UNLOCKING THE **POWER** OF HEALTH INFORMATION

THE OFFICIAL PUBLICATION
OF HEALTH LEVEL SEVEN®
INTERNATIONAL

MAY 2015

HL7 INTERNATIONAL NEWS

HL7 Work Groups Worldwide

Report from the International HL7 Interoperability Conference in Prague

HL7 Asia holds 3rd Annual Event

eStandards and OpenMedicine in Europe

Plus...

Reporting Out from Clinical Work Groups

New Payer User Group and Learning Health System Work Group Launched

Opportunities for Women within HL7

And More!

In this Issue

HL7 News
is the official publication of
Health Level Seven International
3300 Washtenaw Avenue, Suite 227
Ann Arbor, MI 48104-4261 USA
Phone: +1 (734) 677-7777
Fax: +1 (734) 6777-6622
www.HL7.org

Mark McDougall, *Publisher*
Andrea Ribick, *Managing Editor*
Karen Van Hentenryck, *Technical Editor*

Update from Headquarters

By Mark McDougall,
HL7 Executive Director

Standards Versus Trademarks

As most of you know, a couple years ago HL7 decided to license much of its intellectual property (IP) at no cost. HL7 also licenses our HL7 FHIR® standard under Creative Commons license that allows you to use, copy and redistribute the FHIR standard.

HL7 also allows users to create derivative works of the HL7 FHIR standard. However, you cannot publish an altered version of the FHIR specification unless it clearly identifies that it is a derivative specification, not FHIR itself.

HL7 has worked for years to build a strong organization that is known worldwide for quality and integrity. The trademarks owned by HL7 are an important part of maintaining that strength and reputation. While HL7 is removing cost barriers to access HL7 standards, HL7 is also protecting its trademarks carefully.

When referencing the FHIR standard in a document, presentation, website or otherwise, please refer to it as the "HL7® FHIR® standard" in a place of prominence. In subsequent uses, please refer to it as the "FHIR® standard" or "FHIR®", and use the ® symbol as often as is practical – at least once on each page of printed matter, generally in connection with the first or dominant usage.

Any use of Health Level Seven-owned trademarks to brand your product or service and any use of the FHIR flame logo must be approved in writing by Health Level Seven. You may mention HL7®, FHIR® or other Health Level Seven-owned trademarks if you are using the trademarks in a plain language or "fair use". Note that "fair use" does not apply to logos and thus all uses of the FHIR flame logo require approval. When approval has been granted in writing, all uses of the [FLAME DESIGN]® logo require the ® symbol.

Use of Health Level Seven International trademarks in URL domains or to brand your product, event or service without the express written consent of Health Level Seven International is strictly prohibited.

All non-trademark uses of the foregoing marks should include the ® symbol and indicate in text that the mark is a registered trademark of Health Level Seven International. For example:

"HL7, CDA, FHIR and the FHIR [FLAME DESIGN] are the registered trademarks of Health Level Seven International."

Additional FAQs regarding proper use of HL7 trademarks are posted on the HL7 International website: http://www.HL7.org/legal/trademarks.cfm. Also, should you have any questions about proper use of HL7 trademarks, please send emails to: HL7trademarks@HL7.org.

January Working Group Meeting

We served 472 attendees at our January Working Group Meeting held in San Antonio, Texas, January 18-23, 2015. Over 40 HL7 work groups convened meetings in Phoenix and 21 conducted co-chair elections. Attendees also took advantage of 35 tutorials, an HL7 FHIR connectathon with a record 73 participants, a payer summit, and three certification tests that week.

One highlight of the meeting was Ed Hammond's 80th birthday celebration. As mentioned in my toast that evening: "Stan and Chuck are the leaders of HL7, the co-chairs of our many work groups are the backbone of the organization, but Ed Hammond is the heart and soul of HL7."

The popular HL7 Bow Tie SIG also met at the January Working Group Meeting and were pleased to model the new official HL7 bow ties throughout the week. The HL7 Bow Tie even made an appearance on Twitter, as seen at left. For the original tweet, see https://twitter.com/catwelsh/status/558117709838557184 All other photos by Kai Heitmann, MD.

Board Changes

HL7 recognized three outgoing board members who served terms on the HL7 Board of Directors: Don Mon, Keith Boone and Helen Stevens. Don served as the board chair and Keith and Helen served as directors. All three made valuable contributions in their roles for the HL7 organization. I am pleased to extend a sincere thank you to Don, Keith and Helen for their many years of service to HL7.

We previously announced the results of the 2014 board elections that brought a couple new faces to the board, including Jim Case, Frank Oemig and Jeremy Thorp. However, earlier this year HL7's chair-elect, Doug Fridsma, MD, PhD, resigned from the HL7 Board of Directors.

As a result, following the procedure described in the bylaws and a process approved by the Board of Directors, Pat Van Dyke was appointed to serve as HL7's new chair-elect. We are pleased to congratulate Pat and look forward to working with her in this new role.

Pat's appointment led to a vacancy for her director position on the board. Once again, following HL7's approved procedures, the vacated position was filled by the candidate who received the most votes from amongst the candidates that were not elected during the last election for director. We are pleased to announce that Floyd Eisenberg, MD, will serve as a director on the board until the 2015 Board elections are completed.

Photos and contact information for members of the 2015 HL7 Board of Directors are available on page 42.

OUTGOING BOARD MEMBERS

Keith Boone

Douglas Fridsma MD, PhD

Don Mon, PhD

Helen Stevens

INCOMING BOARD MEMBERS

James Case, MS, DVM, PhD

Floyd Eisenberg, MD

Frank Oemig, PhD

Jeremy Thorp

2015 HL7 BOARD OF DIRECTORS

Meeting Sponsors

I am also pleased to recognize the organizations that sponsored key components of our January Working Group Meeting in San Antonio:

GEVITY	iNTERFACEWARE	Hi3

Their sponsorship support contributes to HL7's meeting budget.

Benefactors and Supporters

We are pleased to recognize HL7's 2015 benefactors and gold members who are listed on page 28. All HL7 benefactors are noted in our newsletters, website, press releases, and meetings.

Organizational Member Firms

As listed on pages 29-32, HL7 recognizes and appreciates the organizations that are HL7 organizational member companies.

In Closing

I look forward to seeing you at our May 10-15 Working Group Meeting in Paris, France. Until then, may you and your loved ones be blessed each day with plenty of smiles and laughter.

The Working Groups Meetings in HL7 are busy. Multiple projects. Little time to spare.

How do we find out what is going on in the various groups? How do we maximize our work group face-to-face time, move our projects ahead, and yet meet with other work groups whose work might very well relate to what our work group is doing? How can we be more efficient?

Clinical Work Groups Report Out at HL7 Working Group Meetings

By Pat Van Dyke, RN, Chair-Elect, HL7 International Board of Directors; Co-Chair, HL7 Electronic Health Records Work Group

and Laura Heermann Langford, RN, PhD, Co-Chair, HL7 Emergency Care Work Group

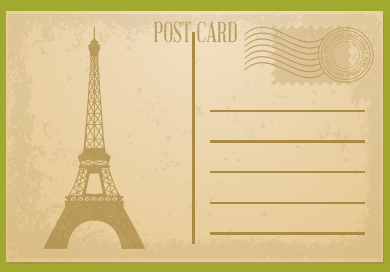
This is what Laura Heermann Langford and Jim McClay, co-chairs of the Emergency Care Work Group were thinking when they came up with the idea of having a 'Report Out for Clinical Work Groups.' Beginning with the September 2014 Working Group Meeting in Chicago, a quarter was set aside for this purpose.

The format is a straightforward 10-minute presentation. A representative from each work group gives an overview of the work group, then reviews its projects, including:

- Project names and descriptions
- Status of each project: new, in progress, in ballot, or completed
- Future plans for each project
- Collaboration with other work groups in progress or requested
- Where the work group needs help
- The work group's call schedule

The HL7 work groups participating in this report out include: Emergency Care, Pharmacy, Electronic Health Records, Clinical Interoperability Council, Patient Care, Public Health and Emergency Response, Clinical Quality Information, Child Health and Biomedical Research Integrated Domain Group (BRIDG). We have also asked the representatives from the Office of the National Coordinator for Health IT (ONC) S&I Framework to join us as there is crossover between the work group and government projects.

It can be challenging to cover all the content, even at a very high level in just one quarter. However, with good time management, attendees have found the quarter to be very informative and a helpful way to get an overview of the many clinically oriented projects in flight at HL7 in a short amount of time.



For the May Working Group Meeting in Paris, we are moving the Report Out to Monday from 1:45-3:00 pm (Q3) in hopes that it might serve to introduce attendees to the work groups and be a guide in the development of their schedules for the week.

Member Spotlight on Russell Hamm

HL7 Member Russ Hamm with his children, Andrew and Audrey.

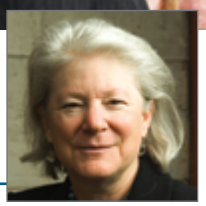
Russell (Russ) Hamm joined HL7 in 2003 with an interest in knowledge representation and terminology software and services. Since then, he has been heavily involved in HL7 vocabulary and vocabulary tool maintenance and development. He has also participated in HL7 Reference Information Model (RIM) and Vocabulary Harmonization. Russ has served as a co-chair for the HL7 Vocabulary Work Group for several terms and is also a past co-chair of the Templates Work Group. In addition, as the co-leader for the HL7 Common Terminology Services – Release 2 (CTS 2) project, he was instrumental to its development and approval. In 2011, Russ received the W. Ed Hammond. PhD Volunteer of the Year Award for his service to HL7. Another notable accomplishment – he has attended every working group meeting since his first meeting in September 2003!

Russ began his career as an operating system developer at IBM in Rochester, MN where he developed software to support system wide threat safety, customer access service programs, as well as supported hot swap and graceful failover for hardware devices. He then transitioned to Mayo Clinic where he worked on natural language processing, terminology services, and expert system development. His work on terminology service operations at Mayo Clinic and his interest in learning about and participating in terminology service standards are what brought him to HL7 in 2003. Russ is now with Lantana Consulting Group where he supports terminology and value set development for the Consolidated Clinical Document Architecture (C-CDA®), terminology mapping activities, as well as terminology architecture and best practices. His favorite activity in his day job is architecting terminology services solutions for large government and private customers, helping customers integrate terminology solutions and best practices. Russ also still enjoys the challenges and moments of Zen that are found in quiet and thoughtful software development.

Russ grew up across Canada and earned his bachelor's degree in computer science from the University of Manitoba. He moved to the United States in 1997 and became a US citizen in 2011. Russ has two children; Audrey is 13 and Andrew is 10. He enjoys hunting, fishing, and camping with his kids, and often looks forward to time in the woods where cell phones and data plans don't work. Russ is a fitness enthusiast. In his spare time, he frequently participates in adventure challenges such as Tough Mudder, Ragnar Relays, and Go Ruck. Russ also recently started CrossFit. He has since competed in four separate CrossFit competitions with the goal of eventually making it to the finisher's podium – even if it is only in the "old guy" division.

Developing Female Leaders within HL7

The Women of HL7



Liora Alschuler, Co-Chair, HL7 Process Improvement Committee

By Karen Van Hentenryck, HL7 Associate Executive Director and Staff Support to the HL7 Nominations Committee and Process and Improvement Committee

There are many women who participate in HL7 but relatively few who seek and hold leadership positions. Of the 170 co-chair positions in HL7 (which includes Steering Divisions) only 37 of those (or about 22%) are held by women. While several women have served on the HL7 Board of Directors, including Freida Hall, Helen Stevens, Catherine Chronaki, Jill Kaufman, Liora and others, Pat Van Dyke and Liz Johnson are the only women currently serving on the 14 member Board. Moreover, only once in HL7's history has a women – Susan Campbell, who served in the early 90s – been elected chair of the organization. We would do well, as on organization, to seek ways to increase the number of woman in our leadership positions.

With this in mind, Liora reached out to a few contacts last September to meet informally to discuss women in leadership in HL7. Through this informal network, about 15 of us showed up for an early breakfast in Chicago. We agreed that HL7 is a vibrant and welcoming community toward all volunteers. However, there are many potential leaders who simply don't step up to leadership, and a disproportionate number are women. While there are many reasons that prevent assuming additional responsibilities, lack of encouragement or lack of role models should not be a barrier.

The "Women of HL7" group was formed to tackle this issue. The group is open to everyone—women and men alike—who have an interest in developing and supporting women leaders. During the last meeting in San Antonio, this group discussed a couple of ideas to encourage women to run for leadership roles. One of those involved inviting the women who served in leadership roles in the "early days" of the organization (e.g., Sue Campbell, Karen Keeter, etc.) to share their experiences with the group and offer suggestions for developing the skills and confidence to run for leadership positions. Another idea was to develop an email and webinar campaign to educate the full HL7 membership, men and women, about the Board election process, the criteria for running for a Board position, and the applicable deadlines. This last idea was passed along to and is now being implemented by the Nominations Committee. There are likely many other ways that we can encourage and grow the number of women leaders in HL7, and we invite everyone who has an interest in this topic to join us.

Accenture and Surescripts Join the Argonauts

HL7 Announces Newest Members of the Argonaut Project

By Andrea Ribick,
HL7 Director of
Communications

HL7® FHIR®
ARGONAUT PROJECT

For more information online:
www.HL7.org/FHIR www.ArgonautProject.org

Accenture and Surecripts joined the Argonaut Project in early April 2015. The Argonaut Project was launched in December 2014 to address the recommendations of the JASON Task Force, a joint task force of the HIT Standards and Policy Committees. The goal of the project is to accelerate the development and adoption of HL7's Fast Healthcare Interoperability Resources (HL7® FHIR®). HL7's FHIR is a next generation standards framework that leverages the latest web standards and applies a tight focus on implementation. It is a RESTful API, which is an approach based on modern internet conventions and widely used in other industries. HL7 FHIR offers enormous flexibility; for patients and providers, its versatility can be applied to mobile devices, web-based applications, cloud communications, and EHR data-sharing using modular components.

The Argonaut Project is funding current FHIR development efforts to provide practical and focused FHIR profiles and implementation guides to the healthcare IT industry. Micky Tripathi, chief executive officer and president of the Massachusetts eHealth Collaborative and Argonaut project manager, noted that the industry is looking to HL7 FHIR to advance interoperability in healthcare. He stated, "We are delighted that the Argonaut Project has garnered so much industry interest in accelerating the development of HL7 FHR and OAuth security. The addition of Accenture and Surescripts broadens the collaborative efforts of the Argonaut Project members to help bring a mature and quality standard to healthcare IT." He added that, "The more testing we conduct and implementation experiences we collect, the faster we will see RESTful API-based transactions become a day-to-day reality in health information exchange."

Accenture and Surescripts will join HL7 and the following founding members of the Argonaut Project:

- athenahealth
- Beth Israel Deaconess Medical Center
- Cerner
- Epic
- Intermountain Healthcare
- Mayo Clinic
- MEDITECH
- McKesson
- Partners HealthCare System
- SMART at the Boston Children's Hospital Informatics Program
- The Advisory Board Company

"Accenture is one of the largest EHR integrators in the world, connecting people, health systems, processes and analytics solutions across the continuum of care to reduce the complexity of healthcare delivery," said Mary Edwards, who leads Accenture's civilian health practice. "We are proud to bring our strong interest and commitment to help achieve superior levels of interoperability for clinicians and our nation's families and to help support the success of the Argonaut Project."

"As a nation, we've made significant investments to ensure that providers have access to electronic health records to support the delivery of care," said Tom Skelton, CEO of Surescripts. "In order to realize a meaningful return on those investments, we must find ways to ensure the rapid, trusted, and efficient movement of health data across a fragmented healthcare system. Our support of FHIR as an industry standard can help simplify and accelerate this process, so we can realize the full potential of interoperability across healthcare."

