

## greenCDA™ Implementation Guide Now Available



Liora Alschuler

By Liora Alschuler, Co-Chair, HL7 Structured Documents Work Group  
and Co-Editor, greenCDA

The HL7 greenCDA Implementation Guide has been published by the HL7 Structured Documents Work Group. The HL7 Clinical Document Architecture (CDA®) is at the core of the requirements for Meaningful Use of Electronic Health Records. It supports continuity of care and re-use of clinical data for public health reporting, quality monitoring, patient safety and clinical trials. greenCDA maintains the utility of CDA while making it easier to implement. It is a simplified XML for CDA templates.

“Any developer with basic XML knowledge and a tool that can process simple XML schemas can create green instances. We flattened the hierarchy, focused on variable data versus fixed structural markup, and removed complexities like xsi:type. The result is simple and intuitive,” said Rick Geimer, Lantana Group CTO and co-editor of the greenCDA Implementation Guide.

greenCDA features include:

- XML schema validation
- Simple business names
- Tagged data elements in extensible library
- Rapid path to Meaningful Use compliance
  - Modular XML with business names generate JAVA, .NET
  - Single style sheet display, as for all CDA
  - Extensible to physician documentation requirements and quality

The enthusiastic response to the development of greenCDA is driving rapid experimentation and has raised the question of how greenCDA fits into the larger ecosystem of clinical information systems. This trial use and experimentation will help us understand how going green affects ease of use for data capture; management and analysis; when it might be an appropriate wire format for CDA; if there are significant limits on expressivity; and where the cost and benefits may lie.

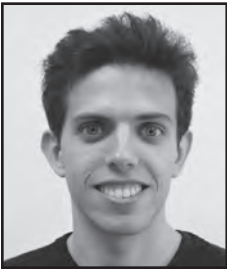
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Manuel Domingo

# Clinical Document Architecture: Spirometry Test Standardization



Matias Lizana

By M. DOMINGO and M. LIZANA, Centre de Competències d'Integració. Parc de la ciència i la innovació Tecnocampus de Mataró. 08304-Mataró, Espanya  
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Respiratory diseases, especially chronic obstructive pulmonary disease (COPD), lung cancer and tuberculosis, are main causes of mortality that will continue to increase in the coming decades. A spirometer is the medical device mandated to measure the pulmonary volume and capacity, identifying possible alterations. Commonly, all devices have a proprietary data format output. This is a setback for their integration in different environments because when data is stored on a shared repository, it is not interoperable since all of the data does not share the same format nor does it contain structured data.

Driven by “Oficina d'Estàndards i Interoperabilitat de TICSalut” and “Pla de Digitalització de la Imatge Mèdica del Departament de Salut de la Generalitat de Catalunya,” a standard has been created based on the HL7 Clinical Document Architecture, Release 2 (CDA® R2). The goal of the standard is to normalize a complete data set, including both data received from spirometers as well as those that come from the test citation provided by the electronic clinical history from a hospital or medical center.

Consequently, this standard creates a spirometry report that contains not only the information re-

lated with the spirometry test, but also all the data from the test request, patient identification, and spirometer. This set of data compiled from different sources requires applying a CDA R2 structure, oriented to ease the integration between medical device and the health information system (HIS), and a higher interoperability among hospital information systems.

The data model<sup>1</sup> has been developed by a multidisciplinary scientific team, consisting of pulmonologists, health-tech experts and spirometer manufacturers, thus providing different perspectives about this model. The model is thus enriched by the diversity and vast knowledge of the team.

Two versions of this data model<sup>1</sup> exist. The first version is more detailed and is clearly oriented to a subsequent execution of a data mining system. The second version is more basic and takes into account that not all the centers or hospitals can provide the information required by the detailed version.

After the data model was developed, a set of normative and technological artifacts was generated to facilitate the standard implementation:

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***This standard creates a spirometry report that contains not only the information related with the spirometry test, but also all the data from the test request, patient identification, and spirometer.***

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## Spirometry Test Standardization continued from page 3

### INFORME DE ESPIROMETRIA

Paciente:	Manel Domingo Falcón	Fecha Nacimiento:	Febrero 1, 1986	ID paciente:	38863687N
Prueba realizada el:	Febrero 21, 2011	Sexo:	Masculino	Tipo ID:	CIP
Edad:	25 años	Talla:	1.75 m	Peso:	63 Kg
Grupo Etnico:	Caucásica	Fumador:	Si	Médico Solicitante:	Roberto Esteban Fernandez
Organización responsable del documento:	SAP HOSPITAL CLINIC I PROVINCIAL DE BARCELONA	Espirometro Autor:	EasyOne - software EasyWare 2.20.0.0 en HCB	Organización solicitante:	HOSPITAL CLINIC I PROVINCIAL DE BARCELONA
Técnico realización prueba:	Rebeca Fernandez Estrada				

### RESULTADOS DEL ESTUDIO

Descripción	Unidad	Valor Basal	Valor Referencia	% del V.Ref
Cantidad Maniobras		8		
FVC (L)	L	-3.6819	4.7262	-77.90
FEV1 (L)	L	-3.1544	3.6812	-85.69
FEF25-75	L/s	-3.5394	3.3106	-106.91
PEF	L/s	-6.4481	9.2287	-69.87
Grado de calidad	D no reproducible			

### CONTROL CALIDAD

+ RESULTADOS POR MANIOBRA DE LA PRUEBA BASAL

### GRÁFICAS

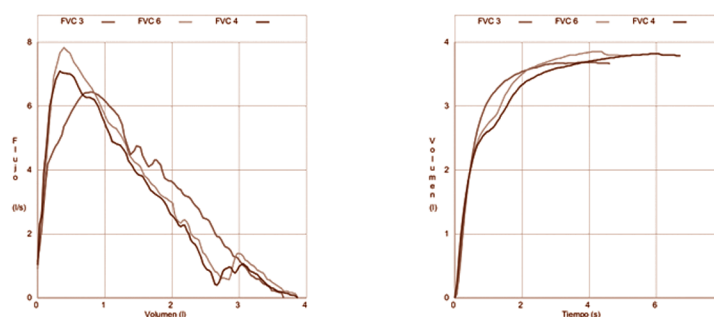


Figure 1. Visualization of spirometry report CDA R2

- **CDA R2 Spirometry Implementation Guide<sup>2</sup>:** This guide contains the norms to follow to implement CDA R2 correctly, including mandatory fields and their content. Two versions of this implementation guide have been created—one for each version of the data model.
- **CDA R2 XML Formatted Templates:** A set of CDA R2 spirometry templates has been created. Templates exist for both versions, basic and detailed.
- **XSL Style Sheet:** This is a file needed to visualize spirometry CDA R2, which follows a standard style sheet for CDA-HL7 presentation.

The first implementation of the CDA R2 spirometry standard was through an open-source integration framework called EI2Med, based on Mirth Connect, in which many tools have been developed to ease generation and integration between standard files and HIS. Manufacturers and spirometry models have been integrated with the integration framework EI2Med.

Public hospitals in Catalonia are currently collaborating on pilot projects to validate the normalization and integration technology of the spirometry tests. There are plans to start the implementation in all health facilities in Catalonia.

Using spirometry CDA R2 allows for the resulting reports to be shared through different hospital health information systems, and executes data mining services, that are very important for medical research processes. It is also important to note that the doctor can view the spirometry digitally from his workstation and watch the tests history for each patient.

