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Healthcare in Japanese IT policy 2003

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Lena Moritz

Enhetschef

Innehåll

Introduction

This report gives an overview of the health care related parts in the Japanese IT policy “e-Japan Strategy II”, and the related measures to be taken as defined in the “e-Japan Priority Policy Program-2003”.

Regarding “e-Japan Strategy II”, this report contains related excerpts from the official translation of the policy.

The “e-Japan Priority Policy Program-2003” gives objectives and programs for the different ministries to realise the policy. The official translation merely offers a summary, and some parts in this report have therefore been translated from the Japanese original by us.

1 Background

In the current recession, the Japanese government is promoting information technology (IT) as a means to effect a structural reform and thereby a genuine economic recovery and sustained growth. Based on this understanding, the government-appointed IT Strategic Headquarters (ISHQ) year 2001 formulated an IT policy, called the "e-Japan Strategy", and an action plan, called the "e-Japan priority policy program", to make Japan the world's most advanced IT nation within five years.

The first e-Japan strategy was heavily focused on infrastructure, such as broadband and wireless access, and the action plans, or programs, for 2001 and 2002 were drawn up in alignment with that strategy.

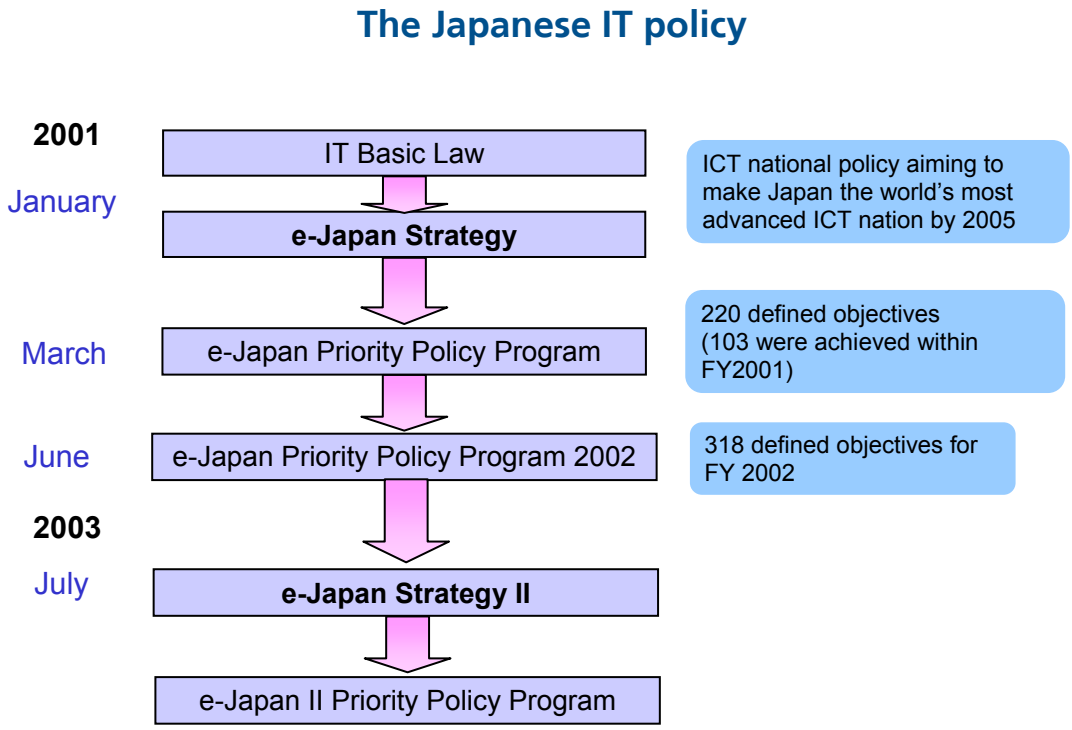


Figure 1. The evolution of the e-Japan strategy

By end 2002 the ISHQ felt that the infrastructural objectives that had been the focus of the first e-Japan strategy had mainly been achieved, and that it was time to update the strategy to instead focus on usage. The updated e-Japan strategy II was published in July 2003, and its objectives were broken down in the Priority Policy Program 2003 published shortly afterwards.