Continuous Learning Systems for Healthcare

HL7 Learning Health Systems Work Group Launched

By Russell Leftwich, MD, Co-Chair, HL7 Learning Health Systems Work Group, Co-Chair, HL7 Patient Care Work Group and Chief Medical Officer, Tennessee Office of eHealth Initiatives

The Institute of Medicine has outlined the concept of learning health care systems in its publication *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*. The vision is the evolution of a healthcare system focused on the health of the individual rather than on healthcare. Enabling such a system will require seamless interoperability across the spectrum of care organizations as well as extending to community organizations, the workplace, and the individual's own home environment. Features of such a system, many of which do exist in a *forme fruste* in healthcare systems that have been early to undertake transformation, include:

- Data mining of administrative and clinical data captured in the course of clinical care to monitor safety of drugs, devices, and immunizations
- Point of care trials and other methods of comparative effectiveness research
- Identification of at risk patients, including point of care identification of individual risk and extension to evaluation of potential benefit of different courses of treatment
- Creation of clinical guidelines and clinical decision support that is part of a paradigm of research and practice as a continuous feedback loop aimed at iterative improvement
- Living clinical guidelines that allow deviation from established standard guidelines and capture the logic for that deviation as well as the comparative outcomes from different courses of treatment
- Rules based real-time analytics in environments which generate large collections of data, such as intensive care settings, to combat information overload for clinicians
- Large collaborative networks that share data and allow researchers to study the effects of differing local health policies and differing payment design

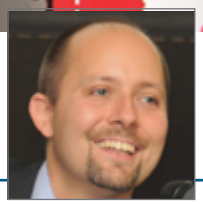
The Institute of Medicine workshop summary Digital Infrastructure for the Learning Health System cites the importance of interoperability standards (including vocabulary standards and harmonization), the importance of use case driven standards development, and standards adoption versus imposed standards. The needs identified in this publication are the inspiration for formation of this new HL7 work group.

The HL7 Learning Health Systems Work Group (LHS WG) has been formed with founding interim co-chairs Russell Leftwich, MD and Mark Roche, MD. The purpose of this work group is to take a healthcare systems level view of a learning health system with the goal of achieving better care for individuals, better health for populations, and lower cost of care. The focus of this work group will be a use case driven domain model for a learning health system that will enable analysis and identification of standards requirements to inform standards development and standards harmonization. The LHS WG is part of the Technical and Support Services Steering division (T3SD) of the HL7 Technical Steering Division.

The first working group meeting of the LHS WG will take place at the HL7 May Working Group Meeting in Paris, France. Those HL7 members wishing to join the LHS WG should sign up for the lhswg@lists.hl7.org listserv under Membership:MyListservs or through the Listserv tab on the Learning Health Systems WG page of HL7.org.

For more information about Learning Health Systems, The Institute of Medicine offers a helpful infographic on their website at:

http://www.iom.edu/Reports/2012/Best-Care-at-Lower-Cost-The-Path-to-Continuously-Learning-Health-Care-in-America/Infographic.aspx



Report from Prague

The International HL7 Interoperability Conference

By Libor Siedl and Bernd Blobel, PhD,
IHIC 2015 Program Committee

The International HL7 Interoperability Conference (IHIC) 2015, hosted by HL7 Czech Republic with support from HL7 Austria, HL7 Germany, and HL7 Switzerland, took place February 9-11 in the beautiful Czech capital Prague. This event was the 15th in a series of successful international conferences addressing the objectives HL7 stands for globally.

The IHIC meetings were started by HL7 Germany by its unforgettable Chair Joachim Dudeck, who organized the first HL7 International Affiliates Meeting in Dresden. Since then, meetings have taken place in Europe, North and South America, Asia and Australia.

IHIC events differ from regular HL7 working group meetings (WGMs) in that they do not specify interoperability standards but rather provide a forum where attendees may share experiences about national and even cross border implementations of HL7.

Many of us remember the venues in Reading (UK), Melbourne (Australia), Daegu (Korea), Acapulco (Mexico), Taipei (Taiwan), Cologne (Germany), Auckland (New Zealand), Hersonissos (Crete, Greece), Kyoto (Japan), Rio de Janeiro (Brazil), Lake Buena Vista (USA), Vienna (Austria), and Sydney (Australia).

IHIC events differ from regular HL7 working group meetings (WGMs) in that they do not specify interoperability standards but rather provide a forum where attendees may share experiences about national and even cross border implementations of HL7. During IHIC events, practitioners and scientists evaluate HL7 specifications against alternative solutions, investigate standards harmonization, as well as address future directions and needs, new principles, methodologies, and tools.

IHIC 2015 kicked-off with a full day of tutorials, which were free for all attendees. On Monday, 48 attendees were able to choose from 12 tutorials that were offered. This format facilitated knowledge sharing about HL7 and interoperability standards, solutions, methodologies and tools.

IHIC 2015 attracted 58 attendees from 14 countries representing Europe, North and South America, and Asia. The event commenced with a keynote from HL7 International CEO Charles Jaffe, MD, PhD. The event included presentations on local, regional and national Electronic Health Records solutions; concepts and frameworks for Smart Interoperability Infrastructure Services; and joint HL7 and IHE implementations at regional and national levels. IHIC 2015 also featured the session “Show Me Your CDA”.

Nebozizek Restaurant in Prague.

Marten Smits from the Netherlands accepts the Joachim Dudeck Award from HL7 Germany Chair Christof Gessner at IHIC 2015 in Prague.

An independent international review process selected the best contributions to IHIC which. These contributions were published as a Special Issue of the European Journal for Biomedical Informatics (EJBI). This edition is available for download at: http://www.ejbi.org/img/ejbi/ejbi2015-2.pdf.

All other contributions accepted by the program committee may be accessed from the IHIC 2015 proceedings: http://ihic2015.hl7cr.eu/Proceedings-web.pdf.

To get the full experience of the implementation reports, speeches were recorded and will be made available on the conference website at: http://ihic2015.hl7cr.eu.

After Joachim Dudeck passed away in 2009, the Joachim W. Dudeck Award was established and first awarded in 2011. This prize recognizes young scientists for outstanding achievements in the development and implementation of HL7-based interoperability solutions and the promotion of the use of HL7 and its harmonization with other standards. This year, an international jury reviewed the contributions submitted and presented to the. The Joachim W. Dudeck Award winner 2015, announced at the end of the IHIC event by the acting Chair of HL7 Germany, is Marten Smits from Amsterdam, the Netherlands, author of the submission "A comparison of two Detailed Clinical Model representations: FHIR and CDA". The paper is co-authored by Ewout Kramer, Martijn Harthoorn and Ronald Cornet and can be read at: http://www.ejbi.org/en/ejbi/artinfo/197-en-27.html.

A popular highlight of the conference was the social event at the Nebozizek restaurant on Petřín Hill which offered excellent local food and a spectacular view of the old town of Prague and the Prague Castle. IHIC 2015 attendees expressed their appreciation of the event.

We would like to thank the local organizers, including the entire staff of the Charles University Prague as well as Jana Zvarova, Editor-in-Chief of the EJBI for their excellent work.

Available Online:

Special Issue of the European Journal for Biomedical Informatics (EJBI)
www.ejbi.org/img/ejbi/ejbi2015-2.pdf

A comparison of two Detailed Clinical Model representations:
www.ejbi.org/en/ejbi/artinfo/197-en-27.html

IHIC 2015 Conference Proceedings:
www.ihic2015.hl7cr.eu/Proceedings-web.pdf

Report from the 3rd HL7 Asia Symposium

Introduction of HL7 Asia

By Ken Toyoda, Chair, Organization Committee, HL7 Asia

HL7 Asia was founded to support the HL7 International initiatives within Asia and provide regional feedback to HL7 International. HL7 Asia promotes education and training, liaisons with regulatory agencies and health authorities, provides feedback on Asian issues to HL7 International.

The 3rd HL7 Asia Symposium was held March 12-13, 2015 at Samsung Medical Center in Seoul, Korea. The event featured two keynote speeches by HL7 International Chief Executive Officer Dr. Charles Jaffe and Mr. Rong-Min Baek from the Digital Healthcare Initiative Korea.

The theme of the symposium was "Mobile Health and Beyond" and included 11 presentations from five countries including the following:

- *A Health Checkup and Tele-Medical Intervention Program for Preventive Medicine in Developing Countries* by Yasunobu Nohara, Kyushu University Hospital, Japan
- *Health Data Integration and its Support for Mobile APPs* by Lijun Wang, Tsinghua University, China
- *Introduction to the Japan Realm C-CDA®* by Masaaki Hirai, HL7 Japan, Japan
- *Cloud applications of EHR in Taiwan* by Chien-Tsai Liu, Taipei Medical University, Taiwan
- *HL7 as an Infrastructure for Standardized Information Exchange: A Standardized Nationwide Health Checkup and Health Promotion Program for Lifestyle Related Disease Prevention in Japan* by Hiroyuki Hoshimoto, University of Tsukuba Hospital, Japan
- *University Activities in Medical Tourism in Japan* by Naoki Nakashima, Kyushu University Hospital, Japan
- *A Personal View on the Paradigm Shift from Cure to Prevention* by Meng Ger LIM, Singapore
- *mHealth R&D Strategy* by Sun-Ju Ahn, National Standard Coordinator, Korea
- *HL7 FHIR® and mHealth* by II Kon Kim, Kyungpook National University
- *Mobile Apps Development with HL7 FHIR®* by Victor CHAI, Singapore
- *HL7 Standards Adoption at Samsung Seoul Hospital* by Jeanhyoung Lee, Samsung Seoul Hospital

There were over 100 attendees from five countries.

The 3rd HL7 Asia General Assembly was held at the Cancer Center of the Samsung Seoul Hospital prior to the symposium. The HL7 Asia charter was discussed at length during this event.

During the General Assembly, Adam Chee (HL7 Singapore), Byong-Kee Yi (HL7 Korea), Chien-Tsai Liu (HL7 Taiwan), Lijun Wang (HL7 China) and Michio Kimura, MD, PhD (HL7 Japan) were accepted as the Executive Council members. The HL7 Asia Executive Council then held elections for the positions of chair, vice chair and secretary. The following individuals will serve two year terms.

Chair:
Michio Kimura, MD, PhD, HL7 Japan

Vice Chair:
Ballou Li, HL7 China

Secretary:
Byong-Kee Yi, HL7 Korea

HL7 Asia was established in 2012 and is comprised of the following HL7 affiliates: HL7 China, HL7 Hong Kong, HL7 India, HL7 Japan, HL7 Korea, HL7 Pakistan, HL7 Philipines, HL7 Singapore and HL7 Taiwan.

The main responsibilities from the charter are as follows:

- Organization of the annual meeting in Asia
- Training and seminars in Asian countries
- Contact with Asia and national competent authorities.
- Liaison with Asian health authorities with particular emphasis on those adopting standards for healthcare information systems.
- Interaction with HL7 representatives within Asia

The 1st HL7 Asia Symposium was held July 18-19, 2013 in Tokyo, Japan. The theme of the Symposium was “Healthcare for the 21st Century in Asia -HL7 leads Standardized Approach”. The 2nd HL7 Asia Symposium was held March 13-14, 2014 in Singapore. The theme was “Interoperability Going Forward – Innovations and Challenges”.

The 4th HL7 Asia Symposium will be held in Taiwan. More information will be available in the coming months. ■

January 2015 HL7 Payer Summit Recap

Payer User Group Launched at Payer Summit in San Antonio

By Karen Van Hentenryck, HL7 Associate Executive Director

Held in conjunction with HL7's January Working Group Meeting, the payer summit provided a forum for payers to learn about HL7, share their interoperability successes and challenges, and talk with others in the payer community.

Approximately 65 payers and sponsors were in attendance at HL7's second Payer Summit, which convened on January 22-23 at the Hyatt Riverwalk in San Antonio.

Thursday Keynote

Dr. Kate Goodrich, Director of the Quality Measurement and Health Assessment Group at the Center for Medicare and Medicaid Service (CMS), kicked off the January 2015 Payer Summit with a keynote address on the topic of CMS' quality and measurement strategy for delivery system and payment transformation. That strategy, according to Goodrich, involves a shift from the current fee-for-service and volume-drive fragmented care to an outcome-driven and coordination care environment that relies on different payment systems. Quality measures and health information technology are essential to this transformation and to CMS' strategy.

HEDIS and STARS Reporting

Goodrich's keynote was followed by a HEDIS and STARS reporting session. McKesson employee Richard Sabbara opened this session by highlighting his experience supporting and advising physicians. He discussed current provider challenges, suggesting that health information exchanges (HIEs) may offer some solutions. Felix Bradbury, senior principal with Accenture with goal health analytics, then provided an overview of the typical issues Medicare Advantage Plans face and discussed how the CMS STARS rating program affects both payers and providers. His presentation included a discussion of best practices and operational factors influencing members' perception of a plan's STARS results. Crystal Kallem of Lantana Consulting concluded the session by discussing the standards produced by HL7's Clinical Qualify Information Work Group (which she co-chairs) that support improvement of healthcare quality and therefore lead to better STARS outcomes.

Use Cases

Following the HEDIS and STARS reporting session, attendees participated in one of three use case sessions. Use cases (problems that need to be solved) were submitted in advance by Payer Summit attendees, and solution discussions were facilitated by representatives from Accenture, Lantana Consulting and 3eServices, LLC. One use case addressed the challenge of receiving the diagnosis code on emergency room and admission precertification requests; a second use case explored ways to improve disease management by identifying beneficiaries with untreated diabetes using HL7 standards; and the third use case focused on minimizing the challenges of transition in care. Structured as a competition, use case solutions were judged by HL7's CTO John Quinn, HL7's Technical Steering Committee Chair Ken McCaslin, and HL7 Financial Management Work Group Chair Paul Knapp. The winning use case, facilitated by Cecil Lynch of Accenture, was announced at the Thursday evening reception.

"How to Build a FHIR"

Another highlight of the first day was a presentation titled "How to Build a FHIR." David Degandi and Amol Vyas from Cambia Health Solutions, had, in the two months prior to the Payer Summit, built an interface using the HL7 Fast Healthcare Interoperability Resources (HL7® FHIR®) standard. They presented their proof of concept implementation as a demonstration to summit attendees and validated that a FHIR-based solution not only provides faster time to market but has positioned Cambia's

standards-based framework for external integration.

Friday Keynote

Esteban Lopez, MD, MBA, presented the keynote address for day two of the Payer Summit. Dr. Lopez, Regional President of Blue Cross and Blue Shield of Texas, discussed enhanced care coordination between doctors, hospitals and other healthcare entities that are collaborating as Accountable Care Organizations (ACOS). Designed to provide high quality care by coordinating care and managing chronic diseases while lowering costs, ACOs are, according to Lopez, impacting operational workflow. He discussed how these programs currently in place at BCBS of Texas are gradually shifting accountability for quality outcomes and costs onto providers. Lopez concluded his keynote by providing an overview of the practice pattern changes in value based care models, including the use of HIT, patient risk stratification, gaps in care identification and physician performance metrics.

Payer Expectations

Thomson Kuhn, Senior Systems Architect at the American College of Physicians, and Russell Leftwich, MD, Chief Medical Informatics Officer at Tennessee Office of eHealth Initiatives, next provided a presentation on what providers expect from payers. From Leftwich's perspective, providers want transparency; uniform, specialty appropriate requirements; evidence-based metrics; and equity of technology cost share. Kuhn noted that providers want to put patients first and improve care. To accomplish these goals, payers and providers must work together to reduce paperwork and the evaluation/management of coding guidelines that frequently get in the way of these goals.