### References

- <sup>1</sup> T. Salas, M. Domingo, y F. Burgos. Data model of the CDA R2 spirometry standard to the "Departament de Salut de la Generalitat de Catalunya." 2010.
- <sup>2</sup> M. Domingo, M. Lizana y D. Kaminker. CDA R2 spirometry implementation guide to the "Departament de Salut de la Generalitat de Catalunya." 2010.



Rene Spronk

# Software Implementation of CDA®

By Rene Spronk, Co-Chair, HL7 RIMBAA Work Group; Trainer/Consultant, Ringholm

This article is an abridged version of a RIMBAA whitepaper created by the RIMBAA Work Group. The whitepaper is based on actual HL7 Version 3 implementation experiences. A full version can be found at <http://j.mp/gDwZKm>.

## Introduction

The implementation of the CDA standard and the validation of CDA-conformant XML instances is based on two types of specifications:

1. The CDA class model, a refinement of the HL7 Reference Information Model (RIM). The class model is expressed in MIF (Model Interchange Format), HL7's meta model format.
2. Context-specific constraints (templates) of the generic CDA model, as defined in a CDA implementation guide for specific document type and one specific context. At this point in time templates are mostly defined in textual form. A single CDA implementation guide may define hundreds of templates.

An HL7 MIF definition of the CDA class model is provided with the HL7 Version 3 standard. The CDA MIF file can be transformed into less "rich" expressions such as UML and XML schema. Parts of the requirements as expressed by the MIF are lost during the transformation process.

## CDA implementation using XML techniques

The standard requires that all CDA instances validate against a published CDA XML schema. This is the main reason why a lot of CDA implementations are based on the CDA XML schema. The wide availability of XML tools is a definite advantage; however, there are disadvantages as well. The XML schema language is not rich enough by far to express all of the requirements that present in the original CDA class model. A CDA document instance that validates against the XML schema is not guaranteed to be a valid CDA instance – to be a valid CDA instance one has to create XML that conforms to the requirements that are expressed in the CDA class model.

Class generators are commonly used next to other well-known XML techniques such as Xpath and DOM/SAX. JAXB is an example of a class generator: a tool which transforms XML schema to corresponding Java classes.

## Model driven CDA implementation

In order to fulfill all requirements as expressed by the CDA class model, the starting point for all CDA implementations would have to be the CDA MIF. MIF, however, has the disadvantage that it is an HL7 specific format that is only supported by a limited number of tools. Because CDA is essentially an information model without any behavioral as-

pects associated with it, one has the option of creating a very solid mapping from CDA MIF to UML, which in turn allows for the use of UML based tools.

The CDA MIF (or the UML equivalent thereof) can be used by class generators to create a set of classes (in e.g. Java or C#). There are a few freely available class generators that one could consider when implementing CDA:

1. MDHT (<http://www.cdtools.org/>), a CDA specific class generator. This tool generates Java classes based on a UML representation of the CDA class model and on an OCL representation of applicable templates.
2. MARC-HI Everest (<http://everest.marc-hi.ca/>), an HL7 Version 3 (not just CDA) MIF-based class generator.
3. Java SIG (<http://aurora.regenstrief.org/javasig>), an MIF-based toolkit which generates Java classes (unfortunately not recently updated).

## Summary

The diagram on page 9 shows the relationships between the various artifacts discussed in this article. A CDA document has to conform to the requirements as defined in a CDA implementation guide. It has to conform to both the formal CDA class model as well as the templates. The

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# Aussies Hit a Home Run

By Mark McDougall, Executive Director, HL7



Mark McDougall

## January Meeting

After many months of planning and promotions, along with the help of many dedicated individuals, HL7's January 2011 Working Group Meeting in Sydney was a big success. The meeting was both productive and enjoyable.

We had 310 attendees from 21 countries participate in the dozens of work group meetings and/or 40 tutorial sessions. The meeting also featured add-on educational workshops produced by HL7 Australia at the end of the WGM week



*HL7 Director of Meetings Lillian Bigham with Cliftons meeting planner Joanne McMaster at the January Working Group Meeting in Sydney, Australia.*

## UPDATE FROM HEADQUARTERS

While there are many individuals that played key roles in planning the Sydney WGM, I'd like to personally recognize the incredible efforts made by three individuals: Richard Dixon Hughes, Klaus Veil and Tina Connell-Clark. They worked incredibly hard and devoted hundreds of hours working to ensure the success of this meeting. On behalf of the HL7 Board, I send a sincere thank you for their efforts for which the success of this meeting relied so heavily.

HL7's meetings were spread out among three facilities during our Sydney Working Group Meeting. The general sessions convened at the Amora Hotel, tutorials were held in the Standards Australia rooms in the Exchange Centre, and most of the work group meetings were produced at the Cliftons Meeting Facilities. The logistics for planning this WGM and getting our attendees to their meetings were smoothly managed primarily by HL7's Director of Meetings, Lillian Bigham, Clifton's Manager Joanne McMaster, and Richard Dixon Hughes.



Richard Dixon Hughes



Tina Connell-Clark



Klaus Veil

Kudos to them for their insightful pre-meeting planning and wonderfully executed plans to produce a very successful meeting in beautiful Sydney.

## Meeting Sponsors

I am also pleased to recognize several organizations that sponsored key components of our recent January Working Group meeting in wonderful Sydney, Australia. The driving force behind the resourcing for the Sydney meeting were provided by:

- Australian Government, Department of Health and Aging
- HL7 Australia
- National E-Health Transition Authority (NEHTA)
- Standards Australia

We are very grateful for the valuable sponsorships also provided by the following organizations:

- Beeler Consulting, LLC
- DH4
- Genie
- Gordon Point Informatics
- HealthLink
- Hewlett-Packard
- Interfaceware
- JP Systems
- Kestral
- Linkmed
- Microsoft
- Orion Health
- Pen Computer Systems
- Sparx Systems

The sponsorship support provided by all of the above organizations contributed heavily to the financial success of the HL7 meeting and is much appreciated.

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*Sponsors for the January Working Group Meeting in Sydney, Australia*

### **HIMSS**

For over 20 years, HL7 has exhibited each year at the annual conference of the Healthcare Information and Management Systems Society (HIMSS). This year's HIMSS convention convened in Orlando, Florida during the week of February 20, 2011. HL7 once again received plenty of attention at our HL7 exhibition booth, which was on the main aisle and at the center of the very large HIMSS Exhibition that attracted over 31,000 people.

HL7's Director of Communications, Andrea Ribick, oversaw the redesign of the HL7 booth that resulted in a significant upgrade to our booth in ways that actually reduced HL7's booth costs. Andrea also oversaw the production of 27 thirty minute presentations on HL7 standards and relevant topics. Many of the presentations attracted crowds that filled the theater area and led to standing room only. I also wish to express our sincere thanks to the many individuals who volunteered to staff our booth and/or make presentations in our booth, including:

Woody Beeler, PhD  
 Bob Dolin, MD  
 Ed Hammond, PhD  
 Chuck Jaffe, MD, PhD  
 Lenel James  
 Ken McCaslin

Chuck Meyer  
 Don Mon, PhD  
 Dan Pollock, MD  
 John Quinn  
 Ken Rubin  
 Erin Sparnon  
 Sandy Stuart  
 Grant Wood

### **Benefactors and Supporters**

We are thrilled to have attracted the all time highest number of HL7 benefactors and supporters, who are listed on page 22. Their support of HL7 is very much needed and sincerely appreciated. We are pleased to recognize our benefactors in all of our HL7 newsletters, on the HL7 website, in all of our HL7 press releases, and at all

of our HL7 Working Group Meetings. A special thank you is extended to the list of firms that represent our 2011 HL7 benefactors and supporters.

