National Projects with HL7 in Japan

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President, HCI Inc.
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- Japanese Government Strategy
- SS-MIX Project by MHLW
- Nagoya-RHIE Project by METI
- Saga Project by MIC
Japanese Government Strategy
Major Governmental Activities for Healthcare IT

- Healthcare Information Systems Advisory Committee...10/'93
- "Healthcare Information System Strategy 21"...7/'94
- New Healthcare Information System Joint Committee...11/'94
- Research and Development for EMR...6/'95
- EMR was authorized as Formal Document...4/'99
- e-Japan Strategy...01/'01
- IT Ground Design for Healthcare System...12/'01
- Privacy Law...5/'03 (effective 4/'05)
- Project on Interoperability for Health IT...06/'04
- New IT Reform Strategy...01/'06
- Standardized Structured Medical Information Exchange Project...06/'06
- Grand-design for Informatization for Healthcare, Nursing Care, and Welfare Domains...03/'07
- Construction of Local Community Models through ICT Utilization / Telemedicine Model Projects...10/'08
Recognizing healthcare related Information System as a social infrastructure to provide healthcare services in unprecedentedly super-aged society in the forthcoming twenty first century, **Healthcare Information Systems Advisory Committee**, which was organized in October 1993 as an official advisory committee for the Director General of Health Policy Bureau, ministry of Health and Welfare, issued in July 1994 a report titled **“Healthcare Information System Strategy 21”**
“Healthcare Information System Strategy 21” (7/94)

Super Aged Society
- Securing quality of healthcare services
- Providing healthcare services efficiently

Technology Improvement
- High speed processing
- Multimedia technology
- Advance use of Network

Healthcare Information System is the Key to improve the Quality and Efficiency of the Healthcare
New IT Reform Strategy (01/’06)

Realizing Ubiquitous and Universal Network Society Where Everyone Can Enjoy the Benefits of IT

Issued by
IT Strategic Headquarters, Prime Minister’s Office

Structural reform of healthcare through IT

Subtitle:
-Full online processing of all medical insurance claims and lifetime self healthcare management-
Targets

1. Drastically reduce healthcare insurance administrative costs through the complete computerization and online processing of medical insurance claims no later than the beginning of FY 2011 and use databases of medical insurance claim information for epidemiological purposes to promote preventive treatment and streamlining of national healthcare costs.

2. Build by FY 2010 the foundations for using individuals’ healthcare information throughout their lifetimes, supporting self management by individuals of their health conditions and efforts to maintain and enhance health.

3. Promote remote healthcare to eliminate disparities in the level of healthcare among different regions including access to advanced treatments and employ terrestrial digital broadcasting to provide effective instructions and information to patients during emergencies.
Targets

4. Clarify the objectives of introduction and promote the widespread use of healthcare information systems including electronic medical records to enhance the quality of healthcare, ensure the safety of medical treatment, and encourage greater collaboration among medical institutions.

5. Promote comprehensive and effective computerization throughout the medical, healthcare, nursing, and social welfare fields.
Development of healthcare computerization infrastructure

1. **Develop indicators** for evaluating appropriately the need for and degree of use of computerization according to objectives, taking into consideration the functions, scale, and individual characteristics of each medical facility by FY 2007.

2. **Introduce in most medical institutions with** 200 or more beds comprehensive healthcare information systems (ordering systems, comprehensive electronic medical records, etc.), to increase operational efficiency, enhance healthcare safety, and provide diagnosis and treatment information (installation at institutions with 400 or more beds to be completed by FY 2008; installation at institutions with less than 400 beds to be completed by FY 2010).
3. At small scale medical institutions where the introduction of comprehensive healthcare information systems would lack cost effectiveness, use electronic medical records suitable for linking diagnosis and treatment information at low cost to achieve comprehensive healthcare collaboration by FY 2010.

4. Start the application by system vendors of standard data formats and standard data exchange protocols to healthcare information systems in FY 2006 to achieve linking of diagnosis and treatment information among medical institutions and to lower system costs through the use of multi-vendor systems.
Development of healthcare computerization infrastructure

5. Promote the utilization of ubiquitous network related technologies such as RFID tags by FY 2010 to achieve high levels of healthcare safety and higher administrative efficiency at medical institutions.

6. Develop healthcare public key infrastructure (HPKI) and safe and secure network infrastructure by FY 2008 to achieve safe exchange of and access to healthcare information including rigorous identification of individuals.

7. Study the concept of chief information officers (CIO) in medical institution who enhance the value of healthcare computerization infrastructure use through the provision of advice and guidance to support effective computerization and create systems for human resource development by FY 2008.
Grand-design for Informatization for Healthcare, Nursing Care, and Welfare Domains

- Individuals can electronically acquire and manage their own health and clinical data upon their request and then, they could utilize them to manage their health and/or provide healthcare providers them and (to) get proper clinical care. Insurers can utilize insured’s health data or receipt data and provide them proper guidance on their health.

