HL7 INTERNATIONAL®

NEWS

JANUARY 2012

UNLOCKING THE POWER OF HEALTH INFORMATION

HL7 Is Foundational To Achieving Meaningful Use

By Gora Datta, HL7 Ambassador; Group Chairman and CEO, CAL2CAL Corporation; Martin Entwistle, MD, HL7 Ambassador; Executive Director, Druker Center for Health Systems Innovation, Palo Alto Medical Foundation; and Grant Wood, HL7 Marketing Council Co-Chair; Senior IT Strategist, Intermountain Healthcare

Gora Datta

Grant Wood

Martin Entwistle, MD

After the plenary session in Boston in October of 2010, the first half-day session on "HL7 and Meaningful Use (MU)" was hosted by the HL7 Ambassador program. The meeting was standing room only, as over 100 people attended. Presentations followed on the HL7 standards that have been adopted as part of MU Stage 1 – Version 2; Version 2 Lab and Public Health Reporting; Clinical Document Architecture (CDA®); Continuity of Care Document (CCD®), and certified Electronic Health Records (EHRs) based on the EHR-S Functional Model.

In 2011, the efforts to communicate HL7's critical role in Meaningful Use increased dramatically. Chuck Jaffe presented on the topic at the HIMSS conference in February 2011. Formal courses were offered at the Educational Summit in March and in April, an Ambassador webinar was presented by Martin Entwistle, MD, and Gora Datta, which was attended by 218 individuals.

With the need and interest growing, a second session on "HL7 and Meaningful Use" was held during the September 2011 Plenary in San Diego, and once again, over 100 people attended.

The objectives of the event were to help people learn more about:

- How HL7 is foundational to achieving Meaningful Use, using certified EHR technology
- How HL7 standards are key for providers submitting data to public health agencies for surveillance reporting, laboratory reporting and submission to immunization registries
- Benefits and challenges to providers achieving Meaningful Use objectives & incentives

The program began with an introduction to the various US national health IT programs and then focused on quality measurement/reporting and clinical decision support as fundamental to the success of these programs. Key initiatives, such as clinical document exchange, laboratory reporting, public health surveillance and immunization reporting, were discussed.

continued on next page

In This Issue...

HL7 is Foundational

continued from page 1

Finally, a panel of experts presented "experiences from the field" – how small, medium and large providers are achieving Meaningful Use objectives and incentives as well as exploring "What is Next for Meaningful Use." This included a discussion on the role new and developing HL7 standards (QRDA, HQMF, HL7 EHR-S FM, HL7 PHR-S FM, HL7 Family History, etc.) are likely to have on supporting the future requirements for Meaningful Use.

While the requirements of eligible hospitals and eligible providers to comply with Meaningful Use Stage 1 are clear, operationalizing the necessary processes can be challenging. For small and medium sized providers, access to timely informational technology help, education and guidance are critical to adopting MU objectives and measures. Large organizations need to achieve efficiency, so seek to establish standard routines and consistency of process. This can prove problematic in the event that there is variation in recording or storage processes between departments, units or regions. Other challenges experienced include addressing the differing requirements for reporting to state and Federal authorities and technical challenges in being able to make electronic public health measure submissions. HL7 has much to offer by way of support for solutions:

- Improving quality of data collection, and storage
- Facilitating extraction and reporting of key measures
- Improving HIE interface capabilities
- Improving data transfer capabilities

Why Meaningful Use

Electronic health records can provide many benefits for providers and their patients:

- Complete and accurate information – a complete clinical history available at the finger-tips of providers for when they need it.
- Better access to information – the ability to share critical clinical information among providers leading to better coordination of care.
- Patient empowerment – Structured comprehensive information empowers patients to take a more active role in their health and in the health of their families.

However, they are not available for all providers and patients as many health care providers still use medical record systems based on paper. In addition, not all medical records systems, or more specifically EHR systems, meet currently accepted standards for storage and sharing of information. Recent government initiatives are incenting providers across the country to make the switch to electronic health records.

The Health Information Technology for Economic and Clinical Health (HITECH) Act, which was enacted as part of the American Recovery and Reinvestment Act of 2009 (ARRA), provides the Department of Health and Human Services (HHS) with the authority to establish programs to improve health care quality, safety, and efficiency through the promotion of health information technology (HIT), including EHRs and private and secure electronic health information exchange.

Under HITECH, eligible health care professionals and hospitals can qualify for Medicare and Medicaid incentive payments when they adopt certified EHR technology and use it to achieve specified objectives.

The specified objectives are defined in two regulations that have been released. One defines the "meaningful use" objectives that providers must meet to qualify for the bonus payments; the other identifies the technical capabilities required for certified EHR technology.

continued on page 7

HL7 NEWS

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Charles Jaffe, MD, PhD

Letter from the CEO

By Charles Jaffe, MD, PhD, HL7 CEO

The creative force of Steve Jobs has already become a vital component in the history of both information technology and marketing. His role is difficult to quantify and nearly impossible to explain. He set a new standard for usability and intuitive functionality. His accomplishments have redefined technical innovation, marketing savvy and strategic vision. What can we learn from his legacy?

Never build something you wouldn't want to use yourself. Does your solution truly solve the problem it is trying to address? Does it require you to break something that doesn't need fixing? We don't want to build something about which we might someday say, "If I could only tear it up and start over again." Pride of ownership is a powerful force in any creative process.

Elegance is simplicity. While healthcare is hard, the sharing of healthcare information poses a much greater challenge. Sharing information completely, reliably and unambiguously is critical to improving patient care and reducing costs. If we were to look inside one of Jobs' products, it might appear complex and daunting. Almost certainly, no part was added without a justifiable rationale. For the user, however, the complexity never showed.

Continuous improvement must be built into every product. I never heard Steve Jobs quoted as saying, "I finally got it right." In everything he did there was always the opportunity to make it better. Good enough was never good enough. He did not confuse the pursuit of perfection with perfection. Jobs would never sacrifice quality improvement for time to market.

Delight your customer. Under Jobs' leadership, everything Apple made was meant to exceed the expectations of his customer. Even the product packaging delivered a message. His team spoke to customer focus as part of their everyday language. At Cupertino, nothing seemed to get out the door that was a compromise to marketing expediency. Delighting the customer was not a slogan; it was an important part of the Apple bible.

The creative force of Steve Jobs has already become a vital component in the history of both information technology and marketing... What can we learn from his legacy?

At HL7 we must change to get better. Our changes should be measured and precise and always with the customer in mind. Inside HL7, our products look complex and sometimes overwhelming. Our greatest challenge is to build the tools and guide the implementation of these products to make their final assembly more straightforward. Even the packaging should reflect our attention to detail. Ultimately, all of our stakeholders should be delighted. As I look back upon how we met the challenges in 2011 and how we have defined our goals in 2012, there is reason to be proud.

HL7 Celebrates Its 25th Plenary Meeting

Mark McDougall

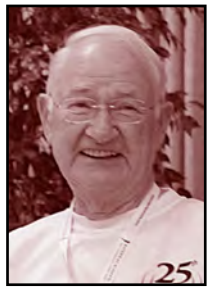
By Mark McDougall, Executive Director, HL7

UPDATE FROM HEADQUARTERS

25th Plenary Meeting

HL7 celebrated its 25th Annual Plenary meeting September 12, 2011 at the Town & Country Resort in San Diego, California. The plenary program featured a wide range of stakeholder perspectives on HL7's value and contributions to our healthcare industry throughout the last 25 years.

The program was kicked off with a special video showing images of patient care and information technology from the last 100 years, and HL7 members from the last 25 years.



Ed Hammond, PhD

Marc Overhage, MD, PhD

Richard Alvarez

The video was produced by HL7 staff and was set to the David Bowie song *Changes*. This video was well received and is available on You Tube at www.youtube.com watch?v = QG4CGRRtdrQ

Keynote addresses were provided by three-time HL7 Board Chair, Ed Hammond, PhD; Richard Alvarez, President and CEO, Canada Health Infoway; and Marc Overhage, MD, PhD, Chief Medical Informatics Officer, Siemens Healthcare. The impressive keynote presentations provided insight on HL7's 25 years from varying perspectives, such as provider, health information exchange, vendor, and from Canada's approach to accelerate the development and adoption of EHR systems with compatible standards.

Bob Dolin, MD, blowing out the candles

A panel presentation discussed "How HL7 has delivered value and the value HL7 has enabled through facilitating collaboration with different stakeholders." Moderated by HL7 Board Chair, Bob Dolin, MD, the panelists included Jamie Ferguson, VP Health IT Strategy and Policy, Kaiser Permanente; Rob Kolodner, MD, Executive VP & CHIO, Open Health Tools, Inc.; Robert Stegwee, MS, PhD, Chair, HL7 The Netherlands; and Daniel A. Pollock, MD, Surveillance Branch Chief, Division of Healthcare Quality Promotion, National Center for Emerging Zoonotic Infectious Diseases, Center for Disease Control and Prevention. Coming from a vast range of perspectives, these panelists offered incredible insight to the value of collaboration and HL7's contributions to improving interoperability and the effectiveness of patient care.

The closing session consisted of a panel of seven past Chairs of the HL7 Board of Directors who provided entertaining insight to HL7's challenges and achievements throughout the last 25 years. Moderated by HL7 CEO Chuck Jaffe, MD, PhD, panelists included Wes Rishel,

L to R: Rob Kolodner, MD, Dan Pollock, MD, Robert Stegwee, MSc, PhD, and Jamie Ferguson await their turn to address the HL7 audience

HL7 Board Chairs applauding members of HL7 for their contributions to its 25 years of success

John Quinn, MD, Stan Huff, MD, Ed Hammond, PhD, Mark Shafarman, Bob Dolin, MD, and Woody Beeler, PhD. This informal panel shared stories about the key issues they faced during their administration, lessons learned and proud moments. Attendees enjoyed hearing such valuable insight from a panel of industry thought leaders who also happen to be HL7's legendary leaders.

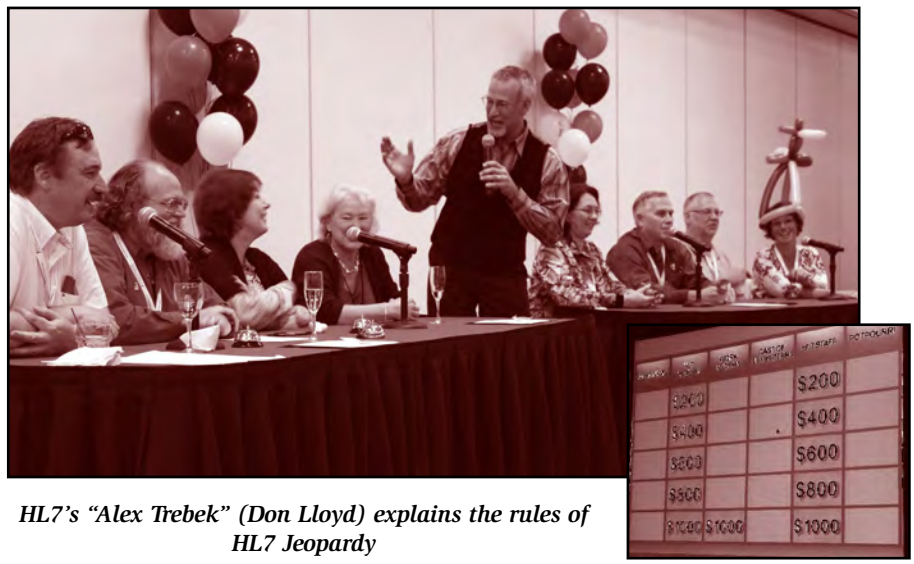
HL7 Jeopardy

This special milestone was celebrated by a networking reception that featured assorted entertainment by professionals, as well as a special production of HL7 JEOPARDY. HL7's Director of Technical Publications, Don Lloyd, PhD, served as the game's "Alex Trebek."