Implementation Case Studies

The final payer summit sessions included four implementation case studies (success stories):

- Dr. Mark Pilley, Medical Director of StrategicHealthSolutions, LLC, led a session on the esMD standards and their applicability to the exchange of digitally-designed, structured documentation for clinical and administrative purposes
- Sherry Wilson, Executive Vice President and Chief Compliance Officer of Jopari Solutions, and Deborah Meisner, Vice President of Regulatory Strategy at Emdeon presented an implementation case study from the property and casualty insurance sector that highlighted how they use technology to encourage electronic submission of billing and supporting clinical documents, which previously had been paper-driven
- Seth Freedman, Director of Corporate Development & Innovation at Independence Blue Cross, presented the newly launched updated version of their IBX Mobile application, which allows members to access their available health information through the National Blue Button Initiative made possible by a partnership between payers and providers in Philadelphia
- Mariann Yeager, CEO of Healtheway, discussed the eHealth Exchange, which enables secure, trusted interoperable exchange of health information among federal agencies and roughly 30% of hospitals in the US

New HL7 Payer User Group

At the conclusion of the Payer Summit, Durwin Day, member of the Payer Summit planning team, announced the formation of the HL7 Payer User Group. The Payer User Group is free to all HL7 voting members. Others may join the user group for $100 annually. Those interested may join the HL7 Payer Use Group on the HL7 website at http://www.HL7.org/participate/UserGroups.cfm.

The HL7 Payer Summits would not be possible without the dedication of our planning team—Durwin Day, David Degandi, Craig Gabron, Lenel James, and Amol Vyas—and our many sponsors: Perficient, Gevity, HealthTrio, Edifecs, Healtheway, NaviNet, Lantana Consulting, Accenture, WEDI, 3eServices LLC, and Medicity.

Working Together to Advance Interoperability

HL7 Pharmacy, IHE Pharmacy and ISO TC215 Collaboration

By Michael Tan, Co-Chair, HL7 Patient Care Work Group; Co-Chair, IHE Pharmacy; Senior Product Manager, NICTIZ

An initiative for an IHE-HL7 collaboration was initiated in San Antonio.

The need for such collaboration was recognized a number of years ago in the pharmacy domain. The HL7 Pharmacy Work Group, IHE Pharmacy and ISO TC215 WG6 have convened regularly since 2011. It started with IHE and HL7 joining their efforts and ideas within the Pharmacy Domain. IHE relies on other standard bodies since it does not invent new standards itself, but makes use of existing standards. Their need for close communication with the HL7 Pharmacy Work Group was apparent, since IHE comes from a radiology background having a strong affiliation for documents (CDA®), while HL7 Pharmacy had its roots in the messaging paradigm with HL7 Version 2 and HL7 Version 3 messages.

IHE Pharmacy persisted to continue with CDA-based communication to be able to benefit from other IHE concepts such as XDS. At the start of IHE Pharmacy there was very little documentation on the use of CDA for prescriptions and dispenses. Since the start of the cooperation, the two groups have been working together to bridge the gap in approach, culture and solutions.

The HL7 Pharmacy Work Group has a broad international background while IHE Pharmacy has a strong European representation. This may seem a minor detail, but it affects the time frame that these groups are able to confer or the places they meet.

The ISO TC215 Workgroup 6 has joined these ranks to strengthen the collaboration. The first meeting was hosted by NICTIZ in June 2013 at their offices in The Hague (Netherlands). The meeting provided an opportunity to give an update on the mission of each group as well as the active projects of the group. The groups also looked for ways to help each other.

The second meeting in June 2014 was held at the University of Porto in Portugal. In addition

Jürgen Brandstätter from IHE Pharmacy presenting IHE to university students

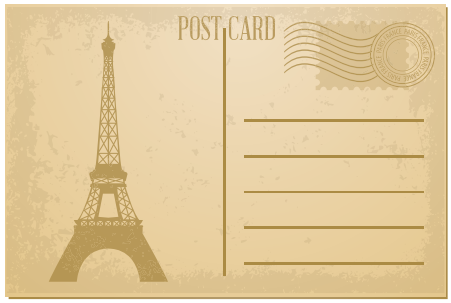
Christian Hay of GS1 presenting ISO to university students

to the collaboration between the groups, each group also presented themselves to the graduate students of the University.

In Porto they also agreed to participate in a Joint Initiative Collaboration (JIC) initiative to ballot ISO TC17523 regarding the requirements for e-Prescriptions. The JIC has free access to the ISO documents. The e-Prescription document describes the common elements that should be present in e-Prescriptions. This ballot closed on February 11th and the ISO affiliates from IHE and HL7 are now reviewing the ballot comments together with the ISO TC215 Workgroup 6.

Other work-items which are pending are the e-Dispenses and the follow up work that flows from the IDMP joint initiative. ■

The HL7 Pharmacy Work Group, IHE Pharmacy and ISO TC215 WG6 collaborating in Porto.



This year the annual meeting will be held after of the May 2015 HL7 Working Group Meeting. The HL7 Pharmacy Work Group, IHE Pharmacy and ISO TC215 WG6 will convene on Friday 15th of May at ASIP Santé in Paris. Topics that are proposed are medication management concepts & definitions and a workshop on Medication Statements. If you are interested in participating, please contact Melva Peters (HL7 Pharmacy Work Group Co-Chair) or Michael Tan (IHE Pharmacy Co-Chair).



By Prof. Sylvia Thun, MD, PhD, University of Applied Sciences Niederrhein

Veli Stroetmann, MD, PhD

Rainer Thiel, PhD, empirica Communication & Technology Research

Semantic Standards In A Multi-Lingual, Multi-Cultural Environment

Assessing SNOMED CT for Large Scale eHealth Deployments in the European Union

Semantic standards like terminology systems are key resources to improve data interoperability and reuse and maximize value from clinical data to optimize care and minimize harm in care delivery. The ASSESS CT project, integrating a broad range of stakeholders, will investigate the fitness of the international clinical terminology SNOMED CT as a potential standard for EU-wide eHealth deployments.

In a joint one-year effort, ASSESS CT will investigate a number of issues related to the current use of SNOMED CT. This effort will review concrete reasons for the adoption/non adoption of SNOMED CT, lessons learned, success factors, type and purpose of use, multilingualism, cultural differences, and strengths and weaknesses. ASSESS CT will evaluate the current state of SNOMED CT use and the fulfilment of semantic interoperability use cases, known technical and organizational drawbacks, and the way the terminology is improved and maintained by using literature reviews, surveys, interviews, focus groups and workshops.

The consortium will analyze the impact of SNOMED CT adoption from a socio-economic viewpoint, encompassing management, business, financial, organizational, and governance aspects. ASSESS CT will provide both the European Commission and the EU member states with a portfolio of best practice approaches to the adoption of SNOMED CT. This will include prerequisites; critical success factors; and methods to overcome technical, legal, organizational and human factor barriers. It will delineate the gaps in the availability and licensing of SNOMED CT and derived assets such as value lists, translations, and tools. It will also identify gaps in the in the market, regarding EHR system capability, educational resources, and analytics. Available evidence, hypotheses, expert and user opinions will be synthesized into useful policy recommendations to support scaling up successful adoption of SNOMED CT and maximizing value from coded clinical data.

Knowledge gaps for aspects of SNOMED CT, such as its suitability

Continued on page 21

The core project team is composed of 14 organizations:

Organization	Country
University of Applied Sciences Niederrhein	Germany
HL7 International Foundation	Belgium
Medical University of Graz	Austria
Averbis GmbH	Germany
European Institute for Health Records	France
empirica Gesellschaft für Kommunikations- und Technologieforschung mbH	Germany
Academisch Medisch Centrum bij de Universiteit van Amsterdam	Netherlands
Nictiz National IT Institute for Healthcare in the Netherlands	Netherlands
Regione Lombardia, General Directorate for Health	Italy
Aalborg University	Denmark
Linköping University	Sweden
INSERM LIMICS	France
Croatian Health Insurance Fund	Croatia
National Institute for Health and Welfare	Finland

Two-Year Project Began May 1, 2015

eStandards: a FocalPoint for Large Scale eHealth Deployment

By Catherine Chronaki, Secretary General, HL7 Foundation, Brussels, Belgium

Large-scale and sustainable deployment of eHealth services across organizations or jurisdictions would favor cost-efficient, consistent, and accelerated implementation of standards that advance interoperability.

The eStandards project selected for funding by the European Commission was proposed by HL7, CEN/TC 251, IHE, EuroRec, OFFIS, and other leading organizations for eHealth standards and specifications development and adoption in Europe. It is supported by the European eHealth Network of European Member State representatives established under Article 14 of the EU Directive on patients' rights to cross-border care as well as ISO/TC 215, GS1, IHTSDO, IEEE, EFMI, and IMIA to advance eHealth interoperability and global alignment of standards and specifications.

The two year project that began on May 1, 2015 aims to bring together stakeholders across Europe and globally to build consensus on creating interoperability across different (possibly overlapping) eHealth standards, accelerate knowledge-sharing, and promote wide adoption of standards.

In an evidence-based Roadmap, the eStandards project targets alignment, iterative consolidation, and broad acceptance of eStandards. It also elaborates on the European eHealth Interoperability Framework use cases with clinical content modeling for different paradigms and embeds a quality management system for interoperability testing and certification of eHealth systems. The project team will collect evidence and will provide guidance on the coexistence of competing or overlapping standards in large-scale eHealth deployment, whether regional, national or cross-border.

The eStandards Roadmap and associated evidence base expected in 2017 will include a white paper on the need for formal standards, and two guidelines addressing how to work with: (a) clinical content in profiles and (b) competing standards in large-scale eHealth deployments aspire to be pragmatic steps toward their alignment and convergence of eHealth standards.

Interoperability tools play a critical role in this context as they hold promise of optimizing the entire interoperability standards lifecycle as introduced in the eHealth Interoperability report:

- Identification of a use case or set of requirements
- Selection of supporting interoperability standards, with the selection of options
- Implementation, conformance testing, certification
- Deployment in projects, which closes the feedback loop from the real world

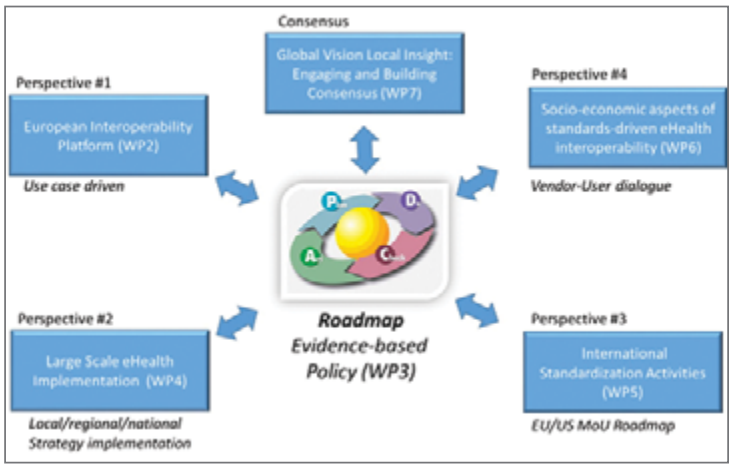


Figure 1

Along with interoperability tools, quality management for testing and certification of eHealth solutions as well as structured meaningful evidence of best practices can drive large scale eHealth deployment. Underlying aspiration is changing the language of interoperability toward a culture of co-creation and mutal trust between traditional purchasers and the health information technology industry. (see Fig. 1).

In this way, eStandards project aims to nurture innovation, sustainability and growth under the emerging Connecting Europe Facility contributing to the Standards and Interoperability pillar and specific key actions of the Digital Agenda 2020 in Europe. Its ultimate ambition is to strengthen Europe's voice and impact, while reinforcing the bridges established with the EU Patient Summary guideline across the Atlantic in Trillium Bridge and among European Union member states with initiatives such as epSOS, eSENS, Antilope, and EXPAND.

For more information contact: euoffice@HL7.org

OpenMedicine

By Jos Devlies, Medical Director Custodix and Medical Director EuroRec

Professor Dr. Karl Stroetmann, Senior Research Associate, empirica GmbH

European Agencies Seek Standards

Meeting the Challenge of Open Access to Medicinal Products

The core goals of the European "Coordination and Support" action are to globally advance the unique identification of medicinal products and to enhance the safety of cross-border healthcare delivery through interoperable ePrescriptions. The epSOS project (Smart Open Services for European Patients - Open eHealth initiative for a European large scale pilot of patient summary and electronic prescription) solved the message transfer problem, but encountered two serious delivery problems. The delivery problems were the univocal identification of medicinal products (MPs) to be dispensed in another country and challenges arising when it becomes necessary to substitute a medicine prescribed in another country for therapeutic and economic reasons.

This project will allow global standards development organizations (SDOs) including World Health Organisation (WHO), Health Level Seven International (HL7), International Health Terminology Standards Development Organisation(IHTSDO), International Organisation for Standardization/European Committee for Standardization [Centre Européen de Normalisation] (ISO/CEN), Global Standards 1 (GS1), the European Union (EU) – Medicines Agency (EMA), as well as EU member state competent and regulatory authorities, major stakeholders (industry, health professionals, patients) and partners in the US to harmonize their respective efforts to deliver the following:

- Common data models expanding upon epSOS and existing standards (ISO/IDMP) - for prescribed MPs
- A common meta-vocabulary for unambiguous definition, description, and identification of MPs
- Rules to harmonize practices of therapeutic and economic substitution
- A roadmap for post-project actions and implementations
- Policy recommendations for the EU-USA eHealth road mapping process

This work will link to and develop upon earlier activities of SDOs, epSOS, and European Union policy and regulatory processes such as those undertaken by the eHealth Network of all member states, and three other eHealth interoperability projects funded under the "person-alizing health and care" (PHC 34) focus of the European Commission Horizon 2020 Program to support research and innovation.

As a first step the project will develop a concise conceptual framework to guide further work. It will focus on use case scenarios where the identification of an MP is an issue, including pharmacological and pharmacokinetic attributes, clinical indications and risks to be considered.

The core project team is composed of eight organizations:

Organization	Country
empirica Gesellschaft für Kommunikations- und Technologieforschung mbH	Denmark
Custodix NV	Belgium
Health Products Regulatory Authority	Ireland
Health Ministry of Regional Government Lombardia	Italy
Health Level Seven International (Europe)	Belgium
Instytut Logistyki i Magazynowania	Poland
Nederlands Normalisatie Instituut (for European Committee for Standardization (CEN))	Netherlands
Agencia Española de Medicamentos y Productos Sanitarios Parque Empresarial	Spain

Next, the core work will address the identification and description of pharmaceutical products, not only for standard pre-packed regulated medicinal products, but also for special cases like MPs with multi-components, biologics, or special packaging, as well as those cases where a prescription for a medicinal product only specifies a cluster or class of products. Furthermore, investigations will be undertaken to clarify what attributes are needed for reverse identification of a medicinal product (e.g. in toxicology).

A parallel work strand will map national rules and regulations in all member states for therapeutic and economic substitution. It will also explore options for harmonization of these rules across the EU.

Each track develops a set of concrete solutions and road map recommendations, validated by experts in face-to-face meetings and workshops.

Over the duration of the project, other national competent authorities, SDOs, stakeholders not part of the core team, and individual experts will be involved and actively encouraged to participate. This is to ensure the practicability, acceptance and trust in the solutions developed.

The study lasts two years and involves eight beneficiaries and approximately 25 expert organizations. The budget is approximately € 1m. ■

Continued from page 18

Assessing SNOMED CT for Large Scale eHealth Deployments in the European Union Products

for clinical use and its use across language and cultural borders, will require further investigations. Small, focused studies using sampled clinical data will provide new evidence about conceptual and term coverage for selected languages, as well as technical fitness in manual and automated semantic annotation scenarios. The costs for enrichment of SNOMED CT by non-English content will be estimated based on cost estimates for adding and validating interface terms. Fitness to clinical requirements will be examined by assessing term and concept coverage and coding agreement in clinical use cases, such as for structured and unstructured patient summaries. The additional evidence is expected to have a significant impact on future policy dialogues and strategic planning.

