the icebreaker. If the saying is true that your reputation in part is measured by the company you keep, I certainly wanted to be part of these internationally recognized healthcare organizations. Please bear in mind that this was a just a contributing factor and not the main reason for seeking this recognition. Like all decisions that profoundly affect corporate culture, none are taken lightly and the main reason is often surrounded by supporting rationale. This is always balanced by an opposing viewpoint and results in a healthy debate that in the best cases results in organizational consensus.

Before I get to the main reason to undergo accreditation by the Joint Commission International, I would be remiss if I did not address some of the opposing viewpoints. These were not so much as opposition as they were differences of opinion, and from my point of view, they stemmed from lack of understanding of the merits to our organization.

Not in any particular order, cost to undergo accreditation was not insignificant. There are both direct and indirect costs associated with major decisions and both need careful consideration. Direct costs are precise, indirect costs are often underestimated and somehow get lost in the general overhead of doing business or get underestimated in order for them to appear more reasonable. The direct costs of JCI accreditation had several components. The first is a set fee based on a questionnaire combined with a description of the organization to be surveyed, the number of surveyors and the number of days required to survey the organization. In our case at 965 operating beds and somewhere near 3,000 outpatient visits per day, it was determined that we would have three surveyors for a full five day survey. The fee for this component was calculated at 55,881.00 dollar with half paid in advance and the other half paid after the conclusion was reached. To this amount is added the transportation and accommodation costs for the surveyors. Direct costs not including the aforementioned fee, transportation and accommodation costs included the cost of two staff to attend a JCI practicum for one week held in Bangkok, observation of a mock survey at Severance Hospital in Seoul by myself and three other senior staff, and two mini-mock surveys of Kameda Medical Center by experts outside of our organization. The JCI survey is always conducted in English regardless of the nationality of the surveyors and they require interpreters that are not part of the medical center's staff. Kameda used four outside interpreters each day. This was a known direct cost which included the interpreter's fees, transportation, accommodations and some meals. Because these costs are precise and documented by invoices, they are hard to be argued with but indirect costs are where internal debate is formed. The big questions have two components. First question prior to the decision is how much will the indirect costs be and the second question is how precise is the cost estimate? After the decision and after the survey is concluded, the questions change slightly to how much were the indirect costs and how precise

was the final indirect cost calculation? In the absence of absolute precision methodology, there is simply no way to predict indirect costs given no historical precedent at our medical center. We were breaking new ground and setting a precedent. I estimate, after the dust has cleared, that our combined direct and indirect costs were somewhere close to 30,000,000 million yen with about one third direct costs, although some media coverage has exaggerated this figure. Budgeted projects for cosmetic improvements initially unrelated to JCI were moved up in the scheduling process and because the JCI survey came within a month of the JCQHC survey it is impossible to determine the cost to each separately. The Kameda main 'team' assigned to this project consisted of myself, a very senior physician, a very senior nurse, a project coordinator, five assistant coordinators and a University of Iowa graduate student for the last three months leading up to and including the actual survey. With the exception of the project coordinator, none were full time but as the date of the survey grew closer, their time requirements grew proportionally. It must also be noted that no new employees were hired to support this project, so employee costs were fixed over the preparation period and that only responsibility shifted. That always makes the estimate of indirect costs a most difficult assessment. The final financial question is: Was it worth it? That answer comes later in this article.

Staff awareness and education is an essential component in changing corporate culture. With JCI accreditation requiring virtually all staff in the medical center to be aware of what needed to be done and the reasons for it, this became a major effort. Translation of the 1,030 measurable elements in the 349 standards into Japanese was done by members of the JCI team and not contracted out. Once this was accomplished, every department in the medical center was provided a copy of the requirements that were specific to their areas of responsibility. Members of the team responsible for the medical staff, nursing staff, ancillary staff and administration visited each and every department on numerous occasions to systematically explain and clarify the requirements and most importantly perhaps, how to provide evidence/documentation regarding compliance. All policies and procedure manuals were reviewed for accuracy. In many cases, there was ample indication of things being done properly, but documentation was poor or absent. In other

cases, new policies and procedures were created to become compliant with the requirements. The JCI requires at least four month of documented compliance prior to an initial survey date in order to meet the standards, another reason why early preparation was so important. It was key and essential that staff understood and agreed with the spirit and intent of the standards and with few exceptions this was not problematic. This effort by all staff to improve the documentation of the wonderful work they did was a great opportunity to improve the quality and safety of the care provided, and it created new opportunities to implement new policies and procedures that would further benefit patients. Were all staffs enthusiastic? No. In any large organization, there are employees who for various reasons do not actively support organizational change. Some are unsupportive because they do not comprehend the need. This is sometimes caused by management's failure to adequately articulate the need. Some are unsupportive because the change is threatening to them, or more rarely, they fear the unknown. And frankly speaking, everyone in hospitals in Japan works extremely hard and often long hours without much recognition, so adding additional tasks and changes are burdensome. However, through frequent visits by JCI team members, internal walk through surveys, use of internal communication methods and having the JCI requirements addressed at all departmental meetings, my assessment is that Kameda did a good job of staff awareness and education.

The value of mock surveys cannot be overestimated. For a healthcare organization facing JCI accreditation in a country where there is no precedent to rely on, mock surveys appear to be an almost essential undertaking in order to prepare properly. The question is how to obtain that expertise. Fortunately, I had experience with JCAHO in the United States, but my experience was quite some time ago. In order to gain more experience in understanding the logistics of undergoing JCI accreditation, Kameda's medical director, director of nursing, JCI team coordinator and I visited Severance Hospital in Seoul in February of this year (2009) which was conducting an in house mock survey in preparation for reaccreditation in 2010. This was a valuable experience to observe not only how the hospital prepared the spaces for interaction with surveyors, but also how the survey process was actually carried out. On our return to Japan, we were determined to conduct

not only an internal mock survey, but to arrange for two mock surveys using external expertise. The JCI Resource Center is the usual and customary source for using JCI consultants, which for all practical purposes mirrors the real thing and also can cost close to the same amount as the actual survey. I do not know the percentage of JCI accredited hospitals that used the consultant resources of the JCI to prepare, but I have heard it is the vast majority, and in particular, for those attempting initial accreditation. Because Kameda has long been a referral site for U. S. Military hospitals in Japan and the fact that all of them are accredited by Joint Commission (formerly known as JCAHO), we asked both the U. S. Navy Hospital in Yokosuka and the U. S. Navy Hospital in Okinawa if they could provide us some assistance in preparing us for the accreditation. In the true spirit of international cooperation, they agreed, and on two separate occasions we underwent a full three day mock survey using both Joint Commission and Joint Commission International Standards. Kameda then corrected any and all deficiencies found during the mock surveys in order to show at least a four month compliance with JCI standards by the time of the actual JCI survey. This cooperation was of immense benefit to Kameda in our successful survey. Practice makes perfect, so to speak.

Given the above background, it is now time to get to the main event question on why Kameda or any other hospital would choose to undergo JCI accreditation. If the main reason is not for increasing market share globally, or as a matter of pride, and the cost is quite expensive, what is the principal motivation?

JCI is a recognized world leader in health care quality and patient safety. Their consultants and surveyors are highly trained clinicians and strong advocates for patient safety. Their focus is on health care quality improvement and patient safety with expertise in infection control, medication safety, facility safety, and accreditation preparation. Kameda aspires to be recognized as a world class medical institution and to learn from highly trained expert clinicians as well as to get global perspectives on patient safety. JCI's standards were developed by health care experts from around the world and were tested in every world region. In fact, more than 300 healthcare institutions in 39 other countries are now accredited by

JCI, so this is a time tested program. If improving patient care quality and patient safety is important (and it is vital), then every resource available should be considered. And this is not an "American" initiative either. JCI's accreditation decisions are made by an international committee of health care experts. I am a member of Joint Commission International Editorial Advisory Board, so I have input along with other international members. The JCI Advisory Councils in Europe, the Middle East, and Asia Pacific are made up of health care leaders who provide guidance on key patient safety and quality issues. I look forward to the day when healthcare leaders from Japan become members of these councils.

Kameda's decision to become JCI accredited was motivated by a desire to improve on an existing culture of safety and quality and to pursue a never ending quest to continually improve patient care processes, and in doing so, improve outcomes. We want to instill confidence and trust by the community we serve – patients, their families, our visitors and our staff, and convey to them in word and deed our concern and priority for patient safety and quality of patient care. For our staff, we wanted to go the extra effort to provide a safe working environment and in doing so, improve employee satisfaction. By pursuing a higher standard, it demonstrates to patients and their loved ones that Kameda cares, respects their rights and privacy, and desires to be in partnership with them in their healthcare decisions. At Kameda, we no longer view the patient and their families as spectators in the process of medical treatment deferring to the decisions of physicians and other medical staff. We view patients as full members of the healthcare team and the principal decision maker. We want to listen to patients attentively and fully involve them in their care. And last, but not least, Kameda wants to improve the corporate culture that is open to learning from things that do not always go as planned, and is fully supportive of the internal reporting of adverse events so that we can improve and prevent reoccurrence. JCI standards and measurable elements are benchmark global standards regarding patient safety, and we fully embrace them.

Was it worth the effort (a question posed earlier)? The answer is absolutely, without reservation and resoundingly YES! Because the JCI accrediting process is educational, we learned many, many things about how to improve quality

and to enhance safety. Through our preparation activities we created new policies and procedures that improved many aspects of our organization prior to the beginning of our survey. Of the more than 1000 measurable elements, we had only 35 that were partially met as opposed to fully met. Although this is a small number, each of these is an opportunity to improve and when improved/corrected, Kameda will be a better organization, and that is the point of participation in any accrediting process.

Kameda now proudly displays the Joint Commission International Gold Seal of Approval as well as that of the Japan Council of Quality Healthcare. In this sense, we have the best of both worlds, and both accrediting programs compliment each other. Their combined value is greater than each one alone. I look forward to other hospitals in Japan considering accomplishing this, and Kameda will be pleased to provide assistance based on our experience.

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Healthcare For The Uninsured — Is There A Perfect Storm Brewing?



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Although the issue of uninsured persons in Japan surfaces in the press now and then, the exposure usually is short-lived and overshadowed by other more pressing national problems. Meanwhile, the uncompensated care provided by hospitals continues to grow unabated and 2010 marks a convergence of circumstances to form this perfect storm. This perfect storm is not on the scale of typhoons or hurricanes, but metaphorically is more like a series of tornados affecting hospitals and patients nationwide. In the United States it is a much more serious problem and we might keep that in mind as this problems grows in Japan.

As background, as little as twenty years ago, virtually everyone residing in Japan except for the few illegal aliens had some form of health insurance. Employers followed the law and enrolled employees within 5 working days as required. Foreign residents were no exception. The self employed, including the vast majority of foreign residents (primarily English teachers) and others were enrolled in one of the forms of Japanese national health insurance. Premiums were considered reasonable as were the co-payments. The uncompensated care provided by hospitals was rather minimal and usually occasioned by an urgent admission of an illegal alien or perhaps a short term visitor to Japan who was not covered by a health insurance program overseas. In many cases, prefectural funds could be used to partially offset these uncollectable debts.

This is no longer the case. The number of foreigners residing in Japan without permission (illegally) has increased, and although the Ministry of Justice may not have precise numbers of those who come to Japan and intentionally overstay their visa, hospitals have experienced

dramatic increases in uninsured patients presenting for medical treatment, and who have no evidence of being in Japan legally. According to the Immigration Bureau, there were 113,072 illegal foreign residents in Japan as of January 2009, after 39,382 were deported in 2008 (This sounds pretty precise doesn't it?). Some 7,388 foreigners received special permission to stay in 2007 according to the Japan Times in an article published on 28 February 2009. But in spite of the data, Japan selectively turns a blind eye to many persons overstaying their visa and this encourages it by inaction. There have, however been landmark exceptions. The Calderon case in Japan got wide publicity and the story was carried internationally. Two citizens of the Philippines entered Japan on other person's passports, a wife in 1992 and her husband in 1993. The wife was arrested in July 2006 and convicted of violating the Immigration Law that September, when their daughter was an elementary school fifth-grader. Both were deported in 2009, and their daughter who was born in Japan remained in Japan with special permission from the Ministry of Justice after a family decision to allow her to stay.

Since then, many here suspect that the Japanese government is now reluctant to deport people for fear of more international criticism and that they would rather detain or ignore them instead, getting less criticism and less publicity. Whether detention, ignoring or deportation, when the government does take action, it acts as a deterrent. Foreigners in Japan without permission know that if they come here without a visa or overstay a visa, that there is considerable risk of detention or detention followed by deportation occurring in spite of the selectiveness of enforcement. Some would make the case that it is difficult

to determine if the overstay was intentional. After all, people are forgetful. It is difficult to claim forgetfulness when the period of overstay is lengthy, and it appears intentional if lengthy, and no documented attempt to remain legally can be produced. Tongue-in-cheek, this might be determined the “Hatoyama Defense” wherein the Prime Minister said that he had no recollection of his mother transferring money to him. It has been widely reported in the press and on television that Hatoyama received 900 million yen in “loans” from his mother over a five year period to 2008.

