

Health Promotion Policy in Japan

Shinya Matsuda

Department of Preventive Medicine and Community Health, School of Medicine, University of Occupational and Environmental Health

Abstract

The health reform program in 2006 was the biggest one for the last 30 years in Japan. According to the plan a nation-wide health promotion program for healthier population will be introduced. As a main program of health promotion, the specified health checkup and follow-up health guidance and intervention program will be introduced from 2008. This program is a Japanese disease management program. In 2006 the preliminary programs have been launched in the three prefectures (Chiba, Toyama, and Fukuoka) and several operational problems have been clarified. In this article the author presents the general feature of program and some critics for it.

Key words: Healthy Japan 21, Health reform 2006, health promotion, Japan

❖ Introduction

Along with the socio-economic development, the Japanese disease structure has changed from the acute diseases dominant to the lifestyle-related chronic diseases dominant pattern. Lifestyle-related diseases are defined as the group of diseases in which such lifestyle as the habits of eating, exercise, rest, smoking and drinking contribute to their outbreak and development.

Today the life style related diseases account for two third of death, one third of health expenditures in Japan (Table 1)¹⁾. The Ministry of Health, Labor and Welfare (MHLW) estimated that the total health expenditures will increase from 34 to 65 trillion yen from 2007 to 2025²⁾.

The MHLW has published the Health care reform plan in 2006. The plan stresses the two programs in order to rationalize the health expenditures; reform of health services delivery system and health promotion.

Received: December 27, 2006

Accepted: May 16, 2007

Correspondence: S. Matsuda, Department of Preventive Medicine and Community Health, School of Medicine, University of Occupational and Environmental Health, 1-1 Iseigaoka, Yahata-nishi-ku, Kitakyushu, Fukuoka 807-8555, Japan

e-mail: smatsuda@med.uoeh-u.ac.jp

For the health promotion, the new law will introduce “the specified health checkup and intervention program” for insureds over 40 years old obligatory for public health insurers from April, 2008. The main target of the specified health check-ups is so called Metabolic Syndrome. It is planned that the insured are to be stratified into 3 groups for the following health promotion programs according to the checkup results.

In this article, the author explains the background and overview of this new program.

❖ Health Promotion Activities in Japan

The health promotion activities are not recent one in Japan. In fact, Japan has made much effort for health promotion compared with other developed countries. However, the effect of such activities has not been systematically reviewed. This is one of the reasons why MHLW will introduce “the specified health checkup and intervention program”. Before explaining the new program, the author explains the current system.

One of the characteristics of Japanese health system is that various health promotion activities are organized under the different schemes. The followings are such programs.

a) Health and medical service law for the elderly:

Table 1 Health expenditure by disease category (2003)

(100 million yen)

	Total	In-Patient	Out-Patient
Total	240,931	117,231	123,700
I Infectious and Parasite Diseases	6,255	2,204	4,051
II Neoplasm	29,724	20,644	9,080
III Diseases of blood, blood forming organs and immune system	1,254	532	723
IV Endocrine, nutritional and metabolic diseases	17,019	4,876	12,143
Diabetes Mellitus	11,465	4,182	7,282
V Mental and behavioural disorders	18,281	13,699	4,582
VI Diseases of the nervous system	6,729	4,614	2,114
VII Diseases of the eyes and adnexa	9,746	2,410	7,335
VIII Diseases of the ear and mastoid process	1,912	350	1,562
IX Diseases of the circulatory system	53,039	27,308	25,731
X Diseases of the respiratory system	20,766	7,110	13,655
XI Diseases of the digestive system	15,610	7,739	7,871
XII Diseases of the skin and subcutaneous tissue	4,418	648	3,770
XIII Diseases of the musculoskeletal and connective tissue	16,662	6,025	10,637
XIV Diseases of the genitourinary system	17,882	4,934	12,948
XV Pregnancy, childbirth and the puerperium	2,017	1,632	386
XVI Certain conditions originating in the perinatal period	808	766	42
XVII Congenital malformations, deformations and chromosomal abnormalities	841	570	271
XVIII Signs, symptoms and abnormal clinical and laboratory findings, not elsewhere classified	2,383	1,113	1,270
XIX Injury, poisoning and certain other consequences of external causes	15,585	10,057	5,528

Source: MHLW (2005)

According to the Health and Medical Service Law for the Elderly, the municipality is required to organize various kinds of preventive activities and health promotion programs. These activities include annual health check up, health education, community rehabilitation services, home visit by public health nurses.

