図6 患者への情報提供のポスター（静岡での取り組み）

6. SS-MIX アーカイブストレージ

　SS-MIX アーカイブストレージは、患者への電子診療データCDを診療所、病院に患者が持ち込んだ際、いきなり外来で再生するのではなく、患者の許可を得て（例えば）病診連携部で）データを拝見し、外来や病棟ではその施設の医療情報システム上でブラウザで見る、という仕組みを提供する。提供条件は上記と同じである。

7. Final Remarks：本事業の目指すもの

　本事業で目指すものは、高価な機器、システムの装備を必要とする診療情報すべての闇雲な施設間連携でなく、医療施設のIT化のレベルに応じ、患者基本、処方、検査結果、画像、紹介状など文書、などについて段階的な連携を推進することである。広がりを重視するため、それらのデータ形式は標準的なものでなければならない。また、連携の相手は他院ばかりではなく、別社のシステムに入れ替えた自施設でもありえる訳で、いわば医療情報の標準的連携・アーカイブを提供することにより、施設にとって安心してIT化を推進する環境を整えるものである。

8. 謝辞

　本事業に当たって、筆者の狙いを十分理解いただき、事業化・予算化を実現された厚生労働省医政局各位に、元となった静岡県版電子カルテプロジェクトを創始された静岡県医療室各位に、静岡県版電子カルテプロジェクトに賛同され、参加されたベンダ各位に、またこれを推進いただいた静岡県病院協会、静岡県医師会各位に、規格の制定、保持、技術的アドバイスなど、本プロジェクトに暖かいご支援を頂いた医療情報標準化関係各位・各団体に、深く御礼申し上げる。

9. 参考文献

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土居弘幸：静岡県版電子カルテシステムプロジェクト
木村通男：静岡県版電子カルテ　一医療の透明性、情報の可用性を目指したその技術的側面一
小野良和：静岡県版電子カルテの開業医システムとの電子紹介状を介した連携
清水俊郎：標準化された医療情報交換規約を採用した電子カルテ構想
古田輝孝：静岡県版電子カルテシステム　クラス概念での迅速検索を可能とした臨床情報検索システムD*D
谷重喜：災害時に医療を支援するコンピュータシステム
[2] 木村通男、静岡県版電子カルテ　一静岡県から全国へ　一医療の透明性向上と標準化基盤の整備、新医療、7月号、2006.
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Ⅲ.研究成果の刊行物・別刷

【学 会 発 表】

2.M.Kimura

EHR in Japan, -Recent Government Activities,

Asia-Pacific Region Reports (I),APAMI2006,

Taipei, Taiwan, October 28, 2006.

EHR in Japan, -Recent Government Activities

Michio Kimura

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Correspondence: kimura@mi.hama-med.ac.jp

Abstract

This paper figures Japan's activities concerning EHR since 1993, according mainly to related government activities.

This also includes current status of EMR and CPOE in Japan, relatively high rate of installation in the world.

1. Healthcare Delivery System in Japan

In Japan, "hospitals" are defined as healthcare provider with more than 20 beds. In 2005, we have 9333 hospitals, and about 90000 clinics. Averaged revenue is 137Myen per 100beds, and averaged employees are 112 per 100beds.

Medical care insurance system is based on "fee for service" payment system, while government is looking to prospective payment system, which is already applied to some 200 large hospitals. All citizens are covered by either employees healthcare insurance or community-based health insurance.

2. EMR Strategies in Japan[1]

Past major government activities for EMR are as follows;
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 (purse 800Myen) ...6/95
EMR was authorized as Formal Document ...4/99
HELICS(Standard Board) was established ...5/'00
IT Grand Design for Healthcare System ...12/'01
Aid Money for EMR Installation (half aid, total purse 20Byen) by MHLW ...'01/02
Aid Money for Regional EHR (total purse 25Byen) by METI ...'02/03
Privacy Law ...5/'03 (effective 4/'05)
Project on Interoperability for Health IT ...06/'04.
Among them, IT Grand Design for Healthcare noted in 2001, as;
To provide practical strategies and objectives to achieve annual and numerical targets in order to promote information system
To present measures to achieve the objectives set for each phase of information system, and lay down an action plan that provides roles and targets for public and private sectors
And its action plan says;
1. Standardization in healthcare[2]
2. Infrastructure for information system
3. Implementation of model projects
4. Subsidy for introduction and maintenance of information system
5. Raising awareness
Its target stated;
By the end of the 2004 fiscal year
At least one institution in every secondary medical area across Japan should have an electronic medical record system. At least 60% of the hospitals should have an e-claim system.
By the end of the 2006 fiscal year
On a national basis, at least 60% of the hospitals with more than 400 beds and 60% of the clinics should have an electronic medical record system. At least 70% of the hospitals should have an e-claim system.

