EFMI STC 2010

Seamless Care - Safe Care

**The Challenges of Interoperability
and Patient Safety in Health Care**

June 2-4, 2010
Reykjavik, Iceland

EFMI
European Federation for Medical Informatics

ský
Skýrslutæknifélag Íslands

Conference Overview

Wednesday, June 2

17:00   Registration – University Center
18:00   Opening Ceremony
             • Minister of Health of Iceland, Álfheiður Ingadóttir
             • Welcome Reception

Thursday, June 3

9:00 - 18:00   Full day conference
19:30   Gala dinner at Restaurant Perlan
             (Bus from University Center 19:15)

Friday, June 4

09:00 - 17:00 Full day conference
17:00   Closing Ceremony

Keynote Speakers

William E. Hammond PhD

W. Ed Hammond is Head of the newly launched Duke Center for Health Informatics, Professor, Department of Community and Family Medicine and Professor, Department of Biomedical Engineering, Duke University and Adjunct Professor in the Fuqua School of Business at Duke University. He is a Past President of the American Medical Informatics Association (AMIA). Recently he successfully completed his third term as Chair of Health Level 7. He is Co-Chair of the Advisory Council; and Co-Chair of the Clinical Interoperability Council. He was Chair of the Data Standards Working Group of the Connecting for Health Public-Private Consortium. Dr. Hammond was a member of the IOM Committee on Patient Safety Data Standards and a member of the Panel for the evaluation of ONC. He served as President of the American College of Medical Informatics and as Chair of the Computer-based Patient Record Institute. He served as the Convenor of ISO Technical Committee 215, Working Group 2 for 6 years and is currently ISO TC 215's Ambassador to Developing Countries. He was chair of the ISO/CEN/HL7/CDISC/IHTSDO Joint Initiative Council. He is a founding fellow of ACMI and a founding fellow of AIMBE. He was a member of the National Library of Medicine's Long Range Planning Committee (2006) and a member of the Healthcare Information Technology Advisory Panel of the Joint Commission on Accreditation of Healthcare Organizations (2006). He was an advisor to the American Hospital Association Information Technology Standards Initiative Strategy Committee and a member of the Tolven Institute Governing Board. Dr. Hammond was awarded the Paul Ellwood Lifetime Achievement Award in 2003 and the ACMI Morris F. Collen Award of Excellence in November 2003. He has published over 350 technical articles.

Peter L. Elkin MD

Dr. Peter L. Elkin is a Professor of Medicine at the Mount Sinai School of Medicine. He is the Center Director of Biomedical Informatics and the Vice-President of Mount Sinai hospital for Biomedical and Translational Informatics. He received his Batchelor of Science from Union College and his M.D. from New York Medical College. He did his Internal Medicine residency at the Lahey Clinic and his NIH/NLM sponsored fellowship in Medical Informatics at Harvard Medical School and the Massachusetts General Hospital. Dr. Elkin has been working in Biomedical Informatics since 1981 and has been actively researching health data representation since 1987. He is the primary author of the American National Standards Institute's (ANSI) national standard on Quality Indicators for Controlled Health Vocabularies ASTM E2087, which has also been approved by ISO TC 215 as a Technical Specification (TS17117). He has chaired the OASIS International Healthcare Continuum and served as a co-chair of Health and Human Service's HITSP Technical Committee on Population Health. Dr. Elkin served as the co-chair of the AHIC Transition Planning Group. Dr. Elkin is a Master of the American College of Physicians and a Fellow of the American College of Medical Informatics. Dr. Elkin chairs the International Medical Informatics Associations Working Group on Human Factors Engineering for Health Informatics. He was awarded the Mayo Department of Medicine's Laureate Award for 2005. Dr. Elkin is the index recipient of the Homer R. Warner award for outstanding contribution to the field of Medical Informatics.

Conference Committees

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Bernd Blobel, *Chair*
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Jos Aarts
Stig Kjær Andersen
Jacob Hofdijk
Christian Lovis

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DAY 1 Thursday, June 3
MAIN HALL – HT105

KEYNOTE 1 (*Session Chair*: Bernd Blobel, Germany)

9:00-10:00 **William E. Hammond:**
Seamless Care: What is it; what is its value;
what does it require; when might we get it?