Below the contents of the strategy itself (see the chapter named Policy: e-Japan Strategy II) and the action plan, (see the chapter named Action plan: e-Japan Program 2003 below) are summarised with regards to their relevance for medical services.

2 Policy: e-Japan Strategy II

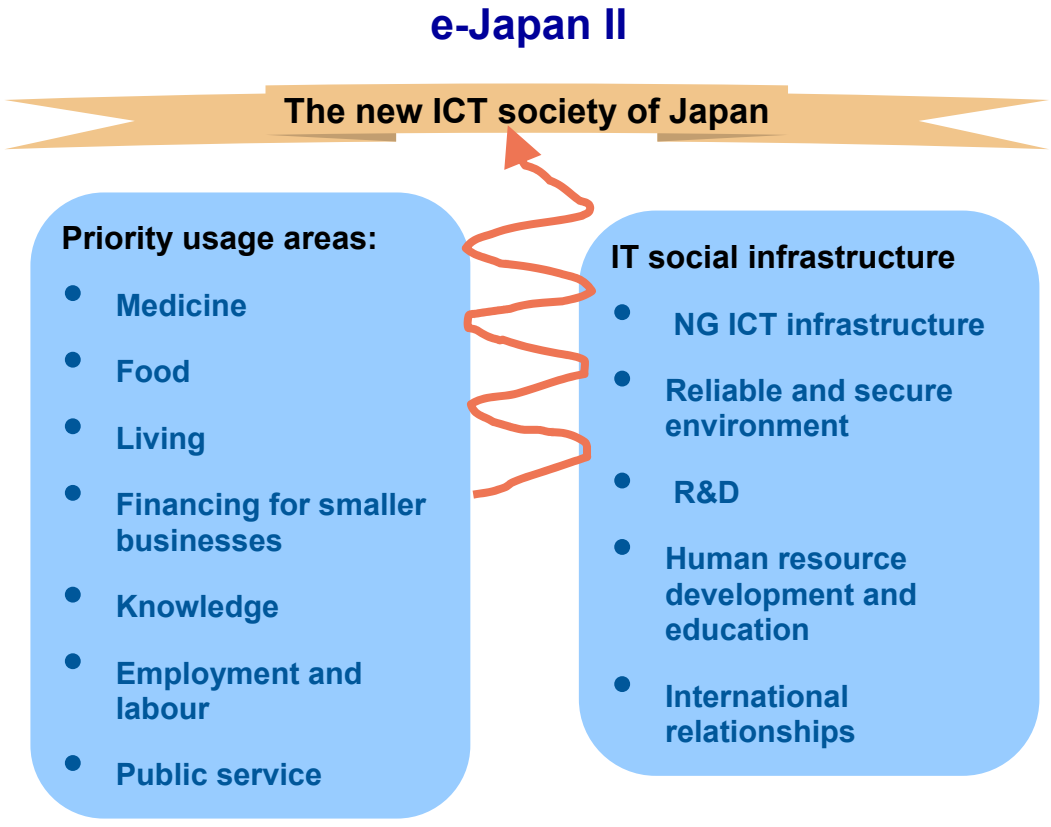
(Source: http://www.kantei.go.jp/foreign/policy/it/0702senryaku_e.pdf)

2.1 Overall philosophy

e-Japan Strategy II is a blueprint of the second phase of Japan's national IT strategy, and focuses on IT usage. It presents new policies for the *practical application and implementation* of Japan's IT infrastructure and advanced technology. The strategy is presented as a national goal which both the government, as well as the entire population, should strive to achieve. The authors believe that its successful implementation will create a "set of new values and a new culture appropriate to the 21st century that will make Japan one of the most culturally and technologically advanced nations in the world."