3. Current Status of Medical Information System in Japan

Order entry system
65% or more of the hospitals with more than 400 beds, in 2004.
Japan is one of the highest rate of order entry installation in the world.
Electronic medical record system
12% of the hospitals with more than 400 beds (as of the end of 2004 fiscal year) and 3% of clinic.
This is based on definition of EMR as "paperless". Author's study on Shizuoka prefecture hospitals shows this rate as 48%, which is based on the definition of "quick and thorough use of order entry database which serves information to patient, not necessarily paperless".

4. Recent Government Activities

4.1. Interoperability of Health Information Systems Project by METI ...'04-'07

Its total budget is 1.5Byen. It comprises
1. IHE-J activity support, which is Connect-a-thon support, and installation support as showcase at Saitama Medical College Hospital.
2. Inter-EMR fundamental data set for system update/vendor change by JAHIS(vendor assoc.)
3. HL7 tools development

4. Health IT CIO training course.

4.2.Standardized EMR Promotion Committee Report by MHLW...05/'05

Its report included;
1. redefinition of EMR dreams,
2. promotion of standards, i.e. HL7, DICOM, HL7 CDA, and other codes & terminology are recommended,
3. Interoperability Promotion
4. Promotion Strategy.

4.3. MHLW promotes Shizuoka Prefecture EHR for Nationwide Use ...04/'06

Shizuoka Prefecture EMR project produced many EMR components, such as progress notes, nursing observations, referral documents, clinical research database, PACSystem, and formatted document system[3],

These components are free for Shizuoka prefecture hospitals(software package only, hardware and maintenance not included). They are operable by information from order entry system in HL7 standard. Ministry invested 88Myen to Shizuoka prefecture to improve its components and let new these components freely available nationwide.

On the other hand, Ministry approved for healthcare providers to collect 3000 yen (example) for handing out clinical data CD to patients, provided that it is in the recommended standard (HL7 and DICOM).

5. IT Strategy 2006 by Cabinet's Office, ...06/'06, Primary Accent is on Healthcare System Restructure by IT

Its action plans are;

1. New Grand Design for IT in Health ...by 2006

2. Prevention Medicine and EMR Promotion by Interoperable Healthcare & Health-checkup Information Healthcare Public Key Infrastructure ..by 2006, which comprises;
Safe and inexpensive broad network,
IC card feasibility study, standardization promotion,
Measurement for IT in healthcare providers,
Interoperable EHR for large hospitals(By 2008 for 400+ beds, by 2010 for smaller),
Start implementing standardized exchange from 2006 (Nationwide Shizuoka Software)
Standard codes recommendation by 2007
Interoperability test (Connect-a-thon) for EHR from 2007
Support for IT in smaller healthcare providers(Nationwide Shizuoka Software)
Incubation of CIO in healthcare providers,
Ontology development from 2006

Development of health information gathering and utilization in EHR era
Health checkup data utilization study from 2007
Health checkup mandated from 2008 for all 40+ ages
Reimbursement claim data utilization study from 2007
Handling health data management by patients study by 2008 (Shizuoka Style CD).

3. Online Reimbursement Claim by 2011
e-Document law applied to healthcare
Incentive promotion for e-claim from 2006
Standard codes mandated by 2010
Simplification of reimbursement scheme
Electronic reimbursement tariff from 2008
Online real time verification of insurance from 2011

4. Communications
Telemedicine,
Surface television broadcast,
IC tags in materials and medicines.

6. Final Remarks -- After All,,

Who is paying for EHR?
(Within Healthcare Providers, Network and Registries)
What is going to be the Terminology?
(SNOMED-CT talk with WHO ICD11, Global vs Local Culture).

