

# eHealth Policies in European Countries

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Increasing healthcare costs due to aging populations and the proliferation of lifestyle-related diseases are rapidly becoming problems not only in Europe, the United States, and Japan but also in emerging countries like China. This study takes a close look at eHealth as an approach to enhancing the cost effectiveness of healthcare within limited healthcare resources while controlling rising healthcare costs. It also analyzes trends in developed countries in Europe, where many progressive approaches are currently being implemented.

In eHealth policies, first and foremost, healthcare is deemed to be a cycle comprised of various stages including prevention, diagnosis, treatment, and rehabilitation/care in terms of services individuals are to receive. The objective of eHealth is not only to optimize services at each stage of the healthcare cycle but also to optimize all services throughout the entire cycle. The second objective of eHealth is to comprehensively collect and analyze data concerning health and medical treatment of individual citizens of a country from the past to the present through the use of IT. In this process, the key task is linking knowledge and information gained from analyses to policies for promoting health and healthcare policies for the people of that country. Therefore, it is essential not only to address technical issues concerning IT but also changes in people's values and the development of appropriate systems. As in Japan, the aging of the population is occurring in many countries in Europe, and many aspects of initiatives adopted in Europe may serve as useful references for Japan.

## 1. eHealth Advantages and Issues

Some of the factors underlying the rising expectations of IT in the healthcare cycle are as follows:

- Ease of data collection due to advances in sensor technology;
- Real-time response of data collection through the widespread penetration of mobile devices such as smartphones and tablets;
- Broader accessibility to collectible data including unstructured audio and image data; and
- Creation of big data from accumulated data and enhancement of output through the development of analytical and utilization technologies.

At the same time, the following issues that must be overcome for the effective use of IT should also be noted:

- Securing and collecting a mother group of data encompassing a sufficient number of cases to enable progressive analyses and to maintain consistency.
- Collection of data linked to individuals over the entire cycle of prevention, diagnosis, medical treatment, and rehabilitation/care.
- Continuation of projects in conditions where there is a time lag until the effect of measures drawn from data analyses becomes evident.

As one measure for addressing these issues, the development of social infrastructure using IT – particularly electronic health records (EHR) – has been attracting attention.

For example, in the UK, the National Health Service (NHS), the world's largest public healthcare service, anticipates a shortfall in funding of about 30 billion pounds (about 5.1 trillion yen) stemming from

excessive demand for services in the years from 2013 to 2020, mainly due to the aging of the population. However, the NHS intends to address this shortfall by promoting health management by the patients themselves and use of the most advanced technology. Health management by the patients themselves will become a key factor for extending healthy life expectancy. With the consensus that development of EHR is essential as a platform for realizing this, various national initiatives involving the population as a whole have been launched.

As a country known for its high level of welfare, Sweden too has started providing advanced healthcare services through the establishment of a nationwide EHR framework developed at the local level with a view to establishing seamless coordination between healthcare and nursing care services.

Following is a summary of four aspects in healthcare initiatives undertaken by the UK, Sweden, and France (a country with a health insurance system quite similar to that of Japan): (1) approach to healthcare system reform, (2) eHealth policy at the national level, (3) EHR infrastructure development and characteristics, and (4) examples of progressive projects and services.

## **2. Healthcare System Reforms in Europe and the Development of EHR**

### **2.1 Trends in the UK**

(1) Approach to healthcare system reform: the UK has continued healthcare system reforms through marketing and large-scale government investment. In 2013 it implemented organizational reforms in efforts to promote management efficiency through deregulation.

(2) eHealth policy at the national level: In January 2013 the government announced Digital Challenge, an initiative to promote reduction in healthcare costs through the introduction of a paperless system, and the sharing of digital information among social care providers, primary healthcare providers (General Practitioner, GP) and secondary healthcare providers

(hospitals).

(3) EHR infrastructure and characteristics: In 2002 the government commenced the development of summary care records (SCR) including basic information for emergencies and detailed care records (DCR) including a comprehensive patient medical history on a national level for the entire population. The development of SCR is expected to be fully completed by March 2015, while the project for DCR, which is suffering from a huge budget deficit, has been extended until 2017.