### **Organizational Member Firms**

As listed on pages 24-26, HL7 is very proud to report that the number of HL7 organizational member companies continues to be near an all time high of 530 companies. We sincerely appreciate their ongoing support of HL7 via their organizational membership dues.

### **In Closing**

I would like to once again thank all of those who participated in our January WGM in incredibly beautiful Sydney, Australia. The participants had many roles, such as attendee, tutorial speaker, sponsor, and meeting planning helper. We sincerely appreciate everyone who participated in the Sydney Working Group Meeting and would like to congratulate HL7 Australia, NEHTA and Standards Australia for their roles in hitting a home run with the January WGM. It was a huge success! Thank you.

*Mark E. McQuay*



*HL7 Chair Dr. Bob Dolin presents at the HL7 Exhibit at HIMSS 2011 in Orlando, FL.*



Catherine Chronaki

# Report from the HL7 International Council Meeting in Sydney

By Catherine Chronaki, Affiliate Director, HL7 Board of Directors; Co-Chair, HL7 International Council; International Liaison, HL7 Hellas Board

Nineteen HL7 Affiliate representatives and more than 80 guests attended the first International Council meeting to be held in Australia. The agenda was quite packed; the morning sessions were devoted to regular business, reports, information items, and immediate decision points. The afternoon session was dedicated to the “HL7 around the world” session and followed fascinating developments in 30+ countries across four continents.

In the first quarter of the meeting, HL7’s CEO Dr. Charles Jaffe presented the framework developed by the Business Model Task Force to explore options and consequences of different business models in developing and further promoting the use of HL7 standards. Bernd Blobel, PhD, chair of HL7 Germany, observed that there are three different models, all of which are followed by HL7: a) attract audience by offering material for free; b) enforce use by law – Europe model through ISO for healthcare standards; c) sell products. Dr. Blobel felt that international input would be useful as HL7 moves forward with weighting these ideas in a new business model. A vibrant discussion followed and steps were taken toward exploring ways to strengthen the business model of HL7 International and its affiliates to the benefit of the world-wide eHealth community.

John Quinn, HL7’s CTO, presented his report to the council. He described the new tooling vision of the TSC, leveraging the added value of the Static Model Designer, Terminology Manager, EHR-S Functional Model, and Published Specifications through a Standard Artifact Repository (as shown in Figure 1).

In the context of the product visibility project, a brain child of past TSC chair Charlie McCay, John Quinn presented 43 different HL7 products that have been identified and for which product briefs will be created.

Robert Stegwee, chair of HL7 Germany, Co-Chair of the HL7 International Council, and the Council’s representative to the Joint Initiative Council (JIC) for Global Health Informatics Standardization, announced that he will be stepping down as the Council’s representative to the JIC as he has been nominated as the next CEN TC251 chair. The Council recognized his contribution and congratulated Robert on this well-deserved achievement that would certainly bring HL7 even closer to the European standardization bodies.

During the Council’s extended Lunch meeting on Thursday, the importance of the Council being represented in the JIC was strongly supported and there was unanimous  
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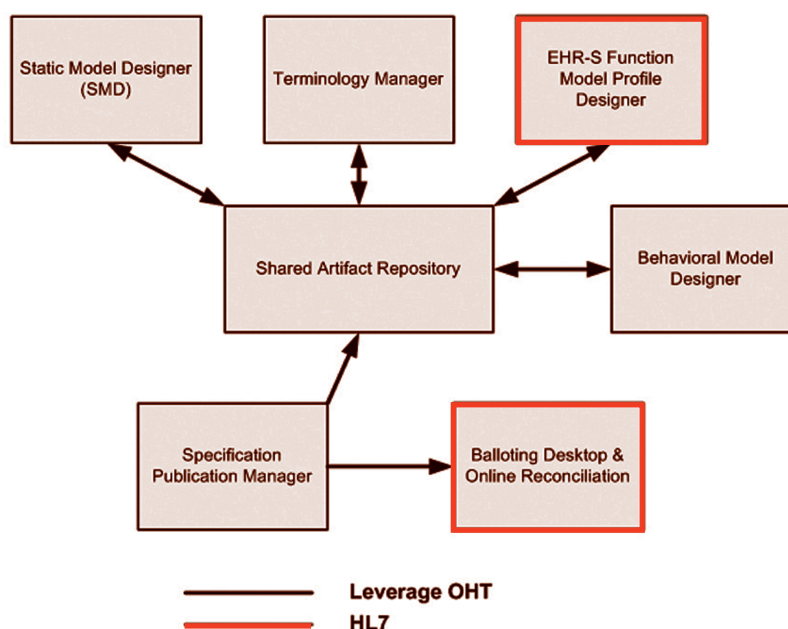


Figure 1: The tooling vision of the TSC as presented by John Quinn at the International Council.



decision to select another representative at the Orlando meeting in May. Affiliate Chairs are encouraged to nominate themselves or one of their members to that position.

Diego Kaminker, chair of HL7 Argentina and pioneer of the HL7 eLearning program, presented relevant developments focusing on the significant backlog of requests to participate in the program. He noted that this is mainly due to the lack of tutors and the emphasis on comprehensiveness and quality. HL7 India reported its positive experience with running the course, and several other

affiliates expressed interest in launching their own programs. The topic raised a lot of discussion as education is one of the primary functions of most countries.

Another important item on the agenda was the revision of the Affiliate Agreement. The Council decided to recommend to the HL7 Board that the existing 2009/2010 agreement be extended to end of 2011 and that during 2011, consultation with the International Council will review issues of concern, such as IP.

In the afternoon, the “HL7 around the world session” included 24 country reports, all of which are available as part of the minutes on the HL7 International Council. A very touching moment was when Byoung-Kee Yi shared with us the pain and sorrow of Dr. Kwak’s premature death. We will all miss his warmth, kindness, and support.

For more information on the activities of the HL7 International Council and its meetings please visit: <http://www.hl7.org/Special/committees/international/>

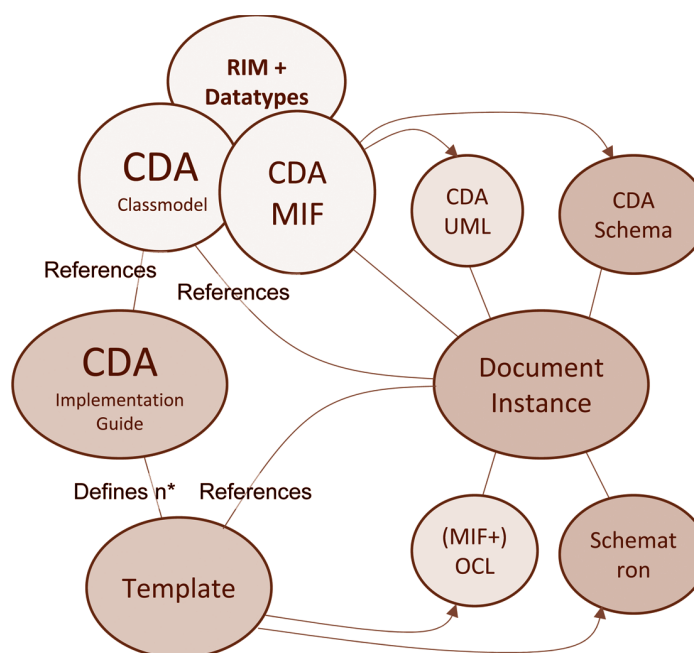


*In memory of Dr. Yun Sik Kwak*

## Software Implementation of CDA continued from page 5

CDA class model can be expressed in either MIF, or in a derived format such as UML or XML schema. Templates can be expressed in Schematron, in OCL, or in MIF with OCL annotations. The actual validation of CDA instances is based on the expressions of the CDA class model and the applicable templates.

