Unlocking the power of health information

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Join us in Booth #7232 today and learn how HL7 standards are changing the face of healthcare information technology.
Is your team confused about interoperability?

**HL7 CAN HELP!**

Health Level Seven International (HL7®) is the global authority for standards and interoperability in health information technology. We create the best and most widely used standards in healthcare. HL7 has members in over 50 countries that are working to ensure that people everywhere benefit from healthcare technology standards.

Our members and volunteers work collaboratively with healthcare industry representatives around the world to develop interoperability standards and create specifications for electronic health records, personal health records, laboratory information and other initiatives that improve healthcare system connectivity.

The Office of the National Coordinator for Health Information Technology in the U.S. Department of Health and Human Services selected the HL7 Clinical Document Architecture, the Continuity of Care Document and Version 2 in its initial set of standards, implementation specifications and certification criteria for EHR technology. The U.S. Surgeon General also uses the HL7 Clinical Genomics Pedigree Model in his family history collection website: My Family Health Portrait. Our standards are being used by other national governments around the world as well as software vendors, hospitals, academic medical institutions and related organizations to guide the development of applications and to create interoperability between disparate systems.

Whether you’re an HL7 veteran or a relative newcomer, you will find sessions of interest every day of HIMSS in our Educational Theater. Join us for an introduction to HL7, learn what’s hot with service oriented architecture and personal health records, hear about HL7’s future plans and the role of standards in healthcare reform – and much, much more.

Visit the HL7 exhibit today (Booth #7232) in Hall B to learn more about how our standards are changing the face of healthcare information technology. Plus, don’t miss the opportunity to win raffle prizes after every educational session!

Health Level Seven® International • www.HL7.org

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**SCHEDULE AT A GLANCE**

**Monday, March 1**

1:15 – 1:45  HL7 Basic Overview
2:00 – 2:30  HL7’s Version 2 Standard
2:45 – 3:15  HL7’s Version 3 Standard
3:30 – 4:00  HL7’s Clinical Document Architecture (CDA) Standard
4:15 – 4:45  HL7’s EHR-System Functional Model Standard
5:00 – 5:30  What HL7 Will Deliver Tomorrow

**Tuesday, March 2**

10:15 – 10:45 HL7 Basic Overview
11:00 – 11:30 A Tour of HL7’s SOA Standards and Their Role in Enterprise Integration
11:45 – 12:15 Preparing for the Collection & Use of External Family History & Genetic Test Result Data
12:30 – 1:00  HL7’s Version 3 Standard
3:30 – 4:00  The ASTM / HL7 Continuity of Care Document (CCD)
4:15 – 4:45  HL7’s PHR-System Functional Model
5:00 – 5:30  HL7 Basic Overview

**Wednesday, March 3**

10:15 – 10:45 HL7 Basic Overview
11:00 – 11:30 HL7’s Version 2 Standard
11:45 – 12:15 What’s New With CDA?
12:30 – 1:00  HL7’s Reference Information Model
3:30 – 4:00  HL7 Standards and IHE Profiles for Meaningful Use
4:15 – 4:45  Clinical Decision Support – HL7’s Contributions to Supporting Standards
Theater Presentation Schedule  BOOTH # 7232

**MONDAY, MARCH 1**

**HL7 Basic Overview**
1:15 pm – 1:45 pm

Learn the basics of the Health Level Seven International organization: how it works; its products and technologies; its efforts in the standards development in the U.S. and abroad; and its role in setting the U.S. standards for communicating healthcare information. The presentation will include HL7’s response to stimulus spending, meaningful use, and ARRA.

*Charles Jaffe, MD, PhD:* HL7 International Chief Executive Officer

**HL7’s Version 2 Standard**
2:00 – 2:30 pm

Learn about HL7’s workhorse messaging standard, Version 2. HL7 Version 2.6 was published in 2008 and 2.7 is in the final phase of development. This tutorial will discuss the various chapters of the standard with emphasis on the major elements of an HL7 message; what was new in 2.6; and what will be published in 2.7.

*John Quinn:* HL7 International Chief Technical Officer

**HL7’s Version 3 Standard**
2:45 pm – 3:15 pm

Version 3 is HL7’s family of standards developed with a model-driven methodology. This talk will provide an overview of: the objectives for Version 3 standards; the Version 3 model-driven architecture and methodology; the importance of model-driven design for the stability and integrity of the standards; and a “walk-through” of the steps to go from HL7’s ANSI and ISO-approved standard Reference Information Model (RIM) to a specific message schema that meets a particular set of requirements.