Foreigners who fear detention or deportation are often reluctant to seek healthcare even if they can pay cash for it because they worry about being reported to the police or the immigration authorities. Often, a medical condition will be self-treated or go untreated until it becomes a medical emergency. Japanese hospitals are obligated to care for patients presenting in an emergency regardless of health insurance status or ability to pay. This is the first circumstance in creating the perfect storm.

(Note: The following Case Examples are all actual cases from the same hospital with slight modifications in order not to be able to identify specific patients.)

■ Actual Case Example 1:

A 67 year old female of Philippine citizenship entered Japan 9 years ago and overstayed her visa remaining in Japan with her husband, also a Philippine national who lived in Japan legally. She came to the emergency room of a large private hospital by ambulance with a life threatening emergency. Three other hospitals refused to accept her citing no available physicians to treat her. She was evaluated in the ER where it was learned that she had no passport, no visa, no foreign registration card and no money. She needed urgent life-saving emergency surgery with a predicted 90% mortality rate without surgery and a 50% mortality rate even with the surgery. The patient was admitted and taken to the operating room within hours and recovered in an intensive care unit on a respirator. This patient in spite of serious co-morbidities survived the surgery, recovered and was discharged from the hospital on the fourteenth postoperative day. The bill was approximately 5 million yen. Because this patient did not have a passport, visa or foreign registration card, she was ineligible for enrollment in the national health insurance program under her husband’s name in spite of producing

a copy of her birth certificate and marriage certificate. As prefectural funds are limited to those patients without a relative living in Japan, funding from the prefecture was not available to pay even partially for her care. Bottom line: The patient received uncompromised quality medical care and the hospital has no immediate prospects of getting reimbursement. Additionally, there is a high likelihood that the patient will suffer from an additional medical emergency and the circumstances will repeat, perhaps with not such a perfect medical outcome. This is not an isolated case at this particular hospital and similar cases are occurring in many, many hospitals across Japan. When it becomes known in the community that urgent care cannot be withheld and that non-payment does not result in the authorities being contacted, these kinds of cases increase. In this case, the hospital did notify the authorities who are covertly monitoring this case to ensure that the person took the necessary steps to obtain a new passport, a visa, obtain a foreign registration card and to become enrolled in national health insurance. However, nothing could be done to reimburse the hospital.

■ Actual Case Example 2:

A 28 year old female suffered a near drowning incident and was brought to the hospital by ambulance. She was immediately admitted to an intensive care unit and placed on a respirator. Physical examination revealed multiple tattoos with markings in the Thai language and she had needle marks on both arms. This patient had no identification - no passport, no visa, no foreign registration and no purse. She had a number of visitors on admission day two who confirmed that she was from Thailand. She regained consciousness on admission day five, confirmed she was from Thailand and worked in a bar in Yokohama where the ‘master’ kept her passport. She refused to provide additional details, but admitted overstaying her visa. She denied drug use and said she was not HIV positive, but was asked to consent to a blood test specifically to determine if she was HIV positive due to the suspicion of previous drug use as evidenced by multiple need marks on both arms. The blood test was confirmed positive for HIV and she later admitted having known this for some time. She was discharged on the eighteenth hospital day where the police met her in the hospital lobby and escorted her from the building. She was reported to the authorities because of her inability to provide identification and the fear that

she would return to Yokohama to engage in work that had the potential to spread an infectious disease. She received uncompromised quality medical treatment. The unpaid bill totaled more than 7 million yen and was never paid.

Another circumstance creating this perfect storm is the continued economic conditions in Japan. More and more Japanese citizens, particularly the elderly or less affluent, are unable to pay their portion of the bill for outpatient and inpatient care as Japan's economy remains in the doldrums. Premiums and co-payments have both increased. According to a Japan Times article published on 13 March of this year, at least 33 people died in 17 prefectures in 2009 after not visiting doctors because they lacked national health insurance – this according to a private survey. These persons apparently stopped being covered by the national health insurance scheme after failing to pay insurance premiums due to financial difficulties, the Japan Federation of Democratic Medical Institutions said. This is quite disturbing news.

Most hospitals in Japan will tell you that their uncollectable co-payments for those covered by national health insurance have increased significantly. When this is added to the burden imposed by uncompensated care provided to those who are in Japan illegally, the perfect storm begins to brew.

■ Actual Case Example 3:

A 24 year old married woman with one child is followed in the outpatient clinic for a normal pregnancy. Her husband has been unemployed recently and they have considerable indebtedness. She delivers a healthy baby at the hospital and is discharged on the fourth post-delivery day. The cost of the delivery amounted to approximately 400,000 yen. She applied for and received a sum of 300,000 yen from the city government as a social welfare benefit. The family did not pay the hospital citing financial difficulties and planned to use the government provided funds for daily living expenses. Bottom line: The patient received uncompromised quality outpatient and inpatient care. The hospital has no prospect of being reimbursed for this medical care. This is not an isolated case. When it becomes known in the community that one can receive care at this hospital and that there is no penalty for non-payment, these cases increase. One could possibly make a case that pregnancy is usually not an emergency, and routine delivery in Japan is indeed not covered by national health

insurance. Therefore, a person who intentionally receives this kind of medical care with no intention of paying is guilty of theft of services and should be prosecuted. After all, pregnancy is optional in most circumstances and the person had nine months to plan financially. This approach of course, is not practical and there would probably be no way a case could be prosecuted in court and furthermore, the hospital pursuing this approach would be seen as cold, cruel and insensitive. However, if a person entered a restaurant and had a meal with no intention of paying and tried to leave without paying the bill, the restaurant would surely contact the authorities. Society and the authorities would not see these cases as similar.

The third component of the perfect storm is the recent decision by the government that foreign residents will not have to show evidence of enrollment in national health insurance as a pre-condition for a visa renewal. This decision was reported in the Japan Times, an English language newspaper which is widely read by the foreign community. This decision has a much wider impact than on just the foreign resident. The government has further acknowledged in its February of 2010 decision that although enrollment in national health insurance is mandatory, there is no penalty for failure to enroll. The government further acknowledged that employers often do not enroll employees (foreign and Japanese) to save money by not having to match contributions. Therefore, the government acknowledgement will allow both foreign residents and Japanese employees to opt out of national health insurance coverage simply because they don't want to pay the monthly premium. This appears to be another case of turning a blind eye to those who do not follow the law, and it appears that the government will not punish companies for failure to enroll employees as is required by law because they admit there is no effective penalty. On visa renewal, foreigners will simply be given national health insurance enrollment information as a mean to encourage enrollment. With tongue-in-cheek, much of that information can be recycled from the trash receptacles near the exits. Also tongue-in-cheek, the immigration authorities can do NHK a big favor by encouraging foreigners to pay the NHK fees when the collector knocks on the door. This is another case in which I believe payment is mandatory but there is no punishment for failure to pay.

An option suggested by some regarding foreign

residents when this issue was being debated was to have foreign residents show proof of private health insurance coverage in lieu of enrollment in national health insurance plans. This apparently was not considered and visa renewal will not require any evidence of health insurance coverage. The issue of foreign residents without any health insurance is identical to that of illegal aliens. They delay or defer healthcare except for minor treatment in which they pay cash, but are at financial risk in the case of a serious illness and therefore a burden on society.

■ Actual Case Example 4:

A 32 year old foreigner self-employed and living in Japan on a valid visa forgoes enrollment in the national health insurance for the self-employed and has gone without coverage for five years. He injures his neck while surfing and is brought to the ER of a hospital by friends. He needs emergency surgery to decompress the spinal cord or he could suffer paralysis. He is admitted and taken to surgery where the disk is replaced by a titanium disk and the spinal cord is decompressed. He is discharged on the tenth postoperative day after paying 50,000 yen and signing a promissory note to pay the remaining 2 million yen bill since he claimed not to have any money. He leaves Japan and is not heard from again. Bottom line: The patient received uncompromising quality medical treatment in spite of not having any health insurance coverage. The hospital has no prospects of being reimbursed. The perfect storm is almost fully formed.

I have to this point addressed those without healthcare coverage as being the most problematic, but many foreign residents and visitors have private health insurance that covers them in Japan. Even some with national health insurance enrollment retain private health insurance coverage to cover the co-payment, room charges for a private room and the unsubsidized meal charges if they are hospitalized.

However, this can result into being lulled into a false sense of security. Although most of the private health insurance policies do provide coverage in Japan if specifically written for overseas coverage, many do not, or have strict prerequisites for payment. In many case, they require payment by the patient first, subject to the patient being reimbursed by the health insurance company by submitting receipts. This may be fine for an appendectomy, but can be a significant problem for

a three vessel coronary artery bypass graft (CABG) that will cost more than 10 million yen in some cases. In these cases, the patient almost always wants to ask the hospital to bill the insurance company because they do not have that kind of money set aside for medical emergencies. In these cases, the hospital or the patient gets pre-approval prior to the medical treatment, or if feasible, the patient asks the insurance company to pay the hospital bill when it is received. Often the insurance company agrees, taking the patient out of the loop so to speak, and assumes responsibility for payment. This is here the perfect storm adds another factor and really takes shape.

■ Actual Case Example 5:

A 52 year old foreign male residing in Japan legally and self employed has forgone enrollment in national health insurance, but retained private health insurance for himself and his family with coverage in Japan. He experiences severe cellulitis requiring admission to a hospital and the estimated charge for hospitalization is determined to be about 600,000 yen. He does not have sufficient funds to pay the hospital and contacts his insurance company which issues a preauthorization for medical care. Patient is admitted to the hospital and the information required by the insurer is sent to them. On the fourth admission day, the insurance company rescinds its pre-authorization citing a pre-existing condition that is not covered. Patient expresses surprise and outrage. On the eighth hospital day, the patient is discharged making a partial payment of 30,000 yen and signs a promissory note to pay the remaining balance. This story has a happy ending because approximately two months later the patient pays the remaining balance due. If this patient had experienced a myocardial infarction (heart attack) caused by a pre-existing condition that was not covered, this story may not have had a good ending for anyone.

■ Actual Case Example 6:

A 65 year old Japanese female living in Guam desired to have recommended breast cancer surgery back in Japan. She did not retain her Japanese National Health Insurance while living in Guam and intended to use her employee health insurance plan on Guam to pay for care in Japan and received pre-approval to undergo the surgery in Japan. The insurance company agreed to pay for her care if billed for reasonable and customary fees. The successful surgery

was performed, the insurance company was sent the bill and the patient was discharged. One month passed and the insurance company was contacted about payment. The insurance company requested an itemized bill in English which was provided to them but they wanted additional information. They requested the medical record in English. The hospital replied that this was not possible and that the medical record was in Japanese. A narrative summary and operation report was prepared in English and sent. It was mentioned to the insurer that Japanese patients receiving care in the United States cannot expect their records to be produced in Japanese for insurance purposes and that this was an unrealistic expectation that the hospital would provide complete medical records in English. Another month passed. The hospital again contacted the insurer. The insurer wanted a list of all medications in English prescribed for the patient. It was done and sent. Another month passed. The hospital again contacted the insurer. They wanted an explanation in English regarding the length of stay because it was longer than in the USA. To make this case explanation short, the hospital had to play 'ping pong' with the insurer over a seven month period in order to get paid. The insurance company then calculated the bill converting yen to U. S. dollars and mailed the hospital a U.S. dollar check. Because of the seven month delay, the dollar amount when converted back to yen was short of the amount billed for this patient's care.

As you can see from the above cases, processing a claim with a foreign insurance company is not an easy task and the average Japanese hospital probably does not have the bilingual resources to aggressively pursue these kinds of issues. Contacting a foreign insurer is not easy with a menu of difficult prompts required to reach a human being who may or may not be helpful, all of this in English unless you "Press 2 for Spanish". It may be harsh, but I believe the goal of many foreign insurance companies is to deny a claim if possible or delay payment as late as possible by perpetually asking for additional information in which to adjudicate the claim.

This perfect storm has been brewing and increasing in intensity for more than a decade. Its slow but sure progress is one reason it has not received much attention. The hospital in the examples above experienced a 40 million yen loss in uncompensated care in 2009, and I expect that other hospitals in Japan have similar loss experiences. When totaled, if it were possible to do so, it should cause

bells to ring and alarms to sound within the Ministry of Justice, the Ministry of Finance and the Ministry of Health, Labor and Welfare. Instead, there is conspicuous silence. Each hospital is left to fend for itself and struggle financially. With many hospitals virtually bankrupt or on the verge of collapse, this perfect storm may be enough to push them over the edge.

The question is whether we believe that the perfect storm has formed and if so, how are we to weather it. Continuing to watch it form and simply watching the uncompensated care losses climb does not seem to be a reasonable response. At some point in time, something has to be done.

A good first step to take is to identify as many illegal aliens as possible and do whatever is necessary to either make them legal residents or deport them. Why foreigners are allowed to overstay their visa without penalty is a mystery to many. Without paying taxes or being enrolled in national healthcare, they are liabilities and burdens on society, not assets, and they are not making meaningful contributions to Japan. If there is a rational argument to the contrary, I am not aware of it.

The next step is to reverse the recent decision that foreigners applying for a visa renewal need not to show proof of enrollment in national health insurance. It is the law and should not be selectively ignored to appease foreigners. Requiring proof of enrollment in national health insurance at time of visa renewal in order to preclude these persons from being burdens on society seems appropriate. Do not accept enrollment in private insurance in lieu of enrollment in national health insurance because it is too burdensome on Japanese hospitals to process claims, can be easily cancelled after the visa is renewed, often contains exclusionary clauses, and it shifts responsibility for payment away from the patient. Private insurance in addition (not in lieu of) to the national health insurance is not problematic for hospitals as the burden of documentation to be reimbursed rests with the patient, not the hospital.