Three scenarios will be followed:

1. ADOPT: SNOMED CT as pan-European eHealth interoperability standard
2. ALTERNATIVE: interoperability without SNOMED CT
3. ABSTAIN: no EU level action taken

The consortium will collect real-world experiences for each of these scenarios to create new evidence that can be used to assess the impact on different stakeholders, including patients and healthcare providers, for cross-border as well as national and regional strategies.

Alignment with the priorities and perspective of the eHealth Network will be sought through a committee of member states' representatives. Validation of all working tasks will be ensured through four large workshops with distinguished experts assembled in an expert panel and national focus groups. Coordination across the parallel H2020 Call PHC34 interoperability projects will be sought. Alignment with EU-US interoperability activities will also be ensured.

ASSESS CT receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 643818. More information is available at: www.assess-ct.eu. ■

Contacts:

Scientific coordination:
Prof. Sylvia Thun, MD, PhD
University of Applied Sciences Niederrhein
Reinarzstr. 49, 47805 Krefeld
Tel. +49 2151/822-6654
Sylvia.Thun@hs-niederrhein.de

Administrative coordination and networking:
Veli Stroetmann, MD, PhD; Rainer Thiel, PhD
empirica Communication & Technology Research
Oxfordstr. 2, 53111 Bonn
+49 (2 28) 9 85 30-00
ASSESSCT@empirica.com

News from the PMO and Project Services Work Group

HL7 Project Scope Statement (PSS) Adds Two Helpful Derivatives

By Dave Hamill, Director, HL7 Project Management Office

Rick Haddorff, Co-Chair Project Services Work Group

Freida Hall, Co-Chair Project Services Work Group

In conjunction with the TSC, the Project Services Work Group and the HL7 Project Management Office have been working on a couple of offshoots from the HL7 Project Scope Statement (PSS) – the 'PSS-Lite' and the 'Project Component Scope Statement'.

Based on feedback given to the TSC regarding the current PSS, many indicated that project teams often don't have enough information to create a full-fledged PSS until a project is well underway. An idea was born to create a 'PSS-Lite' – an abbreviated version of the regular PSS that has fewer requirements than a fully developed PSS.

The purpose of the PSS-Lite is to provide a vehicle for project discovery and exploration to assist in determining project requirements, potential co-sponsoring work groups, project team participants and project efforts.

The duration of the PSS-Lite is limited to two trimesters (6-8 months) at most. Any deliverables resulting from PSS-Lite effort are not ballotable.

Ideally, the outcome of the PSS-Lite's exploratory effort is a fully developed PSS and HL7 project, but in some circumstances, the discovery team may determine that additional effort is not warranted.

In order to roll out the PSS-Lite to the HL7 membership, the Project Services Work Group is following protocol as defined in 'Introducing New Processes to HL7' (located at www.HL7.org > Resources > Procedures). This protocol includes the following steps:

1. Initiation - The TSC received feedback in late 2014 and met with Project Services in January to analyze solutions. Ken McCaslin communicated the idea of a PSS-Lite in the Monday evening Co-Chair dinner at the January 2015 Working Group Meeting in San Antonio
2. Development - Project Services conducted a thorough analysis of each section in the PSS to determine which should be included in the PSS-Lite
3. Validation - Project Services elicited feedback from the HL7 community regarding the PSS-Lite
4. Adoption - Project Services to lead the effort in piloting the PSS-Lite, obtaining endorsement of it and implementing the template and any supporting processes

The second derivative of the PSS being developed is the 'Project Component Scope Statement' (CSS). It's the primary deliverable from Project Services Work Group sponsored Project 1171 - University/College Internship Process Development. The CSS is intended to capture a subset of a larger HL7 project which can be accomplished by a graduate student within a 16 week course. The CSS is just one of many goals of the University/College Internship Process Development project. Other aspects of the project are to:

- Engage students that want to know more about HL7
- Build relationships with students and provide them an experience that may lead them to become an HL7 member
- Provide assistance to stagnant HL7 projects due to resource shortages
- Create a project component selection process
- Create feedback and evaluation processes between project facilitators, students and their professors

We hope both of these new templates will be beneficial to the HL7 membership.

Newly Certified HL7 Specialists

Congratulations to the following people who recently passed the HL7 Certification Exam

Certified HL7 Version 2.x Chapter 2 Control Specialist

NOVEMBER 2014

Abinaya Parthasarathy
Ankur Bhatia
Suchai Tammewar
Allan Casalla
Sameer Mathur
Raymond Chiu
Amy Liu
John Melendy
Chandrasekaran Punniyakoti

DECEMBER 2015

Sanjeev Pandey
Tasneem Fatima
Celia Gornatti

JANUARY 2015

Divya Kotte
Rakesh Kumar Devaraj
Bhupinder Singh
Karan Modi
Parikshit Sheth
Sunil Chaudhari
Vrinda Radadia
Rohini Golesar
Ankit Shetty
Ashish Shetty
Kumar Tulsiani
Shaleen Ahuja
Onkar Jadhav
Vishal Bhosle
Rakesh Waghulde
Mahesh Bhopatrao
Aarti Naik
Mehul Shah
Anil Nere
Mitul Sampat
Sanjeev Singh
Nitesh Joshi
Mihi Banerjee
Shaleen Tripathi
Shraddha Gupta
Ninad Desai
Kanchan Deshmukh
Priyanka Das
Vinayak Suryawanshi
Marta Garcia Gilabert
Kathy Dube
Natalie Raketich

FEBRUARY 2015

Ihor Andrukhiv
Santosh Kumar Jain
Karan Thapa

MARCH 2015

Joshua Anzalone
Gopal Rengan Lakhsmanan
Victor Feria Moreno
Elizabeth Houck
Samir Mahapatra

Certified HL7 Version 3 RIM Specialist

NOVEMBER 2014

Hemanth Ande

DECEMBER 2014

Abderrazek Boufahja

FEBRUARY 2015

Marcin Pusz
Marwan Alsabri
Minli Yang

Certified HL7 CDA Specialist

NOVEMBER 2014

Brian Chaffin
Marwan Sabri
Jeff Chen
Maiko Minami

DECEMBER 2014

Hemanth Ande

JANUARY 2015

David Carlson
Indrajeet Kohok
Trupti Sarang
Raviteja Annadanam
Aniket Bartake
Nuncio Varghese Kolomkanny
Rashmi Nair
Rajshekar R Rampelli
Rahul B Patil
Rizwan Shaikh
Khushboo Bangur
Arijit Roy
Pallavi Metuku
Marco Demarmels
Oliver Egger
Colin Rhodes
Eric Helfin

FEBRUARY 2015

Hamdan Ali
Kanika Khurana
Izabela Rynkiewicz

MARCH 2015

Kelli Barnhardt
Ayman BafaQeeh
Irinel-Florin Georgescu
Adrian Tosca
Michael Gigliotti
Brandon Lyons
David Anaya Treviño
Jose Ramon Garcia Pardos

New Software Helps Healthcare Community Create and Validate EHR Systems

The EHR-S FM Profile Designer Tool

By Anneke Goossen-Baremans, Michael van der Zel, John Ritter, Patricia Van Dyke, William Goossen

Introduction

The HL7 Electronic Health Record System Functional Model (EHR-S FM) is a standards-based description of the functions that may be present in electronic health record systems. The EHR-S FM is a generalized reference model that serves as the foundation from which descriptions ('Functional Profiles' (FP)) of EHR systems for specific care settings or realms can be derived. The EHR-S FM also offers a rigorous set of rules for creating conformant FPs (the Conformance Clause). Both the EHR-S FM and the Conformance Clause's rules have been incorporated into HL7's new 'EHR Profile Designer Tool'. The tool enables users to more easily identity, select, and tailor functions that will meet their stakeholders' needs.

Method

The EHR-S FM Profile Designer Tool is an extension of Sparx Systems' Enterprise Architect (EA) software. EA was chosen because of its availability to the HL7 community and for its tool development and extensibility capabilities. The tool's creation included the following steps:

- HL7's EHR Work Group defined the initial set of requirements, which were then expressed as individual use cases.
- A UML metamodel was designed that would successfully accommodate the EHR-S FM's contents.
- The EHR-S FM was transitioned from Excel to XML format, and then imported into EA (using the UML metamodel).
- The tool's user interface was created.
- The Conformance Clause's rule base was integrated into the tool.
- A FP publication method was established by exporting a new FP as a MAX XML document, then by using XML tooling on the MAX document to generate HTML, PDF, and CSV documents.

The tool has been successfully beta-tested by two FP-development teams, resulting in a Meaningful Use Functional Profile (MU-FP) and a Records Management and Evidentiary Support (RMES-FP).

Beta-Test Findings

A Functional Profile that has been created via the EHR Profile Designer Tool:

- speeds up the development process and leads to more consistent FP's;
- provides traceability back to a specific version of the EHR-S FM;
- promotes consistency among conforming FPs;
- enables combinations, comparisons, and merging of conforming FPs; and
- supports the stakeholder's ability to claim a system's conformance to a standard.

Conclusion

HL7's EHR Profile Designer Tool helps the healthcare community create and validate EHR systems using a standards-based approach. The Tool also supports stakeholders' management of the FP development and consensus-generating process and can serve as an important asset of the HL7 standards community.

Call for Stakeholder Participation

Provide Input During the EHRS-FM on FHIR® Conference Call

By Stephen Hufnagel, PhD, HL7 EHR Work Group Facilitator

The EHR Work Group is kicking-off preparations for the next release of ISO/HL7 10781:2014 EHR-S FM Release 2 (EHR System Functional Model (EHRS-FM) R2).

The EHR-S FM Release 3 Project Scope Statement (PSS) vision will be to specify a clear, complete, concise, correct and consistent EHR-S FM service model which is helpful and easy-to-use for both users and developers.

HL7 Fast Healthcare Interoperability Resources (HL7 FHIR®) linked to each EHR-S FM function provides EHR services specifications in support of easily customized-implemented-and-deployed EHR Platforms' Service Oriented Architecture (SOA). An EHR-related framework is planned in anticipation of EHR-S FM Release 3 to support consistency and reuse across future EHR Work Group functional models and/or profiles (e.g., EHR,PHR, laboratory, pharmacist/ pharmacy/ e-prescribing, imaging, child, public and behavioral health, emergency department, records management and evidentiary support, long-term care, nutrition care, vital records, clinical research, etc.).

The EHR-S FM Release 2 resides within the Sparx Enterprise Architect (EA) tooling environment. Our future stated vision is to support full lifecycle story-boards; use-cases; scenarios; requirements-specifications; acquisition, design and test conformance-criteria; certification; and code generation. The EHR-S FM Release 3 will ideally include reusable and adaptable S&I Framework use-case and implementation-paradigm models for HL7 FHIR and the Clinical Document Architecture (CDA®) and Consolidated CDA (C-CDA) specifications. These will be incorporated within a UML tool-environment to efficiently support HL7 stakeholders, users, implementers and testers.

We Need Your Help!

The HL7 EHR Work Group is looking for stakeholder participation to provide feedback on our build-a-little and test-a-lot DevOps approach. DevOps integrates Agile and Lean Six-Sigma development with immediate operations feedback. The EHR-S FM Release 3 will focus on collaboration among stakeholders, developers and operators/users (aka DevOps) throughout all stages of systems life cycles. The EHR Work Group will be creating service specifications (e.g., SOA) for well-specified EHR system service operations such as functions, data and information exchanges. We consider the DevOps approach key to effective next generation EHR-related systems.

If you are interested in participating, please join the EHR interoperability sub-group conference call every Tuesday at 2 PM Eastern or the plenary EHR work group every Tuesday at 3 PM Eastern.

EHR Interoperability Sub-Group Conference Call

Every Tuesday 2:00 PM EST

Call 770-657-9270 and enter pass code 10269#

Plenary EHR Work Group Conference Call

Every Tuesday 3:00 PM EST

Call 770-657-9270 and enter pass code 10269#

Part 5: HL7 Version 2

The Early History of HL7

By Rene Spronk, Senior Consultant and Trainer, Ringholm; Co-chair, HL7 Application Implementation and Design Work Group

HL7 was founded in March 1987. HL7 Version 1 was created in 1987-1988 as a demonstrator *(see part 4 of this series)*.

HL7 Version 2

HL7 Version 1 consisted of chapters covering the overall transmission control structure (documented in Chapter 2); admission, discharge, and transfer (Chapter 3); order entry (Chapter4) and query (Chapter 5) and was largely based on the StatLAN protocol – its direct precursor.

Version 2.0 (V2) was prepared following the first HL7 plenary in Tyson's Corner and was presented at the second plenary meeting in September 1988. The direction from the HL7 board was to include billing transactions before pursuing adoption. HL7 Version 2.0 included billing (Chapter 6). Although HL7 While Version 2.0 was intended to be the first release for actual use in production, it was only implemented in a few settings. Rather, Version 2.0 primarily served to permit the implementation of a demonstration of the standard. Version 2.1 was published in June 1990, and included laboratory results reporting (Chapter 7) based on the ASTM E1238 specification.

Wes Rishel, the main author of the early HL7 Version 2 publications stated that "The decision to skip to a new major version number was informal and based on the concept that it made the standard sound more mature rather than any deep discussion of family characteristics of versions."

"The balloting for V2.0 occurred in Washington DC. We didn't have ANSI rules at the time and Wes conducted the vote," said HL7's Chief Technology Officer John Quinn. He continued, "It was a 'majority hands raised' type vote and not the kind of ANSI balloting with 30 days' notice, 30 days to complete a set of written comments, and then a negotiation process to arrive at a final count of negatives."

After publication of Version 2.1, HL7 adopted formal bylaws and voting procedures. These procedures are modeled on the balloting procedures of other relevant healthcare industry computer messaging standards organizations (e.g., ASTM) and are designed to conform to the requirements of the American National Standards Institute (ANSI). In June 1994, HL7 became an ANSI accredited standards developing organization.

Mark Shafarman wrote the chapter on master files (Chapter 8), which was added in HL7 Version 2.2. This chapter was based on the University of California San Francisco project *(see part 1 of this series)* where they used an early version of master files.

IEEE Medix

Medix (IEEE P1157 Medical Data Interchange, founded in 1987) was a competitor during the early years. Medix never published a standard. One of the difficulties the organization encountered was agreeing on a data model, which HL7 skirted by building one implicitly in the segment structure.

Their data modeling effort would ultimately lead to the development of the HL7 RIM. According to Clem McDonald, "I consulted with SMS for years and I recall a lunch with the President of SMS where he said they were going with IEEE Medix. I argued with him and told him that nothing exists and he should go with HL7. They did."

At the time of the development of HL7 Version 2.0, MEDIX raised a debate about the use of delimiters or name/value pairs. The main concern at the time was that delimited messages were too big for the typical interconnection technology of the day (i.e. 9600 baud serial lines). It came to a vote, with about 12 dissenting votes out of a total of 40.

Don Simborg recalled that "There was competition between Medix and HL7 for a short time. If we had any hope of getting a standard to be widely used, we needed to have the support of those vendors (e.g. SMS, HBOC, McAuto), which did come slowly and reluctantly. The great debate at the time between Medix (name/value pairs) and HL7 (delimited values) was won by HL7 for two reasons: the mainframe vendors used COBOL which couldn't use name/value pairs, and better marketing by HL7."

ASTM/HL7 Harmonization

The tight relationship between HL7 and the ASTM E1238-88 *(see part 2 of this series)* reporting syntax did not appear until HL7 Version 2. This resulted from a conscious effort by ASTM and deliberate compromises between the HL7 and the ASTM committees to avoid the evolution of two distinct ways to transmit clinical data for the common good. Throughout this collaboration HL7 transactions always had a much larger scope than ASTM E1238, which dealt only with the ordering and reporting of clinical observations.

The 1992 HL7 Board of Directors gathers for a casual photo at its Board Retreat.