Team "Dingers" included Liora Alschuler (Lantana Group), Beat Heggli (HL7 Switzerland), Ioana Singureanu (Eversolve LLC) and Ted Klein (Klein Consulting). Team "Honkers" included Freida Hall (Quest Diagnostics), Jim Case (National Library of Medicine), Dale Nelson (Squaretrends LLC) and Melva Peters (Gordon Point Informatics).

Examples of the categories were Standards Response, in which contestants needed to identify an HL7 Standard, Work Groups, and Cast of Characters, in which contestants needed to identify one of HL7's many colorful members based on Jeopardy-style clues. Many of our contestants discovered just how hard it is to form an answer in the form of a question. All answers were subject to a final ruling by our judges, John Quinn, Ed Hammond and Karen Van Hentenryk.

Plenary Meeting Sponsors



HL7's "Alex Trebek" (Don Lloyd) explains the rules of HL7 Jeopardy

After going though all of the answers/questions on HL7 Jeopardy, including a daily double and final jeopardy question, Team Honkers won the game. It was a fun time for all.

Meeting Sponsors

I am pleased to recognize the following organizations that sponsored key components of our 25th annual Plenary and Working Group Meeting in San Diego, California.

- Beeler Consulting, LLC
- Gordon Point Informatics
- iNTERFACEWARE
- iSOFT
- LINKMED
- Sparx Systems

The additional sponsorship support provided by these organizations contributes heavily to HL7's meeting budget and is much appreciated.

Recognition and Awards

HL7 Fellows – Class of 2011

The HL7 Fellowship program recognizes individuals with outstanding commitment and sustained contribution to HL7 with at least 15 years of HL7 membership. Contributions

Continued on page 6

to HL7 may be reflected through serving as a working group or committee co-chair, serving on the HL7 Board of Directors, serving as an affiliate chair, receiving the W. Ed Hammond Volunteer of the Year Award,

Class of 2011 HL7 Fellows

serving as an HL7 Ambassador, making presentations about HL7, publishing a paper about HL7, or other visible activity.

During the reception at its 25th Plenary meeting, HL7 honored five members with distinction as HL7 Fellows in the Class of 2011:

- Liora Alschuler
- Jim Case, DVM, PhD
- Sam Schultz, PhD
- Rene Spronk
- Maria Ward

15th Annual Volunteer of the Year Award Winners

HL7 honored five members with the 15th annual W. Edward Hammond, PhD Volunteer of the Year Award. Established in 1997, the award is named after Dr. Ed Hammond, one of HL7's most active volunteers, a founding member as well as a three-time HL7 Board Chair. The award recognizes individuals who have made significant contributions to HL7's success. This year's recipients are:

- Calvin Beebe
- Fernando Campos
- Russell Hamm
- Anthony Julian
- Dave Shaver

These individuals have made significant contributions to HL7. Highlights of their involvement are provided in the article on page 8. Below is a group photo of many of the recipients of this award throughout the last 15 years. Congratulations to this very deserving and impressive group of award winners.

15 YEARS OF VOLUNTEER OF THE YEAR AWARDEES 1996-2011

Left to right, front row (reclining): Tom de Jong; Ed Hammond, PhD. 2nd row (seated): AbdulMalik Shakir; Russ Hamm; Tony Julian; Calvin Beebe; Fernando Campos; John Quinn; Wes Rishel. 3rd row (standing): Amnon Shabo, PhD; Lenel James; Hugh Glover; Julie James; Patrick Loyd; Freida Hall; Diego Kaminker; Bernd Blobel, PhD; Helen Stevens Love; Mark Shafarman; Bob Dolin, MD; Maria Ward; Mead Walker; Jane Curry. 4th row (standing): Norman Daoust; Ted Klein; Hans Buitendijk; Rene Spronk; Frank Oemig, PhD; John Ritter; Gary Dickinson; Woody Beeler; Ken McCaslin; Jim Case, MS, DVM, PhD; Austin Kreisler; Charlie Mead; MD, MSc

Benefactors and Supporters
We are thrilled to continue to attract impressive numbers of HL7 benefactors and supporters, who are listed on page 29. Their support of HL7 is very much needed and sincerely appreciated. Representatives from these organizations are pictured at right. A special thank you is extended to those firms that represent our 2011 HL7 benefactors and supporters.

HL7's 2011 Benefactors

Organizational Member Firms
As listed on pages 31-33, HL7 is very proud to report that the number of HL7 organizational member companies is at an all time high, including 751 companies. We sincerely appreciate their ongoing support of HL7 via their organizational membership dues.

Doctors Without Borders

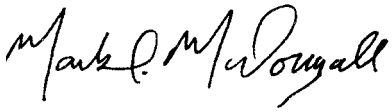
Each year, HL7 donates to Doctors Without Borders in lieu of sending out holiday cards. In addition, the proceeds from the sale of "funny" ribbons at working group meetings are also donated to this worthy organization.

Closing Thoughts

On behalf of the former Chairs of the HL7 Board of Directors, I, too, congratulate and thank each and every person that has attended an HL7 meeting and/or become a member of HL7 throughout HL7's first 25 years. You have supported and guided HL7 each step of the way. Thank you!

Best wishes to you and your loved ones for good health and much laughter in your lives. With the holiday season approaching, I close with a short blessing to you and your loved ones.

May your neighbors respect you,
May troubles neglect you,
May angels protect you, and
May heaven accept you.



HL7 Is Foundational, *continued from page 2*

- Incentive Program for Electronic Health Records: The Medicare and Medicaid EHR Incentive Programs will provide incentive payments to eligible professionals, eligible hospitals and critical access hospitals (CAHs) as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology
- Standards and Certification Criteria for Electronic Health Records: This initial set of standards, implementation specifications, and certification criteria represents the first step in an incremental approach to adopting standards, implementation specifications, and certification criteria to enhance the interoperability, functionality, utility, and security of health IT and to support its meaningful use

HL7 as an organization has taken a significant interest in these initiatives as they directly relate to the collection and interoperability of clinical data; and a number of its existing standards are specified for use within the implementation of Certified EHR Technology and its Meaningful Use (Version 2.x messaging and CDA).

Ambassador Program for Meaningful Use to Continue

Along with the excellent work of the HL7 Education Work Group and the summits and tutorials they offer on Meaningful Use, the Ambassador program will continue to offer the general, high-level, business aspects of the Meaningful Use issue. For the WGM in between the annual Plenary session, a one quarter only session will be offered to share updates and lessons learned while during the Plenary meeting, the MU Ambassador Program will cover two quarters of the Monday afternoon session with an in-depth analysis.

2011 Ed Hammond Volunteer of the Year Awards

HL7 honored five members with the 15th annual W. Edward Hammond, PhD Volunteer of the Year Award. Established in 1997, the award is named after Dr. Ed Hammond, one of HL7's most active volunteers and a founding member as well as past Board chair. The award recognizes individuals who have made significant contributions to HL7's success. The 2011 recipients include:

- Calvin Beebe, technical specialist, Mayo Clinic
- Fernando Campos, HL7 Argentina, and software engineering area chief – Health Informatics Department, Hospital Italiano de Buenos Aires
- Russell Hamm, informatics consultant, Apelon, Inc.
- Anthony Julian, technical specialist-interfaces, Mayo Clinic
- Dave Shaver, chief technology officer, president and founder, Corepoint Health

About the Recipients

Calvin Beebe has been a member of HL7 since 2000. He has served as the co-chair of the HL7 Structured Documents Work Group for more than eight years and is also the co-chair of the Structure and Semantics Steering Division of the HL7 Technical Steering Committee. Beebe is also a co-editor of the HL7 Clinical Document Architecture (CDA®) standard, which is used worldwide and was selected by the US federal government for meaningful use. He has also taught numerous courses on the CDA standard at HL7 functions over the past nine years.

Fernando Campos is a member of the HL7 Argentina affiliate. He has played an integral role in the development of the HL7 e-Learning course (ELC). Through his efforts, HL7 was able to extend the e-Learning course size from a 100 registrant maximum to over 400 individuals. Campos has contributed over 300 hours of research and development to automate a portion of the course assignment review, making it possible for HL7 to accommodate such a large increase in students in the ELC.

Russell Hamm has been a member of HL7 since 2005. He has played a vital role in the development and approval of the HL7 Common Terminology Services, Release 2 specification. He recently served two terms as a co-chair for the Vocabulary Work Group and is also a past co-chair of the Templates Work Group. Hamm is currently the HL7 liaison to the International Health Terminology Standards Development Organization (IHTSDO) and has been involved in the evaluation of the IHTSDO workbench for use by HL7. Hamm has also managed the harmonization of HL7 Version 3 terminology.

Anthony Julian is a long-time volunteer and has been member of HL7 since 1998. During this time, he has held several leadership positions, including having been elected as the co-chair of the HL7 Infrastructure and Messaging (InM) Work Group as well as the co-chair of the HL7 Foundation

continued on next page

and Technology Steering Division for the organization's Technical Steering Committee. He was also appointed by the HL7 Board to serve as the Secretary to the Architectural review Board. In addition, Julian has been actively involved in the development of the HL7 messaging standards, acting as an editor for the Version 2 chapters on control, query and network control as well as an editor for Version 3 in the areas of transmission infrastructure, query infrastructure, message control act infrastructure and lower level protocol.

Dave Shaver has been a member of HL7 since 1998. His organization has been a long-term supporter of HL7 and was influential in helping HL7 gain both name recognition and adoption in the industry. He also co-chaired the Infrastructure and Messaging (InM) Work Group for four years, has assisted in several HL7 demonstrations over the years at the Health Information Management Systems Society's (HIMSS) annual conference and hosts a Tuesday evening reception at HL7 working group meetings for all attendees.

Thank you to these volunteers and all the other volunteers who contribute to the success of the HL7 organization.

Mark Your Calendars for May 2012 in Vancouver, BC

By Michael van Campen, HL7 Canada Chair; Treasurer and Past Affiliate Director, HL7 International Board of Directors

As noted in the September 2011 issue of HL7 News, the May 2012 HL7 Working Group Meeting will be held in Vancouver, May 13-18. HL7 Canada is excited to help co-host the meeting, along with HL7 International. This is a great opportunity to continue the excellent standards development activities that HL7 is famous for, learn about HL7 standards, and learn lessons of how HL7 Version 3 has been instrumental in moving the EHR agenda forward in Canada.

Some of you may be aware that Canada is fortunate to have a national institution called Canada Health Infoway, which has laid the foundation for an interoperable EHR across the country, based primarily on two strong foundations: a national EHR Architecture and a strong standards framework. These two pillars have provided strong guidance to the HIT sector, outlining how each of the various elements, from repositories, registries and infostructure interact with point-of-service applications used in clinical settings. The language of communications throughout is HL7 Version 3, and Canada has made significant progress in advancing the use of these standards in our EHR systems.

The HL7 Working Group Meeting in Vancouver is sure to attract additional Canadian participation (over our US WGMs), so this is an excellent opportunity to work and learn with your Canadian colleagues in May 2012. On behalf of HL7 Canada, we welcome the world of HL7 to Vancouver – we hope to see you there!