SCIENTIFIC SESSION 1 – Patient Empowerment, Patient Satisfaction
(*Session Chairs*: Jana Zvarova, Czech Republik; Ebba Þóra Hvannberg, Iceland)

10:00-10:20 F.A. Allaert, C. Quantin:
Patients' Empowerment of their Personal Health Record Requires Strong
Traceability to Guarantee Patients Health Care Security

10:20-10:40 L. Huniche, B. Dinesen, O. Grann, E. Toft, C. Nielsen:
Empowering Patients with COPD Using Telehomecare Technology

10:40-11:00 C. Showell, E. Cummings, P. Turner:
Language Games and Patient-centred eHealth

11:00-11:40 Coffee Break (Foyer)

SCIENTIFIC SESSION 2 – Process and Systems Evaluation
(*Session Chairs*: Jacob Hofdijk, The Netherlands; Guðrún Auður Harðardóttir, Iceland)

11:40-12:00 I. Johansen, M. Rasmussen:
Interoperability in Exchanging Lab Test Orders and Results between
Laboratories Results in Full Traceability

SCIENTIFIC SESSION 3 – Security, Privacy, Safety and Quality
12:00-12:20 I. Tvede, K. Bredegaard, J.S. Andersen:
Quality Improvements Based on Detailed and Precise Terminology

12:20-12:40 B.T. Björnsson, G. Sigurdardottir, S.O. Stefansson:
Risk Assessment of Integrated Electronic Health Records

12:40-13:00 B. Katt, T. Trojer, R. Breu, T. Schabetsberger, F. Wozak:
Meeting EHR Security Requirements: SeAAS Approach

13:00-14:00 Lunch (Foyer upstairs)

SESSION KEYNOTE – Interoperability
(*Session Chair*: Stig Kjær Andersen, Denmark)

14:00-14:30 B. Blobel, C. Gonzalez,
F. Oemig, D.M. Lopez, P. Nykänen, P. Ruotsalainen:
The Role of Architecture and Ontology for Interoperability

SCIENTIFIC SESSION 4 – Interoperability and Standards 1
(*Session Chairs*: Ragnar Nordberg, Sweden; Guðlaug Sigurðardóttir, Iceland)

14:30-14:50 H. Demski, C. Hildebrand, A. Brass, S. Jedamzik, R. Engelbrecht:
Improvement of Cross-Sector Communication for an Integrated
Health Environment

14:50-15:10 M.H. Kuo, A.W. Kushniruk, E.M. Borycki:
Design and Implementation of a Health Data Interoperability Mediator

15:10-15:30 C. Gonzalez, B. Blobel, D.M. Lopez:
Ontology-based Interoperability Service for HL7 Interfaces Implementation

15:30-15:50 F. Oemig, B. Blobel:
Harmonizing the Semantics of Technical Terms by the Generic Component Model

15:50-16:10 M. Nagy, P. Preckova, L. Seidl, J. Zvarova:
Challenges of Interoperability Using HL7 v3 in Czech Healthcare

16:10-16:30 M. Robles, J.T. Fernández-Breis, J.A. Maldonado, D. Moner, C. Martínez-Costa, D. Boscá, M. Menárguez-Tortosa:
Use of Semantic Web Technologies and Archetypes for the Description of EHRs

16:30-17:00 Tea Break (Foyer)

SESSION KEYNOTE – GS1 (*Session Chair*: Assa Reichert, Israel)

17:00-17:30 U. Kreysa:
When Supply Chain meets Care Delivery: Background on GS1 and HL7 Collaboration

POSTER SESSION – Poster Short Presentations 1
(*Session Chairs*: Christian Lovis, Switzerland; Hákon Sigurhansson, Iceland)

17:30-17:35 J.A. Maldonado, D. Moner, D. Boscá, L. Marco, J.T. Fernández-Breis, E. Reig, M. Robles:
LinkEHR-Ed: A Tool for the Description and Normalization of Legacy Clinical Data

17:35-17:40 M. Prados, M.C. Peña, B. Prados, B. Martinez, J.C. Ortigosa , A.C. Delgado:
Electronic Health Record (EHR) Representation through an Ontology. Mobility, Accessibility, and Interoperability Usefulness

17:40-17:45 L.D. Şerbănaţi, A. Vasilăţeanu:
Agent-based Electronic Healthcare Record

17:45-17:50 V. Ilakovac, M. Hercigonja-Szekeres, J. Devlies, G. De Moor:
Text Analysis of EuroRec Repository Statements for the Purpose of Creation Multilingual Dictionary