(4) Examples of progressive projects and services: In 2013, the NHS linked the data of hospitals, GPs, and all social care services, and started Care Data, a new program aimed at secondary use. By making participation of GPs mandatory, it ensured both volume and quality of data.

At the helm of this project is the Health & Social Care Information Centre (HSCIC), the sole organization in the UK engaged in the collection, processing, coordination, analyses, and disclosure of healthcare and social care data.

If the UK realizes its plans for SCR and Care Data, this will mean that by 2015 (1) in addition to the sharing of basic healthcare information for emergencies on the national level, (2) the platform for the secondary use of all healthcare and social care data will be in place.

Furthermore, the NHS intends to reinforce personal health management by providing NHS Choices, an online service that makes use of the data stored by the HSCIC.

### **2.2 Trends in Sweden**

(1) Approach to healthcare system reform: As a country that experienced the aging of its population ahead of other developed countries, the Swedish government began introducing services for the aged as early as the 1960s. It has also developed measures for reducing healthcare expense including the Edel Reforms, and has maintained a healthcare cost to GDP ratio of less than 10%.

(2) eHealth policy at the national level: In 2010, Sweden announced a national eHealth program underpinned by the basic principles of (1) giving priority to individual needs, (2) application of IT in the area of social services, and (3) coordination of information on a national level and among countries.

(3) EHR infrastructure and characteristics: The task of establishing EHR has until now been undertaken at the landsting (equivalent to prefectural governments in Japan) level under the leadership of CeHis (Center for eHealth in Sweden), a specialist organization in which the Swedish Association of Local Authorities and Regions (SALAR) and Kommun (equivalent to municipality governments in Japan) participate. In 2012, CeHis established national patient overviews (NPO) through nationwide coordination of information. In the future, this organization intends to roll out progressive services developed at the local level for the entire country.

(4) Examples of progressive projects and services: 1177.se, an online information service that also provides for anonymous inquiries, and UMO, a website targeting young people, are being promoted as services that utilize NPO and services for personal health management. In 2014, Sweden will also launch a service that will allow citizens to store welfare and healthcare information on a platform called "My Information," which will allow them to manage their own personal information including setting the information security level and linking various types of healthcare information to applications provided by third parties. In these ways, Sweden intends to enhance health management through initiatives of the people themselves.

### 2.3 Trends in France

(1) Approach to healthcare system reform: France's healthcare system is very similar to Japan's in that healthcare services are provided by both private and public healthcare organizations, and a universal healthcare system is realized through public health insurance. France was ranked No. 1 in health system

performance in the WHO's World Health Report 2000. Despite the implementation of system reforms to reduce healthcare costs through the introduction of GP and other measures, however, the ratio of healthcare costs to GDP in recent years continues to increase.

(2) eHealth policy at the national level: In March 2013 the Minister of Health announced the country's commitment to three important strategies concerning eHealth, and the government's three goals in these strategies are: (1) to assist in promoting work efficiency operations of healthcare workers and institutions, (2) to promote the implementation of cooperative healthcare for healthcare workers, and (3) to improve people's access to healthcare information.

(3) EHR infrastructure and characteristics: EHR Healthcare IDs have been already been introduced. However, EHR registration is lagging despite the provision of incentives to register, such as inclusion of healthcare cost rebates. In this respect, France is behind the other countries discussed in this report. Delays in implementing initiatives due to the impact of changes of government in the past have also been noted. While France aims to integrate healthcare and social care information, it continues to have a number of ongoing issues to contend with including the need to establish necessary legislation.

### 3. Status of Japan and Future Outlook

The Declaration to be the World's Most Advanced IT Nation adopted by the Cabinet Office of Japan in June 2013 clearly states Japan's commitment to the nationwide deployment of a healthcare information coordination network by 2018. The government has also made the preparation and disclosure of data analyses including receipts and the Data Health Plan, an operational plan based on these, mandatory for all Japanese health insurance societies in fiscal 2014. Therefore, matters concerning eHealth occupy an important position at the national level in Japan. Nevertheless, specific initiatives to promote eHealth have only just begun.

The Hitachi Research Institute will pay attention to the position of eHealth policies in national strategies and progressive initiatives of countries around the world and will undertake analyses in the future.