- b) Health insurance law: The Health Insurance Law recommends for each insurer to organize preventive activities. According to this recommendation, most of the insurers organize various preventive activities such as cancer screening program, for their insured and dependant family members. In the most of cases, these services are provided at the moment of annual health check up program mandated by the Occupational Safety and Health Law (see below).
- c) Long term care insurance (LTCI) law: According to the LTCI law, the care services under the LTCI scheme are available only for the frail elderly assessed eligible. Besides these services, each municipality organizes preventive services for the elderly non-eligible for the LTCI scheme. Various preventive services, such as arrangement of hous-

ing condition and rehabilitation program are organized by LTCI insurers.

- d) Occupational Safety and Health (OSH) law: According to the OSH law, the employer has to organize the annual health check up program for the employees. The items of annual health check up are not limited to the occupational diseases, and include general health problems, such as hypertension, diabetes, hyperlipidemia, liver dysfunction. In fact, the most frequent abnormalities found in the annual health check up under the OSH law are hypertension and hyperlipidemia as shown in Table 2³⁾. According to the results of health check up, the OSH staffs organize various type of follow up services, i.e., health education, counseling, physical training, etc.
- e) School health law: According to the school health law, the director of each school has to organize the annual health check up both for children and teachers. However, only referral services to medical institution are organized as follow-up services under this scheme.

Although there are various programs of health

Table 2 Results of health check up under the OSH law (2003)

Item	Prevalence rate (%)
Acuity (1000 Hz)	3.5
Acuity (4000 Hz)	8.5
Chest X ray examination	3.4
Examination of sputum	1.6
Hypertension	11.9
Anemia	6.5
Liver dysfunction	15.4
Hyperlipidemia	29.1
Hyperglycemia	8.3
Urine glucose	5.1
Urine protein	3.2
Electro-Cardiogram (ECG)	8.9
Person with any abnormal results	47.3

Source: MHLW (2005)

promotion in Japan, there is no systematic coordination among these programs. Thus, the contents of programs are different and transfer of information from one to another is very difficult. This situation has long been criticized as an obstacle of life-long health management. The health reform 2006 intends to ameliorate this situation.

◆ Healthy Japan 21

Besides the various health check-up programs mentioned above, the Japanese government has been engaging in the health promotion programs from 1978 at population level in order to extend healthy longevity. For example, MHLW has published a series of guidelines for healthy life, i.e., exercise, diet, and rest. Currently, a new eleven-year plan from 2000 to 2010, the National Health Promotion Movement in the 21st Century, so called Healthy Japan 21 is on going. Figure 1 shows the general perspective of the plan. The most important point of plan is that it sets a series of concrete indicators to be attained; i.e., the rate of obese men between 20 to 60 years old < 15%, and that it requires the monitoring and periodical evaluation of project.

Regardless of the governmental initiative for health promotion, health status of the Japanese has not been ameliorated. The government conducts the National Life-style survey and the National Nutritional survey periodically. The results of 2003’s Nutritional survey clarified that 30% of men between 40 and 60 were obese⁴).

One of the important objectives of the “specified health checkup and intervention” program is to ameliorate this situation.