17:50-17:55 R. Iljaž, M. Meglič, I. Švab:
Experts' Consensus about ePriorites in Slovene Primary Care – Work in Progress

17:55-18:00 V. Kebo, P. Klement, Z. Čermáková, J. Gottfried, M. Sommerová, A. Paleček:
Potential of RFID Technology in Blood Center

DAY 1 Thursday, June 3
HALL 2 – HT104

10:00-11:00 **WORKSHOP 1 – Case Mix Panel**
The Dutch Health care system has been in reform since 1990, shifting from supply to demand orientation. Now 30% of the hospital care is contracted by health insurers and hospitals. Also, a new model of funding of chronic diseases management has been introduced. In the workshop, the first results of this approach will be presented and discussed.
Chair: Jacob Hofdijk (Netherlands)

11:00-11:40 Coffee Break (Foyer)

11:40-13:00 **WORKSHOP 2 – EFMI Primary Care Informatics WG Workshop**
Usable Systems and Usable Data – Twin Challenges to Support Seamless Care.
Discussants: Chris Pearce (Australia), Kristjan Gudmundsson (Iceland)
Chair: Simon de Lusignan (UK)

13:00-14:00 Lunch (Foyer upstairs)

14:30-16:30 **WORKSHOP 3 – European Convergence Workshop –**
Towards a Roadmap on Semantic Interoperability.
The goal is to initiate a consensus and cooperation process between European projects and initiatives through regular convergence work-shops on relevant topics including technical, human, semantic, legal, and process aspects
Chair: Christian Lovis (Switzerland)

16:30-17:00 Tea Break (Foyer)

DAY 1 Thursday, June 3
HALL 3 – HT300

10:00-13:00 **Convergence Workshop on Semantics and Ontology**
(by invitation only)

DAY 2 Friday, June 4
MAIN HALL– HT105

KEYNOTE 2 (*Session Chair*: Jos Aarts, The Netherlands)

9:00-10:00 **Peter L. Elkin**, B.E. Trusko, R. Koppel, T. Speroff, D. Mohrer, S. Sakji, I. Gurewitz, M. Tuttle, S.H. Brown:
Putting the Semantics back in Interoperability

SCIENTIFIC SESSION 5 – Interoperability and Standards 2
(George Mihalas, Romania; Arna Harðardóttir, Iceland)

10:00-10:20 D. Moner, J.A. Maldonado, D. Boscá, C. Angulo, M. Robles, D. Pérez, P. Serrano:
CEN EN13606 Normalisation Framework Implementation Experiences

10:20-10:40   P. Krause, S. de Lusignan:
Procuring Interoperability at the Expense of Usability: a Case Study of UK National Programme for IT Assurance Process

SCIENTIFIC SESSION 6 – Traceability

10:40-11:00   J.J. Sarrasin, M. Schumacher, C. Hay, P. Richard:
HEALTH-IDENTITY: Mobile Services for Consumers of Medicines

11:00-11:40   Coffee Break (Foyer)

SCIENTIFIC SESSION 7 – Patient Safety and Continuity of Care
(*Session Chairs*: Rolf Engelbrecht, Germany; Björn Jónsson, Iceland)

11:40-12:00   R. Wipfli, C. Lovis: **Alerts in Clinical Information Systems: Building Frameworks and Prototypes**

12:00-12:20   L. Stoicu-Tivadar, V. Stoicu-Tivadar, D. Berian: **Tele-assistance for Discharged Patients Supporting Continuity of Care**

12:20-12:40   M. Romano, M. Cesarelli, G. D'Addio, M.C. Mazzoleni, P. Bifulco, N. Ferrara, F. Rengo: **Telemedicine Foetal Phonocardiographic Surveillance: an Italian Satisfactory Experience**

12:40-13:00   M. Rigby: **Citizens, Seamlessness, and Care - Inter-relationships and Inter-operability**

13:00-14:00   Lunch (Foyer upstairs)

SESSION KEYNOTE – Electronic Health Record
(*Session Chair:* Valgerður Gunnarsdóttir, Iceland)

14:00 -14:30   M. Heimisdóttir: **Electronic Health Record, Why and for Whom?**

SCIENTIFIC SESSION 8 – Electronic Health Records, Personal Health Records
(*Session Chairs:* John Mantas, Greece, Óskar Einarsson, Iceland)

14:30-14:50   J. Mykkänen, M. Tuomainen, I. Luukkonen, T. Itälä:
Service functional models and their relationship to EHR-S Functional Model.