Somewhere about the timeframe of Version 2.0 (the fall of 1988) Don Simborg encouraged the merging of the two standards and orchestrated a meeting between Wes Rishel and Clem McDonald with the purpose of determining if Clem's approach to sending structured lab results was suitable for HL7. Don Simborg commissioned Wes Rishel to organize the 'merger'. Wes and Clem spent a day in a room at the Chicago O'Hare airport where they worked out the details. As a direct result they achieved a common format and the two standards were nearly congruent regarding laboratory results reporting.

Even though it took a while (at the very latest in 1992 but most likely earlier than that) to get a formal agreement in place between HL7 and ASTM to duplicate the ASTM content of E1238-88 in HL7 and vice versa, Clem acted as if such an agreement was already in place from the start of the cooperation. He spent several years conducting parallel meetings in ASTM and HL7 to have the identical content within the different syntaxes of HL7 and ASTM E1238. Prior to this agreement orders and observations were both in Chapter 4; they were then split out to 4 and 7 when Clem started the synchronization effort.

Wes Rishel reflected that "The ASTM committee considered the collaboration a very good thing, because HL7 had such a high participation of members from the health informatics industry compared to the more academic composition ASTM committee. The sharing went in both directions. Many fields, data types, features and segments were developed first in the HL7 committee and later adopted by ASTM. This sharing was formalized in an official agreement between the officers of HL7 and ASTM, and was helped by the fact that for nearly a decade the ASTM committee and the HL7 orders-results committee had the same chair (Clem McDonald), and an overlapping membership of the volunteers who actually wrote the two standards."

Clem McDonald stated "I was chair of the HL7 orders/observation committee from its beginning up to around 1996, and wrote and edited all of the content for many years. I was also chair of the ASTM E31-11 ,the committee that created E1238-88 (and at least 2 other releases) until 1996. Toward the early-mid 90's, I think we had five or six people at the ASTM meeting and 60 at the corresponding HL7 meeting. It just did not make sense and I did not have the time to keep doing them as parallel and independent things. So I gave up on the ASTM side, because the number of committee attendees was teeny, as was the uptake of the pure ASTM version."

The core of the standard essentially dates back to the 1980-1992 time frame. Additional functionality (and chapters) have been added in subsequent versions of the HL7 Version 2 standard. ■

This is the fifth part of a series of articles about the early history of HL7. This article is an abridged version of a creative commons article available at http://bit.ly/1e7KScz – you are referred to the full article for references.See http://bit.ly/1njzICA for video interviews related to these series. Please let us know should you have additional information about the early history of HL7.

Upcoming International Events

May 10-15, 2015 HL7 May Working Group Meeting	www.HL7.org/events/wgm052015 Paris, France	June 18 – 19, 2015 eHealth 2015 (Austria)	www.ehealth20xx.at/eHealth2015 Vienna, Austria
May 18 – 20, 2015 Health 2.0 Europe	www.health2con.com/events/conferences/spring-fling-barcelona-2015 Barcelona, Spain	August 3 – 5, 2015 HIC 2015	www.hisa.org.au/hic2015 Brisbane, Australia
May 27 – 29, 2015 MIE2015	www.mie2015.es Madrid, Spain	August 19 – 23, 2015 MEDINFO 2015	www.medinfo2015.org São Paulo, Brazil
May 31 – June 3, 2015 eHealth 2015 (Canada)	www.e-healthconference.com Toronto, Ontario, Canada		

TIP:
You can always find details on HL7 events at www.HL7.org under the "Events" tab.

Benefactors

Organizational Members

BENEFACTORS

Accenture
AEGIS.net, Inc.
Allscripts
Centers for Disease Control and Prevention/CDC
Cerner Corporation
Duke Translational Medicine Institute
Epic
Food and Drug Administration
GE Healthcare
GlaxoSmithKline
Intermountain Healthcare
InterSystems
Kaiser Permanente
Microsoft Corporation
NICTIZ Nat.ICT.Inst.Healthc.Netherlands
Office of the National Coordinator for Health IT
Oracle Corporation - Healthcare
Partners HealthCare System, Inc.
Philips Healthcare
Quest Diagnostics, Incorporated
Tenet Healthcare
U.S. Department of Defense, Military Health System
U.S. Department of Veterans Affairs

GOLD

7 Delta, Inc.
American Health Information Management Association
American Society of Clinical Oncology
Apprio, Inc.
Asseco Poland S.A.
Association of Public Health Laboratories
athenahealth
Blenden Healthcare Consulting
Butler Healthcare Providers
CAL2CAL Corporation
CDISC
Central Health
CNIPS, LLC
Community Health Network of CT
Corepoint Health
Department of State Health Services (Texas)
Digital Healthcare Solutions Arabia (DHS Arabia)
Edidin Group, Inc.
Fresenius Vial
General Dynamics Information Technology
HCA IT&S
Health and Social Care Information Centre
Healthcare Integration Technologies
Hyland Software
Info World
Inofile
Integrity Health Plus
iNTERFACEWARE, Inc.
Klein Consulting, Inc.
Liaison Technologies Inc.,
Michiana Computer and Technology
National Association of Dental Plans
NoMoreClipboard.com
North Carolina A & T State University
OTTR Chronic Care Solutions
PenRad
Pitney Bowes Software
Prime Healthcare Management Inc.,
Rochester RHIO
Sparx Systems
Standing Stone, Inc.
t2b AG
UW Medicine Information Technology Services
Varian Medical Systems
Winchester Hospital

CONSULTANTS

3E Services, LLC
Accenture
AEGIS.net, Inc.
AHIS - St. John Providence Health
Altarum Institute
Apprio, Inc.
Beeler Consulting LLC
Blenden Healthcare Consulting
CAL2CAL Corporation
CentriHealth
CNI Advantage, LLC
CNIPS, LLC
Cognosante, LLC
Dapasoft Inc.
Edidin Group, Inc.
Edmond Scientific Company
EnableCare LLC
ESAC Inc
FEI.com
Furore
General Dynamics Information Technology
Haas Consulting
Health Intersections Pty Ltd
Healthcare Integration Technologies
HLN Consulting, LLC
iEHR.eu
iNTERFACEWARE, Inc.
Just Associates, Inc.
Klein Consulting, Inc.
Lantana Consulting Group
M*Modal, Inc.
MCNA Dental
Michiana Computer and Technology
Motive Medical Intelligence
OTech, Inc.
Panacea Healthcare, LLC
Professional Laboratory Management, Inc.
RedGranite, LLC
River Rock Associates
Rob Savage Consulting
Rochester RHIO
Shafarman Consulting
SLI Global Solutions
Stat! Tech-Time, Inc.
TESCHGlobal
ThinkAnew
Vernetzt, LLC
Virginia Riehl
West Virginia Medical Institute

GENERAL INTEREST

Academy of Nutrition & Dietetics
Advanced Medical Technology Association (AdvaMed)
Agency for Healthcare Research and Quality
Alabama Department of Public Health
American Assoc. of Veterinary Lab Diagnosticians
American College of Physicians
American College of Surgeons, NTDB
American Dental Association
American Health Information Management Association
American Immunization Registry Association (AIRA)
American Medical Association
American Psychiatric Association
American Society of Clinical Oncology
Arizona Department of Health Services
Arkansas Department of Health
ASIP SANTE
Association of Public Health Laboratories
ASTHO
Behavioral Health Informatics Solutions
CA Department of Public Health
California Correctional Health Services
California Department of Health Care Services
CDISC
Center for Medical Interoperability
Centers for Disease Control and Prevention/CDC

Organizational Members (Continued)

GENERAL INTEREST (CONTINUIED)

Centers for Medicare & Medicaid Services
Central Health
City of Houston
College of American Pathologists
College of Healthcare Information Mgmt. Executives
Colorado Regional Health Information Organization
Community Mental Health Center of Crawford County
Connecticut Department of Public Health
Contra Costa County Health Services
Council of Cooperative Health Insurance
Danish National eHealth Authority
Delaware Division of Public Health
Department of Developmental Services
Department of Health
Department of State Health Services (Texas)
DGS, Commonwealth of Virginia
Duke Translational Medicine Institute
ECRI Institute
Estonian eHealth Foundation
Florida Department of Health
Food and Drug Administration
Georgia Medical Care Foundation
GS1 US
Health and Social Care Information Centre
HIMSS
ICCBBA, Inc.
IFPMA (as trustee for ICH)
Indian Health Service
International Training & Education Center for Heal
Iowa Department of Public Health
Japan Pharmaceutical Manufacturers Association
Jefferson Health Information Exchange
Kern Medical Center
KMH Cardiology & Diagnostic Centres
L.A. County Dept of Public Health
Medical University of South Carolina
Michigan Health Information Network
Michigan State University HIT
Minnesota Department of Health
Missouri Department of Health & Senior Services
NAACCR
National Association of Dental Plans
National Cancer Institute
National Center for Health Statistics/CDC
National Council for Prescription Drug Programs
National eHealth Transition Authority (NEHTA)
National Institute of Standards and Technology
National Library of Medicine
National Marrow Donor Program
NCQA
New Mexico Department of Health
New York eHealth Collaborative
New York State Office of Mental Health
NICTIZ Nat.ICT.Inst.Healthc.Netherlands
NIH/CC
NIH/Department of Clinical Research Informatics
NJDOH
North Carolina A & T State University
Office of the National Coordinator for Health IT
Oklahoma State Department of Health
Oregon Public Health Division
OSEHRA
Pathology Associates Medical Laboratories
Pharmaceuticals & Medical Devices Agency
Phast
Primary Care Information Project, NYC Dept Health
Radiological Society of North America
Ramsey County Public Health
Region Midt, It-udvikling, arkitektur og design
Region Syddanmark
SAMHSA
SC Dept. of Health & Environmental Control HS
Social Security Administration
Tennessee Department of Health
Texas Health Services Authority
The Joint Commission
The MITRE Corporation
U.S. Department of Defense, Military Health System
U.S. Department of Veterans Affairs
UCLA Arfthur Ashe Student Health & Wellness Center
UCSF School of Medicine
University of AL at Birmingham
University of Kansas Medical Center
University of Miami
University of Minnesota
University of Texas Medical Branch at Galveston
Utah Health Information Network
UW Medicine Information Technology Services
Virginia Department of Health
Washington State Department of Health
Westat
WNY HEALTHeLINK
WorldVistA

PAYERS

Anthem Inc.
Arkansas Blue Cross Blue Shield
Blue Cross and Blue Shield of Alabama
Blue Cross Blue Shield Association
Blue Cross Blue Shield of Louisiana
Blue Cross Blue Shield of South Carolina
BlueCross BlueShield of Tennessee
Cambia Health Solutions
Community Health Network of CT
Delta Dental Plans Association
Health Care Service Corporation
Highmark Health
Medscheme
Meridian Health Plan
Premera Blue Cross
Wisconsin Physicians Service Ins. Corp.

PHARMACY

Abbott Laboratories
Bristol-Myers Squibb
Eli Lilly and Company
GlaxoSmithKline
Merck & Co. Inc.

PROVIDERS

Adventist Health West
Alaska Native Tribal Health Consortium
Albany Medical Center
Albany Medical Center Hospital
ARUP Laboratories, Inc.
Ascension Health Information Services
Athens Regional Health Services, Inc.
Banner Health
Barnabas Health
BJC HealthCare
Blessing Hospital
Blount Memorial Hospital
Boston Children's Hospital
Boston Medical Center
Butler Healthcare Providers
Campbell County Memorial Hospital
Cedars-Sinai Medical Center
Center for Life Management

Central Illinois Radiological Associates
CHI
Childrens Mercy Hospitals and Clinics
Children's of Alabama
Cincinnati Children's Hospital
City of Hope National Medical Center
Cleveland Clinic Health System
Cottage Health System
Deaconess Health System
Diagnostic Laboratory Services
Dignity Health
Duncan Regional Hospital, Inc.
Geisinger Health System
Gerald Champion Regional Medical Center
Gillette Children's Specialty Healthcare
Grupo Prides
HCA IT&S
Hendricks Regional Health
Hill Country Memorial Hospital and Health System
Hill Physicians Medical Group
Holzer Health System
Integrity Health Plus
Intermountain Healthcare
Interpath Laboratory
Kaiser Permanente
La Rabida Children's Hospital
Laboratory Corporation of America
Lakeland Regional Health System
Lee Memorial Health System
Lexington Medical Center
LifePoint Hospitals
Loyola University Health System
Mayo Clinic
McFarland Clinic PC
Meridian Health
Milton S. Hershey Medical Center
MinuteClinic
MultiCare Health System
New York-Presbyterian Hospital
North Carolina Baptist Hospitals, Inc.
Ohio Valley Hospital
Onondaga Case Management Services Inc.
Partners HealthCare System, Inc.
Pathologists' Regional Laboratory
Patient First
Perry Community Hospital
Pocono Medical Center
Prime Healthcare Management Inc.,
Quest Diagnostics, Incorporated
Rady Children's Hospital
Regenstrief Institute, Inc.
Rheumatology and Dermatology Associates PC
Robert Bosch Healthcare
RTZ Associates, Inc
Saudi Aramco - Healthcare Applications Division
Sharp HealthCare Information Systems
South Bend Medical Foundation, Inc.
Sparrow Health System
Spectrum Health
Spooner Health System
St. Joseph Health
Stanford Children's Health
Summa Health System
Tenet Healthcare
Texas Health Resources
The Children's Hospital of Philadelphia
Trinity Health
Tuomey Healthcare System
UK HealthCare
UNC Health Care System
University of Louisville Physicians
University of Nebraska Medical Center
University of New Mexico Hospitals
University of Pittsburgh Medical Center
University of Utah Health Care
University of Utah Pediatric Critical Care/ IICRC
University Physicians, Inc.
UT M.D. Anderson Cancer Center
Vanderbilt University Medical Center
West Virginia University Hospitals
William Beaumont Hospital
Winchester Hospital

VENDORS

3M Health Information Systems
7 Delta, Inc.
Agilex Technologies
Allscripts
AlphaCM, Inc
Altos Solutions, Inc
Amtelco
Apelon, Inc.
Applied PilotFish Healthcare Integration
Askesis Development Group
Asseco Poland S.A.
athenahealth
Atirix Medical Systems
Availity, LLC
Aversan Inc
Beckman Coulter, Inc.
Care Everywhere, LLC
Carestream Health, Inc.
Casmaco Ltd.
Cedaron Medical, Inc.
Center for Clinical Innovation
Center of Informational Technology DAMU
Cerner Corporation
Certify Data Systems
Cetrea A/S
ChartWise Medical Systems, Inc.
ClientTrack
Clinical Architecture LLC
Clinical Data Management
Clinical Software Solutions
Clinicomp, Intl
Cloud 21 Ltd
CMG Technologies Sdn Bhd
CNSI
Cognitive Medical Systems
Common Cents Systems, Inc.
Community Computer Service, Inc.
Compania de Informatica Aplicata
Comparion Medical Analytics
Computrition, Inc.
COMS Interactive, LLC
Conducive Consulting, inc.
Consultants in Laboratory Medicine
Corepoint Health
Covidien
CPSI
CSC Healthcare
CSS Health Technologies
Curaspan Healthgroup, Inc.
Cyberpulse L.L.C.
Dansk Medicinsk Datacenter ApS
Data Innovations, LLC
Datuit, LLC
Deer Creek Pharmacy Services
Delta Health Technologies, LLC
Digital Healthcare Solutions Arabia (DHS Arabia)
Document Storage Systems, Inc.
DocuTrac, Inc.
Dolbey & Company
EBM Technologies Inc.
eHealth Data Solutions, LLC
Electronic Medical Exchange Holdings LLC
ELEKTA
Emdeon, LLC
Epic
ESO Solutions
eTransX, Inc.
EXTEDO
EyeMD EMR Healthcare Systems, Inc.
ezEMRx
Fenestrae
First Databank
Foothold Technology
Forte Holdings
Forte Research Systems, Inc.
Fresenius Vial
Fretwell-Downing Hospitality
Futures Group
GE Healthcare
Genesis Systems, Inc.
GenoSpace
Geriatric Practice Management
GlobalOne Information Technologies, LLC