*George “Woody” Beeler, Jr., PhD:* Co-Chair, Foundation & Technology Steering Division, HL7 Technical Steering Committee; Co-Chair, HL7 Modeling and Methodology Work Group; Co-Chair, Version 3 Publishing Work Group; Past Chair, HL7 International Board of Directors; Principal, Beeler Consulting, LLC

**The HL7 Clinical Document Architecture (CDA)**
3:30 pm – 4:00 pm

The Clinical Document Architecture (CDA) is a specification for the exchange of electronic clinical documents. It can contain coded data and narrative and is compatible with the electronic health record and document management systems. CDA is at the core of virtually all standards-based exchange networks in the US and abroad and is adaptable for dictated notes and highly-structured public health and quality reporting. This talk describes the basic principles underlying CDA and the solutions it provides for electronic information systems.

*Bob Dolin, MD:* Chair, HL7 International; Co-Chair, HL7 Structured Documents Working Group; Co-Editor, HL7 Clinical Document Architecture; Principal, Semantically Yours, LLC

**Electronic Health Record (EHR) System Functional Model**
4:15 pm – 4:45 pm

The EHR System Functional Model (EHR-S FM) passed as an international standard through the International Organization for Standardization (ISO) in November, 2009. Release 1.1 of the EHR-S FM, which passed as the international standard, as well as planned enhancements for Release 2.0, which may be out for ballot shortly after the HIMSS conference, will be briefly reviewed. Differences between the PHR system and the EHR system functional models will also be identified. The value of EHR System Functional Model to providers, vendors, and other stakeholders in the U.S. and other countries will be discussed. In addition, current activities and next steps for this standard will be provided.

*Donald T. Mon, PhD:* Co-Chair, HL7 Electronic Health Records Work Group; HL7 International Board of Directors; Vice President, Practice Leadership, AHIMA

**What HL7 Will Deliver Tomorrow**
5:00 pm – 5:30 pm

This tutorial presents a general overview of the future direction of HL7 including top strategic priorities of HL7. HL7’s approach to the stimulus funding and meaningful use as well as the organization’s role in the international community will be addressed. HL7’s interaction with policy makers will play a key role in HL7’s future.

*W. Ed Hammond, PhD:* Vice Chair, HL7 International
TUESDAY, MARCH 2

HL7 Basic Overview
10:15 am – 10:45 am
Learn the basics of the Health Level Seven International organization: how it works; its products and technologies; its efforts in the standards development in the U.S. and abroad; and its role in setting the U.S. standards for communicating healthcare information. The presentation will include HL7’s response to stimulus spending, meaningful use, and ARRA.

W. Ed Hammond, PhD: Vice Chair, HL7 International

A Tour of HL7’s SOA Standards and Their Role in Enterprise Integration
11:00 am – 11:30 am
For many, “service-oriented architecture” (SOA) brings thoughts of hardware platforms, angle-brackets, and blueprint-like diagrams, primarily used by IT staff in a corner as they design or integrate applications. The reality is that SOA, done effectively, is a business-driven initiative that can deliver business value, foster transformation, process improvement, and service delivery.

SOA provides a means to specify information, functions, and behavior into consistent, reusable components, and standards are needed to allow these components to collaborate within and across organizational boundaries. This session will explore the role SOA can play in integrating Enterprise systems, and provide an overview of HL7 SOA specifications.

Ken Rubin: Co-Chair, HL7 Service Oriented Architecture Work Group; Chief Architect, Federal Healthcare Portfolio, HP Enterprise Services

Preparing for the Collection & Use of External Family History & Genetic Test Result Data
11:45 am – 12:15 pm
Patients and consumers will use PHRs and genetic testing services outside of your healthcare organization, but will still expect this data to make it into the EHR. With the developments in personalized medicine, adoption of genetic testing into routine clinical care will increase. As a solution, the HL7 Clinical Genomics messaging models can be leveraged to structure family health history data and genetic test results into the EHR for use by clinical decision support systems. The ANSI-approved Pedigree and recently piloted Genetic Variation standards will facilitate the flow of clinical genetic information from genetic testing laboratories to medical practitioners who have ordered such information for patient care. The clinical significance of this model results in new knowledge—from the efficient re-interpretation of genetic “raw” data whenever the definition of the gene in question (or its allele types) changes. This will accelerate adoption of genomic discoveries into clinical care.