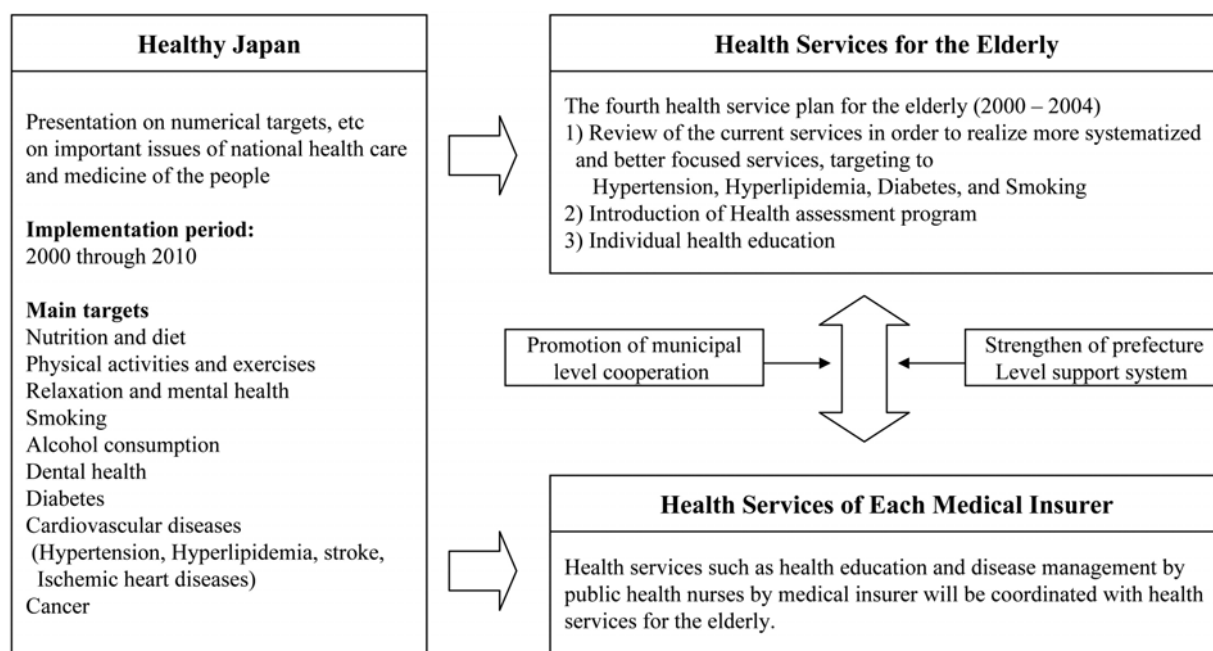


Figure 1. Healthy Japan and promotion of integrated health care service

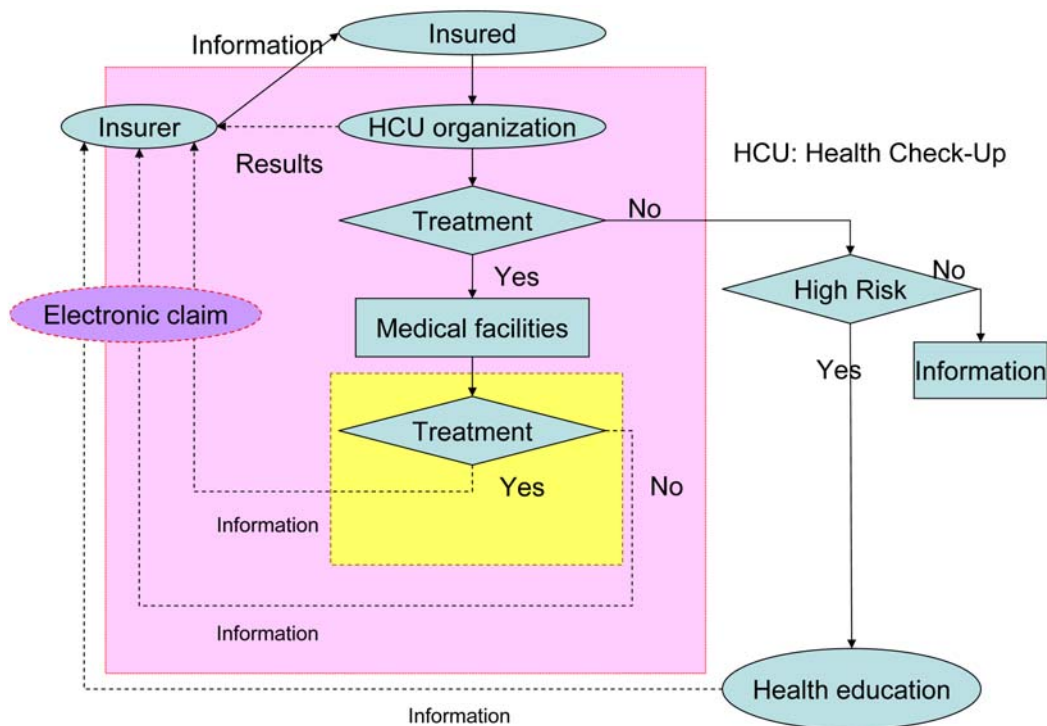


Figure 2. New health check-up program for life-style related diseases from 2008

❖ Health Care Reform 2006 and the “Specified Health Checkup and Intervention” Program

The health care reform program in 2006 is regarded as a turning point of the Japanese health policy. The plan intends to make the health system more efficient and sustainable. For this purpose the plan clarifies the three main programs. The first is to facilitate the differentiation of medical institution and networking among them, and reduction of hospital beds. The second is to implement a nation-wide health promotion program. And the last is to create a new health insurance system for the elderly.

As a main program of health promotion, the specified health checkup and follow-up health guidance and intervention program will be introduced from 2008. Figure 2 shows the system. All public health insurers have to organize health check-up and the following health promotion programs for the insured over 40 years old. The main target of screening is “Metabolic syndrome”.

Figure 3 shows the criteria of syndrome. A standardized computer program is developed for the stratification of recipients. The insured will be categorized

into one of three levels according to their risk level; active support required, giving incentive required, only information required. If an insured is evaluated as active support required or giving incentive required, he/she must follow a standardized disease management program that is offered by the health support organization contracted with the insurers. The health support organization is a health institution that offers health education and other health support services. Persons in charge of health support programs must be health professionals such as doctor, public health nurse, dietician, and etc. It is important to know that this institution is not a medical facility regulated by the Medical Service Law. Thus for-profit private organizations can enter into this new health market.

It is very important to recognize that this new program is the e-claim project. It is obligatory for insurers and service providers to transfer the data by the electronic information of standardized format. It is planned to generalize the e-claim system for all medical services from 2011. If this program is successfully implemented, it becomes possible to evaluate the effect of health promotion activities on health expenditures.

It is planned that the outcomes of this program is

published by eight academic societies(*) in April 2005:

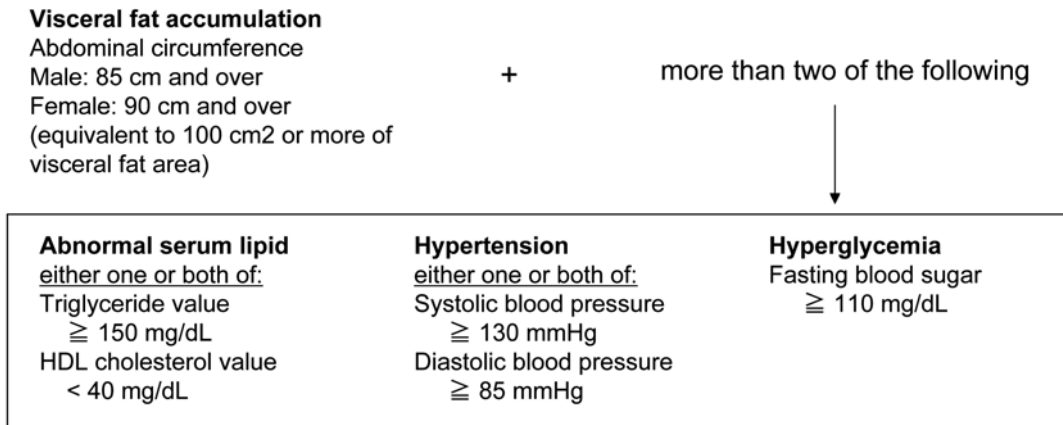


Figure 3. Diagnostic criteria of Metabolic Syndrome in Japan

- * It is desirable to measure the amount of visceral fat by methods such as CT scans.
- * The abdominal circumference should be measured at navel height with light breathing while standing. If there is obvious fat accumulation and the navel points downward, the circumference should be measured at mid-level between the subcostal edge and the anterior interspinal line.
- * If an individual is diagnosed with metabolic syndrome, a glucose tolerance test is recommended, although not necessary, for the diagnosis.
- * If an individual is receiving medication for hypertriglyceridemia, decreased blood HDL-C, hypertension, or diabetes, this should be noted as respective items.

Eight academic societies(*): the Japan Society for the Study of Obesity, the Japan Atherosclerosis Society, the Japan Diabetes Society, the Japanese Society of Hypertension, the Japanese Circulation Society, the Japanese Society of Nephrology, the Japanese Society on Thrombosis and Hemostasis, the Japanese Society of Internal Medicine.

**New independent social insurance scheme
 for the elderly with age 75 years old and over**

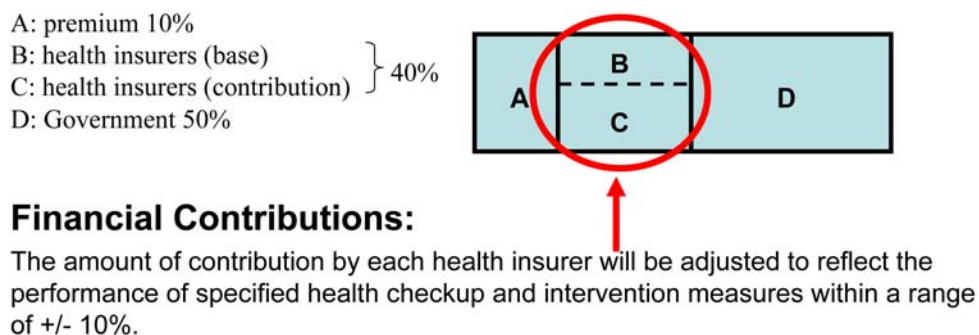


Figure 4. Incentive system for health promotion

reflected to monetary contribution of each insurer for the newly created health insurance scheme for the elderly as shown in Figure 4. The amount of contribution by each health insurer will be adjusted to reflect the performance of specified health checkup and inter-

vention measures within a range of +/- 10%. In the case of insurer with 10,000 insured between 0 and 74 years old, this difference will be about 70 million yen.

In 2006 the social experiments were conducted in the three prefectures (Chiba, Toyama, and Fukuoka).

According to the preliminary results, several operational problems have been identified. The first is the number of persons who are evaluated as active support required or giving incentive required. The preliminary results indicated that about 50 to 60% of insured were evaluated into these two categories. It will be impossible to offer appropriate health promotion services for such many peoples from the viewpoint of human capacity and budget. According to the fact, the stratifying logic has been modified and the percentage of above mentioned two categories has dropped to 20–30%.

The second is the difference in items of health check-up programs among different schemes. For example, the health check-up program in occupational setting does not include LDL cholesterol nor measurement of the waist circumference. To make the system harmonized, the rearrangement of health check-up system is necessary which requires extra investment for all insurers.

These problems have been discussed in the national committee and several modifications were done for the final program. All medical insurers must prepare for the program within 2007 according to the official program manual.

❖ Conclusion

Currently there are many debates and critics on effectiveness of the “specified health checkup and intervention” program. According to the previous articles, for example, the health promotion activities are not considered effective for reducing the life-long health expenditures because one consumes most of the health expenditures within the last year of life⁵⁾. Referring to these kinds of results, several researchers questioned the cost-containment effect of the new program^{6, 7)}.