Organizational Members (Continued)

VENDORS (CONTINUED)

GlobalSubmit
Greater Houston Healthconnect
Greenway Health
Halfpenny Technologies, Inc.
Harris Corporation
Health Care Software, Inc.
Health Companion, Inc.
Health Plan Systems, Inc.
Healthfinch
Healthland
HealthTrio, LLC
HealthUnity Corp
Healthwise, Inc.
heartbase, inc.
Hewlett-Packard Enterprise Services
Hi3 Solutions
Hyland Software
i2i Systems
Iatric Systems
IBM
ICS Software, Ltd.
IIG EMC Corporation
InDxLogic
Info World
Infor
Information Builders
Information Management Associates
InformConsulting, LLP
Inofile
Intelligent Medical Objects (IMO)
Intelligent Records Systems & Services
Interbit Data, Inc.
Interface People, LP
Interfix, LLC
InterSystems
iPatientCare, Inc.
Isoprime Corporation
Jaime Torres C y Cia S.A.
Jopari Solutions
Keane, Inc.
Kestral Computing Pty Ltd
Knowtion
Lab Warehouse, Inc.
Labware, Inc.
Lamprey Networks, Inc.
Lavender & Wyatt Systems, Inc.
Leidos, Inc.
Liaison Technologies Inc.,
Life Systems Software
LINK Medical Computing, Inc.
Logibec
Logical Images Inc.
LORENZ Life Sciences Group
M.S. Group Software, LLC
ManagementPlus
MDLand
MDP Systems, LLC
MedConnect, Inc.
MedEvolve, Inc.
MEDfx Corporation
MEDHOST, Inc.
Medical Messenger Holdings LLC
Medical Web Technologies, LLC
MedicaSoft
Medicity, Inc.
Medicomp Systems, Inc.
Medisolv Inc
MEDITECH, Inc
Mediture
Medtronic
MedUnison LLC
MedVirginia
MGRID
Microsoft Corporation
Mirth Corporation
Mitchell & McCormick, Inc
Mitrais
ModuleMD LLC
MPN Software Systems, Inc.
MuleSoft
NaviNet
NCORD Healthcare LLC
NetDirector
New England Survey Systems Inc
NexJ Systems Inc
NextGen Healthcare Information Systems, Inc.
NoMoreClipboard.com
nSpire Health
Ockham Information Services LLC
Ohio Health Information Partnership
OMNICOM srl
Optum
Oracle Corporation - Healthcare
Orchard Software
Orion Health
OTTR Chronic Care Solutions
OZ Systems
PAREXEL International
Patient Resource LLC
PenRad
Pentacomp Systemy Informatyczne SA
Philips Healthcare
Physician's Computer Company
Physicians Medical Group of Santa Cruz County
Pitney Bowes Software
Practice Fusion
PresiNET Healthcare
Procura
Prometheus Computing LLC
Prometheus Research, LLC
QS/1 Data Systems, Inc.
QuadraMed Corporation
Qvera
Real Seven, LLC
Reed Technology and Information Services Inc.
Roche Diagnostics International Ltd.
Rosch Visionary Systems
Sabiamed Corporation
Sargas Pharmaceutical Adherence & Compliance Int'l
Shasta Networks
Simavita Pty Ltd
SOAPware, Inc.
Softek Solutions, Inc.
Software AG USA, Inc.
Software Partners LLC
Southwestern Provider Services, Inc
Sparx Systems
SRSsoft, Inc.
Standing Stone, Inc.
StatRad, LLC
Stockell Healthcare Systems, Inc.
Strategic Solutions Group, LLC
Summit Healthcare Services, Inc.
Summit Imaging, Inc.
Sunquest Information Systems
Surescripts
SurgiVision Consultants, Inc.
Systematic Group
Systex, Inc.
t2b AG
The CBORD Group Inc.
The Echo Group
The SSI Group, Inc.
Thrasys, Inc.
TIBCO Software Inc.
Timeless Medical Systems Inc.
Uniform Data System for Medical Rehabilitation
Valant Medical Solutions Inc.
Valley Hope Association - IMCSS
Varian Medical Systems
VigiLanz Corporation
Visbion Ltd
Voluware, Inc
Walgreens
WebMD Health Services
Wellsoft Corporation
WESTECH, Inc.
White Pine Systems, LLC
Wolters Kluwer Health
XIFIN, Inc.
Zoho Corp.
ZOLL
Zynx Health

2015 TECHNICAL STEERING COMMITTEE MEMBERS

CHAIR
Ken McCaslin, MAR
Rene Harvey and Associates
Email: hkenmccaslin@gmail.com

CHIEF TECHNICAL OFFICER
John Quinn
HL7 International
Phone: 216-409-1330
Email: jquinn@HL7.org

ARB CHAIR
Anthony Julian
Mayo Clinic
Phone: 507-266-0958
Email: ajulian@mayo.edu

ARB VICE CHAIR
Lorraine Constable
HL7 Canada
Phone: +1 780-951-4853
Email: lorraine@constable.ca

INTERNATIONAL REPRESENTATIVES
Giorgio Cangioli
HL7 Italy
Phone: +39 3357584479
Email: giorgio.cangioli@gmail.com

Jean Duteau
Duteau Design Inc.
Phone: 780-328-6395
Email: jean@duteaudesign.com

DOMAIN EXPERTS CO-CHAIRS
Melva Peters
Jenaker Consulting
Phone: 604-515-0339
Email: melva@jenakereconsulting.com

John Roberts
Tennessee Department of Health
Phone: 615-741-3702
Email: john.a.roberts@tn.gov

FOUNDATION & TECHNOLOGY CO-CHAIRS
George (Woody) Beeler, Jr., PhD
Beeler Consulting, LLC
Phone: 507-254-4810
Email: woody@beelers.com

Paul Knapp
Knapp Consulting, Inc.
Phone: 604-987-3313
Email: pknapp@pknapp.com

STRUCTURE & SEMANTIC DESIGN CO-CHAIRS
Calvin Beebe
Mayo Clinic
Phone: 507-284-3827
Email: cbeebe@mayo.edu

Patricia Van Dyke, RN
Delta Dental Plans Association
Phone: 503-243-4492
Email: patricia.vandyke@modahealth.com

TECHNICAL & SUPPORT SERVICES CO-CHAIRS
Frieda Hall
Quest Diagnostics, Incorporated
Phone: 610-650-6794
Email: freida.x.hall@questdiagnostics.com

Andy Stechishin
HL7 Canada
Phone: 780-903-0885
Email: andy.stechishin@gmail.com

Steering Divisions

DOMAIN EXPERTS
Anatomic Pathology
Anesthesiology
Attachments
Biomedical Research Integrated Domain Group
Child Health
Clinical Genomics
Clinical Interoperability Council
Clinical Quality Information
Community Based Collaborative Care
Emergency Care
Health Care Devices
Patient Care
Pharmacy
Public Health & Emergency Response
Regulated Clinical Research Information Management

FOUNDATION & TECHNOLOGY
Application Implementation & Design
Conformance & Guidance for Implementation/Testing
Implementable Technology Specifications
Infrastructure & Messaging
Modeling & Methodology
Security
Service Oriented Architecture
Templates
Vocabulary

TECHNICAL & SUPPORT SERVICES
Education
Electronic Services & Tools
Healthcare Standards Integration
International Mentoring Committee
Learning Health Systems
Process Improvement Committee
Project Services
Publishing

STRUCTURE & SEMANTIC DESIGN
Arden Syntax
Clinical Decision Support
Clinical Statement
Electronic Health Record
Financial Management
Imaging Integration
Mobile Health
Orders & Observations
Patient Administration
Structured Documents

HL7 Work Group Co-Chairs

ANATOMIC PATHOLOGY

Victor Brodsky, MD
College of American Pathologists
Phone: 646-322-4648
Email: victorbrodsky@gmail.com

John David Nolen
Cerner Corporation
Phone: 816-446-1530
Email: johndavid.nolen@cerner.com

ANESTHESIA

Martin Hurrell, PhD
Phone: 44-7711-669-522
Email: martinhurrell@gmail.com

John Walsh, MD
Partners Healthcare
Phone: 617-726-2067
Email: jwalsh@partners.org

APPLICATION IMPLEMENTATION & DESIGN

Peter Hendler, MD
Kaiser Permanente
Phone: 510-248-3055
Email: peter@javamedical.com

Rene Spronk
HL7 Netherlands
Phone: 31-318-553812
Email: rene.spronk@ringholm.com

Andy Stechishin
HL7 Canada
Phone: 780-903-0885
Email: andy.stechishin@gmail.com

ARCHITECTURAL REVIEW BOARD

Lorrain Constable
HL7 Canada
Phone: 780-951-4853
Email: lorraine@constable.ca
Anthony Julian, FHL7

Mayo Clinic
Phone: 507-266-0958
Email: ajulian@mayo.edu

John Quinn
Health Level Seven International
Phone: 216-409-1330
Email: jquinn@HL7.org

ARDEN SYNTAX

Peter Haug, MD
Intermountain Healthcare
Phone: 801-442-6240
Email: peter.haug@imail.org

Robert Jenders, MD, MS
Charles Drew University/UCLA
Phone: 323-249-5734
Email: jenders@ucla.edu

ATTACHMENTS

Durwin Day
Health Care Service Corporation
Phone: 312-653-5948
Email: dayd@bcbsil.com

Craig Gabron
Blue Cross Blue Shield of South Carolina
Phone: 803-763-1790
Email: craig.gabron@pgba.com

BIOMEDICAL RESEARCH INTEGRATED DOMAIN GROUP

Edward Helton PhD
National Cancer Institute
Phone: 301-480-4290
Email: heltone2@mail.nih.gov

Mary Ann Slack
Food and Drug Administration
Phone: 301-796-0603
Email: maryann.slack@fda.hhs.gov

CHILD HEALTH

Gaye Dolin, MSN, RN
Intelligent Medical Objects (IMO)
Phone: 847-613-6645
Email: gdolin@imo-online.com

Michael Padula, MD, MBI
The Children's Hospital of Philadelphia
Phone: 215-590-1653
Email: padula@email.chop.edu

Feliciano Yu, MD
St. Louis Children's Hospital
Phone: 314-454-2808
Email: yu_f@kids.wustl.edu

CLINICAL DECISION SUPPORT

Guilherme Del Fiol, MD, PhD
University of Utah Health Care
Phone: 919-213-4129
Email: guilherme.delfiol@utah.edu

Robert Jenders, MD, MS
Charles Drew University/UCLA
Phone: 323-249-5734
Email: jenders@ucla.edu

Kensaku Kawamoto, MD, PhD
University of Utah Health Care
Phone: 801-587-8001
Email: kensaku.kawamoto@utah.edu

Howard Strasberg, MD, MS
Wolters Kluwer Health
Phone: 858-481-4249
Email:
howard.strasberg@wolterskluwer.com

CLINICAL GENOMICS

Gil Alterovitz
Boston Children's Hospital
Email: ga@alum.mit.edu

Siew Lam, MD, MSc
Intermountain Healthcare
Phone: 801-507-9630
Email: siew.lam@imail.org

Bob Milius
National Marrow Donor Program
Phone: 612-627-5844
Email: bmilius@nmdp.org

Amnon Shabo, PhD
Philips Healthcare
Phone: 972 978-659-3235
Email: amnon.shvo@gmail.com

Mollie Ullman-Cullere
Partners HealthCare System, Inc.
Phone: 617-582-7249
Email: mullmancullere@partners.org

CLINICAL INTEROPERABILITY COUNCIL

W. Edward Hammond, PhD
Duke Translational Medicine Institute
Phone: 919-668-2408
Email: william.hammond@duke.edu

Dianne Reeves, RN
National Cancer Institute
Phone: 240-276-5130
Email: reevesd@mail.nih.gov

Mitra Rocca
Food and Drug Administration
Phone: 301-796-2175
Email: mitra.rocca@fda.hhs.gov

Anita Walden
Duke Translational Medicine Institute
Phone: 919-668-8256
Email: anita.walden@duke.edu

CLINICAL QUALITY INFORMATION

Patricia Craig
The Joint Commission
Phone: 630-792-5546
Email: pcraig@jointcommission.org

Floyd Eisenberg
iParsimony LLC
Phone: 202-643-6350
Email: feisenberg@iparsimony.com

Crystal Kallem, RHIA, CPHQ
Lantana Consulting Group
Phone: 515-992-3616
Email: crystal.kallem@lantanagroup.com

Christopher Millet
Lazy LLC
Email: cmillet@thelazycompany.com

Walter Suarez, MD, MPH
Kaiser Permanente
Phone: 301-801-3207
Email: walter.g.suarez@kp.org

CLINICAL STATEMENT

Hans Buitendijk,MSc
Cerner Corporation
Phone: 610-219-2087
Email: hans.buitendijk@cerner.com

Rik Smithies
HL7 UK
Phone: 44-7720-290967
Email: rik@nprogram.co.uk

COMMUNITY BASED COLLABORATIVE CARE

Johnathan Coleman
Security Risk Solutions, Inc.
Phone: 843-442-9104
Email: jc@securityrs.com

Suzanne Gonzales-Webb
US Department of Veterans Affairs
Phone: 619-972-9047
Email: suzanne.webb@engilitycorp.com

James Kretz
SAMHSA
Phone: 240-276-1755
Email: jim.kretz@samhsa.hhs.gov

Max Walker
Department of Health
Phone: 61-3-9096-1471
Email: maxtangles@bigpond.com

CONFORMANCE & GUIDANCE FOR IMPLEMENTATION/ TESTING

Nathan Bunker
American Immunization Registry Association
Phone: 435-635-1532
Email: nathan.bunker@gmail.com

Frank Oemig, PhD
HL7 Germany
Phone: 49-208-781194
Email: HL7@oemig.de

Ioana Singureanu
Eversolve, LLC
Phone: 603-870-9739
Email: ioana.singureanu@gmail.com

Robert Snelick
National Institute of Standards & Technology
Phone: 301-975-5924
Email: robert.snelick@nist.gov

EDUCATION

Ken Chen
CHI
Phone: 501-552-8206
Email: kkchen@stvincenthealth.com

Diego Kaminker
HL7 Argentina
Phone: 54-11-4781-2898
Email: diego.kaminker@kern-it.com.ar

Melva Peters
Jenaker Consulting
Phone: 604-515-0339
Email: melva@jenakerconsulting.com

ELECTRONIC HEALTH RECORDS

Gary Dickinson
CentriHealth
Phone: 951-536-7010
Email: gary.dickinson@ehr-standards.com

Reed Gelzer, MD, MPH
Provider Resources, Inc.
Phone: 203-506-5361
Email: R.Gelzer@myfairpoint.net

Mark Janczewski, MD, MPH
Medical Networks, LLC
Phone: 703-994-7637
Email: mark.janczewski@verizon.net

John Ritter
Phone: 412-372-5783
Email: johnritter1@verizon.net

Patricia Van Dyke, RN
Delta Dental Plans Association
Phone: 503-243-4492
Email: patricia.vandyke@modahealth.com

Diana Warner
American Health Information Management Association
Phone: 312-233-1510
Email: diana.warner@ahima.org

ELECTRONIC SERVICES AND TOOLS

Jeff Brown
American Society of Clinical Oncology
Phone: 336-429-2094
Email: jeff.brown@asco.org

David Burgess
Laboratory Corporation of America
Phone: 615-221-1901
Email: burgesd@labcorp.com

Dennis Cheung
Canadian Institute for Health Information (CIHI)
Email: dcheung@cihi.ca

Lorraine Constable
HL7 Canada
Phone: 780-951-4853
Email: lorraine@constable.ca

Andy Stechishin
HL7 Canada
Phone: 780-903-0885
Email: andy.stechishin@gmail.com

Michael Van der Zel
HL7 Netherlands
Phone: 31 503619876
Email: m.van.der.zel@umcg.nl