PLEASE BOOK YOUR ROOM AT THE HL7 MEETING HOTEL

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

Visit www.HL7.org for more information on these upcoming HL7 meetings.

News from the PMO and Project Services Work Group


Dave Hamill


Freida Hall


Rick Haddorf

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

SAIF Pilot Coordination Project

Project Services is leading this project which is sponsored by the Technical Steering Committee. The primary deliverable of the SAIF Pilot Coordination Project are concrete examples of artifacts that can be used in a future version of an HL7 SAIF Implementation Guide.

SAIF Pilot Coordination will assist in the documentation of processes encountered throughout the development of projects under the SAIF AP (Architecture Program) umbrella that require input from more than one work group. The team is using RASCI charts to capture the roles and responsibilities of all groups in these efforts. The first use of this tool was to capture the interactions between groups as a modeling tool was selected for use in the Orders and Observations Composite Order project.

Additionally, the team has decided to use Project Insight to help model the dependencies between the SAIF pilot projects' activities. This is the work we will be focusing on in the next several months.

Overall, the project will document coordination conducted by over 12 HL7 work groups as they proceed through over 9 projects under the SAIF AP umbrella. From this coordination, suggested contributions to SAIF governance documents will be created as well as modifications to the HL7 Project Life Cycle for Product Development (PLCPD).

Project Services is happy to be working on this effort to help move HL7 towards adoption of the SAIF architecture. We appreciate and welcome the contributions from all those involved in the SAIF AP projects.

Project Insight FAQ/Tip Sheet

The HL7 PMO and Project Services have created a Project Insight FAQ/Tip Sheet based on a suggestion and recommendation from the Project Facilitators Luncheon Roundtables held Wednesdays at each working group meeting (attendance open to all). This document is intended to assist project facilitators with easily updating milestones and project statuses, as well as understanding the lifecycle of a project within Project Insight. The document contains screen shots indicating which fields should be modified when updating a project's status; a state transition diagram depicting what actions trigger a change in the Status field in Project Insight; and a table illustrating how all the fields in Project Insight are used.

Project facilitators can use this document as a tool to make updates in Project Insight on their own, or, as always, updates can be emailed to Dave Hamill at pmo@HL7.org.

Updated Project Scope Statement Template for 2012 and Modifications to the Project Approval Process

The HL7 Project Management Office and the Project Services Work Group will release a new 2012 version of the Project Scope Statement (PSS) template; a result of their annual updates to the template. As usual, our goal is to streamline and simplify the template so that it's easier to use by HL7 members and provides the most useful data to the membership.

Changes include:

- Addition of URL links to the Wiki Project Template page in the Project Document Repository text box
- Addition of PSS examples to the zip file containing the PSS template and Project Approval Process
- Modification of the FAQ section to indicate that a new project ID should NOT be created when the project scope changes. By keeping the same project ID, the ballot site can readily point both DSTU and Normative ballots to the same project ID.
- Removal of the 'Withdraw a Standard' checkbox in Project Intent, and change the FAQ to indicate a PSS isn't required, but a Withdrawal request form must be completed and submitted to the TSC, following GOM 14.13.

continued on next page

- Addition of New/Modified HL7 Process checkbox to the PSS Project Intent
- Modification of the Ballot Type section by adding the following checkboxes:
  - DSTU to Normative
  - Normative (no DSTU)
- Changing the time frame from 6+ months to 12+ months in the In the FAQ for creating a new PSS due to Change in Scope, change the parameter stating "The Project End date extends by 6+ months" to be 12+ months
- Removal of Section 8. Strategic Initiative Reference
- Addition of a checkbox under Section 7. Realm: Was this standard balloted/previously approved as realm specific standard?
- In section 5. Project Approval Dates, under SD Approval Date, addition of a checkbox: PBS Metrics Reviewed (req'd for SD Approval)? Also update the FAQ section for this checkbox
- Addition of the following checkbox in Section 1.Products: New/Modified HL7 Policy/Procedure

In addition to the above changes to the Project Scope Statement template, the HL7 Project Management Office and the Project Services Work Group will make the following modifications to the HL7 Project Approval Process.

Changes include:

- Addition of steps/tasks on who/what should be done for a Public Document (The EC told Project Services to remove this)
- Addition of notation that there is an option for project leaders to create a Wiki Project tab
- Addition of appropriate verbiage for PBS Metrics review/analysis during SD PSS review
- When 'Introducing New Processes to HL7', add that work groups need to send the PSS to the ArB when sending the PSS to the Steering Division for review

Webinar Recording: HL7 Project Management Tool Overview for HL7 Project Facilitators

A webinar which provides an overview of the various HL7 Project Management tools is now available. To view the 38 minute webinar recording, go to www.HL7.org > Resources > Webinar Recordings.

This session, targeted for co-chairs and those leading HL7 projects (i.e. Project Facilitators), demonstrates HL7 project tools including Project Insight (HL7's primary project repository), the HL7 Searchable Project Database, GForge, as well as review HL7 project processes and methodologies.

If you'd like the PMO to present this webinar at one of your steering division or work group conference calls, please contact Dave Hamill at pmo@HL7.org to schedule a day and time.

HL7 Project Tracking Tools
All of HL7's project tools, including the Searchable Project Database, GForge and Project Insight, are available on www.HL7.org via Participate > Tools & Resources > Project Tracking Tools.

Upcoming INTERNATIONAL EVENTS

CDISC Interchange Europe
Stockholm, Sweden
April 16 - 20, 2012
For more information, please visit
http://www.cdisc.org/interchange

eHealth Conference 2012 / World of Health IT Conference and Exhibition
Copenhagen, Denmark
May 7 - 9, 2012
For more information, please visit
http://www.worldofhealthit.org/

HL7 May Working Group Meeting
Vancouver, BC, Canada
May 13 - 18, 2012
For more information, please visit
http://www.hl7.org/events/Working Group Meetings

eHealth 2012: Innovating Health e-Care
Vancouver, BC, Canada
May 27 - 30, 2012
For more information, please visit
http://www.e-healthconference.com

MIE 2012: Quality of Life through Quality of Information
Pisa, Italy
August 26 - 29, 2012
For more information, please visit
http://www.mie2012.it

Quest to Bring HL7 to Blood Banking Inspired by Financial Services

Robert Kapler

By Robert Kapler, ABC Liaison to the Blood Bank HL7 SIG; Manager of the Original ABC BECS Conference Planning Committee

From his years working in financial services information systems, Jonathan Harber knew that bringing data exchange standardization into blood banking could be transformative.

Jonathan Harber

Harber, who recently resigned as chief information officer at Blood Systems Inc., is no stranger to standardization. He previously worked at EFD/eFunds, which runs the world's largest debit card processing engine. Shortly after joining BSI, Harber realized that blood establishment computer software (BECS) systems needed the same type of common language that had enabled banks and retailers to enjoy the debit card revolution. "Many of the BECS vendors have a similar weakness," said Harber. "With few exceptions, they have no way to import information from another system other than by manual entry because there is no standard means of data exchange."

A BECS may accept information from apheresis machines or laboratory machines, "but they don't have the ability to do in-bound interfacing with other software systems unless the center pays a ton of money for a custom interface," Harber said. Therefore, while a blood center's laboratory software might indicate a positive infectious disease test result on a blood unit, it cannot talk to the center's donor management software to automatically flag the infected donor.

Harber thought that Blood Systems, the second largest blood-collecting entity in the US, was particularly suited to enjoy the benefits of standardization, given that it had facilities in 18 states with complex software needs. He put his hunch into action two years ago by becoming chair of the Blood Banking Special Interest Group (SIG) to extend Version 2.6 of the Health Level Seven standard into the blood center realm.

The SIG is composed of blood center IT and operations experts, standards experts, and BECS representatives. The project team receives staff and marketing support from America's Blood Centers (ABC) and has been co-funded by the Foundation for America's Blood Centers and Blood Systems.

The team reached a milestone in September 2011 when HL7 International's Orders and Observations Work Group approved the final version of the HL7 Version 2.6 Implementation Guide: Blood Bank Donation Services, Release 1. The guide will be available on the HL7 website in the near future.

The specification and implementation guide are informally referred to by the team as Blood Bank HL7 (BBHL7). When fully implemented, BBHL7 will enable speedy and accurate data exchanges between blood center devices and systems, and eventually, between blood centers and transfusion centers. This should help save money and reduce transfusion errors, thus improving patient safety.

The Forerunners. Harber was not the first to realize the need for a blood banking interface standard. Patti Larson, product manager at Haemonetics Software Solutions, has been working on the problem for more than a decade. The process began when she was employed by the Institute for Transfusion Medicine.

"I was running the transfusion service system that we used to manage patients, orders, samples, and blood products from all the different hospitals for which we provided services," she said. "So the need to develop interfaces was very important."

Patti also participated in America's Technical Advisory Group (ATAG). ATAG advises ICCBBA on matters related to ISBT 128, the global standard for the identification, labeling, and information processing of human blood, cell, tissue, and organ products.

HL7 Version 2 seemed like the right standard for transfusion centers. It was first developed for the hospital IT environment back in 1987 and, over the years, has grown to become the most common IT interface standard used by primary and acute care centers and clinical lab systems in the US.

Patti Larsen

"There was much discussion at ATAG meetings about electronic data interchange," she said. "But the HL7 standard did not adequately support orders for blood bank tests and products, especially for patients with special transfusion requirements. It also did not allow for the easy exchange of information about blood products that had been selected or cross-matched for patients. Blood banking is one of those special areas that really didn't quite fit in standard HL7 messages, even on the patient side."

So a group of interested blood bankers, ATAG members and BECS vendors came together to try to find a way to extend HL7 into blood banking. Larson became co-chair of the HL7 Blood Bank Special Interest Group along with Susan Steane, then director of the Laboratory Information Systems at Vanderbilt University.

The Transfusion SIG held its first meeting in January 2000. Over the following months, the group worked out a new set of HL7 messages, segments and trigger events to better support orders for hospital blood bank tests and products. The proposal went to ballot in May 2001, was accepted by the HL7 Working Group, and became part of Version 2.5 of the HL7 Standard in January in 2002.

Conference Catalyst. While the work of the SIG benefitted hospital blood banks, the problem of a data exchange standard for blood suppliers had yet to be tackled. Then, in 2008, ABC held a BECS Conference in Silver Spring, MD. The event, which attracted 172 participants, focused on finding ways to improve the FDA's 510(k) clearance system for substantially equivalent devices, including blood banking software. One of the suggestions that came out of the conference was to establish a common interface standard.

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Michael van Campen

International Affairs: The HL7 IMATF

By Michael van Campen, Treasurer and Past Affiliate Director, HL7 International Board of Directors; Chair, HL7 Canada

HL7, as an international organization, has affiliates in 36 countries across the globe. Each of these affiliates conducts meetings in their countries to help support the use and localization of HL7 standards. In fact, (just) over half of HL7's global membership are members outside of HL7 International. The activities of affiliates are becoming an ever increasing focus for the organization as a whole, and are helping to ensure that HL7 standards are the standard of choice around the globe.

Early in its evolution HL7 recognized the importance of country-specific focus for HL7 activities. The affiliate structure was created in 1995 with Germany becoming the first affiliate, to be followed the next year by The Netherlands, Canada, Australia and New Zealand. New affiliates are becoming part of the HL7 family every year and help extend HL7's reach to every corner of the globe.

When affiliates were created, they were given a fair amount of local control in order to best serve the needs of their constituents. This included setting up a local non-profit organization, allowing for localization of the international standard(s), and abiding by the principles of HL7 International in such matters as open, transparent voting practices. Affiliates were also granted the capability to raise their own funds to run affiliate operations, extending to membership categories and dues structures and education offerings.

