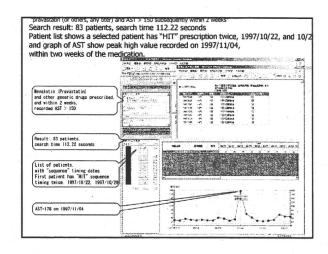


Hamamatsu University's Clinical Database: D*D

- \$73,709,298 records of 10 years of Lab. results, Prescriptions, Diagnoses,,
- #"Pravastatin (any titer, with generics)
 prescribed and recorded AST > 150 within
 two weeks" resulted in "83 Patients", took
 112.22 seconds
- Even in Note PC!

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Search examples in Hamamatsu University Hospital

- ※In 2007, number of patients with HbA1c=6.6-8.0, then examined again in 2-3 months
 △-5.8: 55 cases, 5.9-6.5: 289 cases, 6.6-8.0: 657 cases, 8.1-: 192 cases
- 36 "Gemzar" (gemcitabine, a cytosineantimetabolites) injected patient: 181 cases
 - △"After the injection" interstitial pneumonia (ICD-10 J84.x) diagnosed case: 7 cases
- Stroke onset, and within 3 years recurrence?

 Classification "Stroke" is not reliable, as it can be used for reimbursement reasons of CT scan.

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Odds ratio against control

SAII newly introduced drugs(2007-2009) medicated patients were checked of 5 lab results before/after first medication

%4th grade medical student's research report

	Control	AST	BUN	CK	Albumin	WBC
Abilify(R) Aripiprazole	Akineton(R) BiperidenHCI	1.388	1.378	0.751	3.182	0.262
Vegamox(R) MoxifloxacinHCI	Tarivid(R) Offexacin	1.108	0.394			1.56
Celecox(R) Celecoxib	Voltaren(R) DiclofenacNa	2.015		0.741	3.523	0.794
Orvesco(R) Ciclesonide	Selevent(R) Salmeterol				8.25	1.34
Gabapen(R) Gabapentin	Akineton(R) BiperidenHCI		0.005	7.8	1.174	5.895
Comtan(R) Entacapone	Akineton(R) BiperidenHCI			2.19		0.895
Crestol(R) RosuvastatinCa	Mevalotin(R) Pravastatin	0.501	2.217	4.052	11.57	0.872
ReQuip(R) RepinireleHCI	Akineton(R) BiperidenHCI			7 7	12.33	

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Pilot study by PMDA for 5 Shizuoka hospitals (total 3500 beds), which have D*D clinical search

★ For events which can be evaluated by lab results, disease classifications, DPC classifications, non-intervening search can be done

% Year 1: 2009

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Theme 1

Meuroleptic Malignant Syndrome by Olanzapine

☐ICD10: G210

△CPK>1000

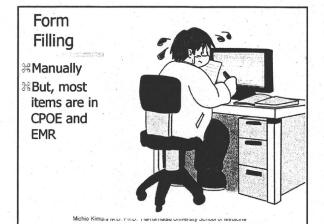
機構ターマ①: オランザビンによる悪性症候群 対象者検索条件 (循規系力産例) 主条件 A) 対象期間:2007年7月1日 - 2010年1月31日 B) 対象第:オランザビン¹の処方あり C) 投与時年齢:20歳以上 陽外条件 D) 対象期間:2007年4月1日~2007年5月30日 D) 対象第:オランザビンの処方あり ひラ共年齢設定なし 対象者 条件或: (A) and B) and C)) not (D) and E) } ヤース検真条件(副作用発理産例) a) 解名:オランザビンの金亀方から2か月以内に医性症検軽(CD10:G210)確定 診断あり D) 国底検査値:オランザビンの金亀方から2カ月以内にCPK1000 BJL以上 除外条件 の) 国底検査値:オランザビンの金亀方から2カ月以内にCPK1000 BJL以上 の・ 3 部あり の・ 3 部のでは、オランザビンの金亀方から2カ月以内にグントロレンナトリウム(注射薬)² の地方オランザビンの金亀方から2カ月以内にダントロレンナトリウム(注射薬)³ の売方あり マース 条件式: (a) or (b) not c) } or d) and 対象者