The aim of the policy is to realize an "energetic, worry-free, exciting and more convenient society through the strategic utilization of IT", and it encompasses two main targets: areas in which IT usage is to be specifically developed, the so called "priority IT usage areas", and areas for new "social infrastructure" to support for example creation of innovative new services and applications.

These two main headings are described in the following two chapters.



One area where Japan has high hopes for potential improvements brought on by IT is the medical industry; an industry which is becoming increasingly important due to Japan's ageing population. By increasingly working online, the government believes that medical institutions can work together to promote more patient-centred service through the better sharing of patients' medical data. They will also be able to offer more services online. All in all, patients should receive better, more patient-specific service, and the medical institutions themselves should be able to operate more efficiently, bringing benefits to both parties involved in the care process.

Government's role

The government defines - and limits - its roles to:

1) Furnishing overall direction;

2) Implementing regulatory reforms and competition policies (focusing on market competition);

3) Motivating activity of private sector;

4) Implementing minimum investments and gap remedies, as well as guarantee security; and

5) Promoting more efficient government and the efficient distribution of resources.

2.2 Strategic IT usage

The IT policy identifies seven areas that on one hand can benefit greatly from improved IT usage, on the other hand can serve as "good examples", and inspire IT usage in other areas. The government expects the private sector to take the leading role with governmental support.

The aim is to create a positive cycle through effective IT utilization: structural reforms, better resource allocation, and the creation of new values.

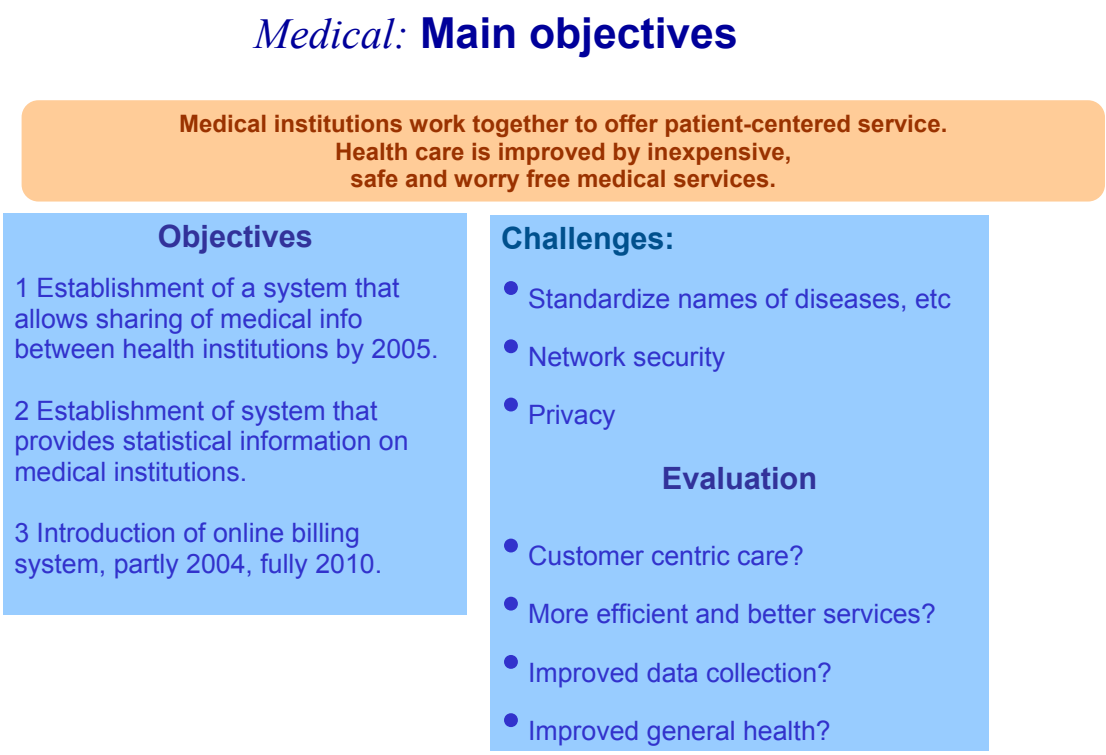
The seven selected IT usage priority areas are:

- medical services,
- food,
- lifestyle,
- small and medium enterprises financing,
- knowledge,
- employment and labour, and
- public service.