Require employers to enroll all eligible employees in the national health insurance plan as required within 5 working days, and impose penalties against employers who violate this law. Impose penalties on employers who hire undocumented workers.

Establish prefectural funding for humanitarian/compassionate care provided to illegal aliens in cases

of life-threatening emergencies, but establish as a prerequisite for funding that hospitals contact police and/or immigration authorities at the time the care is being provided.

Consider legislation that will assist low income, unemployed and elderly with insufficient means in coping with the costs of health care. Although provisions are in place already, co-payments, room charges, meal charges and other out-of-pocket expenses can be a heavy burden on these patients.

Recommend that uncompensated care which is deemed uncollectable be used to offset the taxes that hospitals pay. In this way, the hospitals get some relief for the financial burden in providing uncompensated care.

I fear that if the government does not take proactive steps such as those discussed above, hospitals may take it upon themselves to try and protect themselves from this perfect storm. Hospitals in the case of non-urgent circumstances are legally able to refuse to provide medical treatment to foreigners who are in Japan illegally and are without proper documentation including non-enrollment in national health insurance. Referrals of these patients from smaller hospitals to tertiary care facilities may be refused citing no beds or no doctors being available. This is already a common practice. Although presenting in the ER with an urgent medical condition cannot be refused, some smaller hospitals do not have the specialty care required and this will make referrals most difficult. The delays in arranging appropriate and often life-saving care will severely affect the very lives of these patients. No hospital will want to knowingly accept a patient who cannot pay for medical care. Hospital might start creating "blacklists" of undesirables and carry out discriminatory practices. That would not be a good thing.

Hospitals, in order to be sure that an illegal alien patient does not return to create additional expenses, may post signs at entrances indicating that if it is determined that the foreign citizen patient is without a valid foreign registration card and has no evidence of health insurance, that police and immigration authorities will be contacted at the time of treatment and/or admission to the hospital. The downside will be the creation of fear of being reported and the avoidance of routine medical care until it becomes urgent or life-threatening.

Although it may not be politically correct to say, foreigners who overstay their visas have developed good

social networks. Collectively, they know how to stay under the radar, so to speak. Going to a hospital for medical care, not having to pay and not being reported quickly makes the underground grapevine rounds. For Japanese patients who forgo enrollment in national health insurance, there are more options for the hospital. Contacting the employer is often successful. Retroactive enrollment is often possible. Encouraging loans from family and relatives has met with some success and making periodic payments is an option. These options are essentially not possible for the person who is in Japan illegally. It is therefore a much more difficult problem to solve. There needs to be a safety net of some kind to rescue hospitals from this unfair burden.

It is the opinion of many foreign residents that in spite of the 'Yokoso Japan' campaign that Japan, while fairly accommodating to tourists, is less than welcoming to the foreign resident, illegal or otherwise. I remember the days of seeing 'Japanese Only' signs on commercial establishments and I would certainly be loathe to see these appear again this time at the entrance of hospitals. This is quite unlikely given advances in anti-discrimination in Japan, but non-payment for medical care is sure to create a bias against foreigners as well as the Japanese who increasingly are becoming burdens on society.

The purpose of this article is to convince readers that the perfect storm is real, looming on the horizon and is increasing in intensity. Also to point out that this is a national problem requiring a national solution, and hospitals already suffering financially are further burdened by uncompensated care. And lastly, to point out that hospitals and their staff are compassionate and caring and provide uncompromising quality medical treatment to patients regardless of color, creed, religion, gender or national origin and in the case of emergency care.... inability to pay. It is patently unfair to punish them by not recognizing the dedicated efforts of doctors, nurses and a myriad of others who provide this care by ignoring the financial burdens that are faced by them.

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Current Status and Issues of Medical Care and the Long-Term Care Insurance System for the Old-Old Elderly in Japan



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■ Toned-down discussion by the Committee on the Medical Care System for the Old-Old Elderly

The Medical Care System for the Old-Old Elderly was implemented in April 2008. While the game of politics is a reality in government planning, the politics behind the planning of this system has set records and has resulted in unwieldy changes being made too rapidly. The Democratic Party of Japan (DPJ), the Social Democratic Party (SDP), and the People's New Party (PNP) made clear their coalition's desire to seek the abolition of this system in the manifest they presented in the run-up to the recent election for the House of Representatives, which made it difficult to predict the future of this system. Akira Nagatsuma, the ever cautious head of the Ministry of Health, Labour and Welfare (MHLW) announced that there would be careful discussion about the establishment of a new system that will serve as an alternative to the Medical Care System for the old-old elderly that has been slated for the chopping block by the new administration, within the Committee for the Reformation of the Medical Care System for the Old-Old Elderly that was established last November. The basic goals of this committee are (1) the abolishment of the current Medical Care System for the Old-Old Elderly, (2) the establishment of a new system for the elderly as the first step in a unified move toward regional insurance, (3) resolution of issues related to the classification of the elderly by age grouping, (4) careful consideration of the burden of increased tax on the elderly, and (5) the prevention of rapid increases in insurance premiums and a sense of unfairness among the elderly. Similar movement

also took place under the leadership of former Minister of Health, Labour and Welfare, Yoichi Masuzoe. Can we expect anything this time around? Even the Japanese Communist Party (JCP), which is a perennial opposition party, is against the current system. We have to keep a close watch on the situation.

In fact, criticism has been directed against the program since the LDP-Komeito coalition held a majority of seats in the government. Strong voices have questioned the acceptability of designating the age of 75 as old-old elderly and have criticized the idea of deducting health insurance premiums directly from pension payments. In response to criticism from the elderly, the government changed the name of the system to the Long-Life Medical Care System and, in June 2008, proposed strategies aimed at reducing the cost of insurance premiums, promising to adopt temporary measures in October that would be implemented as permanent measures in April 2009. Local governments got busy with the administrative work involved in implementing the changes, and everything seemed to be moving along according to plan.

During the campaign for leadership of the LDP in September 2008, however, Yoichi Masuzoe, former head of the MHLW and facilitator of the system, announced his plans to review the system. His plan was to reform the National Health Insurance System administered by local governments into a Prefectural Health Insurance System to unify the Long-Life Medical Care and National Health Insurance System, the majority of whose clients are self-employed individuals and pensioners. The Committee on the Medical Care System for the Old-Old Elderly

was placed under the direct control of the MHLW and Masajuro Shiokawa, the former Minister of Finance, was put in as Chairman of the Committee to carry out this drastic reform.

I was also involved as a member of the committee. After an energetic start, however, discussion gradually toned down. The reason for this was that a majority of the committee members from the LDP who were associated with the MHLW wanted to maintain the existing system and stood against Masuzoe, whose actions they considered as mere grandstanding.

We reached the conclusion that the system should be reviewed through the integrated effort of the administration and the ruling coalition parties, and sent it to the government with the expectation that a plan would be formulated by the end of March; however, the final decision was put off. The most important point in dispute during the seven meetings held by the Committee on the Medical Care System for the Old-Old Elderly was the issue of drawing a line at age 75. In fact, the former Medical Care System for the Elderly drew a line at the age of 70; however, it was not an independent system. I question whether a system which separates out a group of individuals and designates it as being at higher risk is sustainable.

Then, two opinions were put forward. One was that the National Health Insurance System, the same as the above-mentioned local insurance system, and the Long-Life Medical Care System should be combined. The other was to draw a line not at age 75, but 65. The reasoning behind drawing the line at age 65 was that 65 was not only the age when retirees began receiving their pensions, but also the age at which individuals would, in principle, start being covered by Long-Term Care Insurance.

Both seem to have merit; however, there are problems with each of them. Looking at the former plan, for example, although there are plans to establish a Prefectural Health Insurance System, it would be difficult to leave the collection of premiums to prefectural governments that have no previous experience in this area. It would probably be entrusted to municipal governments similar to the Extended Association for the Long-Life Medical Care System. But, can we really call them insurers?

At the 3rd and 4th Committee meetings, we heard from persons involved in administration in Kochi, Fukuoka, Hokkaido, and Shiga Prefectures, in which the cost

of medical care is relatively high, on whether or not prefectural governments were capable of handling the collection of insurance premiums; however, we were unable to come to a conclusion based on their input. Many stated their strong opposition to any change in the Long-Life Medical Care System that had just been instituted, a reminder, perhaps, that once we establish a system, change involves significant cost and risk, even if that system is problematic.

Meanwhile, in regard to drawing the line at age 65, the most difficult problem was the need for a significant amount of public funding. Due to differences in financial composition, while certain advantages would be realized by each system, combining the Medical Care System for the Young-Old Elderly and Long-Life Medical Care System would require 2.4 trillion yen in public funding, a figure equivalent to 1% of the nation's annual consumption tax revenues. Raising such funds would require a tax increase, a politically difficult move in light of current economic conditions. With the DPJ announcing a policy of not raising consumption tax for four years, how do they aim to secure the financial resources required to cover costs if the line is drawn, as seems most likely, at age 65?

Furthermore, the DPJ's manifest calls for the "abolishment of the Medical Care System for the old-old elderly" and "a step-by-step integration of Employee Health Insurance and the National Health Insurance Systems into a unified regional insurance system." It does not seem to be possible to realize the DPJ's manifest with only 850 billion yen; however, if it does happen, it would be a great realization of a long-cherished wish that the government has had since the foundation of the universal healthcare system in 1961.

For your information, in regard to the unification of insurers that has been pushed by the All-Japan Federation of National Health Insurance Organization and the Japan Association of City Mayors, at the 1st meeting, I proposed discussing in reference to previous case examples in South Korea and Germany; however, it was dismissed with a laugh and the argument that significant differences in profit levels and the calculation of insurance premiums made it difficult to implement systems from other countries.

I believe that the government needs to take the initiative once again in discussing how to adjust the insurance system, especially in regard to the unification of the systems.

■ Low-Return Long-Life Medical Care System

Why, then, did the Long-Life Medical Care System prompt opposition while the Long-Term Care Insurance System, which was also deducted from pensions, was implemented smoothly.

This is because the Long-Life Medical Care System is low-return although the Long-Term Care Insurance System provides new benefits equivalent to the increase in the burden of the insurance premiums. In fact, the health care cost for the old-old elderly, which was considered as the only key element of the system, is unfortunately not working well.

This system was established to allow primary-care physicians chosen by individuals aged 75 years or older to provide total care that includes both physical and mental health, and continuity during hospitalization, outpatient therapy, and home care. The physicians are given 6000 yen per patient per month.

The government authorities in charge of administering the program billed it as a solution that would provide comprehensive medical care; however, the system has failed to gain popularity among the target population.

According to figures, some prefectures are handling fewer than 20 cases per year. Furthermore, according to the Central Social Insurance Medical Council's Committee for the Evaluation of the Health Care Cost Revision, of the medical institutions that have registered for the system, only 10% actually submit claims for services provided under it. This is strong evidence of a dysfunctional insurance system.

The public might wonder why this new the health care cost system for individuals 75 and above was established in the first place. The reason given is that the old-old elderly receive more medical treatment, especially those undergoing terminal care, and therefore, tend to incur greater expenses. One must ask, however, if this is actually the case. Using Diagnosis Procedure Combination (DPC) data collected from approximately 560,000 individuals through the Hospital Visualization Network developed by the Health Care Economics Section in 2005, hospital inpatients were classified into two groups, those 75 years of age and older, and those younger than 75, and then further classified into patients who died and patients who were discharged. A regression analysis conducted with these data produced unexpected results.

$\ln \text{ health care cost} = a \times \text{Dummy variable for the non old-old elderly} + b \times \text{Dummy variable for the surviving individual} + c \times \text{Dummy variable for the non old-old elderly} \times \text{Dummy variable for the surviving individual} + d \times \text{Dummy variable for gender} + \text{Constant term}$

Health care cost: DPC-based cost, Fee-for-service-based cost

DPC-based cost per day, Fee-for-service-based cost per day

Dummy variable for the non old-old elderly: "0" for the old-old elderly (75 years of age or older), "1" for the non old-old elderly (younger than 75 years of age)

Dummy variable for the surviving individuals: "0" for patients who died, "1" for patients who were discharged from the hospital

Dummy variable for gender: "0" for male, "1" for female

In regard to the patients who died due to cerebral infarction, results revealed that the cost per hospitalization for the old-old elderly was higher than the cost per hospitalization for the non old-old elderly. However, in regard to the patients who died due to the pulmonary malignancy, acute myocardial infarction, and recurrent myocardial infarction, the cost per hospitalization for the old-old elderly was lower than the cost per hospitalization for the non old-old elderly.

Meanwhile, the health care cost was compared between fatal and living cases among the old-old elderly. The health care cost for the fatal cases which was due to the pulmonary malignancy and cerebral infarction were higher than the health care cost for the survival cases, and the health care cost for the fatal cases which was due to acute myocardial infarction and recurrent myocardial infarction were lower than the health care cost for the survival cases.