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Ⅲ.研究成果の刊行物・別刷

【学会発表】

3.木村通男

標準化のモデル紹介：

静岡県での SS-MIX(厚生労働省電子的診療

情報交換推進事業）を用いた糖尿病情報

収集

第27回医療情報学連合大会，医療情報学，

第27回医療情報学連合大会論文集

27-Suppl, 52-55, 2007.

標準化のモデル紹介：静岡県でのSS-MIX（厚生労働省標準的情報交換推進事業）を用いた糖尿病情報収集

木村 通男

浜松医科大学附属病院医療情報部

Standardized DM Survey: DM Patient Data Collection by SS-MIX (Shizuoka Style EHR)

Kimura Michio

Hamamatsu University School of Medicine, Department of Medical Informatics

Shizuoka Style EHR, a part of which is now a Ministry promotion, can be utilized with any vendor's HIS, provided that the HIS can export lab results, and prescriptions in HL7 format.

It can be used for DM case data collection, with a stamped DM items on EMR. However, data collection items must be commonly agreed, and content data type should be standardized for automatic processing of the collected data. By making use of this, setting standardized data set by DM specialists are encouraged.

Keywords: SS-MIX, HL7, Standardization, Clinical Research, Diabetes Mellitus

1. はじめに

静岡県版電子カルテプロジェクトは、HL7、DICOMといった標準的データ交換規格の普及と、それによるさまざまなデータの利活用を目的としたものである。またその一部は厚生労働省標準的診療情報交換事業として全国で利用可能となっている。

ここではこの標準的情報基盤を用いて、糖尿病の情報収集基盤を試作したので、これについてデモを含めて紹介し、専門家諸兄によるデータ項目設定をお願いする。

2. 静岡県版電子カルテと厚生労働省標準的診療情報交換推進事業

静岡県版電子カルテプロジェクト[1]は、ペーパーレス電子カルテを県下の医療機関に配布することを主目的としたものではなく、HL7、DICOMといった標準的データ交換規格の普及と、それによるさまざまなデータの利活用を目的としたものである。それらには電子紹介状・電子診療情報CDの出し入れ、各種文書作成支援、臨床情報検索DBなどがある。

図1 静岡県版電子カルテ概念図

図1に見られるように、HISからHL7形式で患者基本、処方、検査結果、病名登録などを得て、これに紹介状など各種文書を付加してCDを作成する仕組みである。図2にはそれにより出来た紹介状とCDである。

図2 電子紹介状CD

厚生労働省標準的診療情報交換推進事業（SS-MIX）[2]は、この中で、紹介状・診療情報CDの部分を、全国展開できるようにしたものである。県版と同じく、HISがHL7で情報出すことが出来れば、どの
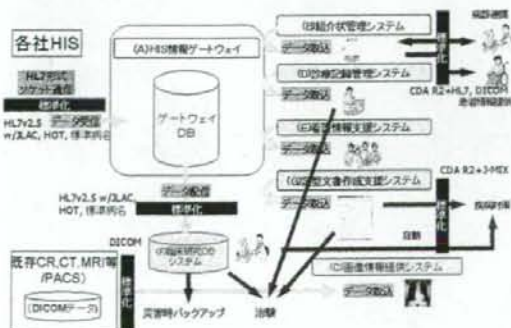
メーカのHISでも接続可能である。なお、これによる電子診療データCDについては、診断書と同じように特定療養費として費用を徴収してよいこととなっている。

3. 静岡県での3疾患情報収集基盤

静岡県では、糖尿病、心不全、脳血管障害について、この静岡県版電子カルテを基盤として、つまり標準的な形式で、これらの疾患についての情報収集を電子的に行う事業を進めている。

図3は電子カルテ所見入力画面に、糖尿病の情報用のスタンプを押し、その情報を電子カルテに記載すると同時に、収集用報告書を作成し、同時に必要な処方歴、検査結果を添付している様子である。ここで、文書形式は各国で用いられつつあるHL7 CDA R2形式である。

図3 電子カルテ上に置かれた糖尿病項目

また、これらの情報を集計し、検索するDBも作成されている。図4では、浜松医大の9年の全検査結果、処方情報と、テスト的に退院時サマリとして入力した、所見情報とに対する検索の例である。