Grant Wood: Senior IT Strategist, Intermountain Healthcare Clinical Genetics Institute

HL7’s Version 3 Standard
12:30 pm – 1:00 pm
Version 3 is HL7’s family of standards developed with a model-driven methodology. This talk will provide an overview of: the objectives for Version 3 standards; the Version 3 model-driven architecture and methodology; the importance of model-driven design for the stability and integrity of the standards; and a “walk-through” of the steps to go from HL7’s ANSI and ISO-approved standard Reference Information Model (RIM) to a specific message schema that meets a particular set of requirements.

George “Woody” Beeler, Jr., PhD: Co-Chair, Foundation & Technology Steering Division, HL7 Technical Steering Committee; Co-Chair, HL7 Modeling and Methodology Work Group; Co-Chair, Version 3 Publishing Work Group; Past Chair, HL7 International Board of Directors; Principal, Beeler Consulting, LLC

The HL7 Clinical Document Architecture (CDA)
2:45 pm – 3:15 pm
The Clinical Document Architecture (CDA) is a specification for the exchange of electronic clinical documents. It can contain coded data and narrative and is compatible with the electronic health record and document management systems. CDA is at the core of virtually all standards-based exchange networks in the U.S. and abroad and is adaptable for dictated notes and highly-structured public health and quality reporting. This talk describes the basic principles underlying CDA and the solutions it provides for electronic information systems.

Bob Dolin, MD: Chair, HL7 International; Co-Chair, HL7 Structured Documents Working Group; Co-Editor, HL7 Clinical Document Architecture; Principal, Semantically Yours, LLC

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The HL7/ASTM Continuity of Care Document
3:30 pm – 4:00 pm

The HL7/ASTM Continuity of Care Document (CCD) is an implementation guide for sharing Continuity of Care Record (CCR) patient summary data using the HL7 Clinical Document Architecture (CDA). The CCD establishes a rich set of templates representing the typical sections of a summary record and expresses these templates as constraints on the CDA. These same templates—for vital signs, family history, plan of care, and so on—can then be reused in other CDA document types, establishing interoperability across a wide range of clinical use cases. The CCD is the basis for interoperability in the U.S. Health Information Technology Standards Panel (HITSP) and Integrating the Healthcare Enterprise (IHE) use cases. This talk describes the basic structures of the CCD and how they support interoperability between electronic health record systems and clinical documents.

Bob Dolin, MD: Chair, HL7 International; Co-Chair, HL7 Structured Documents Working Group; Co-Editor, HL7 Clinical Document Architecture; Principal, Semantically Yours, LLC

Personal Health Record (PHR) System Functional Model
4:15 pm – 4:45 pm

The PHR System Functional Model will be briefly reviewed. Differences between the PHR system and the EHR system functional models will be identified, particularly as they relate to privacy. The value of PHR System Functional Model to consumers, vendors, providers, and other stakeholders, as well as the current activities for this standard, will be discussed.

R. Lenel James, MBA, CPHIT, CPEHR: Senior Project Manager, Blue Cross and Blue Shield Association

HL7 Basic Overview
5:00 – 5:30 pm

Learn the basics of the Health Level Seven International organization: how it works; its products and technologies; its efforts in the standards development in the U.S. and abroad; and its role in setting the U.S. standards for communicating healthcare information. The presentation will include HL7’s response to stimulus spending, meaningful use, and ARRA.

Charles Jaffe, MD, PhD: HL7 International Chief Executive Officer

WEDNESDAY, MARCH 3

HL7 Basic Overview
10:15 – 10:45 am

Learn the basics of the Health Level Seven International organization: how it works; its products and technologies; its efforts in the standards development in the U.S. and abroad; and its role in setting the U.S. standards for communicating healthcare information. The presentation will include HL7’s response to stimulus spending, meaningful use, and ARRA.

Charles Jaffe, MD, PhD: HL7 International Chief Executive Officer

HL7’s Version 2 Standard
11:00 am – 11:30 am

Learn about HL7’s workhorse messaging standard, Version 2. HL7 Version 2.6 was published in 2008 and 2.7 is in the final phase of development. This tutorial will discuss the various chapters of the standard with emphasis on the major elements of an HL7 message; what was new in 2.6; and what will be published in 2.7.