14:50-15:10   A. Brass, D. Moner, C. Hildebrand, M. Robles: **Standardized and Flexible Health Data Management with an Archetype Driven EHR System (EHRflex)**

15:10-15:30   M.A. Shifrin: **On a Seamless Transition from a Running EPR System to a New One**

15:30-16:00   Tea Break (Foyer)

SCIENTIFIC SESSION 9 – Patient Safety and Continuity of Care

16:00-16:20   D. Zikos, M. Diomidous, J. Mantas: **A Framework for the Development of Patient Safety Education and Training Guidelines**

POSTER SESSION – Poster Short Presentations 2
(*Session Chairs:* Patrick Weber, Switzerland; Sigrún Gunnarsdóttir, Iceland)

16:20-16:25 O. Belov, I. Belova:
Distributed Medical Information System

16:25-16:30 G. Endel, K. Neumann, R. N. Boubela, K. Kalcher, G. Nell:
Clinical Relevance of Pharmacologic Interactions

16:30-16:35 E. Mytilinaiou, V. Koufi, F. Malamateniou, G. Vassilacopoulos:

**A Context-Aware Authorization Model for Interoperable
Electronic Health Records**

16:35-16:40 P. Doupi:
**Automated Trigger Tool Development Using the Finnish Minimum
Data Set for EPRs**

16:40-16:45 S. Lou, L. Hulbæk:
**Improving Interpreting Services in Health Care through the
Use of Video Conference Equipment**

16:45-16:50 K.S. Kristjánsdóttir:
The Heart of the Matter: a Dashboard in the Emergency Department

16:50-16:55 K.S. Kristjánsdóttir, C. Delaney, M.D. Ragnarsdóttir, B. Westra:
**Can Electronic Health Record Users in Iceland Prescribe
Interprofessional Treatment Plans? A Pragmatic Use of Clinical
Vocabularies and User Centered Design**

17:00   **Closing Ceremony**

**DAY 2 Friday, June 4
HALL 2 – HT104**

10:00-13:00   WORKSHOP 4 – HL7/GS1 Workshop
The completion of domain-specific message and document definitions by process control mechanisms
(Christian Hay, GS1)

**From prescribing to administering cytostatics - How GS1 standards can be used for supportingglobal
traceability** (Stéphane Spahni, University Hospitals of Geneva, Switzerland)

**The EHR-S/PHR-S Functional Models and specialized Functional Profiles – Means for organizing
workable interoperability** (John Quinn, HL7 International)

**Reference Ontology for Semantic Service Oriented Architectures and the HL7 SOA Healthcare
Ontology Project** (Juha Mykkänen, HL7 Finland, University of Kuopio)

**The HL7 Composite Security and Privacy Domain Analysis Model – an important step towards
interoperable security and privacy environments** (Bernd Blobel, HL7 Germany, University of Regensburg)

The disciplinary, organisational, social and challenge of interoperability (Charles Jaffe, HL7 International)
Chair: Ed Hammond, HL7 International and Duke Center for Health Informatics, USA

11:00-11:40 Coffee Break (Foyer)
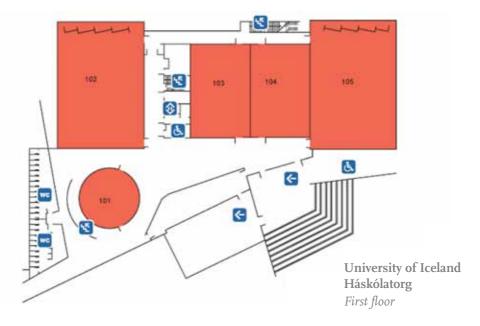
13:00-14:00 Lunch (Foyer upstairs)

14:30-16:30   WORKSHOP 5 – The Conception of Clinically Functional Software
**This tutorial discusses how to apply user centred design in the design of information technology
and how that methodology can ease the deployment of new technology into the clinical setting
without disrupting processes and endangering patients.**
Chairs: Kristín Sólveig Kristjánsdóttir and Margrét Dóra Ragnarsdóttir (Iceland)

15:30-16:00 Tea Break (Foyer)

VENUE:
University of Iceland – Háskólatorg
Reykjavík, Iceland

**University of Iceland
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First floor

Special Tours

- Special trip around Iceland in 6 days, June 5 - June 10
- Blue Lagoon bath and dinner, June 4
- Volcano tours, June 5
- Golden Circle, June 5
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