■ Conclusions Based on the Proven Data

In other words, with regard to the patients included in DPC, the hypothesis that the old-old elderly incur higher health care cost is problematic. Perhaps, if the cost of health care incurred by outpatients and home-care patients were included, the position of the old-old elderly and non old-old elderly would be reversed. This suggests the need

for a review of health care cost for the elderly based on the proven data, and the change of administration that took place in the most recent national elections may have created a good opportunity to do so.

Even the Japan Medical Association, the only organization that pushed for a separate insurance system for individuals 75 years of age or older, has stated that 90% of the cost of health care should be covered by public funds based on the philosophy of security in the basic scheme for the Medical Care System for the Elderly. In fact, the existing Medical Care System for the Old-Old Elderly, while differing in some aspects, is similar to the system proposed by the Japan Medical Association.

Actually, as was made clear at the public hearing attended by representatives of Elderly Club, which took place at the 6th meeting of the Committee, the value of the insurance benefits does justify the premiums, which exceed 10,000 yen, deducted from the pensions of the old-old elderly. In the case of an employee pension of 220,000 yen, the deduction for insurance would account for approximately 5%.

Furthermore, according to a 2006 estimate by the National Institute of Population and Social Security Research, the DPJ has reported that the insurance premiums for the old-old elderly will increase to an estimated 199,000 yen per year in 2030 (in the absence of abatement measures, the increase will be 232,000 yen) from the current 72,000 yen. If medical and long-term care services are considered, the cost of hotels and meals must be added to the 10 to 30% of treatment costs not covered by insurance.

In addition, to abate the rise in the insurance premiums, to be increased along with the 3% increase of long-term care benefits to be implemented in April 2010, the government will contribute approximately 120 billion yen. Combining this with the abatement of the insurance fees for the Long Life Medical Care System, the total amount rises to approximately 236.9 billion yen. In short, the policy of reducing government expenditures for the natural increase of social security expenses by 220 billion yen per year already collapsed under the LDP-Komeito coalition.

The DPJ states in the manifest that the policy of reducing 220 billion yen social security expenses that has been pushed by the LPD and Komeito shall be reevaluated. Although revenue from a tax increase on the sale of

tobacco can be used to make up the difference in the short term, it is extremely hard to do so over the long term.

What I proposed to the Minister Nagatsuma and two other Parliamentary Secretaries on October 16th, 2009 was a plan for integrating the Medical Care System for the Old-Old Elderly and the Long-Term Care Insurance.

The rationale underlying this proposal is the significant difficulty in identifying the old-old elderly who require medical care and those who require nursing care. Policy makers' belief in the benefit of separating the old-old elderly is based on the fantasy that the government will resolve the problem of social hospitalization. However, the Health Insurance Bureau, which is in charge of the Medical Care Insurance, and the Health and Welfare Bureau for the Elderly, which is in charge of the Long-term Care Insurance, could not come up with a workable plan, so that the strategy has not yielded results.

In fact, a review of the institutions that are expected to provide medical and nursing care to the future super-aging society, in which the population of individuals 75 years of age and older will account for 27% of the entire population by 2055 reveals many unsolved issues such as (1) the reassignment of beds allotted to medical treatment to service in nursing homes, (2) classification of medical and long-term care insurance for individuals whose need for rehabilitation is unclear, (3) limitation of medical care benefits for long-term care facilities (especially healthcare facilities for the elderly), etc.

In regard to issue (1) in particular, we still do not have even a clue as to where to begin. The reason for this is that the shift from long-term care type medical care facilities (beds for long-term care) to long-term care type healthcare facilities for the elderly (hereinafter referred to as the "Care Facilities for the Elderly") recommended by the authorities will cause a worsening of profit if they fail to reduce the number of staff.

Three key members of the Ministry of Health, Labor and Welfare have differing opinions on the reallocation of beds for medical treatment. If the government carries out Shinya Adachi's proposed plan for the abolishment of beds for long-term care, facilities will be forced to choose between two alternatives; namely, (1) reducing the number of staff and shifting to Care Facilities for the Elderly, or (2) increasing the ratio of more serious patients under medical care classification 2 and 3 and shift to beds for medical care.

In fact, among patients occupying beds for medical care, the number falling under classification 1, which only costs 7,500 per day, is decreasing. The citizens of this country are anxious about where the patients with a low need for medical care have gone. I believe it is also necessary to investigate this situation.

■ Are Measures for Metabolic Syndrome Helpful in Reducing Health Care Costs?

In addition, the future effect of the Health Check-up and Lifestyle Intervention for Metabolic Syndrome programs that were instituted along with the Long Life Medical Care System targeting individuals between 40 and 74 years of age in April 2008 is still difficult to predict. Although the method of calculating funds for the Long Life Medical Care System will be determined in three years, based on the status of the system at that time, the use rates are not high.

But the authorities remain bold in stating the goals of reducing the incidence of lifestyle diseases and pre-lifestyle diseases 25% by 2015 and aiming to mid- and long-term adjustment of health care costs. Is it really possible to reduce health care costs through the implementation of the Health Check-up and Lifestyle Intervention? According to figures extracted from data covering 5 years of medical checkup expenses for individuals insured by the Toyota Motor Health Insurance Society, the Health Check-up increased the health care costs in the short term. This is because the number of individuals who had not undergone Check-ups in spite of their risk for lifestyle diseases increased as the company encouraged its employees to be checked.

However, in the mid and long term, health care costs may be reduced. This is because the Lifestyle Intervention reduces the likelihood of serious disease developing, which reduces the health care cost required to treat such disease, which will compensate for the increase of cost due to the increase in the number of individuals seeking the Health Check-up and Lifestyle Intervention.

The estimated cost of screening individuals for potential disease over 5 years is 863 million yen, or roughly 173 million yen per year, which is equivalent to 9.1% of the total health care costs for the three diseases mentioned above in FY 2007 for the individuals insured by the Toyota Motor Health Insurance Society. For this

estimation, the cost of screening individuals who would not have normally taken advantage of the screening were presumed to equal the health care costs for all such individuals found to have disease and who would undergo treatment for a period of one year over a 5-year period.

The following 13 diseases are defined as lifestyle diseases: diabetes, hypertension, hyperlipemia, hyperuricemia, hepatic dysfunction, diabetic neuropathy, diabetic retinopathy, diabetic nephropathy, hypertensive renal impairment, cerebrovascular diseases, ischemic heart diseases, arterial occlusion, and aortic diseases.

In fact, statistical analysis of health care costs and related factors shows that lifestyle diseases have a greater impact on health care costs than age (aging) does, suggesting that if the risk of lifestyle diseases can be reduced, the effect in terms of cost savings may compensate for the increase in health care costs related to aging.

If the government still intends to continue this massive experiment the scale of which has not yet been seen before, based on the belief in a phrase, "There is no better medicine than prevention," individuals who are 75 years of age and older should be included as recipients of the Health Check-up and Lifestyle Intervention. I also think comprehensive preventive medical care which includes cancer as well as metabolic syndrome should be provided by public funds. What do you think about it?

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A Case of Laughter Therapy that Helped Improve Advanced Gastric Cancer



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■ Abstract

We have reported the case of a patient diagnosed as having advanced gastric cancer at the age of 88 years old. An endoscopy revealed a type-2 gastric cancer of 25 × 30 mm in the lesser curvature of the middle stomach body and an Ila gastric cancer with T2 SS and cardiac accessory lesions. Both the type-2 and Ila lesions were defined as tub1 with surrounding atrophic gastritis and entero-epithelium metaplastic carcinoma. Considering the patient's age and her desire not to receive cancer treatment, we prescribed laughter therapy as recommended by the Society for Healing Environment. The program was implemented in a laughter-inducing environment and consisted of five stages: (1) Making the patient feel safe, (2) Relaxing the patient, (3) Increasing the effectiveness, (4) Improving her condition and (5) Increasing her joy of living. One year and seven months later, an endoscopy of the lesser curvature of the middle stomach body indicated that the lesions clearly improved with a morphological reduction into Ila + Iic masses. A tissue biopsy revealed that nucleus abnormality clearly improved from the initial diagnosis, with no irregularity in size. The suspected lesion was localized to a limited area near the stomach wall. Although partial gastric adenocarcinoma was suspected, the cancers turned into gastric adenoma, atrophic gastritis, and entero-

epithelium metaplastic carcinoma. Now, five years after the initial diagnosis, she maintains a good condition.

Laughter, one of our casual behaviors, has the effect of reducing the stress experienced by the human body. Laughter is expected to become alternative medicine in the future, and we hope to see more reports and evidence on soothing therapies using laughter.

Keywords; Advanced gastric cancer, complementary and alternative medicine, laughter therapist

■ Introduction

The clinical effect of laughter has been supported by several previous researches. Particularly well-known is the study by Itami et al that tested one group of people, including cancer patients, to evaluate the effect of laughter. The result showed that laughter could increase the production of endorphins and the activation of natural killer (NK) cells known to induce apoptosis in cancer cells¹⁾. However, few cases of laughter treatment have been reported. In this study, we encountered an 88-year-old female patient diagnosed as having an advanced gastric cancer but who was unwilling to receive active treatment, due to reasons such as her age. As laughter therapists (authorized by **the Society for Healing Environment**),



Fig. 1 An initial gastric endoscopic image

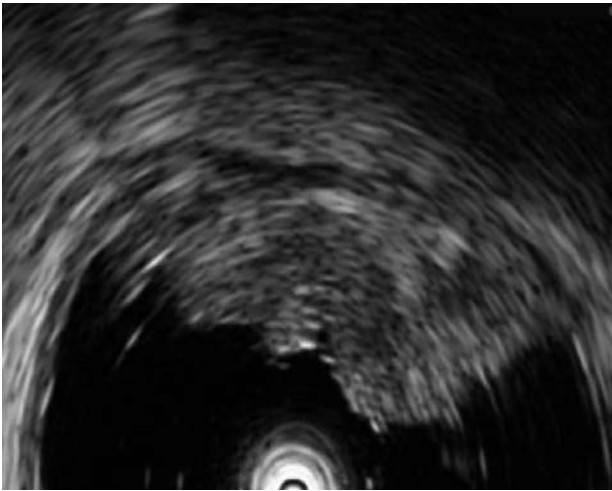


Fig. 2 An EUS image at the initial diagnosis

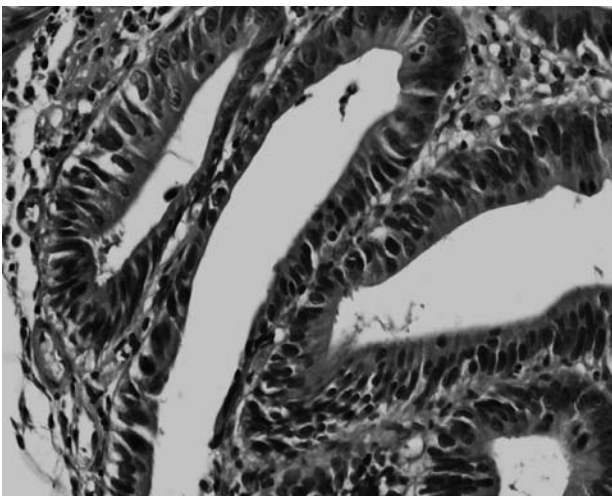


Fig. 3 Tissue at the initial diagnosis

the authors experienced a case in which laughter served as an alternative therapy, resulting in a better patient condition and an endoscopically clear improvement of the disease²⁾.

■ Case Report

Chief complaint: Anorexia

Habits: No history of smoking or drinking; no habit of eating raw fish, such as mackerel.

Present illness: Since 1990, a 88-year-old woman had periodically visited Noji Clinic for a hypertension treatment. In summer of 2005, she showed symptoms of anorexia and melena. The abdomen was flat, and no tumor or superficial lymph node were palpated, although minor anemia was present in the palpebral conjunctiva. Her blood test resulted in a red blood count of $373 \times 10^4/\text{mm}^3$, hemoglobin concentration of 11.5 g/dl, and hematocrit of 35.9%. Hemato-biochemical profile showed no notable abnormality. Fecal hemoccult tests indicated positive guaiac and negative immune responses. An endoscopy revealed a type-2 gastric cancer of 25×30 mm in the lesser curvature of the middle stomach body and a type-IIa gastric cancer with T2 (SS) and cardiac accessory lesions (Figs. 1 and 2). The patient was referred to a university hospital for detailed examinations and treatment. Another endoscopy at the hospital indicated advanced gastric cancer with a type-2 lesion in the lesser curvature of the middle stomach body and an O-IIa accessory lesion extending on the oral side (Fig. 3). With no metastasis to other organs, the patient would normally be eligible for surgical treatment. Due to her age and the wishes of her family, the patient chose a conservative treatment without anti-cancer agent nor radiation therapy.

The patient was then referred back to our clinic and received treatment for hypertension. We were concerned about her mental condition after she was informed of her disease and the possible pains she might subsequently experience. Actually, she was distressed, and further suffered from depression.

Then, we began progressive laughter therapy, considering the following.