John Quinn: HL7 International Chief Technical Officer

What’s New with CDA?
11:45 am – 12:15 pm

The Clinical Document Architecture (CDA) is a specification for the exchange of electronic clinical documents. It is at the core of every standards-based exchange network in Europe, Asia-Pacific and the U.S. This talk discusses timelines and anticipated changes in the upcoming CDA Release 3 ballot; the wide variety and growing number of CDA Implementation Guides; and the notion of “templated CDA,” and how it can serve as the basis for national interoperability objectives.

Bob Dolin, MD: Chair, HL7 International; Co-Chair, HL7 Structured Documents Working Group; Co-Editor, HL7 Clinical Document Architecture; Principal, Semantically Yours, LLC
WEDNESDAY, MARCH 3 (continued)

HL7’s Reference Information Model
12:30 pm – 1:00 pm

The HL7 Reference Information Model (RIM) is the foundation on which HL7’s Version 3 model-driven standards are defined. The RIM, an ANSI and ISO standard, was developed collaboratively within HL7 over the past decade. It is an abstract, relatively lean, information model defined in UML. When combined with a rich set of data types, and HL7-defined and maintained terminology, it provides a solid foundation on which to design health care information structures. This presentation is an overview of the RIM contents, and seeks to provide understanding of the abstractions that allow a compact model to express the full semantic richness required for healthcare communications.

George “Woody” Beeler, Jr., PhD: Co-Chair, Foundation & Technology Steering Division, HL7 Technical Steering Committee; Co-Chair, HL7 Modeling and Methodology Work Group; Co-Chair, Version 3 Publishing Work Group; Past Chair, HL7 International Board of Directors; Principal, Beeler Consulting, LLC

The Standards Landscape: The Future of Standards in the Era of Accelerated HIT Demand in the U.S.
2:45 – 3:15 pm

Outside the U.S., the last five years has seen standards development become critical for ensuring interoperability of healthcare data. While the UK, Canada, the Netherlands, and Australia have well established programs for HIT enablement, the U.S. federal agencies have fallen far behind. Since its enactment, the HITECH (Health Information Technology for Economic and Clinical Health) legislation—the healthcare IT portion of the stimulus package—provides billions of dollars in spending to accelerate development and provide funding for implementation. The Healthcare IT Standards and Policy Committees have become the cornerstone for reframing our notions about standards and their role in the interoperability equation. The requirements for “meaningful use” remain in flux, but the principle elements have been well enunciated for the standards community. We have taken bold steps to meet those challenges.

Charles Jaffe, MD, PhD: HL7 International Chief Executive Officer

HL7 Standards and IHE Profiles for Meaningful Use
3:30 – 4:00 pm

Integrating the Healthcare Enterprise (IHE) is a global initiative that uses standards from HL7 and other SDOs to support the interoperable exchange of healthcare information. IHE was founded in 1997 by a diverse consortium of healthcare professional societies, and healthcare IT experts for this purpose. Over the years, IHE has created a number of interoperability specifications that it calls integration profiles, making use of HL7 standards such as HL7 Version 2 messages, Version 3, CDA and CCOW. This presentation will review these profiles, their use of HL7 and the application of these specifications to meaningful use.

Keith Boone: Standards Architect, GE Healthcare; Co-Chair, HL7 Structured Documents Work Group; Co-Chair, IHE Patient Care Coordination

Clinical Decision Support – HL7’s Contributions to Supporting Standards
4:15 – 4:45 pm

This tutorial presents activities within HL7 supporting standards for decision support. Meaningful use will depend on clinical decision support standards to couple knowledge with data to enhance patient care as well as secondary uses of data. Decision support algorithms must support both professionals and consumers. The tutorial will also address standards that are still needed for decision support.

W. Ed Hammond, PhD: Vice Chair, HL7 International

Great Raffle Prizes!