図4 臨床検索（4件該当）

FBS 60以下の記録があり、アマリール服用歴有（1mgでも3mgでも）、昏睡歴有、という条件での検索で、Cacheというツリー構造データベースを用い、数分という高速で、該当4名という結果が返ってきている。図5はその一人についての、FBSのグラフである。
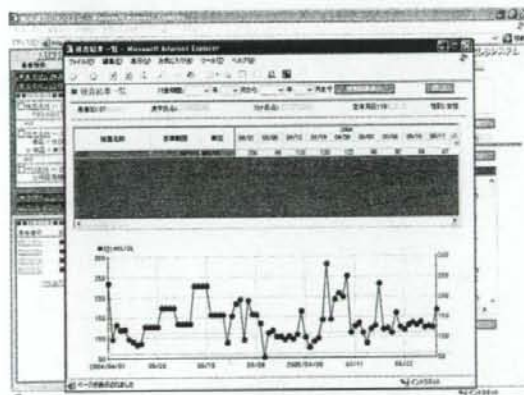

図5 個別の情報

4. 情報収集データセット整備の呼びかけ

先に述べた例は一施設のデータを対象としているが、多施設からのデータ収集となると、データ項目が標準的でなければならない。また、後で行う集計をより自動化するには、データ項目だけでなく、更に細かい取り決めが必要である。

4.1 データタイプ

図6は、静岡での糖尿病テンプレートの一部である（巻末）。中ほどに「合併症」「昏睡歴」という項目があり、細長い記入欄が付いている。ここにユーザは何を入れるであろうか？「　　　」「なし」「あり」「2回」「欠神程度」、、さまざまであろう。これを情報システムが自動で集計できるだろうか？否である。

振り返って図3を見てもらいたい。「昏睡歴」のところには「無○　有○」とあり、細長い記入欄が付いている。「○」はボタンであり、押せばどちらかが「●」となる。これであれば、すくなくとも有無は自動集計できる。

このように、必要な項目のみをリストするだけでなく、どういう形式で記入されるか（有無、数字、文章、選択肢、など）も定めてこそ、自動での集計が可能となる。

4.2 データセットの範囲

データ収集の目的は様々である。様々な狙いを持った先生方が集まり、学会制定のデータセットを作成するとなると、きっと膨れ上がって膨大なものになるであろう。またそれを刻々と進歩する医学に対応してメンテナンスすることは不可能に近い。

まずは、どのようなニーズにも必須である基本項目、さらに「○○系項目」といったもの、最後に個別のスタディの項目、といった形になさることをお勧めする。

5. 結語　　データセット制定の呼びかけ

今回のデモで、集学的データ収集の可能性は理解していただければ幸いであり、前述のようなポイントを押さえて、データセットを作っていただければ、医療情報サイドは喜んでこれに対応した情報システムを構築するであろう。

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静岡県版電子カルテシステム　疾患別テンプレート　　　　　　　　　　　　　2005/12/08

糖尿病ミニマムデータセット

図6 糖尿病項目（静岡県案）（一部）

Ⅲ.研究成果の刊行物・別刷

【学 会 発 表】

4. M.Kimura :

Standards: HIT Interoperability,

HIMSS AsiaPac07, Singapore,

May 16, 2007.

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Wednesday, 16 May

strategy and creating greater patient involvement in their care.

Mr Chai CHUAH
CEO, Hutt Valley District Health Board
New Zealand

11:30 – 12:30
9 IT STRATEGY AND HEALTH SERVICES
MANAGEMENT
Room: Bras Basah
Hospital CEO/CIO Panel
A CEO and CIO from a leading hospital present means for creating and sustaining solid executive partnerships to harness the value of IT within their organisation.

11:30 – 12:30
10 IT STRATEGY AND HEALTH SERVICES
MANAGEMENT
Room: Sophia
Approaches to Healthcare IT by the Japan Medical Association
Learn about the ORCA (Online Receipt Computer Advantage) project and other activities of IT promotion by the Japan Medical Association to support the universal coverage of health insurance system in the IT era.

Mr. Tomoaki UENO
Senior Researcher, Japan Medical Association Research Institute
Japan

11:30 – 12:30
11 EHEALTH
Room: Olivia
Infectious Disease Surveillance and Management: New Approaches
Systems for public health and medical surveillance are effectively being used in the Asia Pacific region. These systems will be discussed in the context of identification, contact tracing, epidemiological investigation, and reporting from township to national level and back again.