A software application will have to be based on the CDA class model if one wishes to ensure that one creates valid CDA instances. Applications that are based on the CDA XML schema can’t guarantee that the documents are valid CDA instances. The MDHT tool is currently the best tool available to support the creation of CDA model based application development.



# Post Sydney WGM Survey and First-Time Attendee Survey

By Karen Van Hentenryck, Associate Executive Director, HL7



*Karen Van Hentenryck*

## **Post WGM Survey**

Thirty-nine work group and Board-appointed committees attended the most recent working group meeting in Australia; 29 of those groups completed the PIC-sponsored post WGM survey. While PIC had hoped to improve the response rate from Board-appointed committees for this survey, the response rate decreased across all groups.

All of the groups that responded to the survey indicated that they had representation at the Monday evening co-chair and steering division meetings. This may be an improvement over the last meetings, where all but three groups were represented. However, given that only 29 of the 39 groups completed the survey, it is difficult to quantify. Approximately one quarter of the groups that completed the survey indicated that they failed to achieve quorum.

The stated objectives portion of the survey is always interesting. Consistent with the last few surveys, status updates and information sharing related to existing projects topped the list of objectives with 95% of respondents identifying this objective. Work and progress reporting on existing projects was a close second with 90% and joint meetings and engagement with other work groups were identified by 80% of respondents, followed by networking at 60% of respondents. New project initiation and engagement with local/regional projects were identified as objectives by 50% of respondents, and ballot resolution was identified as an objective by only 20% of respondents.

Ninety percent of respondents indicated that they accomplished their work group meeting objectives and business. The 10% that did not accomplish their objectives identified insufficient quorum, missing key members and venue facilities as the top three obstacles. Technical support problems also presented a significant barrier to achieving goals and objectives. Participation by key members, pre-meeting preparedness and sufficient quorum were the top ranking reasons cited by work groups as enabling the achievement of objectives and goals.

Thirteen of the responding work groups indicated that they had attendance from local professionals. Twelve of the responding work groups indicated that they would recommend using the conference facility again. Those not recommending the facility cited problems with Internet connectivity and the cost and lack of management support for international meetings. Several respondents noted that scattering the meetings between multiple venues was not ideal. Similarly, not having communal breakfast, lunches and breaks interfered with networking opportunities.

## **First-Time Attendee Survey**

PIC also sponsors the First-Time Attendee program at each of the working group meetings. These meetings typically occur on Sunday evening or Monday morning, but, given meeting room constraints in Australia, there was a single first-time attendee meeting during Monday lunch. Approximately 60 first-time attendees participated in the Sydney meeting and thirty-six of them provided valuable feedback on our program. Most notable was that attendees feel they would benefit from a description of the various ribbon colors and their associated roles (i.e., co-chairs, mentors, Board members, etc.). Likewise, many of the first-time attendees responded that more information on the types of work groups (i.e., perhaps overviews of the groups by steering divisions) would be beneficial. Finally, it is noteworthy that most of the first-time attendees cited education as the reason for their attendance, followed by networking.

PIC would like to thank all of the work groups and first-time attendees who provided feedback. The post WGM survey is available on the website at: [http://www.hl7.org/Library/Committees/pi/Post%20Sydney%20WGM%20SurveySummary\\_02072011.pdf](http://www.hl7.org/Library/Committees/pi/Post%20Sydney%20WGM%20SurveySummary_02072011.pdf)

Questions or comments about the survey or the results can be directed to PIC or to Karen Van Hentenryck (Karenvan@HL7.org).



Dave Hamill

# News from the **PMO** and Project Services Work Group

By Dave Hamill, Director, HL7 Project Management Office  
Rick Haddorff and Freida Hall, Co-Chairs, Project Services Work Group

## **Project Health Report**

The HL7 PMO has been working with the Technical Steering Committee (TSC) and Project Services Work Group to create the Project Health Report. This report reflects various metrics of a work group's project portfolio and is based on data gathered from Project Insight, such as status updates, milestone deliverable dates and balloting information.

The Project Health Report metrics are reported by work group and include:

- Total number of projects, broken down by projects that are Active (pre-ballot), On Hold, In a 'Ballot Status,' or Three Year Plan items.
- "Red" / "Yellow" / "Green" counts of Active (pre-ballot) projects, Three Year Plan items and 'in a Ballot Status' projects. The colors depict project counts that are on target (green), behind < 120 days (yellow) or behind > 120 days (red).
- Number of projects missing a steering division approval date or a TSC approval date.
- Number of DSTU expired test period projects.

The metrics above will be the basis for a Project Report Card that will grade each work group's project health. Ultimately these grades will be incorporated into the project approval process.

The Project Health Report is available via GForge, under the TSC's File tab ([http://gforge.hl7.org/gf/project/tsc/frs/?action=FrsReleaseBrowse&frs\\_package\\_id=98](http://gforge.hl7.org/gf/project/tsc/frs/?action=FrsReleaseBrowse&frs_package_id=98)).

Additionally, a GForge Tracker area has been created within the TSC's Tracker tab to capture suggestions for future project health metrics. Feel free to enter your suggestions at: [http://gforge.hl7.org/gf/project/tsc/tracker/?action=TrackerItemBrowse&tracker\\_id=628](http://gforge.hl7.org/gf/project/tsc/tracker/?action=TrackerItemBrowse&tracker_id=628) or send them to the PMO ([pmo@HL7.org](mailto:pmo@HL7.org)).

## **Leveraging the Orders and Observations Composite Order Project to Provide Examples for a SAIF Implementation Guide**

Under a project sponsored by the Technical Steering Committee, Project Services is working on the Orders and Observations' Composite Order project to create concrete examples of artifacts that can be used in a future version of an HL7 SAIF Implementation Guide.

This is an opportunity to approach an HL7 SAIF Implementation Guide from a "bottom-up" strategy. It is intended to provide recommendations and examples from an HL7 standards development project that relies on work products from multiple work groups.

These documented recommendations and examples will then be available to be incorporated into a future HL7 SAIF Implementation Guide.

Project Services is happy to be working on this effort to help move HL7 toward adoption of the SAIF architecture. We appreciate and welcome the

contributions from all those involved in the Composite Orders project and this accompanying project.

## **Guidance for Projects and Ballots**

As a reminder, Project Services, working in conjunction with Don Lloyd, Director of Technical Publications, has published the **HL7 Electronic Ballot Charts**. These ballot charts were developed as a supplement to the HL7 Co-Chair Handbook in order to provide a quick reference to information related to each of the four levels of HL7 electronic balloting:

- Review Ballot – Comment Only
- Review Ballot – Informative Document
- Review Ballot – Draft Standard for Trial Use (DSTU)
- Normative Ballot

For each ballot type, the ballot charts list the Intent, Recommended Use, Project Approval Levels, and Ballot Milestones. If you have questions, please feel free to contact Project Services.