In these areas, the government in line with the private sector, hope to implement various IT-related reforms which will tackle such issues as the elimination of

redundant investments, the securing of interoperability among systems, the effective utilization of resources, and infrastructure improvement in an environment which is constantly changing. The government will oversee that the benefits achieved by these reforms are directed into the creation of new value-generating industries and markets.

To clarify possible social issues connected to the policies, each IT usage priority area is defined with the following subheadings: "Policy Objectives," "Policies," "Possible Problems and Their Solutions," and "Key Evaluation Points." Below is the information given for the IT usage focused area health care, as quoted from the official translation of e-Japan II.



2.2.1 Overall motto

The overall motto for the health services area is: "Medical institutions work together to offer patient-centred service. Health care is improved by inexpensive, safe and worry free medical services."

2.2.2 Policy Objectives

1. A system is to be set up and maintained that provides comprehensive health and medical services to the general public. It should be a user-friendly system that will allow individuals to access information regarding their health throughout their entire life.

2. The current medical system will be reformed to create and maintain a system that is patient-centred whereby patients can receive consistently excellent treatment

at multiple hospitals and also be able choose an appropriate hospital based on the advice of medical experts. In order to do this, by 2005, a healthcare service–appropriate authentication system is to be established and the transfer and external saving of electronic medical records by medical institutions is to be quickly approved.

3. Costly duplications (medical tests, medications, clerical work, etc.) are to be reduced in order to improve the management efficiency and medical service quality in medical institutions.

4. The cash flow among medical institutions is to be improved by streamlining the medical service billing process, making it more efficient. From FY2004, the medical service billing process system will be moved online, and by 2010 a system will be in place that can handle 100% of the billing process for medical institutions which choose to make use of the online system.

5. Through maximum utilization of IT, the medical services will be made available to remote mountainous areas and isolated islands.

2.2.3 Policies

1. Taking patient privacy and network security into adequate account, a system will be established that allows medical and health institutions to utilize and share patient medical information, as appropriate. Medical records will be externally saveable and transferable online. For instance, when the authentication system infrastructure is up and running, a locally based family doctor will be able to refer to his patient's medical records from a central hospital by accessing them online. In addition, a system will be created whereby the data can be used for preventive medicine and epidemiological studies, adequately protecting the personal data and patient's privacy.

2. A system will be created that provides information to the general public on medical institutions (number of patients treated yearly, types of medical services, etc.) which has first been verified for accuracy by a third party agency.

3. A system will be established that can accurately and quickly verify the treatment details and process billing for various health insurance organizations. (By moving the billing system online, 1) the medical service billing system will become more streamlined and efficient; 2) medical bill claims will be collectable in a timely manner via financial institutions; and 3) financing will be made available via financial institutions using medical bills (electronic health insurance claim forms) as security.).

2.2.4 Possible Problems and Their Solutions

1. Codes will be standardized for items such as disease names and medications in order to help alleviate problems concerning interoperability in electronic patient information systems.

2. In order to establish a system which takes sufficient account of network security and patient privacy, the necessary measures will be taken for improving issues such

as the security policies related to medical services and the guidelines related to personal information protection.

2.2.5 Key Evaluation Points

1. Has patient-centred medical service been achieved? Have medical services' improvements and the expansion of options been achieved?

2. Are medical institutions better able to provide higher quality medical services under more efficient business management practices?

3. Have the government administrative departments and corporate health insurance organizations been able to significantly improve the general health of the people of the nation? And, have they effectively been able to implement medical cost restraints; improve disease data-gathering; and implement fact-finding/measures in medical accident and malpractice cases?