One of the consequences of this approach, specifically as it relates to membership categories and dues, is that there is a wide variety of implementations across the affiliates. Some affiliates look to provide lower cost memberships in order to attract larger participation, while others have structures in line with other professional organizations, and still others have structures that align to neighboring countries or HL7 International.

As HL7 looks to review its operations to more widely recognize the role of the "global" community, it needs to align or harmonize membership categories and dues. The HL7 International Membership and Affiliate Task Force (IMATF) was created by the International Council in May 2011 during the Orlando WGM to help solve this issue, with a particular focus on proposing a membership model that supports a consistent approach to membership across the organization.

To date, the IMATF has met between WGMs on a monthly basis and even held a full day meeting on the Saturday before the San Diego WGM in September 2011, highlighting the dedication of IMATF members. The IMATF has agreed upon a set of 15 principles and has developed four membership model options for analysis.

Over the coming months, a review of current practice is also anticipated in order to understand the implications of any change in the underlying membership model.

Members of the IMATF include (note: not all affiliate reps are affiliate chairs):

- Michael van Campen (HL7 Canada)
- Robert Stegwee, MSc, PhD (HL7 Netherlands)
- Bernd Blobel, PhD (HL7 Germany)
- Colleen Brooks (HL7 Singapore)
- Beat Heggli (HL7 Switzerland)
- Ed Hammond, PhD (representing US)
- Margie Kennedy (HL7 Canada)
- David Rowlands (HL7 Australia)
- Stefan Sabutsch, PhD (HL7 Austria)
- Charlie Bishop (HL7 UK)
- Libor Seidl (HL7 Czech Republic)
- Hans Buitendijk
- Mark McDougall (HL7 Staff)
- Bob Dolin, MD (HL7 Staff)
- Diana Stephens (HL7 Staff)
- Chuck Jaffe, MD, PhD (HL7 Staff)

If you have any questions or comments, please do not hesitate to contact me at michael.vancampen@gpinformatics.com.

Quest, *continued from page 12*

Given the work that had already been done with HL7, and the fact that it was the most popular interface standard for hospitals, the group decided to pursue HL7 once more. Harber and Larson set about putting together a multi-disciplinary group of experts and stakeholders.

Patrick Loyd

Enter an HL7 Expert. Helping to guide the group is Patrick Loyd, a California-based private consultant affiliated with DP Sciences. Loyd has 20 years' experience doing HL7 interfaces and eight years with HL7 International. He says moving the HL7 standard into the blood banking environment – a hospital supplier's environment – is a natural progression.

"A few decades ago, a number of blood banking services were not yet automated," he said. "But as more have become automated, having a standard that will enable the interoperability makes sense. So when Jonathan Harber and the ABC HL7 group came to us and said 'We believe in the efficiencies that could be gained by standardizing those message exchanges. Do you want to work with us?' We said "Sure."

Loyd praised the ABC HL7 for bringing together the vendor, standards and blood banking resources to develop a standard that meets the greatest number of needs. "The cross-functional industry expert panel that Jonathan and ABC put together is in the top 5 percent of those that have come before HL7 International in all my years of doing HL7 interfaces and being part of the HL7 organization," Loyd said.

About the HL7 SIG

The HL7 SIG was organized by America's Blood Center and is composed of representatives from: BBCS; BloodCenter of Wisconsin; Blood Systems; Carter BloodCare; Fenwal; Florida Blood Services; Group Health Cooperative; GPI; Haemonetics; Healthcare-ID; ICCBBA; ITSynergistics; Kaiser Permanente; Mediware; New York Blood Center; and Puget Sound Blood Center.

HL7 Pakistan Celebrates First Anniversary of its Affiliation

By Dr. Hafiz Farooq Ahmad, Chair, HL7 Pakistan; Director, Health Life Horizon Project; Associate Professor, NUST School of Electrical Engineering and Computer Science, Pakistan

Dr. Hafiz Farooq Ahmad

The time has come to celebrate the first anniversary of HL7 Pakistan by looking at the successes it has achieved over the past year. It was a dream until October 2010, when HL7 International approved Pakistan as the next affiliate at its Annual Plenary and Working Group Meeting in Cambridge, MA, USA. As a new affiliate of HL7 International, HL7 Pakistan began with a vision to promote HL7 standards by arranging seminars, workshops, training sessions and tutorials to create awareness among the stakeholders in Pakistan. This article covers HL7 Pakistan's activities for its first year, October 2010 to October 2011.

Memberships: HL7 Pakistan offers membership in categories of Benefactor, Supporter, Organizational, Professional and Student. The membership is open to all and in one year we have approximately 50 members in the categories above, three of which are Benefactors.

Shaukat Khanam Memorial Cancer Hospital and Research Center (SKMCH & RC), Lahore SKMCH & RC is the most well known hospital for cancer treatment in the country, having an in-house research center. It became the first benefactor and created a very strong collaboration with HL7 Pakistan, adopting HL7 standards by making its Hospital Management Information System HL7 compliant (www.shaukatkhanum.org.pk).

National University of Sciences and Technology (NUST), Islamabad is the top ranked university in Pakistan. NUST played the fundamental role to support the pre-affiliation activities towards HL7 Pakistan in term of human resources, infrastructure and financials. NUST provides a competitive research community, international collaborations and state of the art education (www.nust.edu.pk).

Aga Khan University and Hospital, Karachi is among the well-known universities of Pakistan with associated top ranked hospital and laboratories network. Aga Khan has recently become our benefactor by extending its collaboration of special on-site training program from the platform of HL7 Pakistan (www.aku.edu).

Standard Trainings and Certifications: HL7 Pakistan focuses on providing modular and comprehensive training sessions of HL7 standards in order to improve the skills of implementing HL7 standards for various health applications.

HL7 Pakistan has successfully conducted two off-site training sessions, with 50 participants on average, and one on-site training session for Aga Khan University IT Professionals. A fourth training session is scheduled for the first week of January 2012.

HL7 Pakistan has administered two HL7 Version 3 RIM R1 certification exams in close corporation with HL7 International. A list of RIM certified professionals is available on the HL7 International Certification Directory, (http://www.hl7.org/implement/certificationdirectory.cfm?CertLocation=HL7%20Pakistan&sortBy=CertificationDate&sortDirection=ASC). A third certification exam is planned for January 2012 following the training session. Due to high demand, we will also be offering certification on the Clinical Document Architecture (CDA) in the near future.




Workshops and Meetings: HL7 Pakistan also focuses on the promotion of healthcare standardization through workshops and corporate meetings for the executives and policy makers of Pakistan. Their role is pivotal in encouraging local industry to adopt HL7 standards in existing as well as future health systems. HL7 Pakistan organized the first workshop entitled, "Emerging Trends and Role of Standards in Future Healthcare Systems" in August 2011. The workshops attracted more than one hundred executives, managers and professionals from various private and government organizations.

On November 21-21, 2011, a workshop was organized with sponsorship from Comstech. This was an international level workshop with audiences from abroad. Two HL7 experts from HL7 International were invited to speak at the workshop.

HL7 Pakistan also holds regular weekly meetings to improvise the internal team structure, financials and memberships. Only members from the Management Board participate in these meetings.



HL7 eLearning Course: Our next focus in on launching an eLearning course. We were very pleased when Diego Kaminker (Convener of HL7 E-learning Course, Argentina) shared that out of 85 applications for HL7 International E-Learning Scholarships, 46 were from Pakistan. Facilitating the professionals' passion to learn interoperability standards, HL7 Pakistan has planned to launch the HL7 eLearning Course in January 2012.

HL7 Pakistan Student Chapter: Students are the best ambassadors of any campaign. Facilitating the future career plan of students in health informatics by involving them in undertaking their final year projects/research thesis, HL7 Pakistan has launched a student chapter in the Islamabad region. Over time, it is planned to launch this program in other major cities in Pakistan. This will strengthen the HL7 network among the academia of Pakistan and will result in research and development collaboration among different universities throughout the country.

Strategic Alliance with Health Organization for Research and Development: HL7 Pakistan founded, with incredulous and unstinting efforts by its members, the Health Life Horizon (HLH) Project (https://hl7.seecs.nust.edu.pk). HLH started to work on health systems integration and interoperability three years back. The researchers explored new horizons of the domain by publishing more than 20 research publications in reputed local and international conferences and journals. A total of seven post graduate students completed their master's degrees by exploring and proposing innovative tools and techniques of how to incorporate HL7 into the existing health applications. In 2010, one of HLH sub-projects won the first prize of a departmental award during open house exhibition.

The members of this project have established a very strong collaboration with local health laboratories and hospitals, which ultimately added to the overall activities under HL7 Pakistan. Two collaborators– CITI Lab and Shaukat Khanam Memorial– are presented as an example here.

CITI Lab: CITI Lab is one of the quality laboratories in the country and possesses a wide range of experience in the management of complex healthcare facilities. It has enhanced its expertise in healthcare facility management through its membership and affiliation to relevant international learned bodies and institutes. Adhering to its terms and conditions, the HLH team developed and deployed an HL7 Version 3 based interface solution to CITI Lab by enhancing the capabilities of its existing laboratory information system to send and receive lab orders and results using HL7 Version 3 messages with mapping solution of data to HL7 format.

Shaukat Khanam Memorial Cancer Hospital & Research Center (SKMCH & RC): The SKMCH has a comprehensive hospital management and information system. The HLH team has provided customization services in order to create a tailored application for SKMCH, making it HL7 compliant.


Conclusion and Long Journey Ahead: The past year has enabled us to connect various stakeholders from the health industry by organizing workshops, training and certification sessions. We have tried to capture the talent of professionals and utilize them in improving healthcare technology services. We have endeavored to educate and convince people to use HL7 standards by bringing automation to their workflows and enabling the out-world communication. We believe these activities indicate that our efforts are on the right track and that the people of Pakistan are welcoming the adoption of health standards in future systems. It is HL7 Pakistan's hope to continue this advancement in the coming years.

HL7 International eLearning Course – Keys to the Success

Diego Kaminker

Fernando Campos

By Diego Kaminker, Chair, HL7 Argentina; Owner/Manager, KERN-IT SRL; Co-Chair, HL7 Education Work Group; Affiliate Director, HL7 International; HL7 eLearning Course Coordinator; and Fernando Campos, HL7 Volunteer of the Year 2011; eLearning Course Coordinator Technical Lead/Coordinator, HL7 Argentina; Software Engineering Area Chief – Health Informatics Department, Hospital Italiano de Buenos Aires

The eLearning course (ELC) is directed towards application developers, software engineers, consultants and anyone who is interested in basic knowledge of HL7 standards.

The goal of this course is to introduce the key concepts of interoperability, HL7 Version 2.x, Version 3 and the Clinical Document Architecture R2. Each course spans over 14 weeks.

Since 2006 more than 2,000 participants have taken the ELC, which we consider a huge success.

The figures are impressive, but if we think about WHAT makes this course successful, the answer is: its TUTORS. The tutors are key to success: people teach, not computers. Since the course has no schedule, students can ask questions at any time, and a tutor will always be available to answer. The course is global, with tutors from almost every continent, selected from the top performing students. We would like to introduce some of them here and find out, in their own words, how they became involved in the ELC.