1. She might not accept humor in her current state; thus, we began a dialogue using common topics.
2. We then tried to relax her little by little, so as to match her compliance and tolerance to laughter.
3. During her visits to our clinic, we offered appropriate

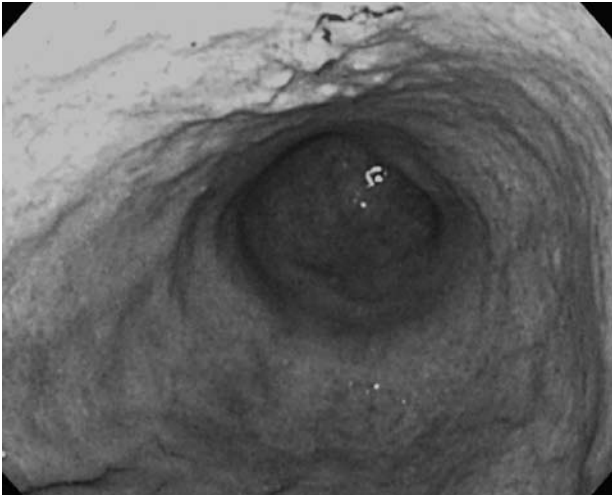


Fig. 4

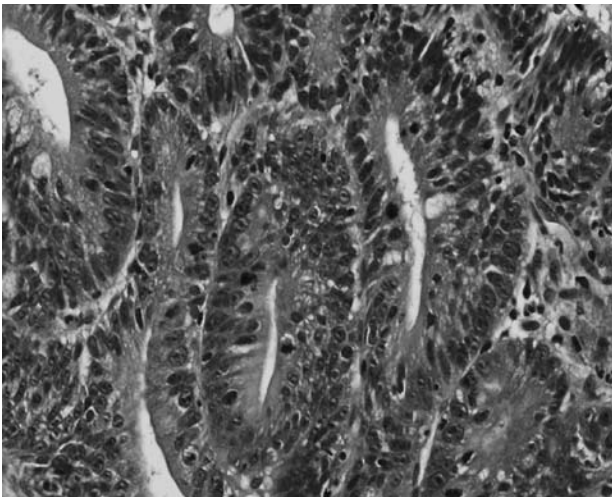


Fig. 5

topics that might induce passive laughter.

We avoided black joke self-deprecation, and any topics that might be suggested with her disease or prognosis.

4. Sometimes, we let her speak and thus listened, in order to elicit laughter from the patient.
5. To create a passive laughter environment at home, we suggested that she watch or listen to comedies, *rakugo* (traditional Japanese comical storytelling), or any other entertainment that she might find enjoyable.
6. We also advised the patient to massage her facial expression muscles.

Three months later, she began to smile more, as she used to before the diagnosis. We implemented laughter therapy only for the initial purpose of managing her mental condition, but she also became relieved from her depression as well. After one year and five months

from the diagnosis, we were informed that her appetite had improved, and we conducted the second epigastric endoscopy.

Second endoscopy (Fig. 4): The lesion in the lesser curvature of the middle part of stomach clearly improved and morphologically reduced to IIa + IIc masses.

Tissue biopsy (Fig. 5): Although a partial gastric adenocarcinoma was suspected, the cancer turned into gastric adenoma, atrophic gastritis, and entero-epithelium metaplastic carcinoma.

After the second endoscopy, the patient moved to a nursing home for the elderly, and her primary physician changed. In 2008, or three years after the diagnosis, we examined the patient again. She looked quite well both mentally and physically. She had a good appetite and gained weight. The result of the third endoscopy was similar to that of the second study. The lesions in the lesser curvature of the middle part of stomach clearly improved and morphologically reduced into IIa + IIc masses. Now, in 2010, five years after the initial diagnosis, she continues the regimen of laughing and maintains a good condition.

■ Discussion

Adjustment disorders, depression, and delirium are the three major psychiatric pathologies exhibited by cancer patients³. In the present case, the patient had advanced gastric cancer and subsequently suffered from depression. We implemented laughter therapy for the initial purpose of managing her mental condition, as guided by the laughter therapists from the Society for Healing Environment. As a result, the patient's primary disease clearly improved from a type-2 advanced cancer (macromolecular tubular gastric adenocarcinoma) to early IIa + IIc masses with morphologically reduced sizes.

In past studies, researchers have attempted to scientifically prove the physical effect of laughter. Yoshino et al reported that laughter-inducing amusement, such as *rakugo*, helped correct the imbalance of the neuro, endocrine, and immune systems that maintain the physical homeostasis against excessive stress⁴. Laughter is expected to increase endorphins, an intracerebral substance similar to morphine, dopamine⁵, and serotonin⁶. However, humor also has an opposing effect; especially when a person is suffering from mental distress, even a casual joke may be harmful and sometimes dangerous⁷. According to an experiment by Takayanagi et al, the

activation of NK cells, which is known as cancer-fighting cells, is promoted the most by passive laughter (natural and spontaneous laughter provoked by a pleasant event) and appropriate amounts of exercise⁸⁾. The activation of NK cells decreases in 30 minutes after the end of the laughter-induced stimulation⁸⁾.

In the present case, the patient was distressed and unlikely to tolerate laughter just after being informed of her advanced gastric cancer. With this in mind, we started a progressive laughter therapy recommended by the Society for Healing Environment.

Our laughter therapy consisted of five stages: (1) Making the patient feel safe, (2) Relaxing the patient, (3) Increasing the effectiveness, (4) Improving her general condition, and (5) Increasing her joy of living. To make our patient feel safe in our clinic, we began our dialogue with common topics. We attempted to relax her little by little, so as to match her compliance and tolerance to laughter. To increase the effectiveness, we offered appropriate topics and avoided black joke, self-deprecation, and any topics that might be associated with her disease or prognosis; sometimes, we let her speak and thus listened, in order to elicit laughter from the patient. To improve her condition, we suggested that she create a passive laughter environment at home. Although comic books and movies are reported to prove effective in one prospective study⁹⁾, we let her choose laughter items according to her preference. The massage of facial expression muscles was intended to produce an effect similar to laughing, even when she was not in the mood to laugh¹⁰⁾. Her spirit was getting better and her appetite increased. We observed that her joy of living appeared to be growing.

It is well-known that tumors can naturally vanish due to anisakiasis¹¹⁾. Shibahara et al has reported a case of

morphological transformation of cancer due to anisakiasis complicated with advanced gastric cancer¹²⁾. In the present case, however, anisakiasis complication was questionable because the patient experienced no stomachaches and had not eaten raw fish. There are very few cases where advanced cancer healed naturally. Nishikawa and Arima et al reported one case of a naturally separated gastric-protruding tumor. For these pediculated lesions, the researchers assumed the possibility of necrosis due to circulatory disorders at the origin and the pyloric vestibule with large pendular peristalsis^{13,14)}. However, this does not apply to our patient because she had a sessile tumor in the middle part of the stomach body. In addition, endoscopic images of reduced tumors indicated that they were unlikely to separate or vanish. Similarly, we should eliminate the possibility of the common processes in the vestibule, such as self-digestion by gastric juice or mechanical stimulation caused by the friction of food particles. In the past, there were few cases of sessile tumors similar to the present case. Kawamura et al reported a vanishing IIC tumor in the vestibule¹⁵⁾, but it is rare and difficult to explain that advanced gastric cancer reaching to the substratum of serous membrane can be reduced to a superficial level.

A gastric cancer patient who had chosen not to receive active treatment had almost no chance of re-examination. In the present case, we observed that the patient's state of depression also improved only through hypertension treatment and laughter. Although we could not measure specific parameters, such as the activation of NK cells, we could surmise that laughter served to induce some sort of immune function and apoptosis. From the fact that the patient survived the stomach cancer for as long as five years and counting, we can assume that laughter is somewhat effective.

■ Progress Table

	Feb.2005	Sep.2005	Sep.2006	Dec.2006	Jan.2007	Jan.2008
		Laughter therapy				
Endoscopic findings		Type-2 and IIa			II a + II c	
Weight (kg)	65	62			64	64
Fecal hemocult tests		+	+	-		
RBC (x10 ⁴ mm)	391	373	350	362	372	
Hb (g/dl)	12	11.5	9.8	10.9	11	
Ht (%)	38.2	35.9	31	35	35.4	

■ Conclusion

We have reported the case of an 88-year-old patient diagnosed as having advanced gastric cancer. With the help of soothing laughter, the cancer was morphologically reduced and she survived for as long as five years. Therefore, we can conclude that laughter, one of our casual behaviors, has the effect of reducing the stress experienced by the human body. Thus, laughter is expected to become alternative medicine in the future, and we hope to see more reports and evidence on soothing therapies using laughter.

■ Acknowledgements

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■ Description of Images

Fig. 1: An initial gastric endoscopic image

The image shows a type-2 gastric cancer (a dish-like protruding lesion with a central depression) of 25 × 30 mm in the lesser curvature of the middle stomach body. This was an IIa gastric cancer with T2 SS and cardiac accessory lesions.

Fig. 2: An EUS image at the initial diagnosis

This endoscopic ultrasonographic image indicates the wall depth of invasion reaching SS. The patient was diagnosed as having advanced gastric cancer.

Fig. 3: Tissues at the initial diagnosis

Macromolecular tubular adenocarcinoma (tub1) with surrounding entero-epithelium metaplastic carcinoma and chronic gastritis; both the type-2 and IIa lesions were defined as tub1 with surrounding atrophic gastritis and entero-epithelium metaplastic carcinoma.

Fig. 4: Second endoscopy (one year and seven months after diagnosis)

In the lesser curvature of the middle stomach body, the lesions clearly improved with a

morphological reduction into IIa + IIc masses.

Tissue biopsy: Although partial gastric adenocarcinoma was suspected, the cancers turned into gastric adenoma, atrophic gastritis, and entero-epithelium metaplastic carcinoma.

Fig. 5: Second tissue endoscopy: Gastric adenocarcinoma was suspected.

Large-scale magnification of the above tissue

Compared to the initial diagnosis, nucleus abnormality is clearly improved with no irregularity in size.

However, the luminal structure has not completely vanished.

Consideration of Grand Design for the Care Environment in Hospitals —Smell, Lighting and Sound—



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■ Abstract

We investigated grand designs for the care environment in hospitals, focusing on smell, lighting and sound, based on a database of observed domestic general hospitals (12 institutions), consisting of 1235 photographs and descriptive data. As a result, we identified four areas that should be incorporated into grand designs for this type of care environment: [1] The smell environment with (1) the exclusion of “odors”, and (2) regulation of “fragrances”; [2] the lighting environment with lighting that successfully incorporates nature; [3] the sound environment that incorporates (1) pleasant sounds, and (2) the exclusion of excess noise; and [4] a natural environment and a healing space where individuals can feel at ease. The most important challenges in reform of the care environment are an emphasis on an approach that employs the senses, and the necessity of raising the awareness of healthcare providers in relation to this type of environment. Although current hospital care environments are being improved through the independent efforts of hospitals themselves, we anticipate that the future will bring about a care environment in which more attention is paid to air quality, lighting and sound, when assessing hospital function.

Keywords; Care environment, smell environment, lighting environment, sound environment

■ Background

In recent years, the care environments in hospitals have undergone considerable changes. Many hospitals have strived to enhance the tangible side of the care environment, including the installation of modern medical equipment resulting from advances in medical treatment, the enrichment of furnishings in hospital rooms associated with improved standards of living, and even the presence of cafes and convenience stores within the actual facilities.

Improvement of the care environment not only has a significant effect on the mind and body of the patient, but also signifies proactive efforts by the hospital, influencing the impression it makes on the public.

In contrast to increasing improvements on the visible, tangible side of the care environment, only in the past few years have hospitals begun tackling the less tangible aspects of the care environment, such as smell, lighting and sound. However, as Florence Nightingale (1860) states in “Notes on Nursing”, “It (nursing) ought to signify the proper use of fresh air, light, warmth, cleanliness, quiet, and the proper selection and administration of diet – all at the least expense of vital power to the patient.”; the appropriate preparation of aspects, such as air, lighting and noise, is the foundation of nursing, and this reduces the expense to the patient’s vitality.

There have been few studies on the care environment of hospitals that focus on smell, lighting and noise, and proposals emphasizing a clear approach to such investigations have yet to be offered.

■ Purpose

In this study, our objective is to formulate a proposal for a grand design for the care environment in hospitals, with a focus on smell, lighting and sound.

■ Method

We targeted domestic general hospitals (12 institutions), and considered the care environment of each institution, focusing on smell, lighting and sound. The subject hospitals of our investigations consisted of 10 Designated Cancer Care Hospitals, 1 hotel-quality hospital specializing in rehabilitation, and 1 hospital specializing in palliative care, which puts significant effort into the care environment, for a total of 12 institutions. Our reason for focusing on Designated Cancer Care Hospitals was our assumption that they could ensure a hospital-scale care environment and would possess Designated Cancer Care Hospital facility standards [(1) surgical treatment for cancer, anticancer drug treatment and radiotherapy that satisfy certain criteria; multiple departments able to work together to provide medical care, (2) the handling of second opinions and the ability to provide palliative treatment; and collaborative systems in place with regional hospitals and clinics, (3) specialist staff include doctors, pharmacists, nurses, clinical psychologists, social workers and radiological technologists, (4) the existence of facilities and environments such as specialist care

units, counseling and support centers, smoking cessation measures, and internal cancer registration, among others]. In order to consider a grand design for care environments, we also targeted two additional hospitals, one of “hotel” quality, and one that specializes both in palliative care and that puts significant effort into the care environment. A summary of the target hospitals is given in Table 1.

For consideration of the care environments, we used 1,235 photographs taken by two researchers, and notes recorded at the target institutions.