## **HL7 Project Tracking Tools**

All of HL7's project tools, including the Searchable Project Database, GForge and Project Insight, are available on [www.HL7.org](http://www.HL7.org) via [Participate > Tools & Resources > Project Tracking Tools](#).



# Healthcare Information Standards for Active Aging: State of Play for Patient Summaries

By Catherine Chronaki, Affiliate Director HL7 Board of Directors, International Council Co-Chair; Christian Hay, GS1 Senior Consultant Healthcare, Chair IHE Suisse and Board Member Swiss Medical Informatics Association; and Anne Moen, RN, PhD, Chair Norwegian Society of Medical Informatics, MIE2011 SPC Co-Chair and LOC Co-Chair



Anne Moen



Christian Hay



Catherine Chronaki

This year's European health informatics conference MIE2011 will be held in Oslo, Norway on August, 28-31, 2011. The theme is User Centred, Networked Healthcare. For this conference, HL7 International, an Institutional member of the European Federation for Medical Informatics (EFMI) through its European Brussels Office, joins forces with GS1 (another Institutional Member of EFMI) and the Norwegian Society for Medical Informatics, to organize an invited session in the invitational track "Partnerships in Innovation" and discuss significant interoperability challenges related to patient summaries. The invitational track brings together Charles Jaffe, MD, PhD, CEO of HL7 International; Bob Dolin, MD, Chair, HL7 International; and leading eHealth and standardization experts in Europe to reflect on the synergies needed for health informatics and standardization internationally to effectively support patient summaries in an integrated care environment.

The goal of this conference is to discuss challenges for interoperability, technology and standards related to patient summaries. An unfolding user story envisioning the health-illness trajectory of an elderly, vulnerable



women hampered by chronic-disease with an acute episode will frame the discussion of technological, organizational and professional challenges to support health and active aging. Specifically, the user story takes an acute episode requiring emergency admission as a starting point, and then focuses on critical aspects in the user story where information sharing is necessary. In particular, the potential of current and future interoperability standards and emerging solutions to enable innovative systems to deliver patient summaries linking organizations, professional strands, and required services will be addressed by the following questions:

- Where are we and where do we wish to be in the future?
- What do current tools and approaches to standards do to support information flow in an aging person's health-illness trajectory?
- What are the problems/ challenges that technology solutions

need to address to contribute to an integrated, holistic service approach in an aging person's health-illness trajectory?

- What could be the strategic and operational initiatives, by HL7, GS1, EFMI and others; to augment integration across technological, professional and organizational strands to ensure meaningful use of patient summaries?

Specific wider issues that will be touched upon in the discussion include: 1) ensuring sustainability of healthcare systems; 2) delivering quality of care and contributing to desired patient outcomes; 3) unlocking the market for innovative interoperable solutions based on standards; thus supporting the EU digital agenda key actions on standards and innovation.

More information is available at:  
[www.mie2011.org](http://www.mie2011.org).



# HL7 Educational Session at the eHealth Week 2011: "eHealth: Investing in Health Systems of the Future"



Catherine Chronaki

By Catherine Chronaki, Affiliate Director, HL7 International and Co-Chair, HL7 International Council

eHealth Week 2011 is a co-location of the European Commission's High Level Ministerial Conference and the World of Health IT Conference & Exhibi-

tion and is organized by the European Commission (EC), the Healthcare Information and Management Systems Society Europe (HIMSS Europe), and the Hungarian Presidency of the Council of the European Union. eHealth Week will be held in Budapest, Hungary on May 10-12, 2011.

eHealth Week 2011 brings together key stakeholders from Europe's healthcare community, including policy makers, providers, insurers, research facilities, vendors and patient associations. It will host the eHealth Government Initiative (eHGI), a formal body of healthcare state secretaries and other stakeholders aimed at aligning national eHealth systems in Europe. The European Office of HL7, established in Brussels in 2010, is a member of the eHGI initiative.

This will be the ninth edition of the high-level eHealth conference, which has a legacy of leading progress in eHealth across the European Union, through a series of Ministerial Declarations. This year, thanks to Oracle's significant support, Health Level Seven will be participating at eHealth Week with an educational event targeted at government officials, national and regional eHealth project leaders, and decision makers who wish to promote sustainable eHealth innovation, through safe, trusted, and interoperable eHealth services and infrastructures.

## FREE EVENT!

### eHealth Week: Health Level Seven International – Educational Session:

Unlocking the Power of Health Information  
through Collaborative Use of Health  
Information Technology Standards

Budapest, Monday May 10, 4:45-6:00 pm

Co-chairs: Catherine Chronaki, HL7 International &  
FORTH-Institute of Computer Science  
Miroslav Koncar, HL7 Croatia & Oracle Corporation

- The Business Case for HL7: *Charles Jaffe, CEO, HL7 International*
- Trust in Interoperability: *Robert Stegwee, HL7 Ambassador; Chair, HL7 The Netherlands; Co-Chair, HL7 International Council*
- Investing in the Secondary Use of Health Data: *Pier-Yves Lastic, HL7 Ambassador, Chair CDISC European Coordination Committee*
- Collaborative Use of Standards for X-Border ePrescription and Patient Summaries: *Fredrik Linden, epSOS Coordinator*
- HL7 Never Sleeps: Snapshots around the Globe: *Catherine Chronaki, Affiliate Director, HL7 International Board of Directors*

For more information on the eHealth Week 2011, please visit [www.ehealthweek.org](http://www.ehealthweek.org) or the twitter page at [http://twitter.com/EU\\_ehealthweek](http://twitter.com/EU_ehealthweek).

To register, please go to the following link:  
<http://www.worldofhealthit.org/registration/>

The High Level eHealth Conference and Declarations: [http://ec.europa.eu/information\\_society/activities/health/policy/ehealth\\_conf](http://ec.europa.eu/information_society/activities/health/policy/ehealth_conf)



# New Chair for the Joint Initiative Council

By Bron Kisler and Kees Molenaar, Chair and Immediate Past Chair, Joint Initiative Council



*Bron Kisler*

The Joint Initiative on SDO Global Health Informatics Standardization is a collaborative initiative to help the end users of standards by addressing issues of gaps and overlaps across key global standards: one topic, one standard. CDISC, CEN/TC251, GS1, HL7, IHTSDO and ISO/TC215 are members of the Joint Initiative Council (JIC). In 2010, the JIC was chaired by Kees Molenaar, chair of CEN/TC251<sup>1</sup>; as of January 2011 Bron Kisler from CDISC is now chairing the JIC.

In 2010, the Joint Initiative Council expanded to six member organizations, added a number of work items, and worked hard to become more transparent and supportive of the broader health standards community. We launched the Joint Initiative's website<sup>2</sup> – hosted by HL7 – that provides access to all available JIC documents: charter, policy and procedures, work item proposals, presentation slides and meeting minutes. The website also includes the JIC work item registry, where all joint work items can be found. The JIC began a project on automatic identification and data capture standard patient ID and care giver ID as well as a Standards Knowledge Management Tool (SKMT). The JIC also decided to adopt the ISO work item **Business requirements for a syntax to exchange structured dose information for medicinal products** as a Joint Initiative work item. Other key ongoing JIC projects include: the BRIDG model, Clinical Trials Registration (CTR), Identification of Medicinal Products (IDMP) and Individual Case Safety Report (ICSR).