Country	Students	Region
United States	645	North America
Spain	295	Europe
Canada	271	North America
Argentina	222	Latin America
India	189	Asia
Uruguay	120	Latin America
Chile	86	Latin America
Mexico	47	Latin America
China	40	Asia
Austria	35	Europe
Singapore	25	Asia
Colombia	25	Latin America
Australia	23	Oceania
Romania	19	Europe
Sri Lanka	18	Asia
Italy	15	Europe
Brazil	12	Latin America
Pakistan	10	Asia
Cuba	10	Latin America
New Zealand	10	Oceania

Country	Students	Region
New Zealand	10	Oceania
Ireland	8	Europe
United Kingdom	6	Europe
Malaysia	5	Asia
Philippines	5	Asia
Saudi Arabia	4	Asia
France	4	Europe
Hong Kong	3	Asia
Thailand	3	Asia
Bosnia and Herzegovina	3	Europe
Sweden	3	Europe
Puerto Rico	3	Latin America
Ghana	2	Africa
Cambodia	2	Asia
Indonesia	2	Asia
United Arab Emirates	2	Asia
Norway	2	Europe
Costa Rica	2	Latin America
Ecuador	2	Latin America
Peru	2	Latin America

Country	Students	Region
Gambia	1	Africa
South Africa	1	Africa
Afghanistan	1	Asia
Iran, Islamic Republic of	1	Asia
Belgium	1	Europe
Croatia	1	Europe
Estonia	1	Europe
Germany	1	Europe
Lithuania	1	Europe
Luxembourg	1	Europe
Malta	1	Europe
Poland	1	Europe
Portugal	1	Europe
Serbia	1	Europe
Switzerland	1	Europe
Bolivia	1	Latin America
Venezuela	1	Latin America
Virgin Islands (British)	1	North America
Papua New Guinea	1	Oceania

Students by Country

Iryna Roy

Iryna Roy, Canada, ELC Completed 2008, Tutor since 2009 – I obtained a bachelor degree in CS and started my Healthcare IT career as a practice management software vendor. Using HL7 Version 2.3 I implemented ADT transactions between the EMR application and the hospital system. I completed the course in 2008 and applied Version 3 CDA skills immediately in the "MedicAlert Access En Route" project, making the life-saving information available to paramedics in Nova Scotia. Recently I joined the eHealth Ontario team as a Senior Standards Analyst (Registries) to adopt, adapt, develop and promote HL7 Version 3 messages in the province of Ontario, Canada.

Melva Peters

Melva Peters, Canada, ELC Completed 2008, Tutor since 2009 – I am a consultant as a drug information system subject matter expert as well as conformance testing support to a drug information project. I began my career as a pharmacist and changed directions when PharmaNet was implemented in British Columbia, Canada. PharmaNet captures dispenses of medications from community pharmacies in British Columbia using Version 2 customized messages. I am involved in HL7 International as a co-chair of the Pharmacy Work Group and member of the GOC. In the Canadian Standards world, I am on the HL7 Canada Council and also in Standards Collaborative's Medication Management WG. I enjoy tutoring the ELC – I keep learning and get to interact with students and tutors from all over the world.

Xtning Huang

Xinting Huang, China, ELC Completed 2008, Tutor since 2008 – I am the chief architect of Carefx China Corporation.

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Previously, I worked as a manager in China National Institute of Hospital Administration, focusing on health information standardization. Since 2010, I have participated in the CDA Workgroup of China EHR Committee, managed by the China Ministry of Health. We have created CDA local implementation guide. I have published 10 + articles in core journals about health informatics. I have a degree in information management from Peking University and a degree in Clinical Medicine. It is a great pleasure to collaborate closely with all other tutors and students from many parts of the world.

Mike Muin, MD

Mike Muin, Phillipines, ELC Completed 2010, Tutor since 2011 – I am a medical doctor and a healthcare IT professional in the Philippines, Chief Information Officer (CIO) of The Medical City group of hospitals and clinics. As CIO of The Medical City, I lead development of administrative and clinical applications including clinical system integrations, improved collaborative systems, clinical data repositories, patient registries and the hospital electronic medical record (EMR). The ELC has provided us with skills, knowledge and perspective for our interoperability work. I look forward to continuing to teach HL7.

Victor Andrade

Victor Andrade, Canada, ELC Completed 2009, Tutor since 2009 – I have a bachelor's degree in computer science, and have been working in Canada for about six years. I work for Propharm Ltd., mainly focusing on software development for our Pharmacies (i.e. a system called Nexxsys, for around 1500 pharmacies around Canada). Our system has been enhanced in order to be HL7 compliant with provinces implementing their own ehealth system / repository like Prince Edward Island, Saskatchewan and Newfoundland. In the near future, it is anticipated that Alberta, New Brunswick and Ontario will also implement their own ehealth systems. The ELC has been such a great experience as I get to share and learn so much.

Karen Salazar

Karen Garcia Salazar, Mexico, ELC Completed 2011, Tutor since 2011 – I'm glad to share this experience with all the students. I work as a quality assurance engineer at Nearsoft (an outsourcing development company) and I have been involved with health care information since 2007. I decided to take the course to have a better understanding of how HL7 interacts system-wide.

Cyr Bakinde

Cyr Bakinde, US, ELC Completed 2008, Tutor since 2009 – I have more than fifteen years of experience in information technology, including more than ten years in software development and three years in the healthcare industry. Currently, I work with systems that process HIPAA X12 transactions.

Milan Trninic

Milan Trninic, Serbia, ELC Completed 2010, Tutor since 2010 – A professional with over 13 years of industry experience, I performed in the roles of software architect, system analyst, domain and data modeler, software engineer and developer, technical team lead, specification writer, and worked in different domains, including insurance (life and health). My focus is distributed software systems for different target domains and technologies: architectures, databases, platforms, etc.

If you are HL7 certified or are an outstanding student of our HL7 ELC, and are interested in becoming a tutor, please contact us. If you want to know more about the ELC or are interested in running an edition of the course in an HL7 affiliate country, please contact Mary Ann Boyle (maryann@hl7.org).

Keith Boone

HL7 Pledges to Empower Patients

By Keith Boone, Director, HL7 Board of Directors; Standards Architect, GE Healthcare

At the last working group meeting, the HL7 Board unanimously agreed to pledge to engage and empower individuals to be partners in their health through information technology. This pledge was developed by the US Office of the National Coordinator (ONC) to promote patient appreciation of the value and benefits of health information technology. We would like to further encourage our members to take either the Pledge for Data Holders or the Pledge for non-Data Holders as appropriate. More details about the pledge can be found at the ONC website at http://www.healthit.gov/pledge.

We are pleased to join with ONC in this important national initiative, and we further encourage other healthcare standards development organizations to follow suit.

John Quinn

An Update on HL7's Tooling Strategy from the CTO

By John Quinn, HL7 Chief Technical Officer

At our San Diego Plenary meeting in September, I announced that HL7 is making a decided shift in its tooling strategy. For many years, HL7 has focused its efforts and resources on tools to support its balloting and publications processes. While more work could be invested, HL7 has, with the significant efforts of its toolsmiths, created a reasonably automated and stable set of tools that support its balloting cycles and yearly Version 3 publishing efforts.

It is now important that we shift our focus to supporting the users of our standards. The specific areas that appear to need the most help include CDA templating, implementation specification generation and testing tools.

Some of you may not be aware that HL7 has significant user tooling resources available today. You can find the existing set of tools available on our website. Included are: 14 tool sets for Version 2; 8 tool sets and other resources for Version 3 implementation; 10 contributions supporting vocabulary resources; 13 utilities and more. HL7 needs to expand the capabilities, visibility and availability of assistance for tooling to support its current and new future user tools.

The strategies now being worked on in the HL7 Tooling Work Group include: tools that are available in open source; tools with current and useful user documentation; and tools that can also be accessed through our collaboration with Open Health Tools (OHT) in an online shared artifacts repository.

Working with the Tooling Work Group, over the next few months our strategy will be turned into specific prioritized plans for HL7 user tools. We will also take those priorities and, where appropriate and with HL7 Board approval, request some of HL7's limited financial resources to accelerate development. The HL7 Board is in general agreement with our approach. I will periodically update you on our status and specific tooling deliverables as they unfold.

Jane Curry

Tooling Work Group Response to HL7's Tooling Strategy

By Jane Curry, Co-Chair, HL7 Tooling Work Group and Board Liaison

The Tooling Work Group has responded to the new emphasis on user tools by initiating three new projects, which have recently been approved by the TSC.

- The Tooling Strategy and Process Revision project will produce a draft strategy document targeted for the January Working Group Meeting, trialed and then accepted by the HL7 Board at the May Working Group Meeting.

  This project will examine the current process and consider how to identify, gather requirements, endorse tools or acquire and maintain tools to support HL7's own processes, as well as those that will make HL7 standards easier to implement. The strategy will include mechanisms to consider requests for new types of tools and enhancements to existing tools, priority setting criteria, acquisition alternatives and user support considerations.

- The Tooling Communication Plan and Execution project will prepare a plan by the January Working Group Meeting with expected execution of the plan by the May Working Group Meeting. This project will examine and improve the various channels available to the Tooling Work Group to increase the awareness of existing tools, how to acquire them, how to use them and how to get support for them.

- The Tooling Dash Board project will design and implement an online pictorial representation of the current state of HL7 sponsored tools and of those projects developing and enhancing tools. A design is anticipated by the January Working Group Meeting; however, execution will be dependent on staff resources.

All interested parties are invited to sign up to the Tooling Work Group listserve, attend weekly teleconferences on Thursdays at 10:00 a.m. Eastern or visit the Tooling wiki page at http://wiki.hl7.org/index.php?title=Tooling_Work_Group. We encourage participation from both potential toolsmiths and users. Future articles will provide updates to these three projects, as well as any tool development or enhancement projects approved for funding.

W. Edward Hammond, PhD

Stan Huff, MD

A Fresh Look

By W. Edward Hammond, PhD, Director, HL7 International Board of Directors; U.S. Representative to the International Council; and Stan Huff, MD, Director, HL7 International Board of Directors

Over the past 25 years, HL7 has been guided by the requirements and motivations of its members in choosing which standards to create. At the onset, HL7 members were clearly focused on creating standards that would permit the implementation of a hospital information system whose components were identified as "Best of Breed". That standard, Version 2.x (V2) continues to evolve and is widely used around the world, but particularly in the US. Over time, a component of HL7 membership pursued developing a new set of standards based on an explicit information model – the HL7 Reference Information Model (RIM). That effort gave birth to a series of standards including the HL7 Version 3 (V3) messaging standards, the Clinical Document Architecture (CDA), other standards in clinical decision support, EHR functionality standards, regulatory standards, domain analysis model (DAM) standards, and other work. The broader community often found themselves in a position of defending the use of V2 or CDA versus V3. In an effort to bring some clarity to these issues, in 2007, the HL7 Board created the V2/V3 Task Force. Stan Huff was asked to chair this task force and the Board approved a membership of 11 other individuals representing the international community and several domains of interest. The task force interviewed a number of individuals within HL7 and in March 2011 submitted a set of recommendations to the Board as its final report. The Board accepted those recommendations and shared them with the appropriate bodies to carry out.

One of the recommendations was to create a new task force to develop an approach to a new generation of standards. The new task force was approved by the Board and named Fresh Look. Its activities would have no pre-conditions or pre-requisites on architecture, approach, or technology. It would simply be bound by the overall HL7 mission. Stan Huff was asked to chair the Fresh Look Task Force, and the Board approved the appointment of the following members to it: Stan Huff, MD, (chair); Ed Hammond, PhD; Chuck Jaffe, MD, PhD; John Quinn, Bob Dolin, MD; Sam Heard, MD, MBBS; William Goossen, RN, PhD; Mark Shafarman; Dennis Giokas; John Gutai; Nicholas Oughtibridge, BSc, FBCS; Colleen Brooks; Rebecca Kush, PhD; and Grahame Grieve.