(Ethical considerations)

Consideration was given to ensure that patients and staff did not appear in photographs taken at the institutions.

(Definition of terms)

[Odor]: Unpleasant odors such as fecal odor, urine odor, and/or odor associated with sickness

[Chemical odor]: Odors caused by chemical substances. Such odors are not perceptible to many people but are noticed by individuals with a keen sense of smell, patients with multiple-chemical sensitivity, and immunocompromised individuals.

[Fragrance]: Smells that are generally regarded as being pleasant.

[Smell]: General term encompassing “odor”, “chemical odor” and “fragrance”.

■ Results

● Smells: odors, chemical odors, fragrances

No hospitals were observed in which fecal and urine odors or odors associated with sickness were prevalent, but there was one hospital where a slight odor was perceived.

There was one hospital in which a strong chemical odor was present. It was the smell of a restroom air freshener (wall-mounted type that diffuses its fragrance via an electric motor) perceptible from the entrance, and strong enough to cause headache upon entering the restroom. One hospital was observed in which a chlorine odor was present near the dialysis and outpatient chemotherapy rooms. An air-purifier was not observed in the hospital rooms, nor was periodic ventilation.

With regard to fragrances, hospital “A” had 3 full-time aroma therapists. This hospital used aroma diffusers to fragrance the entrance with small quantities of organic

■ Table 1 – Summary of target hospitals

hospital	Governing body	beds
A	Medical corporation	170
B	Medical corporation	250
C^a	National hospital organization	250
D^a	Consumers cooperative union	350
E^a	National hospital organization	200
F^a	National university corporation	550
G^a	Municipal	500
H^a	Regional medical union	500
I^a	Prefectural	350
J^a	National hospital Organization	450
K^a	Municipal	400
L^a	Municipal	350

^a Designated Cancer Care Hospitals

essential oils. An aromatherapy salon was also established within the hospital, in which aromatherapy was performed at no charge for inpatients, for various therapeutic purposes, including the treatment of insomnia, relaxation and sensory stimulation (Figures 1–3).

■ Figure 1. Organic essential oils: hospital “A”



■ Figure 2. Aromatherapy supplies: hospital “A”



■ Figure 3. Aromatherapy room: hospital “A”



At hospital “C” and hospital “L”, nurses who were studying aromatherapy provided instruction to other nurses on the use carrier oils and essential oils. Therapies using essential oils, such as edema care, were being carried out not by aromatherapists, but by ward nurses. A method of employing essential oils that was observed numerous times involved the use of an air massager for periods of approximately 30 minutes. This method made use of air pressure to massage patients who had developed edema in the legs, followed by an oil massage using essential oils. In the palliative care wards, the use of aromatherapy was widespread; however, use of the oils was not based on their having certain therapeutic effects. Rather, the essential oils were chosen according to patient preference (Figures 4 and 5).

■ Figure 4. Massage kit: hospital “C”



■ Figure 5. Massage kit: hospital “L”



In wards implementing this type of care, because they were proactively incorporating fragrances into their treatment, odors within the ward tended to be kept under control.

● Lighting

Many of the hospitals were considering the use of natural lighting. Approaches included full-windowed lounge areas, large windows throughout the buildings, and windows in all patient rooms that face gardens (Figures 6 and 7).

■ Figure 6. Full-windowed lounge: hospital "L"



■ Figure 7. Bathroom with natural lighting: hospital "C"



Hospital interiors generally employed indirect illumination. However, we also observed hospitals that create a relaxed and appropriate level of brightness as well as a classy atmosphere through a harmony

between natural light and illumination, and hospitals that incorporate indirect lighting beneath handrails, thus giving consideration to illumination of the feet, for people using the handrail while walking (Figures 8 and 9).

■ Figure 8. Harmony between natural light and illumination: hospital "A"



■ Figure 9. Handrail and indirect illumination: hospital "A"



● Noise

The sound that is present in the care environment can be divided into two types; pleasant sounds, and excess noise.

A background music amenity director at hospital "A" had selected pleasant sounds in the form of music for the hospital to use, which was neither agitating nor irritating, in order to maintain motivation during rehabilitation, and he had this music added to a CD to be played. The music, which had a presence akin to that of clean air, did not feel as though it entered the ear directly. Likewise, the volume

was adjusted to give it a sense that it would not be at all audible if one did not make a conscious effort to hear it.

At the entrance of hospital “B”, there was a grand player piano, which gave the setting a glamorous atmosphere. Shown on the wall was an image of the moon, projected from the hospital’s observatory, which demonstrated the character and depth of the hospital (Figure 10).

■ Figure 10. Player piano performance and image of the moon: hospital “B”



With regard to excess noise, carts were not used at hospital “A” in order to avoid the production of unnecessary noise such as the noises caused by pushing the carts. Nurses, instead, did their rounds carrying a tote bag containing equipment such as blood pressure monitors, thermometers and equipment for measuring oxygen saturation. A waist pouch is employed at hospital “A”, and is situated at the nurses’ backs to hold writing implements and similar supplies. Being carried in this way instead of in the front pockets of their uniforms prevents these items from accidentally harming patients. Carts are not used to transport terminals and PCs for inputting information into electronic medical charts. Instead, this is performed at “input booths” situated at multiple sites along hospital corridors. After data input is complete, and the booth is no longer required, it is hidden behind a closed door (Figures 11–13).

● Other

Hospitals were observed to be bringing nature inside, having created gardens and green houses within the facility. Some hospitals also established private gardens in front of

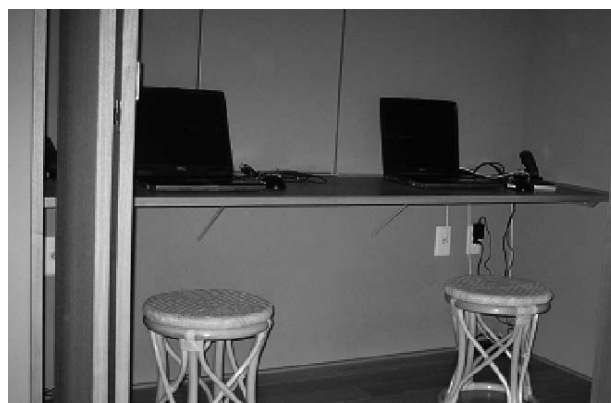
■ Figure 11. Tote bag used in place of a cart: hospital “A”



■ Figure 12. Use of a back waist pouch: hospital “A”



■ Figure 13. Input booth: hospital “A”



hospital rooms, and developed paths to facilitate the use of gurneys. In this case, even if a particular patient finds movement difficult, he or she would be able to experience nature. (Figures 14–16).

■ Figure 14. Greenhouse and roof garden: hospital “B”



■ Figure 15. Private garden in front of hospital room: hospital “A”

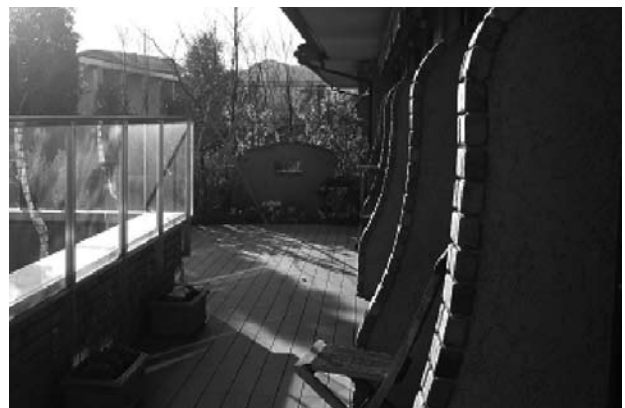


■ Figure 16. Garden where patients can be taken on gurneys: hospital “C”



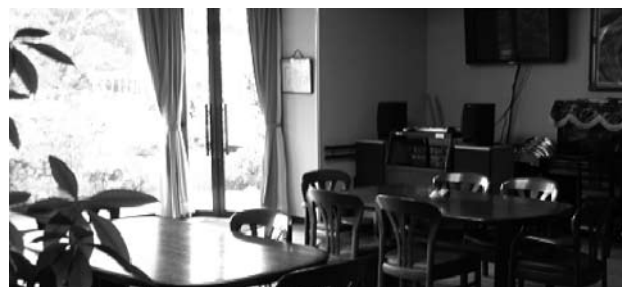
At hospital “L”, consideration has been given to enable entry into the garden from each hospital room. Further ingenuity was exercised with the inclusion of a partition between rooms that provides patients with privacy and allows them the option basking in the sun outside (Figure 17).

■ Figure 17. Garden outside of residential room, and dividing wall: hospital “L”



At hospital “C”, natural light was introduced from a tall sliding window, and within the room there were decorative plants, audio equipment, paintings and an upright piano. A space had been created where a feeling of ease could be found amid common household items (Figure 18).

■ Figure 18. Space in which household clutter provides relief: hospital “C”



■ Discussion

● Smell

Assessment of the subject hospitals for smell revealed a lack of consideration regarding chemical odors in, for example, the absence of air purifiers and regulations pertaining to ventilation. These shortcomings may be due to the fact that many people are unable to perceive chemical odors, a situation that might be expected to delay awareness of the need to improve and, therefore, the need to employ countermeasures. The presence of chemical odor does not necessarily suggest that the odor itself is harmful. The chemical substances that cause such odors, however, can have a negative effect on certain individuals. Because even minute quantities of such chemicals can affect the lives of patients with multiple-chemical sensitivity, urgent measures for storage that would minimize or eliminate these odors are necessary. Multiple-chemical sensitivity is not just a condition that affects only certain people; it is an ailment that occurs when an individual's chemical tolerance level is exceeded. Even if they do not show multiple-chemical sensitivity, it is common for patients with weakened immune systems and patients with an acute sense of smell to suffer physical effects when exposed to chemical substances. It is the duty of medical institutions to ensure that chemical substances and their odors are properly contained.

Recently, as a means of achieving the objective of keeping care environments free of odors, regardless of origin, some hospitals have started to ventilate their facilities every 2 hours during the day, and use odor sensors to measure odors 4 times per day. However, few hospitals carry out regular ventilation in this way, and awareness with regard to odor countermeasures, such as the use of air fresheners to eliminate odors, and sterilization has not yet spread widely. As places such as dialysis and outpatient chemotherapy rooms must be cleaned and sterilized, situations exist in which disinfection is absolutely necessary. Resolving the question of how to do so while facilitating the development of an odor-free environment (including chemical substances), is of considerable importance.

With regard to the fragrances available for aromatherapy, the selection of essential oils in terms of scent and quality, and the regulation of quantities to be put into diffusers is necessary. If these issues are not addressed properly, "fragrance" can become "odor",

resulting in headache and nausea. The effectiveness of aromatherapy has been discussed extensively (Hinohara, 2002; Yamamoto, 2008), and if it is to be used in medical treatment and care, it is desirable that this be subsequent to considerations pertaining to the utility of organic essential oils that are safe and of high quality.

● Lighting

While there are times when lighting gives patients hope, excess brightness can cause adverse effects. The regulation of lighting conditions and brightness is, therefore, essential. There is both a psychological and physical aspect, and there are times when it is necessary to regulate lighting based on patient conditions. However, in busy medical practice, care and support related to the regulation of lighting is not possible, unless it is for fall prevention, and there are no physical consequences. It is desirable that on-site healthcare providers be mindful of lighting adjustment and adopt tangible approaches to lighting, as seen in each of the hospitals, in efforts to avoid over-lighting, and to prevent lighting from shining directly into the eyes while providing gentle illumination and installing both full and tall sliding windows.

Recently, the successful incorporation of natural lighting has yielded more than simply appropriate light levels, it has also been shown to have effects on the mind and body, including regulation of the sleep-wake rhythms (Arayama, Furuta, Kaneda, Kosaka, & Koshino 1999; Iwamitsu, Ozeki, Konishi, Murakami, Kimura, & Okawa 2007), and comfort. It is likely in the future that considering light as a part of the care environment will be important.

● Sound

As exemplified in music therapy, pleasant sounds have the potential to heal patients, raise the quality of life, and draw out natural healing abilities in the form of increased immune strength (Bittman et al., 2001). While there are no immediate effects equivalent to drug therapy, tapping into the natural healing ability of the patient has long been the role of nursing. We, therefore, anticipate that discussion relating to the provision of pleasant sounds will become commonplace in the future.

Conversely, excess noise obstructs the patient's sense of well-being, and, at night, it can foster sleeplessness. Typical excess noises produced by healthcare providers

are the noises caused by pushing carts and footsteps. Many nurses are currently resigned to this, thinking that although they try to be careful, such noises cannot be helped. The sound of nurses' shoes to a patient who presses the nurse call button is recognized as a sign that help is on the way. To other patients though, it is excess noise. All hospitals should apply the same method as hospital "A", by installing PC booths, yet manpower shortages and differences in nursing techniques may render this impractical. Nevertheless, instead of being resigned to the fact that it cannot be helped, it is necessary to consider countermeasures for noise appropriate to the circumstances of each individual ward. It is also necessary to develop products that minimize cart noise.

● Nature, an environment in which we feel at ease

The natural environment tends to be overlooked in the care environment. However, there has been a recent trend toward the introduction of green hospitals in line with the Lifestyle of Health and Sustainability (LOHAS) concept and the spread of alternative healthcare, and use of the natural environment is continuing to draw much attention (Imanishi & Imanishi, 2008; Iwasaki, 2008; Owada, 2008). As exemplified by forest and horticultural therapy, there is a power in nature to heal individuals. When one comes into contact with nature, it can calm the emotions and help find serenity.