The 2010 successes are foremost successes in leadership collaboration. The JIC has achieved close collaboration

and cooperation between the leaders of the participating SDOs; monthly teleconferences and have 2-3 face-to-face meetings annually. We still have much to gain in cross SDO procedures like simultaneous balloting and in further supporting project leads to get their joint work done. Looking forward in 2011, we will continue working hard to progress in these areas.



*Kees Molenaar*

In 2010, the JIC also started a task force to investigate how we can help emerging and developing countries by improving access to meetings and SDO materials. In collaboration with SDO global leadership, the donor community, and other key global stakeholders, the JIC will continue to push this important work forward in 2011. We plan to explore further the usability of standards, and educational opportunities, as well as projects particularly relevant to emerging and developing countries such as tuberculosis and HIV/AIDS.

The JIC will be exhibiting at the upcoming European eHealth Week in Budapest, Hungary on May 10-12, 2011. Please stop by if you would like more information regarding Joint Initiative projects or future activities.

<sup>1</sup> Kees has resigned as chair of CEN/TC251;

Robert Stegwee is nominated as the new chairman

<sup>2</sup> [www.jointinitiativecouncil.org](http://www.jointinitiativecouncil.org)

 Joint Initiative Council





*Bernd Blobel, PhD*

# EFMI Special Topic Conference 2011: **eHealth across Borders without Boundaries**



*Catherine Chronaki*

By Professor Bernd Blobel, PhD, Chair HL7 Germany and  
Catherine Chronaki, Affiliate Director, HL7 Board of Directors; Co-Chair, HL7 International

The International Council of HL7 International sponsored the 11th European Federation of Medical Informatics (EFMI) Special Topic Conference (STC). It was held in the picturesque Laško, Slovenia on April 14-15, 2011 and was organized by the Slovenian Society of Medical Informatics.

HL7 Europe, the HL7 International Foundation established in Brussels in 2010, and the European HL7 Affiliates are committed to moving forward with eHealth across borders and without barriers as they join forces with the Integrating the Healthcare Enterprise (IHE) Initiative in an educational workshop that is part of the conference.

The HL7/IHE program was chaired by Professor Bernd Blobel and was held on the afternoon of Thursday, April 14. The workshop's program included:

- HL7 Developments in Europe and Worldwide presented by Catherine Chronaki, Affiliate Director, HL7 International Board of Directors and Board Member, HL7 Hellas
- IHE Infrastructure Specifications for Cross-Border Interoperability presented by Lisa Spellman, IHE Senior Director, Informatics, HIMSS
- eHealth Enabling Continuity of Care within and Across National Borders presented by Lacramioara Stoicu-Tivadar, Board Member, HL7 Romania



*Laško, Slovenia*

- HL7 Test Implementations in the Czech Republic presented by Libor Seidl, Chair, HL7 Czech Republic
- CTS II for Enabling Multi-lingual Communications presented by Frank Oemig, Board Member, HL7 Germany
- Domain Analysis Models as Reference for National Profiles presented by Professor Bernd Blobel, Chair, HL7 Germany

In addition, a unique poster presented recent developments in HL7 International, its organization and standards.

For more information please visit: <http://www.stc2011.si>



## EFMI Special Topic Conference STC 2011

*E-salus trans confinia sine finibus*

*e-Health Across Borders Without Boundaries*

**14 - 15 April 2011**

**Laško, Slovenia**

# TSC Newsletter Updates

By Lynn Laakso, HL7 TSC Project Manager



Lynn Laakso

The TSC is conducting projects on product visibility, product quality, communication strategy, and innovations, as well as new projects for the SAIF Architecture Program and T3F Review. More information is available on each of these efforts from the TSC web page under "Projects," at <http://www.hl7.org/Special/committees/tsc/projects.cfm>. In addition, the TSC continues maintenance of Work Group Visibility, as well as Work Group Health.

- By the 2011 May WGM, 13 work groups will need to review their Mission and Charter (M&C) statements which have not been reviewed for two years for the Work **Group Visibility Maintenance** project at Project Insight (PI #631) Please review your Mission and Charter statements to keep them current! In addition, the new metric on Decision Making Practices (DMP) will affect 17 work groups (WG) that need to update their DMPs in accord with the latest template. For the 2011 May WGM, the TSC will also recognize the "healthiest" work groups.
- New innovative concepts can be submitted for presentation and review at the 2011 May WGM, where the **Innovations Project** (PI #701) will again host an opportunity for presen-

tation of new concepts and a brief status update on current innovations initiatives.

- The TSC developed, circulated, and approved two new projects this cycle, for the **SAIF Architecture Program** (PI #751), and a **TSC Retrospective Self-Assessment Based on T3F Recommendations** (PI #749).
- The **Product Quality** project (PI #647) will be moving forward under the umbrella of the SAIF Architecture Program as that evolves.

The TSC also approved a number of new projects. You can always see the most recent list of new projects from the Project Insight Searchable Database. You can sort the searchable database. To show the projects most recently approved by the TSC, select "TSC Approval" from among the different date fields and then click "Filter Projects." By entering a date range you can see just the projects approved since the last working group meeting, or click the column heading over "TSC Approval Date" to bring the most recent TSC approvals to the top of the list.

The TSC welcomed back Ravi Natarajan, who was elected by the International Council to fill the Affiliate Representative position vacated by Charlie McCay.

The TSC acknowledged updates to work group documents (M&C, DMP) as approved by the work groups' respective steering divisions:

- Domain Experts Steering Division (DESD) approved an updated M&C for the Child Health WG, Community Based Collaborative Care (CBCC) WG and Imaging Integration WG
- The Foundation and Technology Steering Division (FTSD) approved the updated M&C for the Implementable Technology Specifications (ITS) WG
- The Structure and Semantic Design Steering Division (SSD SD) approved an update to the M&C of both the Arden Syntax Work Group and the Clinical Statement WG
- The TSC approved an update to its M&C and its DMP

The TSC has approved several DSTU publications since the last working group meeting. Interested parties are invited to download these DSTUs and provide comments and feedback on the standards and their implementation at <http://www.hl7.org/dstuc Comments/>.

- **Implementation Guide for CDA® Release 2.0 Progress Note**, for the Structured Documents Work Group of SSD SD, at Project Insight ID (PI #679), for 24 months

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- **Consent Directive CDA Implementation Guide:** for the Community Based Collaborative Care Work Group (CBCC) of DESD, at (PI #553), for 18 months
- **HL7 Version 3 Standard: Transmission Infrastructure, Release 2:** for the Infrastructure and Messaging (InM) Work Group of FTSD, at (PI #619), for 24 months
- **Implementation Guide for NHSN Healthcare Associated Infection (HAI) Reports, Release 6:** for Structured Documents WG (SDWG), at (PI #319), for 24 months
- **HL7 Version 3 Standard: Regulated Studies: CDISC Content to Message – Study Design, Release 1:** and
- **HL7 Version 3 Standard: Regulated Studies: CDISC Content to Message – Study Participation, Release 1:** for the Regulated Clinical Research Information Management Work Group (RCRIM) of DESD, at (PI #205), for 24 months each
- **Context-Aware Knowledge Retrieval (Infobutton), Service-Oriented Architecture Implementation Guide:** for Clinical Decision Support of SSD SD at (PI #507) for 24 months
- SDWG requested a 1 year extension to each of the below DSTUs, which were balloted 2 years ago
  - **HL7 Implementation Guide for CDA Release 2: Quality Reporting Document Architecture (QRDA), Release 1:** at (PI #210).
  - **HL7 Implementation Guide for CDA Release 2: CDA Framework for Questionnaire Assessments, Release 1:** at (PI #381).
- **HL7 Implementation Guide for CDA Release 2: Operative Notes, Release 1:** at (PI #728)

The TSC also approved a special meeting request for the Pharmacy Work Group, which met in the United Kingdom from February 14-16, 2011. In addition, the TSC approved an out-of-cycle special meeting for the RIMBAA Work Group on November 15, 2011 in Amsterdam, the Netherlands.