The group first met at the Orlando-Working Group Meeting. Several new ideas were introduced, one of which involved developing an approved set of clinical information models in an open shared repository. Those in attendance voted to move forward with this modeling activity. The group felt that this activity needed to be comprised of all interested standards groups (ISO/CEN/HL7/CDISC/openEHR/IHTSDO etc.) and other private and national program activities, and should not be governed by just one of the existing standards organizations. One of the tasks for Fresh Look will be to make a recommendation to the HL7 Board about whether and how HL7 should participate in the modeling activity.

Fresh Look activity continued after the Orlando meeting through conference calls and another face-to-face meeting at the San Diego meeting. Most of the effort thus far has been in defining the scope and focus of Fresh Look. There has been a lot of interest in Fresh Look – interest outside of the Board-appointed task force. A decision was made to have a combination of open meetings and meetings restricted to members of the task force. The obvious reason was to keep a smaller group to make decisions and to advance the activities, while providing an opportunity for all HL7 members to have input into the thinking and direction of Fresh Look.

As one might expect, there were many different visions as to what Fresh Look should be about. Fresh Look clearly needed to be forward thinking and not redundantly addressing issues that were currently being addressed by the TSC and work groups. At the San Diego meeting, the Task Force decided on two related but different directions. The first activity would be to address the problems and issues that relate to the near future. The second activity addressed more future activity – examining where HIT might be five years from now. What standards would be required in the future? What new stakeholders might want to have a relationship with HL7? Clearly the area of informatics was expanding from the 'omics' community to clinical research to patient care, to public health, and to population health. Many funding activities in the US, as well as around the world, were focusing on these activities, specifically looking at translational informatics, clinical effectiveness research, drug development, knowledge acquisition, and other areas perhaps only peripherally address or addressed not at all by HL7.

The task force identified four drivers for information exchange:

1. Direction of healthcare, as noted above, will change the data exchange requirements
2. Integration of work across standards bodies to provide greater value to users of health care information and to simplify implementation
3. Trends in information technology that might impact the way standards are defined, documented, and supported by tooling
4. Government, legislation, and regulatory shifts will drive demand and constraints on standards

Fresh Look will be just that – looking ahead untethered by what HL7 is doing today. We plan to have both an open meeting and a task force only meeting in San Antonio in January. We invite your support, activity and suggestions.

Dave Hamill

News from the PBS Metrics Team

By HL7 International Staff Members Dave Hamill, Director, Project Management Office; Lynn Laakso, TSC Project Manager; Don Lloyd, Director of Technical Publications; and Karen Van Hentenryck, Associate Executive Director

Lynn Laakso

Don Lloyd, PhD

Karen Van Hentenryck

PBS Metrics (Projects, Ballots and Standards) Report

The PBS Metrics Team would like to thank all the work group co-chairs, project facilitators and everyone else who had a hand in cleaning up their 'infractions' (i.e. red items). The team continues to enhance reporting, visibility and resources to make it as easy as possible for work groups to address problem areas. On HL7.org, via Resources > Work Groups, you can now find forms, templates and process documentation to help you address PBS infractions. Also, we've added a link to the Excel PBS Metrics report on the Work Groups 'Reports' link and the Searchable Project Database tool.

Helpful Hints

Did you know that the steps for discontinuing a project vary depending on whether the project is informative or normative? Also, discontinuing a project should not be confused with withdrawing a normative standard or informative document that has been published by HL7.

For projects that have not been balloted or published (or never been designated as informative or normative), all that is required is an email to Dave Hamill, Director of the HL7 Project Management Office (pmo@HL7.org), indicating which project should be closed, the date that the work group passed the motion to close the project, and the reasons for closing the project.

Withdrawing a project for a document specified as normative that has been balloted but not published requires work groups to complete HL7's Notice of Withdrawal of Proposed ANS form located at: http://www.hl7.org/permalink/?WithdrawANS. This form will act as a request to notify ANSI that work on a candidate standard is being discontinued by a work group.

Section 13.01.07 of the HL7 Governance and Operations Manual (GOM) in regards to withdrawing an Informative Document that has been published:

A Work Group that, through its decision making practices, identifies a non-normative HL7 Protocol Specification [§02.02] to be withdrawn shall initiate a project for that purpose and request that a Comment-only Ballot be undertaken to assess the impact of the withdrawal of the subject protocol specification. The content of said Comment-only Ballot shall identify the subject protocol specification and request input on the decision to withdraw the document. The ballot instructions shall clearly state that the intent of the ballot is to assess the impact of the withdrawal of the document; not to collect comments on the contents of the subject protocol specification.

Should the TSC, considering the results of the Comment-only ballot, support the withdrawal of the subject protocol specification, a notice of withdrawal shall be published in the HL7 eNews citing the date of withdrawal. If the document to be withdrawn has been registered with ANSI as a Technical Report, the decision to withdraw the document will be reported to ANSI for publication in ANSI Standards Action. The proposed date of withdrawal shall allow sufficient time to address any public comments that may be received.

Section 14.14 of the HL7 Governance and Operations Manual (GOM) outlines the steps for discontinuing a Nor-

mative (and DSTU) Standards project that has not been published:

The TSC may discontinue a project involving a new HL7 Protocol Specification (§02.02) or revision to an existing HL7 Protocol Specification (a standards project) if the initiating Work Group has been:

a) Unable to reach consensus necessary to bring the HL7 Protocol Specification to normative ballot within a year of project initiation; or
b) Unable to successfully complete a normative ballot and move the HL7 Protocol Specification to publication within a year of initiation of a normative ballot

Given approval by three quarters of those in session when the motion is addressed, a Work Group may petition the TSC to discontinue a standards project regardless of its current status. The Work Group has the discretion to take this action for whatever reason it deems appropriate. The TSC shall have the final decision on a request to discontinue a standards project.

Section 15.04.02 of the HL7 Governance and Operations Manual (GOM) in regards to withdrawing a Normative standard that has received ANSI approval and been published by HL7:

Upon a decision by the Work Group to withdraw an HL7 ANS, either of its own volition or as a result of a Normative Ballot for reaffirmation, HL7 Headquarters, with the concurrence of the TSC, shall notify ANSI of the withdrawal action. The HL7 ANS shall be withdrawn concurrent with an announcement in ANSI Standards Action. Any public comments regarding the withdrawal of an HL7 ANS shall be reconciled under the normative process defined in §14.

Reports Link on HL7.org Work Group WebPages

The PBS Metrics reporting and dashboards are easily accessible via the Reports link on your work group's HL7.org page. This link directs you to GForge, where the report resides within the TSC's File area (http://gforge.hl7.org/gf/project/tsc/frs/?action=FrsReleaseBrowse&frs_package_id=169).

As a reminder, the PBS reporting and dashboards reflect the following criteria for each work group:

1. Idle Ballots – Items that haven't balloted in a year, and are still "open" (haven't successfully completed their ballot)
2. No Recon Package – Items that have not had a reconciliation package posted
3. Non-Advancing Ballots – Items that have gone through 3 or more ballots
4. Expired DSTUs – Expired DSTUs that have not proceeded to normative or some other ballot level
5. Unpublished CMETs – CMETs that are finished (passed by numbers and reconciliation) but unpublished (waiting for the CMET clean-up work to be completed by Andy Stechison and Dave Hamill)
6. Unpublished Ballots – Items that are finished (passed by numbers and reconciliation is complete) but unpublished (not in Normative Edition or on HL7 Standards page)
7. Projects in Project Insight that are behind more than 120 Days
8. Projects in Project Insight with an 'Unknown' status
9. Work groups that do not have any 3-Year Plan items in Project Insight

The PBS Metrics Report was created to support the HL7 Strategic Initiative to "streamline the HL7 standards development process." It is intended to be a tool to assist work groups with managing ballots, in addition to cleaning up projects and old data. By reviewing the reports, work groups can identify potential issues before they get out of hand, as well as move items through balloting to a final document or standard state.

If you have any questions or comments, please direct them to any PBS Metrics team member: Dave Hamill (dhamill@HL7.org), Lynn Laakso (lynn@HL7.org), Don Lloyd (dlloyd@HL7.org) and Karen Van Hentenryck (karenvan@HL7.org).

Best Practices for HL7 Working Group Meetings (WGMs)

By Margie Kennedy, PIC Co-Chair

Most of us have been in meetings where disagreements or an energetic discussion led by a few group members seem to take on a life of their own and consume formerly well-ordered meetings; or where we feel our voice is not being heard or the democratic process is being abandoned. On rare occasions, meetings can seem to spiral completely out of control, failing to conduct business properly or professionally, resulting in missed opportunities to achieve our goals, leaving participants feeling frustrated and disrespected.

So, what makes a great HL7 meeting? It's more than simply getting the agenda items covered in the allotted meeting time. It's about making genuine progress on identified work items that positively contribute to healthcare priorities. It's also as much about how we conduct meetings as the work we get done. HL7 International is built on the recognition of volunteers' expertise, contributions and commitment – where every volunteer is valued for the diverse expertise and perspective brought to the collective efforts. The foundational rules of HL7 seek consensus among participants to achieve the best possible outcomes. The best meetings are those where we able to participate in discussions and activities in a manner that is respectful and empowering for all participants and effective for the goals of HL7 International.

The HL7 Co-Chairs Handbook provides guidance for all aspects of managing meetings and the various details of leadership of a work group. Most co-chairs will agree that applying even some of the following best practices will enhance your meetings and promote continued positive relationships and advancement of your work items.

1. Advance Preparation

Advance preparation is more than simply showing up 10 minutes before your meeting commences. co-chairs need to distribute the agenda in advance to allow participants to plan which meetings (or parts of meetings) they need to attend. This also allows participants to prepare any supporting or reference materials they feel is necessary to inform the discussions and work activities. And most importantly, it allows participants to complete any last development to assigned work products for review at meetings.

2. Assign Roles

Ensure that co-chairs are providing support to appropriate activities according to the Co-Chairs Handbook. This also means that minutes are being recorded and will be posted in a timely manner with actions and decisions correctly documented. When necessary, refer to the Co-Chairs Handbook for elections of acting or interim co-chairs as necessary to ensure that work is conducted efficiently.

3. Maintain Rules of Order and Decorum

Section 3.11.2.3 of the Co-Chairs Handbook provides links to Robert's Rules of Order, which details the parliamentary procedures relevant to conducting meetings. Although parliamentary proceedings may seem inconsequential compared to the actual work content of your group, it is important to maintain consistent order, democratic opportunities for speaking to the issues, and clear adherence to the meeting rule in order to achieve effective, efficient, and professional meetings. It is a fundamental expectation of co-chairs that they will maintain neutrality and conduct all meetings in the spirit of Robert's Rules of Order, in alignment with HL7 International values and principles.

4. Time Management

Busy agendas are invariably challenging; however, it is worth remembering that WGMs are an opportunity to address priority work items and issues. Several risks exist with agendas, including 1) non-priority agenda items consuming valuable face to face time, 2) under allocating time for significant work item discussions and ballot dispositions, and 3) losing focus during spirited exchanges and allowing discussions to continue too long without effective resolution. Time management practices are essential, and this means keeping a clear focus during discussions on the achievement of consensus and resolution. It also means that co-chairs need to develop agendas with priorities in mind and rely on Robert's Rules of Order to manage speaking opportunities, prolonged debate, progression of work items, and time constraints.