If we turn our attention to the space in which patients undergo treatment, we find there are no requirements for such spaces to be perfectly maintained. Sometimes, a cluttered space can be one that fosters a feeling of ease, in the same way as would one's home. In particular, when long-term treatment is necessary, there is bound to be room for consideration of this type of space.

In the hospitals targeted in our study, nature was being incorporated in various ways. However, irrespective of the hospital, thought was given to assisting the medical care of the patient, and the natural environment was adjusted in accordance with their patient population. In terms of space and cost, there are cases in which it is difficult to provide a natural environment. If the hospital is situated in the countryside though, untouched nature can be borrowed as is, while city hospitals require improvisation in order to organize a green environment, for example, by utilizing something like green gardens or small spaces.

When it comes to the situational conditions of the hospital, a location that is blessed with nature is ideal, where one can open and close the windows to adjust air quality and temperature without relying too heavily upon air conditioning. At present, there are more than a few institutions citing problems such as "We cannot open and close the windows on upper floors", or "Ventilation is not possible because the air quality outside is worse." Nevertheless, we feel this is a perspective that should be considered when building hospitals in the future.

● Proposal for care environment assessment

In the future, it will be necessary to consider the universal care environment rather than simply limiting our attention to wards. The ideal would be a two-tiered structure of common items for assessment, and items that are unique to the specialized functions of the hospital wards in question.

When considering a better care environment, we must not only consider the condition of the majority patients undergoing treatment, but also the condition of patients with special needs. If we are able to clarify the needs of patients, including individuals with special diseases or disabilities (e.g., eyesight, hearing, physical, psychological) as well as people for whom stage of life is relevant (e.g., pregnant, elderly, infant), then more specific items for evaluation can be determined.

Thanks to hospital "A", it has become clear that it is important to create a care environment appropriate to purpose in order to improve the effects of treatment. Nakayama (2005) states that "Building is the creation of floors, walls, ceilings and roofs, and is the introduction of technology to control our environment (e.g., temperature, brightness, moisture)... It creates for us, 'space' as a vessel in which to perform various activities, and 'unity of space' to secure the continuity of activities, as well as the 'program of activities' itself."

Our proposal for a grand design for the care environment involves the concept that the healthcare provider should be aware of the direct correlation between improvement of the care environment and the quality of life of the individual undergoing treatment. The necessity of raising awareness in healthcare providers toward the care environment is the most significant challenge.

Tangible points, such as furnishings, are easily

evaluated by sight. Elements such as noise, air, water, temperature and humidity, lighting and colors, on the other hand, are difficult to engage with, and are points that can be overlooked if one's senses are not sufficiently tuned. The factors considered herein, smell, lighting and sound, only comprise a small number of these; however, for such intangible elements, we believe it is important to establish a system that facilitates evaluation.

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The Prevalence of Pandemic (H1N1) 2009 in a Suburb of Osaka City —Based on Reports on the Temporary Closing of Classes—



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■ Abstract

An outbreak of pandemic (H1N1) 2009 occurred in May 2009 in Osaka and Kobe, Japan. We studied the prevalence of this strain of influenza in Yao City. According to the study, the frequency of temporary class closure did not vary significantly among the first to sixth grades of elementary schools; however, there was a markedly lower frequency of temporary closures among junior high school third-year classes.

Key words: Pandemic (H1N1) 2009, prevalence of Influenza, temporary closure of classes

■ Background

WHO declared a phase 4 alert for Pandemic (H1N1) 2009 on April 28, 2009. In response to this, frontline defense programs were launched in Japan, including quarantine inspections at airports. From May 8 to 9, the first H1N1 cases were detected in quarantine at Narita Airport. In addition to these, many cases were found on May 16 among high school students in Kobe City who had no record of overseas travel and among high school students in Ibaraki City, Osaka Prefecture, on May 17. In Yao City, cases were detected among elementary school students on May 18. In response to decisions made by local governments, the majority of

elementary, junior and senior high schools in Osaka and Hyogo Prefectures were closed from May 18 to 24 and from May 18 to 22 respectively. A total of 4,700 schools were closed.

After June, no cases of group infection with the new strain of influenza had been detected. From the close of summer break at the end of August, however, frequent class closures at elementary and junior high schools occurred due to mass infection of influenza. We investigated the spread of the H1N1 2009 virus by examining temporary class closures at kindergartens, elementary schools, and junior high schools in Yao City from the end of August 2009 through the end of March 2010.

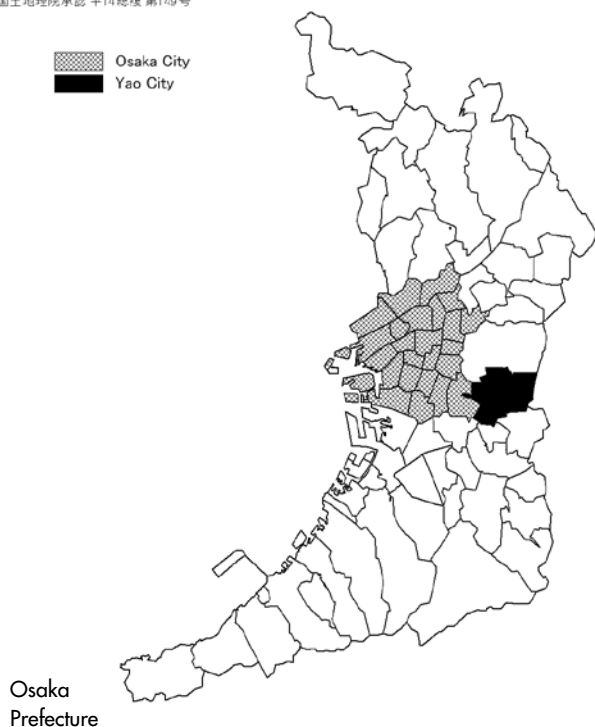
■ Subject and Method

The subject of the study was Yao City, which is located to the east of Osaka City and which has a population of 270,000 (Fig. 1). Stationary measurement is commonly used to observe the prevalence of influenza and other pandemic diseases. However, these details were not readily available to us. On the other hand, reports on the temporary closure of classes published by city boards of education were easily obtained because they were faxed to the members of the medical association through local association offices. Since the closure information contained in the reports was broken down by grade, age

composition (Table 1) could be clarified. By sorting the data by date of closure, the epidemic peak could also be identified, although indirectly.

■ Figure 1. Geographical relationship between Osaka City and Yao City

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■ Table 1. Relations between grades and ages

Grade	Age
Kindergarten, junior	4 – 5
Kindergarten, senior	5 – 6
Elementary school, 1 st	6 – 7
Elementary school, 2 nd	7 – 8
Elementary school, 3 rd	8 – 9
Elementary school, 4 th	9 – 10
Elementary school, 5 th	10 – 11
Elementary school, 6 th	11 – 12
Junior high school, 1 st	12 – 13
Junior high school, 2 nd	13 – 14
Junior high school, 3 rd	14 – 15

■ Results

A cumulative total of 602 classes were closed within the seven month period examined. An analysis of age based on grade level revealed no significant difference in the number of class closures among the first to sixth grades of the elementary schools in the subject city. At junior high schools, temporary closures of the third-grade classes totaled 51.6% of the average closures of first- and second-grade classes (Fig. 2).

As for closure time distribution, the total number of class closures in all grades peaked on November 9. A second peak was identified from January 18 to 27, after the winter break (Fig. 3). A comparison of elementary and junior high schools revealed that many class closures occurred at junior high schools from September 7 to 11, while fewer cases of closure were found at elementary schools. An examination of the periods from October 20 to 27 and from February 27 to the end of March revealed a high number of class closures at elementary schools and a small number of closures at junior high schools.

■ Discussion

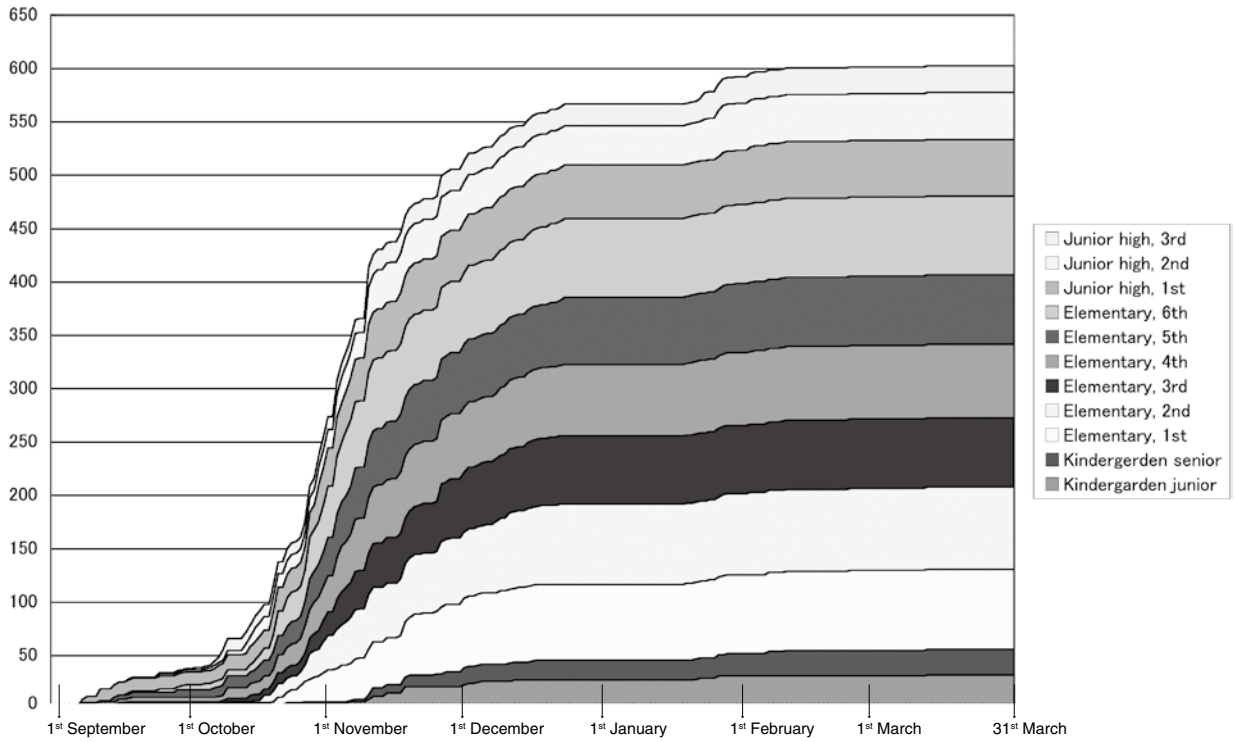
Pandemic (H1N1) 2009 infection in Japan is characterized by markedly fewer severe and fatal cases than in other countries. According to the Ministry of Health, Labour and Welfare (MHLW), the estimated rate of hospitalization from July to September 2009 was approximately 0.18%.

The MHLW's summary on Pandemic (H1N1) 2009 reported that 35% of hospitalized patients were between ages 5 and 9 and 15% were between ages 10 and 14. Based on these figures, we concluded that we could identify the trend of the H1N1 infection by studying the prevalence of the virus among children between ages 4 and 15, who attend kindergarten, elementary school, or junior high school.

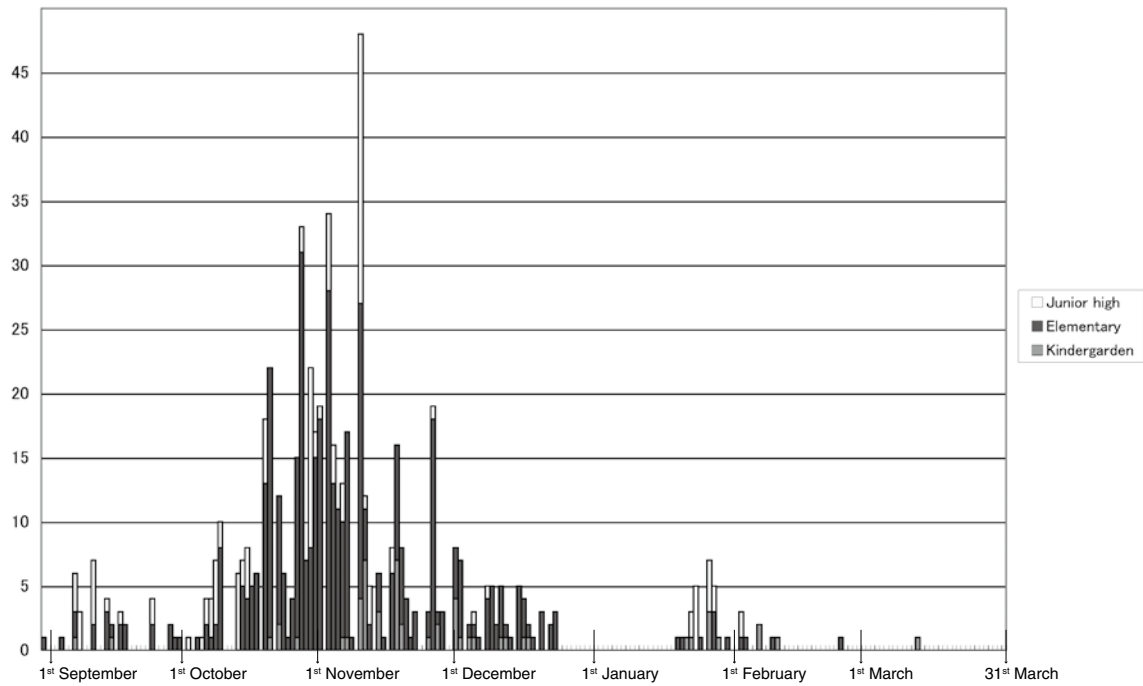
In the Pandemic (H1N1) 2009 surveillance program in Japan, all suspected patients were subject to the PCR test from May 2009. Stationary observation was adopted instead on July 24 due to the spread of the virus to the point where more than 5,000 cases had been detected in Japan. Stationary observation comprises numerical values collected at approximately 5,000 influenza sentinel clinics nationwide based on clinical diagnosis. Viral screening on samples revealed that 99% of the cases reported as of the end of November 2009 were H1N1.