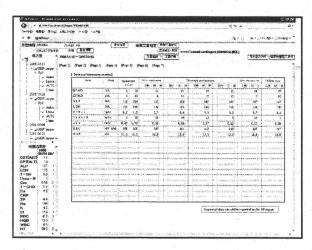
Post Market Adverse Event Report

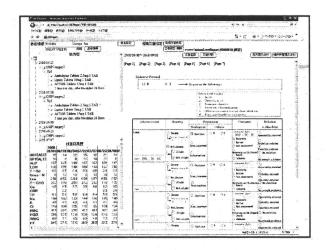
Manually collected in busy clinics

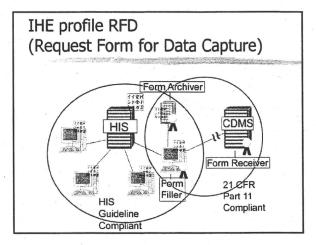


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CPOE(Computerized Physician's Order Entry) in Japan

- 3890%+ in large hospitals (400+ beds)
- Top 2 vendors became able to export patient demographics, prescriptions, lab results, diagnoses, in HL7 v.2 messages
 - △594 hospitals (March 2010)
 - MHLW standard designation ... March 2010
 - SHL7 v2.5, HL7 CDA R2, DICOM and IHE PDI, Codes (ICD10 disease code, drug code, lab exam code)

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MHLW notification

- March 2010
- 8 standards to be used for future reimbursements, ministry projects
 - ©IHL7 v2.5, CDA, DICOM, IHE PDI, Codes(ICD10, Rx, Lab), etc.

Director Hea

- Orector Health Philos Bures Director Health Insurance Bures
- Hotelschool concerning IT can dark to be enoughable
- nongs are to be designated as Mell IV star dat by Standard Master for Phoroscessical Products(HOT reference municipal SCHIC Based Standard Dusase Gode Medier for Electroric Medical Piccords
- Pasient Referral Document & Clarical Decument.
 Standard for inclemal documents for transposit.
 bit. PDEP organic Data for integral fotogration Profits, and its Application Guidaline.
- Encoding rules

 Digital braging and Communications in Medicine DICOM?

 Dis (ANS) Protocol for Objects Laboration Dica Communication
- 2. Embrustva
 With medical information pysione on Easilit or mattered in health are floated, in it is very reliable from
 when pricing it information swoodales for implement systems according to MRUX installable. It is all
 usualful for regional inaditioner concernation involved and meaning faility. And it is invested to have
- DICOM, THE PDI, standardors of encountries to make of enterior to place.

 Codes(ICD10, RX, some addressed of the encountries of the standard or regarded for recovery and orders and Lab), etc.

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Service and a se

Cabinet's office unveiled (June 2010) 5 healthcare IT roadmaps

- 霧「どこでもMy病院」
 - ☐ "My clinic, everywhere", PHR project
- 第「シームレスな地域連携医療」
- **録「レセプト情報の活用による医療の効率化」**

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Cabinet's office unveiled (June 2010) 5 healthcare IT roadmaps (cont.)

- 爰「医療情報データベースの活用による医薬品等安全対策」
 - □ "Pharmacovigilance by HIS data"
- 器「高齢者在宅医療介護見守り支援」
 - □ "Home care for elderly by IT"

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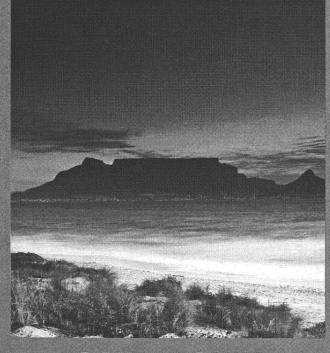
End of presentation Maracana Stadium, Rio de Janeiro Michio Kimura M.D. Ph.D. Hamamatsu University School of Medicine

8. M. Kimura, , YC Li, YS Kwak:
Survey for Asia-Pacific
Countries/Regions; What are the Medical,
Records for?
MEDINFO 2010, 13th World Congress on Medical
and Health Informatics,
Cape Town, South Africa, September 13,
2010.