5. Practice Democratic Process

HL7 International values and depends on involvement and support from all members to expand and enhance the HL7 standard and the overall success of the organization. To this end, co-chairs act as stewards of this mandate and are accountable to employ democratic processes during WGM and regular meetings to ensure equity and fairness. Co-chairs can refer to the Co-Chairs Handbook, Decision Making Practices, and Robert's Rules of Order for guidance on how to conduct meetings with effective democratic processes.

The Process Improvement Committee (PIC) is available for questions and/or guidance on meeting processes or the resources supporting co-chairs.

Rob Brull

Six Questions to Consider About Merging a Continuity of Care Document

By Rob Brull, Product Manager, Corepoint Health; Certified HL7 CDA Specialist

Several questions can arise when considering whether to parse the data of a Continuity of Care (CCD) document from a remote facility and merge it into the local EHR. Health Information Exchanges(HIEs) are spurring increased emphasis on the use of CCD documents to exchange information among facilities, so it would be ideal to have consistent practices regarding the merging of the received data into the existing EHR. With the CCD seen as the vehicle for EHR to EHR communication, the questions below raise some concerns as to how this vehicle should be utilized.

1.Is having the CCD available as an attachment sufficient?

With some EHR implementations, the receiving system may not be able to support the import of the CCD. Or, the EHR vendor may chose to optionally import only some of the data, such as allergies and medications, but not the rest of the data. The provider may also be given the option to select what data is imported during the initial implementation of the EHR system.

Having a human readable CCD available to the physician is obviously preferable to not having any data available at all. But is simply having the human readable CCD sufficient? It may be sufficient in some cases, but it is definitely not optimal. With the use of clinical decision support systems and quality of care analytics, having level 3 coded entries imported into the EHR is the only way to take advantage of such healthcare tools that utilize the stored data.

2.Who is liable for ensuring that the data is correct?

Physicians can be hesitant to accept other provider's data into their EHR because they assume they will become liable for it. This opens a large legal question as to who is responsible if the patient is treated incorrectly based on bad data that was not even collected by the physician's medical staff. Receiving providers do not like the idea of supporting the imported data because they only truly trust what was directly input into their EHR by their staff.

Separating the CCD as a human readable attachment draws a clear distinction as to what information was entered in-house, and what is relayed from an outside source. If the CCD is parsed and merged, it would be preferable from the physician's point-of-view to have this data clearly distinguished as received from an outside source with the ability to identify and contact that source.

3.What audit trail exists for the data?

The ONC has specific guidelines for audit tracking in its EHR Certification process. But how do those audit trail standards apply to imported data? A CCD does not include all the details about who entered every entry, and whether the entry was ever edited. From a legal perspective, some states also have specific laws pertaining to re-disclosure. These laws define how imported information must be tracked and protected.

When data is imported, the EHR system should be as detailed as possible about the source of all the data. The CCD audit trail is limited to the participant information included in the header of the document. At a minimum, this participant information must be tagged to each entry as it is parsed and merged with existing data.

4.What if there is conflicting data?

The reconciliation of the data can be a difficult routine for vendors to implement as part of the process for importing CCD data into existing EHR data. Sorting out duplicate data is the first logical step, but resolving conflicting data or displaying it in an effective manner can be a difficult task to perform.

At a minimum, if the resolution of the conflict cannot be determined, the physician must be made aware of the conflict so they can do their own analysis of the situation. Ideally, during import an alert would be sent to the staff so the patient, and/or responsible parties, could be contacted to ensure the correct data is represented in the system. This puts a large burden on the EHR vendor to accommodate a unique workflow that can be utilized for resolution.

5.Is someone responsible if the data is not merged and a bad decision is made because of the lack of data?

Clinical decision support systems will not work if the data is not in the EHR. What if a medication interaction was not flagged because the medication section of a CCD was not imported into the EMR, and that interaction resulted in harm to the patient?

Clinical decision support systems and quality-driven analytics are important tools in the changing healthcare landscape. Level 3 CCD data, in the form of coded entries, support the use of these tools, which aim to provide better patient care through the use of more available data. The decision to only use the CCD in a human readable format, rather than importing the data, directly impacts the effectiveness of the tools.

6.What is best for patient care?

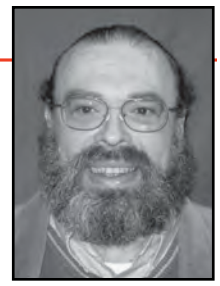
The final question is undoubtedly the most important. The quality of care for the patient should ultimately be the driving force in whether the CCD is imported into the receiving EHR system. On one hand, if the imported data simply clouds the existing data because of poor reconciliation or a failure to clearly indicate the source, then the "easy" approach of simply making a human readable format would be superior. But, given the capability to cleanly import the data and clearly mark its source, there is little doubt that importing and merging data would lead to superior clinical outcomes.

Forget the complexity of the CDA format and the difficulties of parsing, mapping, and reconciliation. The politics behind actually importing the data for real patient care is the big hurdle that needs to be overcome. Issues behind liability and re-disclosure need to be addressed so the tools that enable a higher quality of care, based on coded data, can be utilized to their full extent. Maybe future stages of Meaningful Use will provide the guidance.

Rob has guided Corepoint Health through the ONC EHR certification process for Meaningful Use, becoming the first integration engine to be certified.

Where Are All The Standards?

Austin Kreisler, Chair, HL7 Technical Steering Committee; Technical Fellow, Science Applications International Corporation (SAIC)



Austin Kreisler

Perhaps the biggest process change introduced by the Technical Steering Committee (TSC) is the project scope approval process. As an organization, we have become good at creating new projects, most of which focus on developing new standards. On the other hand, we are much slower on balloting and publishing new standards as well as closing out the projects related to developing those standards. The table below shows counts of current active projects.

Active Projects	**Count**
Ballot – Normative	56
Ballot – Informative	45
Ballot – DSTU	68
Ballot – Comment Only	6
Other	66
Total	241

During the most recent trimester (May – September) the TSC approved 20 new projects. The TSC also approved one project withdrawal, three publication requests and two standards withdrawals. Assuming each publication request and standards withdrawal equate with the completion of a project, we have a net gain of 14 projects. Of the total active projects above, 175 (73%) are focused on balloting content. Assuming the 20 new projects follow the same pattern as the overall population of active projects, 14 of the new projects focus on content for ballot. Clearly, in the past trimester, we had a net growth of projects focused on balloting content (and presumably development of a standard). Although we do not have the statistics right now, this growth in projects has been going on since we started the project scope approval process. The implication is clear; the work of developing standards is growing.

One complaint the TSC has from work groups is they do not have enough people to work on all the projects they have on their plates. Obviously, there is a disconnect between the amount of work HL7 is taking on and the number of individuals needed to work on projects. Effectively, this means HL7 is developing a backlog of projects. A large part of the backlog is due to a lack of individuals to do the work of developing a standard.

Another significant part of the backlog is due to failure to close projects once they reach an end state. There are varieties of reasons projects are not being closed or completed, including:

- Failing to request publication of a standard
- Abandoned projects kept on the books
- Projects kept active in anticipation of subsequent release of a standard

The first two items are examples of items work groups need to wrap up while the third (keeping a project active for further releases) is something on which the TSC will be developing guidance for work groups.

Failing to request publication of a standard or document that completes balloting is like stopping just short of the finish line and losing the race. The project team has worked hard on developing the standard or document including developing content, taking it through one or more rounds of balloting, doing ballot reconciliation, etc. The reward at the end of that process is seeing the standard or document published and become available for HL7 members to implement. We now have a formal process for requesting publication (see template at http://www.hl7.org/permalink/?PublicationRequestTemplate). Work groups that believe they have completed balloting of content and are ready to have that content published should follow through on this publication request step. Part of the TSC guidance managing subsequent releases of a standard will include requirements around publishing the previous release before initiating balloting on a new release.

Sometimes project stakeholders change their minds regarding development of a standard. There are various reasons why stakeholders stop supporting standards projects, and work groups need to identify when it happens and respond to the situation. When this happens, work groups are often reluctant to shutdown the project. This reluctance may be due to a desire to preserve content already completed, often in hopes that work will resume in the future. Alternately, the reason may just be that no one has spent the small amount of time necessary to shut the project down. Regardless of the reason, these stagnant projects are a problem from the HL7 organization perspective. HL7 notifies ANSI that HL7 has initiated a project to develop a standard based on the approved project scope statement. If HL7 is no longer pursuing development of the standard, HL7 has an obligation to report that to ANSI. The TSC has developed a process for work groups to shut down projects and notify ANSI that a proposed standard is withdrawn (see template at http://www.hl7.org/documentcenter/public/membership/ANSI_proposal_withdrawal.doc). HL7 does have a mechanism for preserving any content developed as part of the project so that it will remain available for further development. HL7's GForge and SVN repository are available to any work group to archive old content, as well as help actively manage current content. The TSC strongly recommends work groups take advantage of these resources.

Right now, following through on the two items above are voluntary for work groups. Starting in January 2012, the TSC and the steering divisions, as part of the project scope approval process, will start looking at the work groups current set of projects to see if a work group has the capacity to handle the new project. Work groups carrying active projects that for whatever reason are no longer active, will probably be asked to cleanup that backlog of old projects. Work groups are strongly encouraged to start reviewing their existing projects, requesting publication for those that qualify and shutting down those that are no longer being pursued. To help work groups with that review, HL7 staff has developed a number of reports to help work groups manage their projects. These reports are collectively known as PBS (Project, Ballot, Standards) Metrics. A summary PBS Metric spreadsheet is available at http://gforge.hl7.org/gf/project/tsc/frs/?action=FrsReleaseBrowse&frs_package_id=169.

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Tom de Jong

Pharmacy in Paris:
First Joint Meeting of HL7 and IHE Work Groups

By Tom de Jong, Co-Chair, HL7 Pharmacy Work Group

HL7 and IHE have always had a lot in common, since both organizations aim to provide standards for an efficient exchange of healthcare information. The main difference is in degree of freedom, with IHE profiles corresponding to a strict workflow or architecture, often building on more universal HL7 standards (Version 2 or Version 3).

Even though their products are so closely connected, HL7 and IHE work groups have mostly operated separately from each other. When IHE worked on a profile that applied a pre-existing HL7 standard, this wasn't really an issue. However, it's a different story when goals and schedules overlap, leading to the danger of re-inventing the wheel.

The HL7 Pharmacy Work Group (WG) has been active for many years now, maintaining the domain-specific materials for both Version 2 and Version 3. Like most other domain-specific groups the focus in the Pharmacy Work Group was on the development of Version 3 messages. Clinical Document Architecture (CDA) documents dealing with the same type of content were specified elsewhere, leading to parallel standards.

A few years ago, a group of mostly European stakeholders formed IHE Pharmacy, aiming to create implementation profiles for both community and hospital workflows. I was present at their first meeting in Brussels, where I represented the HL7 Pharmacy Work Group and introduced the existing materials. IHE then decided which standards to build on.

For the hospital profile (HMW), the choice was made to apply HL7 Version 2.5. A specific workflow, with corresponding actors, was described using a restriction on existing Version 2 messages and segments. For the community profile (CMPD), there was a strong connection with the epSOS project in Europe, based on a CCD-style CDA template.