Regulations for class closure, on which this study was

■ Figure 2. Accumulated total temporary class closures by grade



■ Figure 3. Closure time distribution Sum of all grades



based, varied by prefecture. The Osaka Prefectural Board of Education, to which Yao City belongs, had specified that a class should be closed for seven days in the event that greater than two students in the class were infected. This requirement was modified on August 20, 2009 to four days in the event that five students in a class (10 – 15% of class size) were infected.

The Japanese educational system requires six years of elementary school education and three years of junior high school education. Almost all children attend local schools. Therefore, temporary class closures indicate the prevalence of influenza among the relevant ages in a given area. However, because kindergarten, which children attend from age four to six, is not a part of compulsory education in Japan, it is not possible to compare it with other grades.

Several situations were observed in which few H1N1 cases were found in junior high schools when the virus was prevalent in elementary schools, or vice versa. The reason for this is considered to be that kindergartens, elementary schools, and junior high schools have separate premises and buildings. In other words, the influenza virus spread more easily when students were together in the same building. In addition to this, there were relatively few cases in which the virus was passed among siblings at home and spread across different grades.

We attributed the particularly low rate of closure among junior high school third-year classes to the fact that the students were preparing to take their high school entrance examinations. It can be considered that students took better care of their own health and that parents had them vaccinated.

This study does not include the spatial expansion of the virus. We will conduct further research and include more detailed data in the future.

Health Inequalities: Is Japan a Paradox?



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It is a great pleasure to be invited to contribute again to your journal, which I think plays an important role in keeping the issues facing Japan's healthcare service on the international agenda. There are many stories which could be told about the current situation in the UK for the National Health Service. It is difficult to predict what the future will bring to the UK, given that as I write this, the outcome of the General Election has resulted in a hung parliament, with the subsequent government becoming a coalition. The issues facing the UK are especially difficult due to the deficit in public spending. While spending on health is to be protected, the steady increase in demand and the rising cost of treatment means that savings will need to be made. One subject that I hope remains high on the government's agenda is the tackling of health inequalities, discussions about which often involve reference to Japan.

■ What is a Health Inequality?

There are multiple health inequalities, the number varying according to how you define and count them. Classically in the UK, the term 'health inequalities' has been used to describe the differences in health outcomes that are attributable to socioeconomic differences. For example, those born into higher social classes, e.g. professionals, have a higher life expectancy than those born into the lower social classes, e.g. manual workers. This has been demonstrated by a number of UK government enquiries since the 1980s, most recently by the 2010 Marmot Review, which shows that life expectancy between the least and most deprived groups is ten years, and even

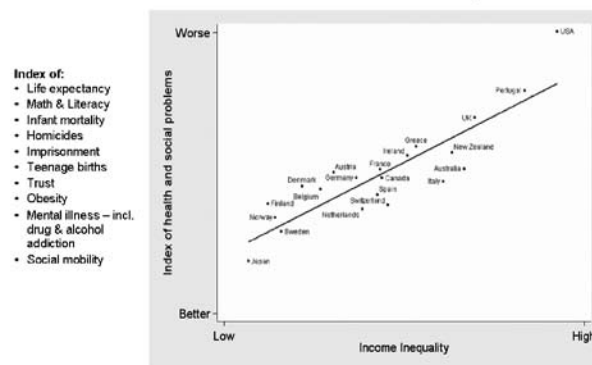
more when disability free life expectancy is measured.¹

Many discussions about health inequalities include terms such as 'social justice' and 'fairness'. These are often quite vague political concepts, without significant utility to direct policy. Starfield proposes the following definition of health inequity in a bid to encourage a clearer description of the situation:

'A systematic and potentially remediable difference in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.'²

■ Figure 1. Graph showing health compared to income inequality for different countries

Health and Social Problems are Worse in More Unequal Countries



Source: Wilkinson & Pickett. *The Spirit Level* (2009)

www.equalitytrust.org.uk

1 Marmot M et al, *Fair Society, Healthy Lives: A Strategic Review of Health Inequalities in England Post-2010* Department of Health, UK, 2010

2 B. Starfield. Basic Concepts in Population Health and Health Care. *J. Epidemiol. Community Health* 2001; 55:452-454

In this sense the picture can be complicated given the number of parameters that are involved. For example, from a distance Japan appears to have a very equal society and, when compared to other countries, seems to do very well.

Yet this global picture may eclipse differences within Japan. For example, it is known that the distribution of doctors in Japan favours urban areas compared to rural areas³, with cardiovascular disease worse in rural areas.⁴ Within the UK discussions around health inequalities often include debate about health differences according to race, geography, age, gender, and sexuality. Despite the potential complexity of health inequalities as a subject it has become a significant area of international interest. Following on from the recent inquiry into the social determinants of health in the UK⁵, a similar inquiry is planned by the European Union.

■ How Should Health Inequalities Be Tackled?

This is a particularly difficult question to answer, and the response will vary depending on the inequality being described. For example, in the UK one of the strongest recommendations from those researching the question is that we need to be more like Japan, i.e. that the gap between the richest in society and the poorest should not be so extreme. In other words, the social gradient needs to be reduced.⁶ Such a change is unlikely to occur during the doctor-patient consultation as it requires quite a fundamental shift in wage structure or the nature of taxation. In many ways, to address the question of health inequalities on this scale is to hold up the limitations of the health profession for all to see. It can be viewed as

3 Inoue K, Matsumoto M, Toyokawa S, Kobayashi Y. Transition of physician distribution (1980-2002) in Japan and factors predicting future rural practice.

Rural & Remote Health. 9(2):1070, 2009 Apr-Jun.

4 Mannami T, Baba S, Konishi M, Terao A, Kitamura A, Iida M, Shimamoto T. Comparison of the prevalence of asymptomatic carotid atherosclerosis detected by high-resolution ultrasonography in rural and urban middle-aged Japanese men. Journal of Stroke & Cerebrovascular Diseases. 9(3):106-12, 2000 May-Jun.

5 Marmot M et al, *Fair Society, Healthy Lives: A Strategic Review of Health Inequalities in England Post-2010* Department of Health, UK, 2010

6 Marmot M et al, *Fair Society, Healthy Lives: A Strategic Review of Health Inequalities in England Post-2010* Department of Health, UK, 2010

a political problem, and hence the recent report in the UK looks at changes across many aspects of society, e.g. education, housing, taxation, antenatal care etc.

Another way of thinking about health inequalities is to consider the distribution of doctors, and other health professionals. In the UK, during the 1970s, Julian Tudor Hart described the 'inverse care law', which states that 'The availability of good medical care tends to vary inversely with the need for it in the population served.'⁷ This articulates the point that those areas which have the greatest health needs usually have the fewest resources. It would be possible to argue this with regard to the distribution of doctors in rural areas. Efforts in Japan to recruit and retain doctors in rural areas, through specialist schools and training programmes, are impressive and an example of a targeted health intervention to address a particular health inequality.

Although there is no single quick fix to reducing health inequalities, the World Health Organization has recommended strengthening countries' primary care systems.⁸ Part of this comes from concern about developing countries and the tendency to focus health interventions on large-scale disease-specific programmes, with little attention to the care infrastructure. Nevertheless, it points out that primary care is also important in tackling health inequalities in developed countries. Work in the US, where health inequalities between rich and poor are particularly marked, has shown that patients with access to a Family Physician have better outcomes than those who do not.⁹ This prompts the question, is Japan a paradox?

Is Japan a paradox?

Japan does very well on its health indicators despite the apparent lack of a comprehensive primary care system. Researches have rated developed countries' primary care systems on various parameters such as the proportion of primary care physicians to specialists, the requirement that patients be registered to a Family Physicians list, the

7 Tudor Hart J, The Inverse Care Law, *The Lancet*, Volume 297, Issue 7696, Pages 405-412

8 The World Health Organisation's 2008 annual report, 'Primary Care: Now More Than Ever!' <http://www.who.int/whr/2008/en/index.html> [last accessed 1.6.2010]

9 Starfield B, Shi L, Macinko J Contribution of primary care to health systems and health Milbank Q. 2005;83(3):457-502, p469

number of academic departments specialising in primary care etc.¹⁰ On this scoring system Japan rates somewhere in the middle with the UK towards the top, while US is towards the bottom.

Does this mean that if Japan were to have a more developed primary care system health inequalities would be even less? Certainly, with regard to the issue of rural health programmes the data seems to favour recruitment of doctors where family medicine is chosen as a specialty. In a comparison study between rural doctors in the UK and Japan, it is postulated that the provision of doctors in the UK is better due to the strength of the UK primary care system.¹¹

It is challenging to make comparisons between different countries because of the way in which data is collected. Nevertheless, the Japanese healthcare system poses an interesting question. Perhaps, as some have suggested, specialists in Japan provide more than just specialist service. One of the research questions suggested has been to look at the number of problems that specialists manage and the extent to which patients tend to consult the same physician, for example, in the context of the office doctor.¹² In the UK in traditional Family Medicine/ General Practice it is common for patients to present with three or four problems and to be registered with the same doctor for many years. However, as pressure increases in the UK to improve rapid access to health services along with more disease-specific targets, there is a trend to see different doctors rather than to consult with only one, an index of quality that appears to have been compromised by a shift in the direction of UK health service.¹³

There is also the point that policy planners may overestimate the ability of primary care to impact the wider social determinates of health; i.e. inequalities in Japan are less despite a highly specialised healthcare system as

overall wealth is high and the differences between rich and poor are relatively small, not to mention the impact that lifestyles can have. Of course, as mentioned at the outset, what appears to be an equal picture may be more complex on closer inspection, and as such, the perspective of observers from outside Japan is inevitably limited. In its 2008 report, the WHO calls on doctors to become active in the political sphere by speaking out to influence policy that will help their communities.

In 2009, at the WONCA World Rural Health Conference, there was significant debate about access to medical services in rural areas. For example, a person who suffers acute chest pain in a rural mountain village will often be managed differently from one who suffers chest pain in the city. There was some concern amongst delegates that healthy solutions are in danger of being too reductive, i.e. the person who lives in a rural community may be 'poor' with regard to access to high-tech medical interventions but may be 'rich' in terms of the quality of life that they lead. A similar point was made by the British artist David Hockney when he stated that he felt 'healthy' even though he smoked and did not exercise regularly, as he was able to sit and observe the world, whereas people who were busy running around and obsessed with health were preoccupied with other things.¹⁴

In the UK, doctors who work with some of the most deprived populations often question their ability to tackle the effects of poverty and unemployment, which correlate with the worse health outcomes. One of the challenges for all countries is to bridge the data we have on populations with consultations with individual patients.

If any readers have any opinions about the nature of health inequalities within Japan or the role of primary care, I would be very keen to hear them. Future international comparisons will, I hope, allow a better understanding of how both our health systems operate; both with regard to their strengths and to their limitations.

10 Starfield B, Shi L, The Policy Determinants of Health: an international perspective, Health Policy 60 (2002) 2001–2018, p203

11 Masatoshi Matsumoto, Kazuo Inoue, Jane Farmer, Haruhiko Inada and Eiji Kajii Geographic distribution of primary care physicians in Japan and Britain, Health & Place, Volume 16, Issue 1, January 2010, Pages 164–166

12 Starfield B, Shi L, The Policy Determinants of Health: an international perspective, Health Policy 60 (2002) 2001–2018, p211

13 Campbell S, Reeves D, Kontopantelis E, Sibbald B, Roland M. Effects of Payment for Performance on the Quality of Primary Care in England, NEJM 2009;361:368–78.

14 The South Bank Show: David Hockney. ITV. 22.15–23.15, 2 May 2010

「Japan Hospitals No. 30」(July 2011)の原稿募集!

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- | | |
|---------|---|
| 1. 募集内容 | 本誌は日本の医療や病院の実情を海外に紹介、PR するもので、看護の実態とか医療制度の問題なども含み、関連する論文や研究報告など他誌に発表されていないものとする。(国内既発表のものの翻訳で国外未発表のものは可) |
| 2. 読者対象 | 国際病院連盟(IHF)のA会員(各国を代表する病院協会または政府機関)及びアジア病院連盟(AHF)の会員(同)ほか関係先。国内では大学医学部付属図書館等。 |
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