Prof Tao JIANG
Deputy Director, National Center for Public Health Surveillance and Information Service, Chinese Center for Disease Control and Prevention
China

Mr LOW Yew Jern
Ministry of Health
Singapore

11:30 – 12:30
12 EHR / EMR / EPR
Room: Moor-Morrison
Clinicians' Perceptions of Digital Medical Records: An Australian Case Study
The contextual insight of the clinician's perception and adaptation of information communication technology through the implementation of a scanned digital medical record at a tertiary hospital in Australia.

Dr. Kwang Chien YEE, MBBS,
B Med Sci
SITCRC, School of Information Systems, University of Tasmania
Australia

Mr. Chris SHOWELL, B App Sci
Dept of Health and Human Services,
Tasmania
Australia

11:30 – 12:30
13 CLINICAL LEADERSHIP AND GOVERNANCE
Room: Orchard
Standards: HIT Interoperability
This session will identify principles among the types and topics of healthcare IT standards highlighting perspectives from common terminology coding systems for semantic interoperability to support eHealth and electronic health record systems.

Prof Michio KIMURA, MS, MD, PhD
Professor of Radiology, Hamamatsu Medical University, Chair HL7
Japan

14:45 – 15:45
14 THOUGHT LEADER SESSION
Room: Canning
Industry Standards and Effective Integration on Healthcare Settings
Join Sangita Reddy, Executive Director of Apollo Hospitals Group and Dr Jiang Feng, President of China Association for Medical Devices Industry as they share their perspectives on healthcare IT.

Ms Sangita REDDY
Executive Director, Apollo Hospitals Group
India

Dr Jiang FENG
Chairman, China Association for Medical Devices Industry (CAMDI)
China

14:45 – 15:45
15 CLINICAL LEADERSHIP AND GOVERNANCE
Room: Bras Basah
Create Health Plans, Not Health Records
Electronic medical records have facilitated bringing together past-visit details. However, there are limits to improving the ability of healthcare professionals to generate health plans for their clients based on evidence-based medicine while taking into consideration current conditions, recent laboratory results and ongoing drug treatments.

Professor Dr Jai MOHAN, FRCP (Lon),
FAMM
Professor of Health Informatics & Paediatrics, International Medical University
Malaysia

Standards:
HIT Interoperability

Michio Kimura
Hamamatsu University Hospital
HL7 Japan Chair, IHE Japan Board

In this presentation

- Standards and merits, with example of Patient data CD
- Interoperability within & between healthcare providers
  - IHE Scheduled Work Flow
    - IHE-J video
  - IHE X(cross) enterprise Document Sharing
- More to go: standard terminology.

Merits of standardized infrastructure

- Installation connection cost: Less than 1/10
- User can select most appropriate product for each specialty
- Never losing patient clinical data, over system replace even to different vendor.

Patient Data CD demo

- Attached document as HL7 CDA R2
  - could be referral document, case report form, etc.
- Prescription and Lab results as HL7 v2.5
- Images as DICOM.

What is needed more?

- HIS-RIS, get or put
  - HL7 can describe both
  - Then method must be determined at each site
- DICOM files in CD
  - Files of DICOM images are better than JPEG files (which has no clinical information)
  - Still, what part of CT slices are these?
  - DICOM directory, digital signature should be in agreed place in CD directory.

What is Standardized IT Infrastructure

- Images: DICOM
- Patient demographics, Lab orders and results, Prescriptions, etc. : HL7
- How to integrate department subsystems using these: IHE
  - Scheduled workflow(SWF), Lab workflow(LSWF), Cath-Lab workflow(CATH), Portable patient data(PDI), Consistent presentation of images(CPI),,
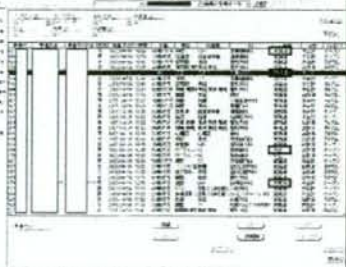- Above standards and guidelines are recommended by Standardized EMR promotion committee(Ministry of HLW, 2005)

IHE-J video

- IHE profiles are based on use cases
- Use cases could be different in nation level, institute level, etc.