Since then, the groups have stayed in touch with each other (partly because some members were attending both). But as we were both gearing up for new projects, it became clear there was a real danger of working on the same topics without keeping each other synchronized. When the Pharmacy WG was planning an out-of-cycle (OOC) meeting to focus on some of these new work items, the WG decided to try and schedule it to coincide with the already scheduled IHE face-to-face meeting in order for the two groups to have some shared meeting time.

The IHE Pharmacy had its face-to-face meeting on October 4-5 and the HL7 Pharmacy WG held its OOC meeting on October 5-7, both generously hosted by the organization of French hospital pharmacists (Phast) in their offices in Paris. The key aspect was the overlapping day, with a joint meeting on October 5, hosted by IHE Pharmacy. In addition to the great synergy that resulted from simply being in the same room together, there were also quite a few people who chose to visit the meeting of the 'other' group.

While concrete progress was made on a number of hot topics, I believe the most essential virtue of this meeting was to remove the 'barrier' that many people perceived between the two groups. Both teams have knowledgeable people working to improve healthcare interoperability. We will be more active in each other's group and plan to meet again next year. For the Pharmacy domain, it should now be easier to share information, discuss common solutions, and provide more harmonized results.

Where Are All the Standards? ***continued from previous page***

On the HL7 website, on each of the work groups web page, there is a Report link (towards the end of the line directly below the work group name) that has a variety of reports available to help work groups manage their projects and ballots. HL7 members are encouraged to review these reports and bring questions to the work groups you participate in regarding issues identified in these reports.

So where are all the standards? As represented by projects, many of the standards are on track in development. Some of the standards are nearly completed, but the sponsoring work group has not taken the final steps to complete release of the standard. A few of those standards simply are not going to be completed, and work groups need to recognize the situations and shut down the associated projects.

In summary, the fact that HL7 has a growing number of projects and standards to develop is great. It does mean we need to pay closer attention to managing the organization's workload so we are not overburdening our volunteers with unnecessary work, while clearly communicating with those outside the HL7 organization regarding what standards HL7 is developing. Starting a project is also an obligation to bring the project to an endpoint. We have become good at starting projects; we now need to work on closing the loop and ending projects.

Ten Years of Patient Care Provision in The Netherlands

Michael Tan

Kai Heitmann, MD

William Goossen. RN, PhD

By Michael Tan, Product Manager, NICTIZ; Kai Heitmann, MD, Chair, HL7 Germany; and William Goossen, RN, PhD, Co-Chair, HL7 Patient Care Work Group

What is Patient Care Provision?

If you browse through the older versions of the normative edition of HL7 Version 3 (V3), in the classification of Universal domains you will find the information necessary to communicate between several systems in healthcare. Some of the information found there includes administrative sets for patients, financial administration, and also the more order oriented exchange such as pharmacy or laboratory.

An important chapter is grouped under the name of Care Provision. It could also be referred to as "care module" and is collection of communication possibilities in which medical care is at the core. This care module is the communication tool which stands closest to the care process of the patient and the care provider. The Care Provision models are multipurpose and can be used for:

- Referrals or transfer of care
- Consultation with specialists
- Request to third parties
- Queries on care data
- Report of findings
- Submission of a Care plan or pass on (safety, health and welfare) plan
- Passing on (of parts) medical records (care file)

Now, ten years after the creation of the first models, we can reflect on the developments and implementations of the Care Provision model; particularly the experience in The Netherlands.

In The Beginning

Despite the problems in the tools during its infancy, an HL7 team of HL7 Netherlands spent much time and energy understanding HL7 Version 3 (V3). A pilot for modeling the midwife chain (the Perinatology) was commissioned by Vizi, the predecessor of Nictiz in 2000. The Perinatal chain is obviously very special, because it concerns not only the pregnant patient, but sometimes the fetus or the spouse of the patient as well. The HL7 team thought that if the chain of perinatal could be modeled with Care Provision, then all other types of care could also be supported by this model. This resulted in Nictiz and the CVA (cerebrovascular attack) organization supporting the integrated care of stroke services with Care Provision.

After the first experimental models of Care Provision in Perinatology and CVA, the model was also used for messages for general practitioner (GP) referrals to mental health care. Unfortunately, the modeling for GPs took a different path. The starting point for modeling in HL7 V3 began with the GP to GP model, an English model for communication between GPs. When the HL7 experts could not solve the SOAP (subjective, objective, assessment and plan) methodology and structure of episodes in these models, they began to set up their own models.

This became the Primary Care model. There were many similarities between the models, thus we wondered if they could be consolidated. The stakeholders in primary care have now decided to build the Primary Care model and gradually switch to the Care Provision model of HL7 V3. The Primary Care model is currently in use by 95% of the GP locum practices in The Netherlands and is able to process the query and response of the professional summary of the GP. The switch to the Care Provision model will, therefore, be gradually introduced.

International Developments

Meanwhile, the international community engaged in consolidating the Care Provision model. The tools for the models from Visio to generate XML schemas were gradually improved, and HL7 experts like Kai Heitmann and Gerrit Boers needed to intervene less.

One important step is the formation of the Care Statement choice box. This selection box allows different types (supporting) of information to be sent along with the care message. These are data objects, in which the object type determines what data elements are required to be sent.

This pattern of clinical statements is increasingly reflected in the various products of HL7. It is basically the same selection that is used for the Clinical Document Architecture (CDA) and the Dutch Primary Care model. We say basically because in principle it is the same mechanism it refers to, but because relationships are established within a version, differences may arise. Thus CDA Release 2 references Version 2.7 of the HL7 RIM and the associated clinical statement choice box and data types. That model of Care Provision is still evolving.

The Patient Care Provision model was submitted for ballot in 2006 and received Draft Standard for Trial Use (DSTU) status in 2007. This status means that the specification is "frozen" for a period of two years, during which time the healthcare IT industry can verify its usability. The DSTU status was extended in 2009 for another two years, which allowed for more information to be gathered. In 2010, the TSC conducted an evaluation of Care Provision internationally, which showed its usefulness in IHE and in applications used in Ontario. However, changes are also required according to the users of the Care Provision models. The DSTU status has ended now, but the Patient Care Work Group is currently preparing the model for normative ballot.

Applications in The Netherlands

In The Netherlands, a broad deployment of the message set of Care Provision was set up in the perinatology project called Spirit. In this project, midwife systems communicate with systems of public

continued on next page

health and scientific institutions for screening purposes and national registration. The pregnant patient's fetus could be tested for Down's syndrome, Spina Bifida and infectious diseases. The Care Provision messages were developed by six vendors in their IT systems.

Care Provision is used Youth Health Care (YHC). YHC is the regular preventive public care that every child experiences until his 19th year. All vaccinations, observations of growth, and development are stored in the child health record. The first application of the Care Provision message is a file transfer when a child moves from one place to another.

Care Provision models could also be used by certifying institutions for the indexing of assisted households because of illness or disability. Care Provision is being used and its use is only expected to increase, especially if IHE Netherlands is also active in this field. A working group for Patient Care Coordination from IHE was recently formed to give substance to patient care coordination. If this group utilizes the experiences and existing specifications of Care Provision, as has already been done in the international profile, then it would reinforce their initiatives mutually.

The Road Ahead

Is the future of Care Provision ensured? Internationally, there is certainly work to be done. The DSTU term for Patient Care provision may not be renewed. It is, therefore, time to convert Care Provision to normative status. The collective memory of an HL7 global community is fluid and does not stand riveted. Unfortunately, new players, in their enthusiasm, reinvent the wheel time and time again. Discussions on diagnoses, conditions and groupings of data seem to cycle every four years, which is not bad, if the ultimate conclusion is that a wheel already exists. But, if that conclusion is not reached, countries that have already implemented an existing model may likely have a compatibility issue.

The scope of topics covered by Patient Care expands to a broad variety of topics, ranging from Care Plan to allergies. Thus, the coordination and manageability of the products under Patient Care became increasingly difficult. The consolidation of parts under Patient Care into a normative standard would help. The plan is to present the material for the January 2012 ballot. The ballot will hopefully be discussed during the Working Group Meeting in San Antonio, TX. Ten years after the advent of Patient Care we finally can talk about a normative standard.

Literature

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Yu-Ting Yeh

2011 Asia-Pacific HL7 Conference on Health Information Standards

By Yu-Ting Yeh, Secretary General of HL7 Taiwan; PhD Candidate of Graduate Institute of Medical Sciences, Taipei Medical University, Taiwan

Medical informatics innovations are confronting the advancing evolution with diverse solutions to improve the healthcare care quality, promote patient safety, and support effective use of healthcare resources. In recent years, the Taiwan Government has vigorously promoted the implementation of electronic medical records (EHRs) and supported the international standards for system interoperability and data exchange across the boundaries of hospitals to facilitate meaningful use of the EHR. However, health policy makers, medical industry, healthcare service systems and patients face increasingly complex challenges in integration of such environments to support seamless continuity of care. HL7 Taiwan has long provided platforms for research collaboration and knowledge sharing among different parties. The Asia-Pacific HL7 Conference on Health Information Standards (APHC) is one of the most important platforms hosted by HL7 Taiwan in the Asia Pacific region.

HL7 Taiwan has hosted the APHC annually since 2002. It is intended to bring policy makers, industry experts, researchers and consumers in medical informatics together for facilitating adoption of ehealth and promoting better and more efficient healthcare services.

In 2011, the 10th Asia-Pacific HL7 Conference on Health Information Standards (APHC 2011) was held on August 26-27 in Taipei, Taiwan. The main theme was "Roadmap to Future eHealth via Health Informatics Standards". Activities during the APHC 201 included several tutorials on the Clinical Document Architecture (CDA), an Integrating the Healthcare Network (IHE) character standard forum, invited talks, paper presentation sessions and an extended industrial exhibition, as well as thematic round tables. It also presented the demonstration of Electronic Medical Record (EMR) exchange center and application in IHE. Over 200 participants attended from the United States, Japan, Australia, Philippines, Singapore, India, Indonesia, Kirghizia and Taiwan. Twenty-four papers were delivered in various areas. Based on successful experiences in the past decade, the outcome of the APHC 2011 brought important key ingredients that had profound impact to medical informatics field in the Asia-Pacific region.

1. APHC 2011 provided varied tutorials to nurture the outstanding talents of the global community.
2. APHC 2011 disclosed the latest technologies, applications and operations of ehealth implementation and evaluation to encourage HL7 standards adoption in Asia region.
3. It represented an opportunity for ehealth policy & development in Asian countries, as well as experience exchange and knowledge sharing to promote regional collaboration in Asia.

Congratulations

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HL7 Croatia Welcomes New Chair

Miroslav Koncar, PhD, is employed by Oracle Corporation in the position of Business Development Director for Healthcare Industry, covering the region of East and Central Europe, Middle East and Africa. He has been active in HL7 for almost 10 years now, previously serving two consecutive terms as the Technical Co-Chair of the International Council. He has been an active contributor to HL7 developments in Croatia and internationally, focusing on infrastructure, transport technologies and messaging parts of the standard. Apart from working for Oracle, Miroslav is an active member of the professional community, by representing Oracle in various eHealth think tanks and European-wide projects. In respect to his scientific career, Miroslav holds a PhD in the medical informatics area, and most recently has been elected as the Honorary Associate Professor at the Faculty of Electrical Engineering and Computing in Zagreb, Croatia, where he teaches Biomedical Engineering to undergraduate students during their final year of studies. He is the author of over 25 scientific and expert papers in this domain.

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November 2012
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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.

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May 13 – 18, 2012

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Sheraton Vancouver
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September 9 – 14, 2012

26th Annual Plenary & Working Group Meeting

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