13th World Congress on Medical and Health Informatics

12th to 15th September 2010



CAPE TOWN
International
Convention Centre



International Medical Informatics Association





PROGRAMME OVERVIEW - MONDAY 13 SEPTEMBER 2010

08h30 - 10h00	Audi 1	Student Paper Awards							
Session 1		Plenary 2							
Jession I		Dr Marion Ball							
		Prof Reinhold Haux							
10h00 -10h30	Exhibition Hall 4	Break							
Session 2	7.00	Parallel Session							
10h30 - 12h15		Papers							
	1.4.1 & 1.4.2	Public Health Informatics I							
	1.4.3 & 1.4.4	Translational Bioinformatics							
	1.6.1 & 1.6.2	Interoperability Issues							
	1.6.3 & 1.6.4	Specialised Registries							
	2.4.1 & 2.4.2	Adoption Determinants							
	2.4.4 & 2.4.5	Implementation							
	2.6.1 & 2.6.2	Intelligent Analysis of Monitoring Data							
	2.6.4 & 2.6.5	Emerging Technologies							
	Audi 1	Surveillance							
and the state of t	Roof Terrace	Mining Clinical Narratives							
12h15 - 13h30	Exhibition Hall 4	Lunch							
		Poster Session & Poster Tours 1							
13h30 - 15h00		Parallel Session							
Session 3		Papers							
	1.4.1 & 1.4.2	System Usability							
Banchigar spanned	1.4.3 & 1.4.4	Coding and Terminologies							
operation and the second and the sec	1.6.1 & 1.6.2	Citizen-Centric eHealth							
		Panels							
Empire dimensional access and the second access ac	1.6.3 & 1.6.4	979 HON code Certification: 13 years of services for improving the quality of health online information							
Resolvation concerns and	2.4.1 & 2.4.2	963 Accelerating the Translation of Knowledge into Clinical Decision Support Four National Demonstration Projects							
Surjection and the surjection of the surjection	2.4.4 & 2.4.5	2875 Information Models for Supporting Semantic Interoperability and System Development: Collaborative Efforts from the Domain							
Annotation and the second and the se	2.6.1 & 2.6.2	757 Automatic data analysis in Biomedicine: Applications and Challenges							
diameter and a second	Roof Terrace	518 Social Media – New Tools for Personal Health and Wellbeing							
	Audi 1	441 Survey for Asia-Pacific Countries/Regions; "What are the Medical Records for?							
15h00 - 15h30	Exhibition Hall 4	Break							
15h30 - 17h15		Parallel Session							
Session 4		Papers							
i i	Audi 1	Nursing Informatics							

Correct at date of print - 20 August 2010



MONDAY 13 SEPTEMBER 2010

TIME:	VENUE:	ACTIVITY;						
	Audi 1	441: Survey for Asia-Pacific Countries/Regions; What are the Medical Records for? (M Kimura, YC Li, YS Kwak)						
15h00 15h30	Exhibition Hall 4	Break						
15h30 17h15		Parallel Session						
Session 4	and the state of t	Papers						
	Audi 1	Nursing Informatics Chair: Heimar Marin						
		120: Clinical users prospective on telemonitoring of patients with long term conditions: understood through concepts of Giddens s structuration theory & consequence of Modernity (U Sharma, M Clarke)						
		176: Analysis on data captured by barcode medication administration system with PDA for reducing medical error at point of care in Japanese Red Cross Kochi Hospital. (M Akiyama, A Koshio, N Kaihotsu)						
		993: Foundations for a Nursing Services Reference Model (L Heslop, K Toh, E Hovenga)						
		653: Ambulatory orthopaedic surgery patients knowledge with Internet-based education (K Heikkinen, S Salanterä, H Leino-Kilpi)						
	1.4.1 & 1.4.2	Telemedicine Chair: Maurice Mars						
		859: Leapfrogging Paper-Based Records Using Handheld Technology: Experie from Western Kenya (M Were, J Kariuki, V Chepng'eno, M Wandabwa, S Nde P Braitstein, J Wachira, S Kimaiyo, B Mamlin)						
		59: Cell phone Short Messaging Services (SMS) in Health care pertaining to HIV/AIDS in South Africa. (KC Mukund Bahadur, P J. Murray)						
		203: Deploying Portable Ultrasonography with Remote Assistance for Isolated Physicians in Africa: Lessons from a Pilot Study in Mali (CO Bagayoko, M Niang, ST Traoré, G Bediang, JM Naef, A Geissbuhler)						
		774: Exploring Feasibility of Home Telemanagement in African Americans with Congestive Heart Failure (J Finkelstein, E Cha, C Dennison)						
		224: A Configurable Home Care Platform for Monitoring Patients with Reminder Messaging and Compliancy Tracking Services (D Capozzi, G Lanzola)						
	1.4.3 & 1.4.4	Communication and Workflow Issues Chair: Nicola (Nikki) Shaw						
		212: Why is it so difficult to measure the effects of interruptions in healthcare? (F Magrabi, SYW Li, AG Dunn, E Coiera)						
	AND AND COLOR OF THE PARTY OF T	397: Impact of a Critical Care Clinical Information System on Interruption Rates During Intensive Care Nurse and Physician Documentation Tasks (M Ballermann, N Shaw, K Arbeau, D Mayes, N Gibney)						
	de la constantina del constantina de la constantina del constantina de la constantin	749: Peri-operative Communication Patterns and Media Usage Implications for Systems Design (ES Karlsen, P Toussaint)						
		806: Do CPOE Actually Disrupt Physicians-Nurses Communications? (S Pelayo F Anceaux, J Rogalski, MC Beuscart-Zephir)						
	Control of the Contro	839: The Avoidable Misfortune of a Computerised Patient Chart (I Sørby, G Seland, Ø Nytrø)						





APAMI Panel: What are the Medical Records for?