For any additions, updates or suggestions on any of these TSC promoted initiatives please contact Lynn Laakso (lynn@HL7.org).

### **How to find TSC information**

The TSC wiki site houses its minutes, process documents, templates, links to the ArB wiki and the TSC Issue Tracker, a list of current projects, and more. You can access the TSC wiki at: <http://www.hl7.org/permalink/?TSCWiki>. See the links below for instructions on how to view the list of projects and access the TSC Issue Tracker.

- TSC Tracker: link to <http://gforge.hl7.org/gf/project/tsc/tracker/>

## Upcoming **INTERNATIONAL EVENTS**

### **eHealth Conference 2011 / World of Health IT Conference and Exhibition**

Budapest, Hungary

May 10 – 12, 2011

For more information, please visit

<http://www.worldofhealthit.org/>

### **eHealth 2011: Enabling Healthy Outcomes**

Toronto, Canada

May 29 – June 1, 2011

For more information, please visit

<http://www.e-healthconference.com/>

### **12th International HL7 Interoperability Conference**

Lake Buena Vista, FL

May 13 – 14, 2011

For more information, please visit

[www.ihic2011.org](http://www.ihic2011.org)

### **MIE 2011**

Oslo, Norway

August 28 – 31, 2011

For more information, please visit

<http://www.mie2011.org/>





Austin Kreisler

# Service-Aware Interoperability Framework (SAIF) Architecture Program

By Austin Kreisler, Chair, HL7 Technical Steering Committee

If you were at the January 2011 Working Group Meeting in Sydney, you probably heard me talking a lot about the SAIF Architecture Program. If you are like a lot of people, you are probably wondering why this is an important program and what does it mean for the work you are currently doing developing HL7 standards. I'll try to describe the reasons why this is important and what short and long term impact it will have on your standards development work, and ultimately on the standards HL7 produces.

On the surface, the SAIF Architecture Program's purpose is to roll out, within the HL7 organization, the framework standards interoperability described by the SAIF standard. I've deliberately used a small "s" in SAIF standard because at this point, SAIF is not formally an HL7 Standard of any sort. For more information on SAIF, see the HL7 wiki at [http://wiki.hl7.org/index.php?title=SAIF\\_main\\_page](http://wiki.hl7.org/index.php?title=SAIF_main_page) and the SAIF Executive Summary at [http://wiki.hl7.org/index.php?title=SAIF\\_ExecutiveSummary](http://wiki.hl7.org/index.php?title=SAIF_ExecutiveSummary). SAIF has received

several peer reviews, but it has not been balloted. Balloting SAIF and turning it into an HL7 Standard (capital "S") is one of the first things we would like to accomplish under the SAIF Architecture Program. Development of the SAIF standard has primarily been the responsibility of the HL7 Architectural review Board (ArB). The ArB has created a project to ballot the SAIF standard.

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SAIF describes a framework within which an organization can develop interoperability specifications. SAIF was designed to be general enough to be adapted by many different organizations to meet their interoperability needs. HL7 is obviously one such organization, and the SAIF Architecture Program's primary goal is to flesh

out SAIF specifically for use within the HL7 organization. We actually have a term for taking a standard and defining how it should be used for a particular use case—it's called developing an implementation guide. In addition to balloting the SAIF standard, one of the top goals of the SAIF Architecture Program is to develop HL7's SAIF Implementation Guide. The SAIF Implementation Guide will ultimately describe how SAIF is used

within the HL7 organization. Developing this implementation guide is going to be a second project, this time sponsored by the Technical Steering Committee. Why the TSC? The reason is that the TSC is the one group in HL7 that spans all the groups necessary to develop and deploy all the aspects of SAIF within

HL7. Many existing work groups will have input into developing the SAIF Implementation Guide.

Thus far, we have identified two projects for the SAIF Architecture Program: a project to ballot the SAIF standard and a project to develop

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HL7's SAIF Implementation Guide. In fact, there will be a number of projects involved in deploying SAIF within HL7. We will be piloting the use of the SAIF Implementation Guide with at least one standards development project and we will need to manage changes to tooling and processes for publishing SAIF based standards as well as other projects that will be identified as we proceed down the path of implementing SAIF at HL7. That brings us to the word "Program" in the SAIF Architecture Program. Over the past few years, HL7 has been implementing a project management approach to the development of standards. The complexity of developing standards has continued to evolve within HL7, reflecting the complexity of the interoperability space our standards address. Rolling out SAIF across the HL7 organization is going to require multiple projects, and those projects need to be coordinated. That is the primary reason for the SAIF Architecture Program. It will be using program management techniques to manage the projects within the program. This actually makes explicit some processes we already have within HL7. We effectively already have a "program" called Version 2 Publishing that oversees production of the various incremental versions of 2.x (2.5., 2.5.1, 2.6, 2.7...). There are certainly other examples of implicit programs already at work within HL7. One of the goals of SAIF is to make explicit things which were previously implicit. Explicit identification of "programs" is one effect of moving to a SAIF-based approach to developing standards. What this means is that

projects associated with the SAIF Program will have accountability back to the Program, not just accountability to the sponsoring work groups.

Now you are probably wondering what this means for the standards development work you are currently performing through HL7. For the majority of existing HL7 standards projects, there is little or no immediate impact. Unless I have already talked to your work group about your specific project, then it is very likely there is no immediate impact on your project. In the long term, there will certainly be an impact on how all HL7 standards are developed, but our plan for rolling out SAIF to the broader HL7 organization should make this as painless as possible.

Currently, we envision the creation of a "brand" called "HL7 SAIF Architected" standard. The first standards under this brand are the limited number of standards that are piloting the SAIF Implementation Guide under the SAIF Architecture Program. The SAIF Implementation Guide will describe the processes and artifacts necessary to develop a standard carrying the new brand name. Once the piloting stage is completed, we will transition to the next stage where standards development projects can petition to join the SAIF Architected Brand. To join the brand means the project will need to develop the standard according to the rules laid out in the SAIF Implementation Guide. Becoming SAIF branded in this second phase will be optional. In the long term, we may require all new standards to be developed under the SAIF brand, following the rules

and processes described in the SAIF Implementation Guide. It is my hope that in the long run, the advantages of developing a standard under the SAIF brand will far outweigh any disadvantages. We may identify processes within the SAIF brand which bring major benefits while having minimal or no cost for implementing in the broader HL7 organization. The TSC will look at moving these sorts of benefits outside of the SAIF brand and into the broader HL7 organization more quickly than described above.