2.3 Infrastructure

The first e-Japan strategy, released 2001, focused on infrastructure. While most of the main objectives outlined there have been met, and the new e-Japan Strategy II therefore instead focuses on IT usage, the government acknowledges that there is still need for further infrastructure implementation. Instead of broadband and fibre, the need now is however stressed for crucial *social* infrastructure, which allows the creation of services that the citizens need and want to use, whether connecting via computers, cell phones or TVs.

In order to achieve this, this part of e-Japan II outlines the following policies: "Information and Telecommunications Infrastructure Development for Next Generation;" "Development of a Secure and Reliable IT Environment;" "Promotion of Technology R&D to Create Next-Generation Knowledge;" and "Promotion of IT Human Resource Development and Education for the Era of Effective IT Utilization."

Below the parts which relate to medical service have been extracted.

2.3.1 Policy Objectives

By 2005, a general rule will be made that all public institutions—such as administrative agencies, regional public organizations, ***medical institutions***, schools, libraries, and community centres—be connected to the Internet via high-speed two-way networks (for the most part employing fibre optics technology). In this way, public institutions will be able to effectively utilize IT for their functioning, activities, and services.

2.3.2 Policies

The necessary regulatory reforms and competition policies will be implemented in order to provide an environment in which people can utilize ultra high-speed/high-speed Internet throughout the country. Special measures will be taken regarding those areas where it is not profitable to establish these services. In addition, the

promotion will proceed of connecting ***public institutions*** with ultra high-speed two-way networks.

2.4 Policy Chart

The specific e-Japan Strategy II policy recommendations are described in two chapters, divided between those applying to IT usage and those referring to infrastructure build-up, corresponding to the previous two chapters in this report,.

These recommendations can be divided into 1) those which call on the government to implement direct actions, and 2) those which call for the private sector to share in the government's view and to implement certain actions based on market principles. In a special chapter in the strategy, the policy objectives described earlier are summarized; and specific measures are described, divided into roles taken by the government and roles taken by the private sector. In addition, in the section, "Specific Numerical Targets," the overall social objectives to be achieved through the efforts of both the government and private sector respectively are described.

The parts which refer to health services are excerpted below.

2.4.1 Specific Numerical Targets

- By 2005, a healthcare service–appropriate authentication system will be established and medical institutions will be promptly permitted to transfer and save externally electronic medical records.

- From 2004, the medical service billing process system will begin being processed online, and by 2010 a system will be in place that can handle the billing process for all medical institutions which choose to make use of the online system.

2.4.2 Policies the Government Should Implement

- Taking patients' privacy and wishes into adequate account, the government will establish a system that allows medical and health institutions to utilize and share patient medical information as appropriate. (Medical records will be created, saved and transferred online. For instance, when the authentication system infrastructure is up and running, a locally based family doctor will be able to refer to his patient's medical records from a central hospital by accessing them online. In addition, the government will create a system whereby the data can be used for preventive medicine and epidemiological studies, adequately protecting personal data and patients' privacy.)

- The government is to promote standardized codes for disease names and medications to help alleviate problems concerning interoperability in electronic patient information systems. In addition, it will promote popularization and technological development to achieve compatibility among different codes.

- The government is to support improving both the security policies related to medical services and the guidelines related to personal information protection.

- The government will develop a system to move the medical service billing process online and thoroughly implement this system throughout public medical institutions and public insurance organizations.

2.4.3 Actions for the Private Sector to Take

- The medical industry will introduce and utilize electronic medical records and electronic health insurance claim forms.

- The government will call for medical institutions and pharmaceutical-related organizations to work toward standardizing codes for disease names and medications, as well as to step up technological developments and strengthen their cooperative ties in order to improve the interoperability in electronic patient information systems.

- R&D agencies and IT-related companies will work toward the effective technological development as well as the standardization of the management of patient information in a way which takes patient privacy and wishes into adequate account,

- Specialists, such as medical institutions, medical and pharmaceutical-related organizations, legal scholars, and IT engineers, will work toward developing the guidelines and security policies related to personal information protection.