Michio Kimura, Jack Li, CP Wong

continued and revised from the panel at Hiroshima, Nov 2009



LPAM12009

Survey on Medical Records and EHR to Asia-Pacific delegates

Peter Croll(AU), BaoLuo Li(CN), CP Wong(HK), SB Gogia(ID), Anis Fuad(IN), Michio Kimura(JP), YunSik Kwak(KR), Stephen Chu(NZ), Alvin Marcelo(PH), ChowYuen Ho(SG), Wansa Paoin (TH), YuChuan Li(TW)

PAMI2009

Questionnaire sent to APAMI delegates (12 valid answers)

- Purpose of medical records is primary for healthcare itself, what are 2nd? 3rd?
- #Do your country/region has national ID? national health ID?
- What is the status of your country/region's EHR(lifelong health record) project status?
 - Purpose of EHR is primary for continuity of care, what are 2nd? 3rd?

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Questionnaire sent to APAMI delegates (12 valid answers)(cont'd)

- What language is used for; medical records? nursing records?
- Bisclosure of medical record contents to patient. referred physician, insurance payer, public health dept., health policy dept. are unconditional/conditional/prohibited?
- Secondary use of medical record (dis-identified) by public health dept., health policy dept., non-profit research, for-profit research, are unconditional/conditional/prohibited? Any general regulations?

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Follow-up questionnaires on ID (1)

- Boes your country/region have unique ID for residents?
 - ☐ If YES, the ID is used/linkable to following purposes?
 - Healthcare claim person number
 - Healthcare record patient number at each provider
 - Healthcare record patient number among providers (unique EHR patient number)
 - Pension record number
 - Taxpaver's number
 - Driver's license number
 - Passport number

PAM12005 Employee number Hamamatsu University School of Medicine

Follow-up questionnaires on ID (2)

- 36 Does your country/region have unique healthcare ID for patients?
 - If YES, the ID is used/linkable to following purposes?
 - Healthcare claim person number
 - Healthcare record patient number at each provider
 - Healthcare record patient number among providers (unique EHR patient number)
 - Pension record number
 - ☑ Taxpayer's number
 - Driver's license number
 - Passport number

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Follow-up questionnaires on Privacy regulations

- SIs there any regulation/legislation concerning secondary use of private data? (Person's ID enough anonymised, and without person's consent)

 - ☐ General privacy regulations only
 - ☐General privacy regulation, which puts emphasis on healthcare
 - Privacy regulation, specially for healthcare

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Languages used

• .	Medical records	Regulations on description	Nursing records	Medical school education	Nursing school education
Australia	English	Must be English	English	Emglish	English
China	Chinise		Chinese	Chinese	Chinese
HK	English		English	English	English
India	English		English	English	English
Indonesia	Indonesia	Must be Indonesia	Indonesia	Indonesia	Indonesia
Japan	Japanese	Must be Japanese	Japanese	Japanese	Japanese
Korea	Korean & English	Must be Korean	Korean & English	Korean & English	Korean & English
NZ	English		English	English	English
Philippines	English		English	English	English
Singapore	English		English	English	English
Thailand	Thai & English		Thai & English	Thai & English	Thai & English
Taiwan	English		Chinese	Chinese	Chinese

Purpose of Medical Records, Primary is for Healthcare itself. What comes after it?

Australia: Bill, Research, Manage, Edu, PH

岩 China: Manage, Bill, Research, PH, Edu

Manage, PH, Bill, Research, Edu ₩ HK:

Bill, "Protection against Litigation", Manage, PH, Edu 35 India:

🔐 Indonesia: Bill, PH, Manage, Edu, Research 36 Japan: Bill, Edu, Research, Manage, PH

Korea: Bill, Edu, Research, Manage, PH, "Legal Document"

₩ NZ: Manage, Bill, "Health Policy", PH, Edu, Research

Bill, Research, PH, Manage, Edu

🗝 Singapore: Bill, PH, Manage, Research, Edu

Thailand: Bill, Manage, Edu, Research, PH

Taiwan: Bill, Manage, Research, Edu, PH

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Does your country/region have unique ID for residents?

#If YES, the ID is used/linkable to following purposes?