Attend sessions at the HL7 exhibit (Booth #7232) and enter to win one of three drawings for an Amazon Kindle! Plus, additional prizes will be raffled off at the end of every education session!
DESCRIPTION OF SOME OF HL7’S STANDARDS

Clinical Document Architecture (CDA)

Clinical documents are the core of a patient’s lifetime health record. HL7’s CDA standard provides an exchange model for clinical documents such as discharge summaries and progress notes. A consistent approach to electronic clinical documents means that critical information contained in the documents can be used independently of the application on which it was produced. For example, CDA documents can be displayed using XML-aware Web browsers or wireless applications on mobile devices. The standard is used throughout the world in countries such as Argentina, Germany, Japan and the United Kingdom. CDA Release 2 was published as an international standard by the International Organization for Standardization (ISO) in late 2009.

Clinical Genomics Pedigree Topic

The HL7 Clinical Genomics Pedigree Topic includes the Family History Model describing a patient’s pedigree with genomic data. It has the ability to transmit complete family history information for clinical decision support. This model is ANSI-approved and is the HITSP-accepted standard. This standard allows EHR/PHR interoperability, and is in use by the U.S. Surgeon General in his family history collection website: My Family Health Portrait. It is also in the process of becoming of an international standard through ISO.

Continuity of Care Document (CCD)

HL7 and ASTM International created the Continuity of Care Document (CCD) to integrate two complementary healthcare data specifications ASTM’s Continuity of Care Record (CCR) and HL7’s Clinical Document Architecture (CDA). The CCD is endorsed by the Healthcare Information Technology Standards Panel (HITSP) as the harmonized format for the exchange of clinical information, including patient demographics, medications and allergies. It was also recently selected by the U.S Office of the National Coordinator for Health Information Technology as part of its initial set of standards, implementation specifications and certification criteria for EHR technology.

The Electronic Health Record System (EHR-S) Functional Model

The healthcare industry will reap tremendous benefits by adopting a common standard for electronic health record systems (EHR-S). The HL7 EHR-S Functional Model outlines important features and functions that should be contained in an EHR system. Through the creation of functional profiles, this model provides a standard description and common understanding of functions for healthcare settings. To date, HL7 has developed or is developing profiles for areas such as child health, clinical research, emergency care, long term care, behavioral health and vital statistic reporting. The EHR-S Functional Model was published by ISO as an international standard in late 2009.

The Personal Health Record System Functional Model (PHR-S FM)

The PHR-S FM defines the set of functions for Personal Health Record (PHR) systems and offers guidelines that facilitate health information exchange among different PHR systems and between PHR and EHR systems. The PHR-S FM was published as a Draft Standard for Trial Use (DSTU) in December 2008. As a DSTU, consumers can begin requesting standards-based functionality when they select PHR systems for their use, vendors can begin incorporating the model’s requirements into their products and organizations that certify PHR systems can begin using the model’s conformance criteria for certification development and testing purposes. Groups such as the Certification Commission for Healthcare Information Technology (CCHIT) and the Centers for Medicare and Medicaid Services have already begun using components of the PHR-S FM.

The Reference Information Model (RIM)

The Reference Information Model (RIM) is the cornerstone of the HL7 Version 3 development process. The RIM is the ultimate source from which all HL7 Version 3 protocol specification standards draw their information-related content. It is a static model of health and healthcare information as viewed within the scope of HL7 standards development activities. The RIM is an object model and graphically represents the clinical data (domains) and identifies the life cycle of events that a message or groups of related messages will carry. The RIM became an ANSI-approved standard in late 2003 and was published as an international standard by ISO in September 2006.

Version 2 Messaging Standard

The Version 2 Messaging Standard is one of the most widely implemented standards for healthcare information in the world and was published as an international standard by ISO in 2009. First released in October 1987 as An Application Protocol for Electronic Data Exchange in Healthcare Environments, Version 2 is a messaging standard that allows the exchange of clinical data between systems. It is designed to support a central patient care system as well as a more distributed environment where data resides in departmental systems. Version 2.6 was published in January 2008. Version 2.7 is in the final stages of development and is expected to be released in the near future. It was also recently selected by the U.S Office of the National Coordinator for Health Information Technology as part of its initial set of standards, implementation specifications and certification criteria for EHR technology.

Version 3 Normative Edition

The release of HL7’s Version 3 Normative Edition marks a quantum leap in the functionality and interoperability of messaging standards. Developed using the Reference Information Model (RIM), Version 3 is one of the first in the industry to embrace XML. Several countries throughout the world have already begun significant Version 3 implementations, including the United Kingdom, Canada, the Netherlands, Mexico, Germany and Croatia.
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