- A fair and neutral third party will collect information on medical institutions, such as their treatment record and services, and will provide the information to the public after examining its reliability.

- Medical institutions and medical fee payment funds will promote moving the medical service billing process system online.

3 Action plan: e-Japan Program 2003

Sources: http://www.kantei.go.jp/foreign/policy/it/0808summary/030808gaiyo_e.pdf

http://www.kantei.go.jp/jp/singi/it2/kettei/030808honbun.pdf

3.1 Background

An e-Japan Priority Policy program has been formulated for each year since the policy was formulated, and it is the action plan for realising the objectives in the strategy. The program specifies a number of quantifiable objectives with deadlines, and appoints a responsible ministry for each one.

Below are the parts relevant to medical services.

The following abbreviations are used:

MHLW: Ministry of Health, Labour and Welfare
METI: Ministry of Economy, Trade and Industry

3.2 Target

1. A system is to be set up and maintained that provides comprehensive health and medical services to the general public. It should be a user-friendly system that will allow individuals to access information regarding their health throughout their entire life.

2. The current medical system will be reformed to create and maintain a system that is patient-centred whereby patients can receive consistently excellent treatment at multiple hospitals and also be able choose an appropriate hospital based on the advice of medical experts. In order to do this, by 2005, a healthcare service–appropriate authentication system is to be established and the transfer and external saving of electronic medical records by medical institutions is to be quickly approved.

3. Costly duplications (medical tests, medications, clerical work, etc.) are to be reduced in order to improve the management efficiency and medical service quality in medical institutions.

4. The cash flow among medical institutions is to be improved by streamlining the medical service billing process, making it more efficient. From FY2004, the medical service billing process system will be moved online, and by 2010 a system will be in place that can handle 100% of the billing process for medical institutions which choose to make use of the online system.

Through maximum utilization of IT, the medical services will be made available to remote mountainous areas and isolated islands

3.3 Current status and challenges

Japanese medical services have been developed and have given the world highest level of health, under the development of medical service provision system, in which anyone can take medical treatment, and the universal health insurance coverage system. However, diversification of patients' needs, advancement of medical care technologies, and specialization of medical services have also progressed; therefore, new environment, which provides patient-centered, higher quality, and efficient medical care services, should be developed.

Information Technology must provide effective measures to achieve such.

A new patient-centred medical care system should be developed and maintained. For example, information about patients and medical institutions should be shared by means of IT, so that a patient could take medical care services continuously at different medical institutes.

Also, by introducing IT to processes to avoid various duplications, such as, inspections, medications, and administrative operations, medical institutions should increase the operational efficiency and the quality of services. Especially, on-line electronic health insurance claim form should be introduced to promote the rationalization, and to improve the efficiency of operations in medical institutions.

Furthermore, by IT utilization, medical information collection, organization, disclosure, and remote service should be promoted.

3.4 Measures to be taken

1) Promotion and enhancement of a health and medical services authentication system infrastructure, and approval of the transferring, etc., of electronic medical records over networks (MHLW, METI, by 2005)

2) Establishment of health and medical service guidelines concerning IT-compatible security, etc. (MHLW by FY 2005 at the very latest)

3) Improvement of the environment for the practical evaluation of medical institutions, and development of infrastructure for the compiling of medical information into databases, etc. (MHLW Continuing on from FY 2003)

4) Introduction of a Medical Ordering System (MHLW by 2003)

5) Enhancement and promotion of electronic medical records (MHLW by FY 2006)

6) Promotion of the use of computerized medical bills, and medical bill claims will begin being processed online (MHLW By 2010)

7) Enhancement of computerized medical bill systems (METI by FY 2004)

8) Supporting the introduction of remote medical care systems (MHLW by FY 2005)

9 Medical examination guidelines, etc. to be compiled into databases, and medical information to be made available via the Internet, etc (MHLW by FY 2003)

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