	AU	CN	HK	IN	ID	JP	KR	NZ	PH	SG	TH	TW
YES orNO	N	Y	Y	N	Y	Y	Y	N		Y	Y	Y
Healthcare Claim Number	-	N	U	-	N	N	L	-	1	U	U	U
Hospital Patient Number	-	N	L	-	L	N	L	-		U	L	L
Unique EHR Number	-	N	U	-	N	N	L	-	T	U	N	N
Pension Record Number	-	L	U	T -	N	N	L	-		U	N	U
Taxpayer's Number	1-	U	L	-	'N	N	L	-	1	U	L	U
Driver's License Number	-	L	U	-	L	N	L	-	T	U	L	U
PassportNum ber	-	N	L	-	L	L	L	-		U	L	L
Employee Number	-	L	L	-	N	N	L	1-1	T	U	N	L

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unique healthcare ID for patients?

If YES, the ID is used/linkable to following purposes?

	AU	CN	HK	IN	ID	JP	KR	NZ	PH	SG	TH	TW
YES, NO or Citizen D	N	N	ID	ID	N	Y	N	Y		ID	ID	Y
Healthcare Claim Number	T-	T -	U	N	-	U	T -	U	1	N	U	U
Hospital Patient Number	-	-	L	L	-	L	1-	N		N	L	L
Unique EHR Number	-	-	U	N		N	1-	N	1	N	N	N
Pension Record Number	-	1-	U	N	1 -	N	1-	N		N	N	U
Taxpayer's Number	-	1 -	L	N	1-	N	-	N		N	L	U
Driver's License Number	-	-	U	'N	-	N	-	N	1	N	L	U
P assport Num ber	-	-	L	N	T-	N	T-	N	1	N	L	L
Employee Number	-	-	L	L	-	L	T-	N	1	L	N	L

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EHR Project Status

- 36 Australia: Being partially tested
- # China: Being partially tested
- ३३ Hong Kong: Almost accomplished
- ₩ India: No plan
- 38 Indonesia: Being partially tested
- ∺ Japan: Being partially tested
- ₩ Korea: Being partially tested
- Being partially tested
- Rhilippines: No plan
- 35 Singapore: Being partially tested
- # Thailand: Being partially tested
- Raiwan: Being partially tested

Purpose of EHR, Primary is for continuation of care. What comes after it?

- # Prioritize among:
 - ☑ Public Health/Disease Control, Healthcare Cost Cut, Clincal Research
- HK: 2:HCC, 3:PH

 Indonesia: 2:HCC, 3:PH, 4:CR
- ## Japan: 2:HCC, 3:PH, 4:CR
- % Korea: 2:HCC, 3:PH, 4:CR % Singapore: 2:HCC, 3:PH, 4:CR
- # Thailand: 2:PH, 3:CR, 4:HCC # Taiwan: 2:HCC, 3:CR, 4:PH

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Disclosure (patient name identified, without patient's consent) to;

第O: Unconditional, C: Conditional, X: Not done/prohibited

	The patient	Referred Dr	Insurance	Public Health	Health Policy
AU	C(Summery)	X	X	C(Infections)	C(Claim query)
CN	0	0	0	C(If Name required)	X
HK	0	0	0	X	0
ID	0	0	X	C(Notifiable Disease)	0
IN	0	0	0	0	0
JP	C(Approval)	0	C(Claim query)	C(Notifiable Disease)	X
KR	0	X	0	0	X
NZ	C(Approval)	Χ .	C(Claim data)	C(Disease Control)	X
PH	0	0	0	C(per protocol)	C(per protocol)
SG	0.	X	X	C(Infection Act)	C(Stats. Act)
TH	X	0	X	0	0
TW	X	X	X	X	X

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Secondary Use (patient name enough anonymized, without consent) by;

	Public Health	Health Policy	non-profit	for-profit	Any reg.
AU	0	0	0	0	0
CN	C	0	0	0	X
HK	0	0	C(Universities)	0	Χ .
ID .	0	0	C(Approval)	C(Approval)	X
IN	C(Certain Disease)	C(Certain Disease)	C(Approval)	C(agency member)	X
JP	Χ .	X	C(IRB)	Χ .	0
KR	C(Outbreak)	X	X	X	0
NZ	C(No other purpose)	C(No other purpose)	C(No other purpose)	X	0
NZ PH SG	0	X	X	X	X
SG	C(Stats Act)	C(Stats Act)	C(IRB)	C(IRB)	X
TH	X	X	0	X	X
TW .	0	0	0	0	X

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End of Presentation

- Memory of APAMI 2009 in Hiroshima
 - Peace Memorial Park and Museum (next to the venue)
 - Miyajima Shrine on the Sea (50 minutes boat or train ride)