Nat Wong
HL7 Australia
Email: nathaniel.wong@HL7.org.au

EMERGENCY CARE

Laura Heermann Langford, RN, PhD
Intermountain Healthcare
Phone: 801-507-9254
Email: laura.heermann@imail.org

James McClay, MD
University of Nebraska Medical Center
Phone: 402-559-3587
Email: jmcclay@unmc.edu

Peter Park, MD
US Department of Defense, Military Health System
Phone: 202-762-0926
Email: peterjpark@mindspring.com

FHIR

Grahame Grieve
Health Intersections Pty Ltd
Phone: 61 3-98445796
Email: grahame@healthintersections.com.au

David Hay, MD
HL7 New Zealand
Phone: 64 9-638-9286
Email: david.hay25@gmail.com

Lloyd McKenzie
Gevity (HL7 Canada)
Email: Lloyd@lmckenzie.com

FINANCIAL MANAGEMENT

Kathleen Connor
Edmond Scientific Company
Email: kathleen_connor@comcast.net

Beat Heggli
HL7 Switzerland
Phone: 41-44-297-5737
Email: beat.heggli@netcetera.ch

Paul Knapp
Knapp Consulting
Phone: 604-987-3313
Email: pknapp@pknapp.com

HEALTH CARE DEVICES

Todd Cooper
Center for Medical Interoperability
Phone: 858-442-9200
Email: todd@center4MI.org

Chris Courville
Epic
Phone: 608-271-9000
Email: ccourvil@epic.com

John Garguilo
National Institute of Standards
Email: john.garguilo@nist.gov

John Rhoads, PhD
Philips Healthcare
Phone: 978-659-3024
Email: john.rhoads@philips.com

HEALTHCARE STANDARDS INTEGRATION WORK GROUP

Todd Cooper (Interim)
Center for Medical Interoperability
Phone: 858-442-9200
Email: todd@center4mi.org

John Donnelly, MS, MBA (Interim)
IntePro Solutions Inc.
Phone: 732-943-7391
Email: jtdonnelly@intepro.biz

IMAGING INTEGRATION

Helmut Koenig, MD
Siemens Healthcare
Email: helmut.koenig@siemens.com

Harry Solomon
GE Healthcare
Phone: 847-277-5096
Email: harry.solomon@med.ge.com

HL7 Work Group Co-Chairs (Continued)

IMPLEMENTABLE TECHNOLOGY SPECIFICATIONS

Paul Knapp
Knapp Consulting Inc.
Phone: 604-987-3313
Email: pknapp@pknapp.com

Dale Nelson
Lantana Consulting Group
Phone: 916-367-1458
Email: dale.nelson@squaretrends.com

Andy Stechishin
HL7 Canada
Phone: 780-903-0885
Email: andy.stechishin@gmail.com

INFRASTRUCTURE & MESSAGING

Anthony Julian, FHL7
Mayo Clinic
Phone: 507-266-0958
Email: ajulian@mayo.edu

David Shaver
Corepoint Health
Phone: 214-618-7000
Email: dave.shaver@corepointhealth.com

Sandra Stuart
Kaiser Permanente
Phone: 925-924-7473
Email: sandra.stuart@kp.org

INTERNATIONAL COUNCIL

Diego Kaminker
HL7 Argentina
Phone: 54 11-4781-2898
Email: diego.kaminker@kern-it.com.ar

Melva Peters
HL7 Canada
Phone: 778-228-4839
Email: mpeters@gevityinc.com

INTERNATIONAL MENTORING COMMITTEE

Diego Kaminker
HL7 Argentina
Phone: 54-11-4781-2898
Email: diego.kaminker@kern-it.com.ar

John Ritter
Phone: 412-372-5783
Email: johnritter1@verizon.net

LEARNING HEALTH SYSTEMS

Russell Leftwich, MD (Interim)
Office of eHealth Initiatives
Phone: 615-507-6465
Email: cmiotn@gmail.com

Mark Roche, MD, MSMI (Interim)
Office of National Coordinator for Health IT
Email: mrochemd@gmail.com

MOBILE HEALTH

Nathan Botts, PhD, MSIS
Westat
Phone: 760-845-8356
Email: nathanbotts@westat.com

Gora Datta
CAL2CAL Corporation
Phone: 949-955-3443
Email: gora@cal2cal.com

Matthew Graham
Mayo Clinic
Phone: 507-284-3028
Email: mgraham@mayo.edu

Harry Rhodes
American Health Information Management Association
Phone: 312-233-1119
Email: harry.rhodes@ahima.org

MODELING AND METHODOLOGY

George (Woody) Beeler Jr., PhD
Beeler Consulting, LLC
Phone: 507-254-4810
Email: woody@beelers.com

Jean Duteau
Duteau Design Inc.
Phone: 780-328-6395
Email: jean@duteaudesign.com

Grahame Grieve
Health Intersections Pty Ltd
Phone: 61-3-98445796
Email: grahame@healthintersections.com.au

Lloyd McKenzie
Gevity (HL7 Canada)
Email: lloyd@lmckenzie.com

AbdulMalik Shakir
Hi3 Solutions
Phone: 626-644-4491
Email: abdulmalik.shakir@hi3solutions.com

ORDERS/OBSERVATIONS

Hans Buitendijk, MSc
Cerner Corporation
Phone: 610-219-2087
Email: hans.buitendijk@cerner.com

Lorraine Constable
HL7 Canada
Phone: 780-951-4853
Email: lorraine@constable.ca

Robert Hausam, MD
Hausam Consulting, LLC
Phone: 801-949-1556
Email: rrhausam@gmail.com

Ken McCaslin, MAR
Quest Diagnostics, Incorporated
Phone: 610-650-6692
Email: kenneth.h.mccaslin@questdiagnostics.com

Ulrike Merrick
Vernetzt, LLC
Phone: 415-634-4131
Email: rikimerrick@gmail.com

ORGANIZATIONAL RELATIONS COMMITTEE

Scott Robertson, PharmD
Kaiser Permanente
Phone: 310-200-0231
Email: scott.m.robertson@kp.org

OUTREACH COMMITTEE FOR CLINICAL RESEARCH

Ed Helton, PhD
National Cancer Institute
Phone: 301-480-4290
Email: heltone2@mail.nih.gov

PATIENT ADMINSTRATION

Alexander deLeon
Kaiser Permanente
Phone: 626-381-4141
Email: alexander.j.deleon@kp.org

Irma Jongeneel-de Haas
HL7 Netherlands
Phone: 31 681153857
Email: jongeneel@vzvz.nl

Line Saele
HL7 Norway
Phone: 47 9592-5357
Email: line.sele@nasjonalikt.no

PATIENT CARE

Elaine Ayres
NIH/CC
Phone: 301-594-3019
Email: eayres@cc.nih.gov

Stephen Chu, MD
Queensland Health
Phone: 61-731704942
Email: stephen.chu@health.qld.gov.au

Jean Duteau
Duteau Design Inc.
Phone: 780-328-6395
Email: jean@duteaudesign.com

Laura Heermann Langford, RN, PhD
Intermountain Healthcare
Phone: 801-507-9254
Email: laura.heermann@imail.org

Russell Leftwich, MD
Office of eHealth Initiatives
Phone: 615-507-6465
Email: cmiotn@gmail.com

Jay Lyle
Ockham Information Services LLC
Phone: 404-217-2403
Email: jay@lyle.net

Michael Tan
NICTIZ
Phone: 31-7031-73450
Email: tan@nictiz.nl

PHARMACY

Hugh Glover
HL7 UK
Phone: 44-07889407113
Email: hugh_glover@bluewaveinformatics.co.uk

John Hatem
Oracle Corporation - Healthcare
Phone: 415-269-7170
Email: john.hatem@oracle.com

Melva Peters
Jenaker Consulting
Phone: 604-515-0339
Email: melva@jenakerconsulting.com

Scott Robertson, PharmD
Kaiser Permanente
Phone: 310-200-0231
Email: scott.m.robertson@kp.org

PROCESS IMPROVEMENT COMMITTEE

Liora Alschuler
Lantana Consulting Group
Phone: 802-785-2623
Email: liora.alschuler@lantanagroup.com

Sandra Stuart
Kaiser Permanente
Phone: 925-924-7473
Email: sandra.stuart@kp.org

PROJECT SERVICES

Rick Haddorff
Mayo Clinic
Phone: 978-296-1462
Email: haddorff.richard@mayo.edu

Freida Hall
Quest Diagnostics, Inc.
Phone: 610-650-6794
Email: freida.x.hall@questdiagnostics.com

PUBLIC HEALTH EMERGENCY RESPONSE

Erin Holt, MPH
Tennessee Department of Health
Phone: 615-741-3702
Email: erin.holt@tn.gov

Joginder Madra
Madra Consulting Inc.
Phone: 780-717-4295
Email: hl7@madraconsulting.com

John Roberts
Tennessee Department of Health
Phone: 615-741-3702
Email: john.a.roberts@tn.gov

Rob Savage
Rob Savage Consulting
Email: rob.savage50@gmail.com

PUBLISHING COMMITTEE

George (Woody) Beeler Jr., PhD-V3
Beeler Consulting, LLC
Phone: 507-254-4810
Email: woody@beelers.com

Jane Daus-V2
McKesson Provider Technologies
Phone: 847-495-1289
Email: jane.daus@mckesson.com

Peter Gilbert-V2
Covisint
Phone: 734-604-0255
Email: peter.gilbert@covisint.com

Frank Oemig, PhD-V2 (Interim)
HL7 Germany
Phone: 49 208-781194
Email: HL7@oemig.de

Brian Pech, MD, MBA-V2
Kaiser Permanente
Phone: 678-245-1762
Email: brian.pech@kp.org

Andy Stechishin-V3
HL7 Canada
Phone: 780-903-0885
Email: andy.stechishin@gmail.com

REGULATED CLINICAL RESEARCH INFORMATION MANAGEMENT

Ed Helton, PhD
National Cancer Institute
Phone: 301-480-4290
Email: heltone2@mail.nih.gov

John Kiser, MS, BS
Phone: 847-937-3725
Email: john.kiser@abbvie.com

Mary Ann Slack (Interim)
Food and Drug Administration
Phone: 301-796-0603
Email: maryann.slack@fda.hhs.gov

SECURITY

Mike Davis
U.S. Department of Veterans Affairs
Phone: 760-632-0294
Email: mike.davis@va.gov

Alexander Mense
HL7 Austria
Phone: 43-01-1-333-40-77-232
Email: alexander.mense@HL7.at

John Moehrke
GE Healthcare
Phone: 920-912-8451
Email: john.moehrke@med.ge.com

Patricia Williams, PhD, MSc
HL7 Australia
Phone: 61-863045039
Email: trish.williams@ecu.edu.au

SERVICES ORIENTED ARCHITECTURE

Don Jorgenson
Phone: 970-472-1441
Email: djorgenson@inpriva.com

Stefano Lotti
HL7 Italy
Phone: 39-06-421-60685
Email: slotti@invitalia.it

Vince McCauley, MBBS, PhD
Medical Software Industry Association
Phone: 61-298-186493
Email: vincem@bigpond.com.au

Ken Rubin
Hewlett-Packard Enterprise Services
Phone: 301-613-3104
Email: ken.rubin@hp.com

STRUCTURED DOCUMENTS

Calvin Beebe
Mayo Clinic
Phone: 507-284-3827
Email: cbeebe@mayo.edu

Diana Behling
Iatric Systems
Phone: 978-805-3159
Email: diana.behling@iatric.com

Rick Geimer
Lantana Consulting Group
Phone: 650-209-4839
Email: rick.geimer@lantanagroup.com

Austin Kreisler
Leidos, Inc.
Phone: 706-525-1181
Email: austin.j.kreisler@leidos.com

Brett Marquard
River Rock Associates
Email: brett@riverrockassociates.com

Mark Roche, MD, MSMI
Office of National Coordinator for Health IT
Email: mrochemd@gmail.com

TEMPLATES

Kai Heitmann, MD
HL7 Germany
Phone: 49-172-2660814
Email: hl7@kheitmann.de

John Roberts
Tennessee Department of Health
Phone: 615-741-3702
Email: john.a.roberts@tn.gov

Mark Shafarman
Shafarman Consulting
Phone: 510-593-3483
Email: mark.shafarman@earthlink.net

VOCABULARY

Jim Case, MS, DVM, PhD
National Library of Medicine
Phone: 301-412-9287
Email: james.case@mail.nih.gov

Heather Grain
eHealth Education
Phone: 61-3-956-99443
Email: heather@lginformatics.com

Russell Hamm
Lantana Consulting Group
Phone: 507-271-0227
Email: russ.hamm@lantanagroup.com

Robert Hausam, MD
Hausam Consulting, LLC
Phone: 801-949-1556
Email: rrhausam@gmail.com

William Ted Klein
Klein Consulting, Inc.
Phone: 631-924-6922
Email: kci@tklein.com

HL7 Facilitators

MODELING AND METHODOLOGY FACILITATORS

George (Woody) Beeler, Jr., PhD
Beeler Consulting LLC
Facilitator-at-Large
Phone: 507-254-4810
Email: woody@beelers.com

Charlie Bishop
HL7 UK
Clinical Statement
Phone: 44-7989-705-395
Email: hl7@bishops-online.net

Bernd Blobel, PhD
HL7 Germany
Security
Phone: 49-941-944-6767
Email:
bernd.blobel@klinik.uni-regensburg.de

Kathleen Connor
Edmond Scientific Company
Financial Management
Email: kathleen_connor@comcast.net

Kevin Coonan, MD
Emergency Care
Email: kevin.coonan@gmail.com

Jean Duteau
Duteau Design Inc.
Patient Care; Pharmacy
Phone: 780-328-6395
Email: jean@duteaudesign.com

Hugh Glover
HL7 UK
Medication
Phone: 44-0-7889-407-113
Email:
hugh_glover@bluewaveinformatics.co.uk

Grahame Grieve
Health Intersections Pty Ltd
Infrastructure & Messaging
Phone: 61-3-9844-5796
Email:
grahame@healthintersections.com.au

Alexander Henket
HL7 Netherlands
Patient Administration
Email: henket@nictiz.nl

William "Ted" Klein
Klein Consulting, Inc.
Vocabulary
Phone: 631-924-6922
Email: kci@tklein.com

Austin Kreisler
Leidos, Inc.
Structured Documents
Phone: 706-525-1181
Email: austin.j.kreisler@leidos.com

Patrick Loyd
ICode Solutions
Orders & Observations
Email: patrick.e.loyd@gmail.com

Joginder Madra
Madra Consulting Inc.
Immunization, PHER
Phone: 780-717-4295
Email: hl7@madraconsulting.com

Dale Nelson
Lantana Consulting Group
Implementable Technology Specifications
Phone: 916-367-1458
Email: dale.nelson@squaretrends.com

Lloyd McKenzie
HL7 Canada
Facilitator-at-Large
Email: lloyd@lmckenzie.com

Craig Parker, MD
Intermountain Healthcare
Clinical Decision Support
Phone: 801-859-4480
Email: craig.parker@imail.org

Amnon Shabo, PhD
Philips Healthcare
Clinical Genomics
Phone: 978-659-3235
Email: amnon.shvo@gmail.com

AbdulMalik Shakir Sr.
Hi3 Solutions
Clinical Interoperability Council; Modeling & Methodology
Phone: 626-644-4491
Email:
abdulmalik.shakir@hi3solutions.com

Ioana Singureanu
Eversolve, LLC
CBCC; Health Care Devices
Phone: 603-870-9739
Email: ioana.singureanu@gmail.com

Corey Spears
Medicity
Electronic Health Records
Phone: 917-426-7397
Email: corey.spears@healthagen.com