IHE Success Story at Hamamatsu University Hospital

Together with Toshiba CT, Fuji RIS sends information to NEC HIS, which shows progress of examination as "not arrived" "not examined" "examination finish" on patient list.
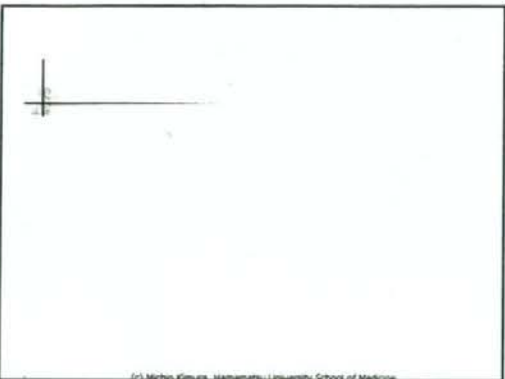

IHE supported by Ministries

- 2006.11 Conference of Japan Assoc. for Medical Informatics "Cooperation among ministries shown in the chorography on Health IT"
- Ministry of Health Labor and Welfare
  - 2007 Development of interoperability testing tool (budget $1M)
- Ministry of Economy Trade & Industry
  - 2007-2009 Interoperability promotion project (budget $2M)

A doctor may say,

- Every record is visible now
- But, I have no time to see all
- Patient may sue me because of overlooking
- What is the practical minimum requirement? against floods of records.

What is still needed?
Standard terminology

- Lab examination items
  - LOINC, JLAC10
- SNOMED
  - Multiple axis for description of pathology (Anatomy, Pathophysiology, etc.)
  - Purchased READ code of UK for clinical extension, became SNOMED-CT
  - UK and USA paid millions of dollars
  - Problems
    - Language, terminology engine, usecases
- ICD-11
  - likely to base on SNOMED-CT
  - Back to original policy, what are global usecases for WHO?.

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End of presentation

- Please come to
  - HL7 Working group meeting May 2009 in Kyoto
  - Hiroshima HIT week November 2009
    - APAMI Conference
    - IMIA WG4 Security
    - IMIA General Assembly
    - Japan National MI Convention JCMI29