- Medical institutes will be informatized and electronically and effectively keep and handle clinical information. This will help them to provide quality of care and patient safety, because IT may make it possible to improve the safety and effectiveness of physical and information distribution. This may also helps them to improve and speed up communication among providers and then, reduce errors caused by misreading and miswriting various documents. Furthermore, this will make it possible to lead statistical and epidemiological use of clinical information.
Grand-design for Informatization for Healthcare, Nursing Care, and Welfare Domains

- Healthcare and nursing care providers will securely share information such as allergy and chronic diseases of patients.

- Healthcare institutions will transfer claim electronically and reduce administrative costs related to this.
Medical institutions

Citizens

Medical treatment in any hospitals by referring the previous illness or health condition

Illness

Healthy

Self Manage own health throughout a life

Medical records

Medical Service, Nursing

Health Insurer

Develop proper health care costs by insurance people's health instruction

Hospitals

Offering continuous health care

National-level Data-collecting and analysis

Evidence Based Medicine

Medical Insurance Claims Collaboration
Report of disease information, etc.

Safe and reliable unified network

Anonymous data

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SS-MIX: Standardized Structured Medical Information eXchange Project

The "Important Plan 2006" announced by MHLW in July 2006 declares the following targets: The target year shall be 2010.

- To build an infrastructure to collect individual lifelong health information.
- To encourage people to use their own medical information for the purpose of health promotion.
- To help insurers deliver sophisticated health guidance.
- To promote the use of electronic medical records and other medical information systems.
- To improve quality of medical care.
- To ensure medical safety.
- To drastically promote collaboration between medical institutions and the nationwide use of medical information.
SS-MIX: Standardized Structured Medical Information eXchange Project

MHLW is building an environment where medical information is shared by using IT. As a part of their effort, MHLW is preparing to promote the Standardized Structured Medical Information Exchange (hereinafter referred to as SS-MIX), which is based on the Shizuoka EMR complying with **HL7 CDA rel.2.0**.
Nagoya-RHIE Project by METI

“A REGIONAL HEALTH INFORMATION EXCHANGE SYSTEM FOR STROKE CARE”
by Masaharu OBAYASHI at IHIC2008
Nagoya-RHIE Project by METI

The Nagoya-RHIE project is an initiative to develop regional health information exchange (RHIE) system based on the international standard.

The NPO, named Tokai Medinet Forum, is an organization for promoting the project sponsored by Ministry of Economy, Trade and Industry (METI) to implement a RHIE system for stroke care in the Nagoya area using international standards including HL7 and IHE, and to evaluate their efficacy through trial experiment.

In August, 2006, the project was initiated, and the system was developed throughout 2006 and 2007. Trial use began from 4Q of 2007.
Nagoya-RHIE Project by METI

XDS was implemented to exchange 6 types of CDA documents on the RHIE system for collaborative stroke care

– first notification (referral) for pre-discharge
– discharge summary for transfer from acute hospital
– evaluation report after 3 months rehabilitation
– discharge summary for transfer from rehabilitation hospital
– report of post-discharge in home care
– current medication and allergy for emergency medicine

This system has been developed based on IHE IT Infrastructure Technical Framework and OASIS ebXML registry repository standards.
Saga Project by MIC
Interim Report from the Panel on Telemedicine Promotion Measures

The Ministry of Internal Affairs and Communications (MIC) and the Ministry of Health, Labour and Welfare (MHLW) hereby announce that they adopted an interim report compiled by the Panel on Telemedicine Promotion Measures (Chair: Prof. KANEKO Ikuyo, Graduate School of Media and Governance, Keio University).
Projects for Construction of Local Community Models through ICT Utilization/Telemedicine Model Projects

Purpose

The government selects telemedicine model projects to entrust to municipalities, with a goal to further promote the penetration of telemedicine by taking into account the ICT utilization and achievements of such projects. From among initiatives set up based on specific local proposals for solving local issues in the medical field through utilization of telemedicine, the government chooses projects that intend to establish telemedicine as a sustainable and general social system so that appropriate telemedicine can be provided, wherever required, as a social alternative.

Details of the entrusted projects

Entrusted by MIC, each municipality will build a telemedicine model that solves local issues. Each model should encompass a series of activities to solve problems in the ICT user field, such as planning, designing and developing information and communications systems for the provision of telemedicine, continuous operation of such systems, and establishing necessary frameworks.
佐賀県民健康情報連携システム

佐賀県
運用環境整備支援等

佐賀大学病院
総合病院情報システム
電子カルテDB
DICOM
検査

院内電子カルテシステム
電子カルテDB
DICOM

県立病院 好生館

有田共立
唐津赤

中核医療機関
Q/W

連携推進DB（仮想DB）
ヘルスケア情報リポジトリ
IDリンク
認証局

地域医療連携ASP

診療情報提供（ASP）

診療情報提供（ASP）

診療情報提供（ASP）

検査結果確認（ASP）

院/クリニック

Aさん宅

NHO佐賀
NHO嬉野

白石共立

所定の要件に基づき、医療機関毎にGW設置病院を選定

医療機関情報（ASP）

検診データ登録（ASP）

受診履歴管理（ASP）

保健所/健診センター

(C) mt0405 Saga University Hospital

2009/4/15
Thank You