D. Mead Walker
Mead Walker Consulting
RCRIM
Phone: 610-518-6259
Email: dmead@comcast.net

PUBLISHING FACILITATORS

Becky Angeles
ESAC Inc.
RCRIM
Email: rebecca.angeles@esacinc.com

Douglas Baird
Boston Scientific Corporation
Templates
Phone: 651-582-3241
Email: douglas.baird@guidant.com

Lorraine Constable
HL7 Canada
Orders & Observations
Phone: 780-951-4853
Email: lorraine@constable.ca

Mike Davis
US Department of Veterans Affairs
Security
Phone: 760-632-0294
Email: mike.davis@va.gov

Jean Duteau
Duteau Design Inc.
PHER
Phone: 780-328-6395
Email: jean@duteaudesign.com

Isobel Frean
Bupa Group
Clinical Statement
Phone: 44-207-656-2146
Email: isobelfrean@btinternet.com

Peter Gilbert
Covisint
Structured Documents
Phone: 734-604-0255
Email: peter.gilbert@covisint.com

Robert Hallowell
Cerner Corporation
Medication; Pharmacy
Phone: 816-201-3290
Email: robert.hallowell@siemens.com

Alexander Henket
HL7 Netherlands
Patient Administration
Email: henket@nictiz.nl

Anthony Julian
Mayo Clinic
Infrastructure & Messaging
Phone: 507-266-0958
Email: ajulian@mayo.edu

Helmut Koenig, MD
Imaging Integration
Email: helmut.koenig@siemens.com

Margaret (Peggy) Leizear
Food and Drug Administration
RCRIM
Phone: 301-796-8495
Email: peggy.leizear@fda.hhs.gov

Mary Kay McDaniel
Cognosante, LLC
Financial Management
Phone: 602-300-4246
Email: mk_mcdaniel@hotmail.com

Dale Nelson
Lantana Consulting Group
CMET; Implementable Technology Specifications
Phone: 916-367-1458
Email: dale.nelson@squaretrends.com

Frank Oemig, PhD
HL7 Germany
German Realm
Phone: 49-208-781194
Email: hl7@oemig.de

Craig Parker, MD
Intermountain Healthcare
Clinical Decision Support
Phone: 801-859-4480
Email: craig.parker@imail.com

John Ritter
Electronic Health Records
Phone: 412-372-5783
Email: johnritter1@verizon.net

Ioana Singureanu
Eversolve, LLC
CBCC
Phone: 603-870-9739
Email: ioana.singureanu@gmail.com

Margarita Sordo
Partners HealthCare System, Inc.
Gello
Phone: 781-416-8479
Email: msordo@partners.org

Anita Walden
Duke Translational Medicine Institute
Clinical Interoperability Council
Phone: 919-668-8256
Email: anita.walden@duke.edu

Grant Wood
Intermountain Healthcare
Clinical Genomics
Phone: 801-408-8153
Email: grant.wood@imail.org

VOCABULARY FACILITATORS

Paul Biondich, MD
IU School of Medicine
Child Health
Phone: 317-278-3466
Email: mollewis@iupui.edu

Kathleen Connor
Edmond Scientific Company
Financial Management
Email: kathleen_connor@comcast.net

Kevin Coonan, MD
Emergency Care
Email: kevin.coonan@gmail.com

Guilherme Del Fiol, MD, PhD
University of Utah Health Care
Clinical Decision Support
Phone: 919-213-4129
Email: guilherme.delfiol@utah.edu

Christof Gessner
HL7 Germany
Health Care Devices
Phone: 49-172-3994033
Email: christof.gessner@gematik.de

W. Edward Hammond, PhD
Duke Transitional Medicine Institute
Templates
Phone: 919-558-2408
Email: william.hammond@duke.edu

Monica Harry
HL7 Canada
PHER
Email: monicahl1533@gmail.com

Robert Hausam, MD
Hausam Consulting
Orders & Observations; Structured Documents
Phone: 801-949-1556
Email: rrhausam@gmail.com

Joyce Hernandez
Clinical Genomics
Email: joyce.hernandez_0029@yahoo.com

Wendy Huang
Canada Health Infoway Inc.
Patient Administration
Phone: 416-595-3449
Email: whuang@infoway-inforoute.ca

Julie James
Blue Wave Informatics
Medication; Pharmacy; RCRIM
Email:
julie_james@bluewaveinformatics.co.uk

William "Ted" Klein
Klein Consulting, Inc.
Modeling & Methodology
Phone: 631-924-6922
Email: kci@tklein.com

Susan Matney
3M Health Information Systems
Patient Care
Phone: 801-265-4326
Email: samatney@mmm.com

Robert McClure, MD
MD Partners, Inc.
CBCC
Phone: 303-926-6771
Email: rmcclure@mdpartners.com

Sarah Ryan
Clinical Interoperability Council
The MITRE Corporation
Phone: 703-983-5783
Email: sarahryan@mitre.org

Harold Solbrig
Mayo Clinic
Modeling & Methodology
Email: solbrig.harold@mayo.edu

Harry Solomon
GE Healthcare
Imaging Integration
Phone: 847-277-5096
Email: harry.solomon@med.ge.com

Sandra Stuart
Kaiser Permanente
Infrastructure & Messaging
Phone: 925-924-7473
Email: sandra.stuart@kp.org

Pat Van Dyke, RN
Delta Dental Plans Association
Electronic Health Records
Phone: 503-243-4992
Email: patricia.vandyke@modahealth.com

Tony Weida
Apelon
Security
Phone: 203-431-2530
Email: weida@apelon.com

Affiliate Contacts

HL7 ARGENTINA
Fernando Campos
Phone: +54 11-4781-2898
Email: fernando.campos@hospitalitaliano.org.ar

HL7 AUSTRALIA
Patricia Williams PhD MSc
Phone: +61 863045039
Email: trish.williams@ecu.edu.au

HL7 AUSTRIA
Stefan Sabutsch
Phone: +43 664-3132505
Email: standards@sabutsch.at

HL7 BOSNIA AND HERZEGOVINA
Samir Dedovic
Phone: +387 0-33-721-911
Email: samir.dedovic@medit.ba

HL7 BRAZIL
Marivan Abrahao MD
Phone: +55 11-5573-9580
Email: marivan@mac.com

HL7 CANADA
Melva Peters
Phone: +1 778-228-4839
Email: mpeters@gevityinc.com

HL7 CHINA
Baoluo Li Professor
Phone: +86 010-65815129
Email: liblpumch@gmail.com

HL7 CROATIA
Miroslav Koncar
Phone: +385 99-321-2253
Email: miroslav.koncar@oracle.com

HL7 CZECH REPUBLIC
Libor Seidl
Phone: +420 605740492
Email: seidl@hl7cr.eu

HL7 DENMARK
Gitte Meltofte
Phone: +45 39966127
Email: gim@ds.dk

HL7 FINLAND
Juha Mykkanen PhD
Phone: +358 403552824
Email: juha.mykkanen@uef.fi

HL7 FRANCE
Nicolas Canu
Phone: +33 02-35-60-41-97
Email: nicolas.canu@wanadoo.fr

HL7 GERMANY
Christof Gessner
Phone: +49 172-3994033
Email: christof.gessner@gematik.de

HL7 GREECE
Alexander Berler
Phone: +30 2111001691
Email: a.berler@gnomon.com.gr

HL7 HONG KONG
Dr. Chung Ping Ho
Phone: +852 34883762
Email: chair@HL7.org.hk

HL7 INDIA
Lavanian Dorairaj MBBS, MD
Email: chairman@HL7India.org

HL7 ITALY
Stefano Lotti
Phone: +39 06-42160685
Email: slotti@invitalia.it

HL7 JAPAN
Michio Kimura, MD, PhD
Phone: +81 53-435-2770
Email: kimura@mi.hama-med.ac.jp

HL7 KOREA
Byoung-Kee Yi, PhD
Phone: +82 234101944
Email: byoungkeeyi@gmail.com

HL7 MALAYSIA
Mohamad Azrin Zubir
Email: azrinmd@mpmsb.net

HL7 NETHERLANDS
Robert Stegwee MSc, PhD
Phone: +31 30-689-2730
Email: robert.stegwee@capgemini.com

HL7 NEW ZEALAND
David Hay MD
Phone: +64 9-638-9286
Email: david.hay25@gmail.com

HL7 NORWAY
Line Saele
Phone: +47 9592-5357
Email: line.sele@nasjonalikt.no

HL7 PAKISTAN
Maajid Maqbool
Phone: +92 5190852159
Email: maajid.maqbool@seecs.edu.pk

HL7 PHILIPPINES
Michael Hussin Muin, MD
Email: mikemuin@gmail.com

HL7 PUERTO RICO
Julio Cajigas
Phone: +1 787-447-3713
Email: cajigas@caribe.net

HL7 ROMANIA
Florica Moldoveanu
Phone: +40 21-4115781
Email: florica.moldoveanu@cs.pub.ro

HL7 RUSSIA
Sergey Shvyrev MD, EE, PhD
Phone: +7 495-434-55-82
Email: sergey.shvyrev@gmail.com

HL7 SINGAPORE
Adam Chee
Email: hl7@binaryhealthcare.com

HL7 SLOVENIA
Brane Leskosek, PhD
Phone: +386 543-7775
Email: brane.leskosek@mf.uni-lj.si

HL7 SPAIN
Francisco Perez
Phone: +34 637208657
Email: fperezfernan@gmail.com

HL7 SWEDEN
Mikael Wintell
Phone: +46 736-254831
Email: mikael.wintell@vgregion.se

HL7 SWITZERLAND
Marco Demarmels MD, MBA
Phone: +41 712791189
Email: HL7@lakegriffin.ch

HL7 TAIWAN
Chih-Chan (Chad) Yen
Phone: +886 2-2552-6990
Email: cyen@linkmedasia.com

HL7 TURKEY
Ergin Soysa, MD, PhD
Email: esoysal@gmail.com

HL7 UK
Philip Scott, PhD
Phone: +44 8700-112-866
Email: chair@hl7.org.uk

HL7 URUGUAY
Julio Leivas, MD
Phone: +598 095229291
Email: jleivas@adinet.com.uy

2015 HL7 Staff

Chief Executive Officer

Charles Jaffe MD PhD
+1 858-720-8200
cjaffe@HL7.org

Chief Technology Officer

John Quinn
+1 216-409-1330
jquinn@HL7.org

Executive Director

Mark McDougall
+1 734-677-7777 x103
markmcd@HL7.org

Associate Executive Director

Karen Van Hentenryck
+1 734-677-7777 x104
karenvan@HL7.org

Director of Meetings

Lillian Bigham
+1 989-736-3703
lbigham@HL7.org

Manager of Education

Mary Ann Boyle
+1 734-677-7777 x141
maryann@HL7.org

Director of Education

Sharon Chaplock PhD
+1 414-778-2167
sharon@HL7.org

Director of Global Partnerships and Policy

Ticia Gerber
+1 202-486-5236
tgerber@HL7.org

Director, Project Management Office

Dave Hamill
+1 734-677-7777 x142
dhamill@HL7.org

Director of Marketing

Melanie Hilliard
+1 734-677-7777 x101
melanie@HL7.org

Director of Membership and Administrative Services

Linda Jenkins
+1 734-677-7777 x170
linda@HL7.org

Director of Technical Services

Tamara Kamara
+1 734-677-7777 x125
tamara@HL7.org

Director of Technical Publications

Lynn Laakso, MPA
+1 906-361-5966
lynn@HL7.org

Web Developer

Laura Mitter
+1 740-963-9839
laura@HL7.org

Director of Communications

Andrea Ribick
+1 734-677-7777 x165
andrea@HL7.org

HL7 Project Manager

Anne Wizauer
+1 734-677-7777 x112
anne@HL7.org

2015 HL7 Board of Directors

BOARD CHAIR

Stanley Huff, MD
Intermountain Healthcare
+1 801-507-9111
stan.huff@imail.org

CHAIR-ELECT

Patricia Van Dyke
Delta Dental Plans Association
+1 503-243-4492
patricia.vandyke@modahealth.com

CHAIR EMERITUS & BOARD SECRETARY

W. Edward Hammond, PhD
Duke Translational Medicine Institute
+1 919-668-2408
william.hammond@duke.edu

BOARD TREASURER

Calvin Beebe
Mayo Clinic
+1 507-284-3827
cbeebe@mayo.edu

TSC CHAIR

Ken McCaslin, MAR
Rene Harvey and Associates
HKenMcCaslin@gmail.com

APPOINTED

Jeremy Thorp
Health and Social Care Information Centre
+44 113-397-3145
jeremy.thorp@hscic.gov.uk

Jamie Ferguson
Kaiser Permanente
+1 510-271-5639
jamie.ferguson@kp.org

AFFILIATE DIRECTORS

Liz Johnson, BS, MS
Tenet Healthcare
+1 4698932039
liz.johnson@tenethealth.com

Diego Kaminker
HL7 Argentina
+54 11-4781-2898
diego.kaminker@kern-it.com.ar

Frank Oemig, PhD
HL7 Germany
+49 208-781194
hl7@oemig.de

DIRECTORS-AT-LARGE

Floyd Eisenberg, MD
iParsimony LLC
+1 202-643-6350
FEisenberg@iParsimony.com

Hans Buitendijk
Cerner Corporation
+1 610-219-2087
hans.buitendijk@cerner.com

James Case, MS, DVM, PhD
National Library of Medicine
+1 301-412-9287
james.case@mail.nih.gov

Austin Kreisler
Leidos, Inc.
+1 706-525-1181
austin.j.kreisler@leidos.com

NON-VOTING MEMBERS

Charles Jaffe, MD, PhD
HL7 CEO
+1 858-720-8200
cjaffe@HL7.org

John Quinn
HL7 CTO
+1 216-409-1330
jquinn@HL7.org

Mark McDougall
HL7 Executive Director
+1 734-677-7777 x103
markmcd@HL7.org

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

HL7® FHIR®

Institute & Meaningful Use Standards Implementation Workshops

What is the HL7 FHIR® Institute?

The HL7 FHIR® Institute provides resources and training for the next generation standards framework created by HL7: Fast Health Interoperability Resources or FHIR®. The FHIR Institute focuses on making this new standard easier to understand and implement across the healthcare community. Training at the FHIR Institute includes both face-to-face and virtual events and is targeted at software developers, implementers and executives. Learn about FHIR straight from the source at FHIR® Institute programs delivered by expert FHIR standard developers.

UPCOMING EVENTS

July 13-16, 2015

HL7 FHIR Institute & Meaningful Use Standards Implementation Workshop

Embassy Suites Hotel at the Chevy Chase Pavilion

Washington, D.C.

November 16-19, 2015

HL7 FHIR Institute & Meaningful Use Standards Implementation Workshop

Hilton Dallas/Park Cities

Dallas, Texas

What is an Implementation Workshop?

An HL7 Implementation Workshop is a three-day interactive hands-ons event focused on HL7-specific topics such as Version 2, Clinical Document Architecture (CDA®), Quality Health Reporting Document Architecture (QRDA), and Health Quality Measure Format (HQMF). It includes a combination of exercises and presentations to help attendees learn how to implement HL7 standards.

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 are:

- **Efficiency** Concentrated 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 develop the HL7 standards
- **Certification Testing** Become HL7 Certified: HL7 is the sole source for HL7 certification testing, now offering testing on Version 2.7, 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

October 4 – 9, 2015
29th Annual Plenary & Working Group Meeting

Sheraton Atlanta Hotel
Atlanta, Georgia

January 10 – 15, 2016
Working Group Meeting

Hyatt Regency Orlando
Orlando, Florida

May 8 – 13, 2016
Working Group Meeting

Le Centre Sheraton
Montreal (Quebec), Canada

September 18 – 23, 2016
30th Annual Plenary & Working Group Meeting

Hyatt Regency Baltimore
Baltimore, Maryland

Find HL7 on Social Media!

Follow us on Twitter @HL7
http://twitter.com/HL7

Find us on Facebook
http://www.facebook.com/HealthLevel7