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Ⅲ. 研究成果の刊行物・別刷

【学 会 発 表】

5. M.Kimura, K.Heitmann, Y.kim, Sl. Kim,

K. O' Donnell:

Standards Enable and Empower Interoperable

EHR,

12th World Congress on Health(Medical)
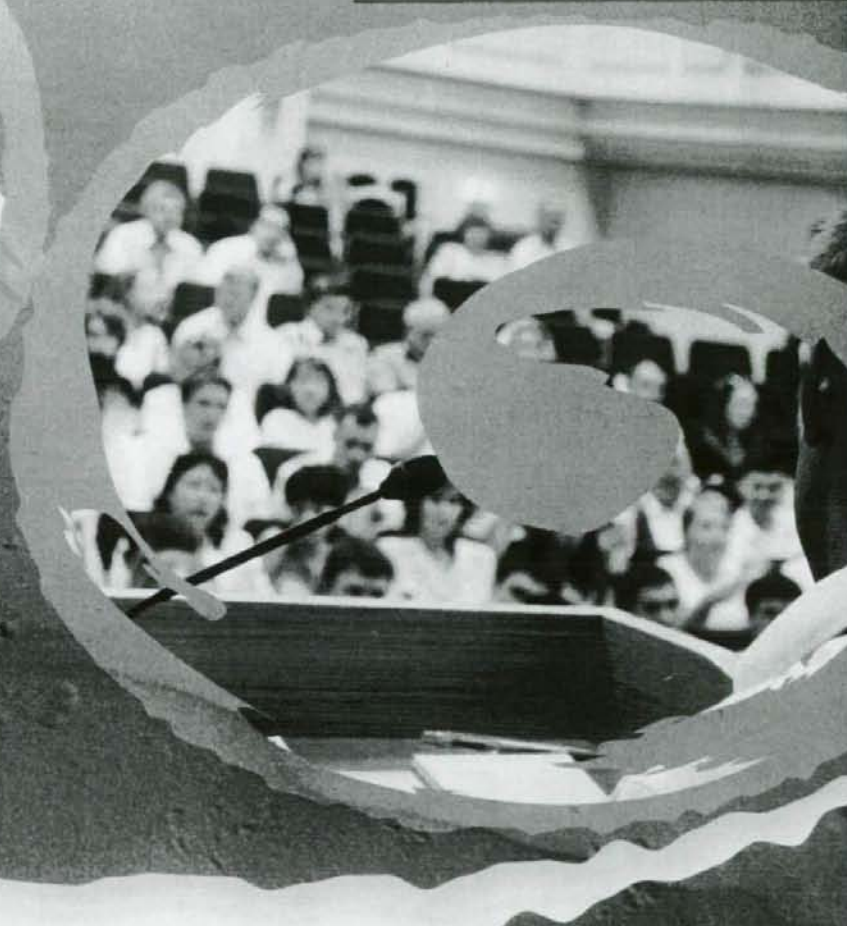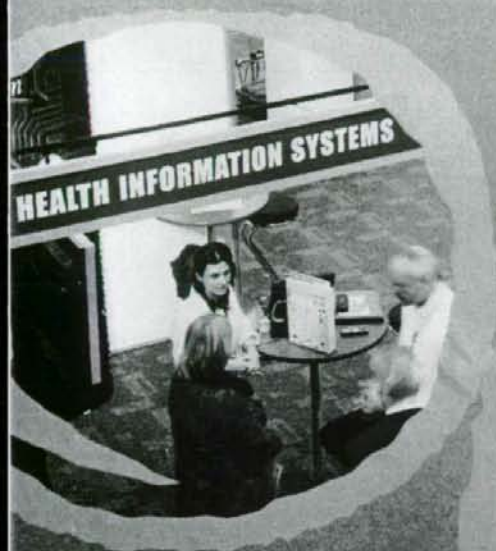
Informatics (MEDINFO2007),

Brisbane, Australia, August 23, 2007.

MEDinfo
2007

12th World Congress on Health
(Medical) Informatics

PROGRAM

HEALTH INFORMATION SYSTEMS

MEDINFO CONGRESS 20-24 August 2007
Brisbane Convention Centre - Australia

THURSDAY 23rd August 2007

TIME	SESSION	TOPIC, AUTHORS & BRIEF SUMMARY	ROOM
1400	S144	**Poster Session 3 (Poster Session 3 and Panels run concurrently. See Page 51 for Poster Program)**	
1400		**Panel Sessions**	
	S145	**Health Information Systems** **Chair: Magnus Bang** National-Scale Interoperable/Sharable EHR *YC Li, W Hammond, Y Kim, S Chu, M Kimura, H Goh*	M 1
	S146	**Health Information Systems** **Chair: Yu-Chuan Li** What we obtained and what were the real barriers of CPOE and EHR – Lessons learned from CPOE and RHIO in Japan *M Akiyama, M Kimura, M Miyamoto, K Toyoda*	GH 2
	S147	**Emerging Technologies** **Chair: Eta S. Berner** Sensing Technologies + Clinical Information = Improved Care *Tamara Merryman, JJ Barton, S Mandava*	GH 3
	S148	**Health Information Systems** **Chair: Marcus Wise** Patient Portals to Support Communication and Information Sharing between Patients and Care Providers *Jonathan S Wald, Cornelia M Ruland, Justin Starren, Deborah Lewis, Edward Cohen*	GH 4
	S149	**Organisational Issues** **Chair: Batami Sadan** Strategic Plan for Promoting Middle East Healthcare Informatics: The Agenda for the IMIA New Region (MEAHI) *H Takeda, R Moghaddam, N Al-Shorbaji*	GH 1
	S150	**Standards** **Chair: Gunnar Klein** Standards Enable and Empower Interoperable EHR *M Kimura, K Heitmann, Y Kim, SI Kim, K O'Donnell*	M 2
	S151	**Primary care** **Chair: Don Walker** Implementing Advanced Terminology Systems in Primary Care *G Miller, J Campbell, N Boothe, A Orsonio, R Simkus, A Syed*	M 3
	S151B	**Health Information Systems** **Chair: Elmer Bernstam** National Efforts for Biosurveillance Standardization: Impact on the International Community *F Eisenberg, K McCormick, V Sintchenko*	M 4
	S151C	**DEMONSTRATIONS** **Chair: Frank Cordingley** Demonstration of a Lightweight Mobile Electronic Medical record for the Homeless *D Buck, J Turley, S Gupta, K Mahata* Demonstration: Implementation of an integrated network for health research in Quebec *A Huang, J Lemieux, JC Bouchard, M Bourque, R Tamblyn* Computer Simulation and Medical Education: Complementary Tools for the Third Millennium *Y Lessard, P Siregar, N Julen, JP Sinteff, P Le Beux* Demonstration of GuideView a Multi-platform System for Interactive Multimodal Presentation of Clinical Advice *M Sriram Iyengar, J Florez-Arango*	P 1
1530		**Refreshment Break EXPO HALL**	EXPO
1600	S152	**Activity Modeling** **Chair: Thomas Bürkle**	P 2
		A Systems Development Life Cycle Approach to Patient Journey Modeling Projects *Joanne Curry, Carolyn M. McGregor, Sally Tracy*	
		The Nurse-Patient Trajectory Framework *Gregory L. Alexander*	
		System Analysis and Improvement in the Process of Transplant Patient Care *Catherine Staes, R. Scott Evans, Scott Narus, Stanley Huff, John Sorensen*	
		St Elsewhere's or St Everywhere's: Improving Patient Throughput in the Private Hospital Sector *Jennifer Laffey, Moran Wasson*	