In conclusion, the SAIF Architecture Program is something everyone participating in HL7 should keep their eyes on. The short term impact on what you are doing today is probably minimal, but in the long term it will have significant impact on how HL7 develops standards. The goal is for SAIF to provide HL7 a way of developing improved interoperability standards in a quicker fashion.

# 4th Annual SOA in Healthcare Conference

*July 13-15, 2011 in Washington, DC*

OMG® and Health Level Seven® International (HL7) are excited to bring you the fourth annual SOA in Healthcare Conference: "SOA Road-map to Integration: Architecting Interoperability in Healthcare." The conference will be held July 13-15, 2011 in Washington, D.C.



The focus of the SOA in Healthcare Conference is to convey real-world experiences, assembling a community of peers to exchange ideas and discuss what has worked, what did not work, and review best practices. Not a "tech industry" event, this conference is exclusively healthcare focused, and will highlight the challenges unique to healthcare organizations and emphasize cross-industry solutions that are viable within the healthcare domain. It is targeted primarily to a health-IT savvy audience.

A wide cross-section of the health industry will participate, including healthcare providers, payers, public health organizations and vendors from both the public and private sector. The conference program committee has invited world-class speakers to present at the 4th Annual SOA in Healthcare conference. Organizations expected to participate include MITRE, CSC, DoD Military Health System, Mayo Clinic, Fallon Community Health Plan, Brazil Dept. of Defense, in addition to many universities.

The conference will feature a keynote address by Paul A. Tibbits, MD. Dr. Tibbits was inducted into Senior Executive Service in February 2004, appointed Deputy Chief Information Officer for Enterprise Development for Department of Veterans Affairs on December 7,

2006–July 2010. He is currently the Deputy Chief Information Officer for Architecture, Strategy, and Design. Please check the conference website for additional keynotes and featured speakers. The call for participation was still underway at the time this article was written so be sure to sign up for program updates.

The conference will be experientially focused; with speakers bringing their personal and organizational experiences to what will be a presentation and discussion-oriented forum. The conference will be divided into an Executive Summit, and Functional and Technical Tracks. Some topic areas you can expect to see include:

- Modeling (SoaML, SysML, BPMN, etc.)
- Semantic Computability and Interoperability
- Ontology and Vocabularies
- Decision Support Systems
- Cloud Computing
- Enterprise Architecture (Business, System, SOA and Technical)

## **Registration & Information**

The SOA in Healthcare event is hosted by OMG, HL7 International, Open Health Tools (OHT), and the BPM/SOA Community of Practice. Everyone with an interest in SOA in healthcare is invited to attend. The early-bird registration discount is available until Friday, May 6, 2011. Registration information is available at <http://www.omg.org/hc-pr>. Exhibit space is available; for more information contact Mike Narducci at [marketing@omg.org](mailto:marketing@omg.org) + 1-781-444 0404. Sponsorship opportunities are available; contact Ken Berk at [kenberk@omg.org](mailto:kenberk@omg.org) or + 1-781-444 0404



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**February 22, 2011**  
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## HL7 Benefactors as of April 15, 2011



## HL7 International Welcomes HL7 Luxembourg as its Newest Affiliate



*Stefan Benzschawel, MD*

Dr. Stefan Benzschawel is the inaugural chair of HL7 Luxembourg. He holds a degree in Computer Science from the University of Kaiserslautern. After his studies, he worked as a member of a research group financed by IBM and as scientific collaborator of the University of Trier where he earned a Doctorate. His software and

healthcare industry experience based upon three years at SAP as software developer, and 10 years as R&D manager at AGFA Health-Care. For the past two years, he has been the project leader for eHealth at the CRP Henri Tudor.



## AFFILIATE CONTACTS

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# HL7 EDUCATIONAL SUMMITS

**Gain real-world HL7 knowledge  
TODAY  
that you can apply  
TOMORROW**



## What is an Educational Summit?

The HL7 Educational Summit is a two-day schedule of tutorials focused on HL7-specific topics such as Version 2, Version 3 and Clinical Document Architecture. Educational sessions also cover general interest industry topics such as vocabulary.



**July 12 – 14, 2011**  
**Embassy Suites Denver-Aurora**  
**Denver, CO**

**November 15 – 17, 2011**  
**Embassy Suites at the Chevy Chase Pavilion**  
**Washington, DC**

## Why Should I Attend?

This is an invaluable educational opportunity for the healthcare IT community as it strives for greater interoperability among healthcare information systems. Our classes offer a wealth of information designed to benefit a wide range of HL7 users, from beginner to advanced.

Among the benefits of attending the HL7 Educational Summit are:

- **Efficiency**  
 Concentrated two-day format provides maximum training with minimal time investment
- **Learn Today, Apply Tomorrow**  
 A focused curriculum featuring real-world HL7 knowledge that you can apply immediately
- **Quality Education**  
 High-quality training in a “small classroom” setting promotes more one-on-one learning
- **Superior Instructors**  
 You’ll get HL7 training straight from the source: Our instructors. They are not only HL7 experts; they are the people who help produce the HL7 standards
- **Certification Testing**  
 Become HL7 Certified: HL7 is the sole source for HL7 certification testing, now offering testing on Version 2.6, Clinical Document Architecture, and Version 3 RIM
- **Economical**  
 A more economical alternative for companies who want the benefits of HL7’s on-site training but have fewer employees to train



# Upcoming **WORKING GROUP MEETINGS**



**May 15 – 20, 2011**

## **Working Group Meeting**

Hilton in the Walt Disney  
World Resort  
Lake Buena Vista, FL



**September 11 – 16, 2011**

## **25th Annual Plenary and Working Group Meeting**

Town and Country Resort and  
Convention Center  
San Diego, CA



**January 15 – 20, 2012**

## **Working Group Meeting**

Hyatt Regency on the Riverwalk  
San Antonio, TX



**May 13 – 18, 2012**

## **Working Group Meeting**

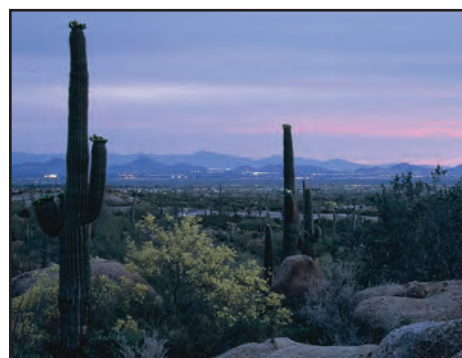
Sheraton Vancouver  
Wall Centre Hotel  
Vancouver, BC, Canada



**September 9 – 14, 2012**

## **26th Annual Plenary & Working Group Meeting**

Hyatt Regency Baltimore  
Baltimore, MD



**January 13 – 18, 2013**

## **Working Group Meeting**

Pointe Hilton at  
Squaw Peak Resort  
Phoenix, AZ

### **PLEASE BOOK YOUR ROOM AT THE HL7 MEETING HOTEL**

HL7 urges all meeting attendees to secure their hotel reservations at the HL7 Working Group Meeting Host Hotel. In order to secure the required meeting space, HL7 has a contractual obligation to fill our sleeping room block. If you make reservations at a different hotel, HL7 risks falling short on our obligation and will incur additional costs in the form of penalties. Should this occur, HL7 will likely be forced to pass these costs on to our attendees through increased meeting registration fees. Thank you for your cooperation!

*Visit [www.HL7.org](http://www.HL7.org) for more information on these upcoming HL7 meetings.*