However, the CDC estimated that obesity-attributable medical cost expenditures reached \$75 billion in 2003 and that taxpayers finance about half of these cost through Medicare and Medicaid⁸⁾. This fact suggests that prevention of obesity must be effective for reduction of medical expenditures.

Considering the efforts of pharmaceutical companies to develop new innovative drugs for life-style related diseases, such as diabetes melitus, hypertension, and hyperlipidemia, theoretically, the primary

prevention of metabolic syndrome will have a cost-containment effect.

Furthermore, it will be misleading to value the health promotion program from the effect on health expenditures. The value of health cannot be limited into such a narrow perspective.

According to the ILO report, the Japanese elderly are highly motivated to work and the actual employment rate among the elderly is very high compared with other developed countries; 74.8% of men of age 60 to 64, 35.9% of men of age 65 and more, 40.1% of women of age 60 to 64, and 15.2% of women of age 65 and more, were working in 1998⁹⁾. Economic needs are not the only reason for the elderly to work. According to the survey conducted by MHLW, about fifty percent of the elderly replied that they wanted to work in order to maintain their health and to have fulfillment in life¹⁰⁾.

Seike and Yamada have clarified that there are three important factors for the elderly to be able to continue to work based on their field study; that is, vocational skill, distance between residence and work place, and finally health¹¹⁾.

Health promotion activity will assist for the Japanese to stay active during their aged life and to realize their fulfillment. It is also possible that the new program will facilitate for the senior to continue to work and indirectly to contribute to the social security finance.

The introduction of specified health checkup and intervention program is a social experiment for the public health policy. Thus, it must be evaluated for the effectiveness and efficacy, and the contents must be modified if necessary. The mid-term evaluation of the program is planned in 2011.

Although the author evaluates the necessity of new program, there are many points to be modified in order to make it more practical and feasible. For example, the current plan requires that the initial follow-up intervention must be a face to face type and be for more than 20 minutes for each insured. Considering the number of insured evaluated as “health guidance required”, the human resources in charge of health education is not enough. More cost-effective way of intervention will be necessary.

Actually we are developing such a web-based system for health education. We would like to introduce our system in the following literatures.

❖ Acknowledgement

A part of this study was supported by an unrestricted grant from The Merck Company Foundation, Whitehouse Station, NJ, USA.

❖ References

- 1) Ministry of Health, Labor and Welfare: National Health Expenditures 2003 (2005) (in Japanese).
- 2) Ministry of Health, Labor and Welfare: Documents of the committee on future estimation of medical expenditures, (December 27, 2006) (in Japanese).
- 3) Ministry of Health, Labor and Welfare: Report on periodical health examination 2003 (2005) (in Japanese).
- 4) Ministry of Health, Labor and Welfare: National Nutritional Survey 2003 (2005) (in Japanese).
- 5) Lubitz J, Liming C, et al.: Health, Life expectancy, and health care spending among the elderly. *NEJM* 349, 1048–1055 (2003).
- 6) Tsutsumi S: Comments on the draft of Health care reform 2006 (Iryo seido kaikaku houan wo yonde), *Syakai Hoken Junpo* No.2275, 6–15 (2006) (in Japanese).
- 7) Yoo BK: Health Economics for “Reform” (2006) (in Japanese).
- 8) CDC: Obesity costs states billions in Medicare expenses, CDC Media relations-Press release (January 21 2004).
- 9) ILO: 1998-1999 edition of Yearbook of Labor Statistics (Japan). Tokyo: ILO. 2000 (in Japanese).
- 10) Ministry of Labor: Survey on Employment Conditions of Persons. 1996 (in Japanese).
- 11) Seike A, Yamada A: Economics of the Elderly Working (Korei-sya syugyo no keizai-gaku), Tokyo: Nihon Keizai Shinbun-sya, 2004 (in Japanese).