Slide 1

EMR, EHR in Japan
-with recent government activities

Michio Kimura, M.D., Ph.D.
Hamamatsu University, School of
Medicine

Slide 2

CPOE and EMR in Japan
Past Ministry Projects on EMR

⌘ Order entry system
  ⊠65% or more of the hospitals with more than 400 beds.
⌘ Electronic medical record system
  ⊠12% of the hospitals with more than 400 beds (as of the end of 2004 fiscal year) and 3% of clinic.

⌘ Past Ministry Projects on EMR
  ⊠Aid Money for EMR Installation (half aid, total budget 20Byen) by MHLW ...'01/02
  ⊠Aid Money for Regional EHR (total budget 25Byen) by METI ...'02/03

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Slide 3

Very Recent Government Activities

⌘ Interoperability of Health Information Systems Project by METI ...'04-'07
  ⊠IHE Japan activity support
  ⊠Trial XDS-I for neurosurgery referral in Nagoya
⌘ MHLW promotes Shizuoka Prefecture EHR for Nationwide Use ...04/'06
  ⊠Standardized referral documents
  ⊠Let CPOE become able to export data in HL7 v2.5
⌘ Clinical Trial 5 year Promotion Aid by MHLW ...'07-'11
  ⊠CDISC and HL7
⌘ Mandated Health Check Up for all 40-75 citizens from '08
  ⊠In hope of healthcare cost reduction
  ⊠Each insurer's performance measured by % of check up

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Slide 4

After All..

⌘ What we are going to share?
  ⊠Whole record vs Only summaries
⌘ Who is paying for EHR?
  ⊠Well kept personal health ecord is a premium for luxury insurance?
    ⊠In Japan "All health insurance is Equal."
⌘ How to avoid "nasty use" of health data by insurer?
  ⊠Vulnerable person may be eliminated from any insurance.

Michio Kimura M.D. Ph.D. Hamamatsu University School of Medicine

Slide 5

End of Presentation

⌘ In 2009. please come to
  ⊠HL7 Working group meeting May 2009 in Kyoto
  ⊠Hiroshima HIT week November 2009
    ⊠APAMI Conference
    ⊠IMIA WG4 Security
    ⊠IMIA General Assembly
    ⊠Japan National MI Convention JCMI29

Michio Kimura M.D. Ph.D. Hamamatsu University School of Medicine

Ⅲ.研究成果の刊行物・別刷

【学 会 発 表】

6. 木村通男

国際標準形式を用いた病診連携と集学的利用

－静岡県版電子カルテプロジェクトと

厚生労働省電子的情報交換事業 SS-MIX

第 51 回日本糖尿病学会学術集会

Journal of the Japan Diabetes Society

51-Supplement1, S-54, 2008.