



Health Level 7 An Overview

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What does the name HL7 mean?

- "Health" represents the domain of focus. HL7's domain includes clinical and administrative data.
- "Level Seven" refers to the highest level of the International Organization for Standardization (ISO) communications model for Open Systems Interconnection (OSI) – i.e., the application level.

Health Level Seven is an American National Standards Institute (ANSI - accredited Standards Developing Organizations (SDOs)).



The Organization

- HL7 is headquartered in Ann Arbor, MI, and, like most of the other SDOs, is a not-for-profit volunteer organization.
- *Its members—providers, vendors, payers, consultants, government groups and others who have an interest in the development and advancement of clinical and administrative standards for healthcare—develop the standards and other products.*



What does HL7 do?

- Health Level Seven adheres to a strict and well-defined set of operating procedures that ensures consensus, openness and balance of interest on all matters, including balloting of standards.
- Health Level Seven develops specifications, the most widely used being a messaging standard that enables disparate healthcare applications to exchange key sets of clinical and administrative data.
- HL7 also supports a wide range of additional standards including the clinical document architecture, standards for clinical decision support, and others.



HL7's Vision

To create the best and most widely used standards in healthcare.

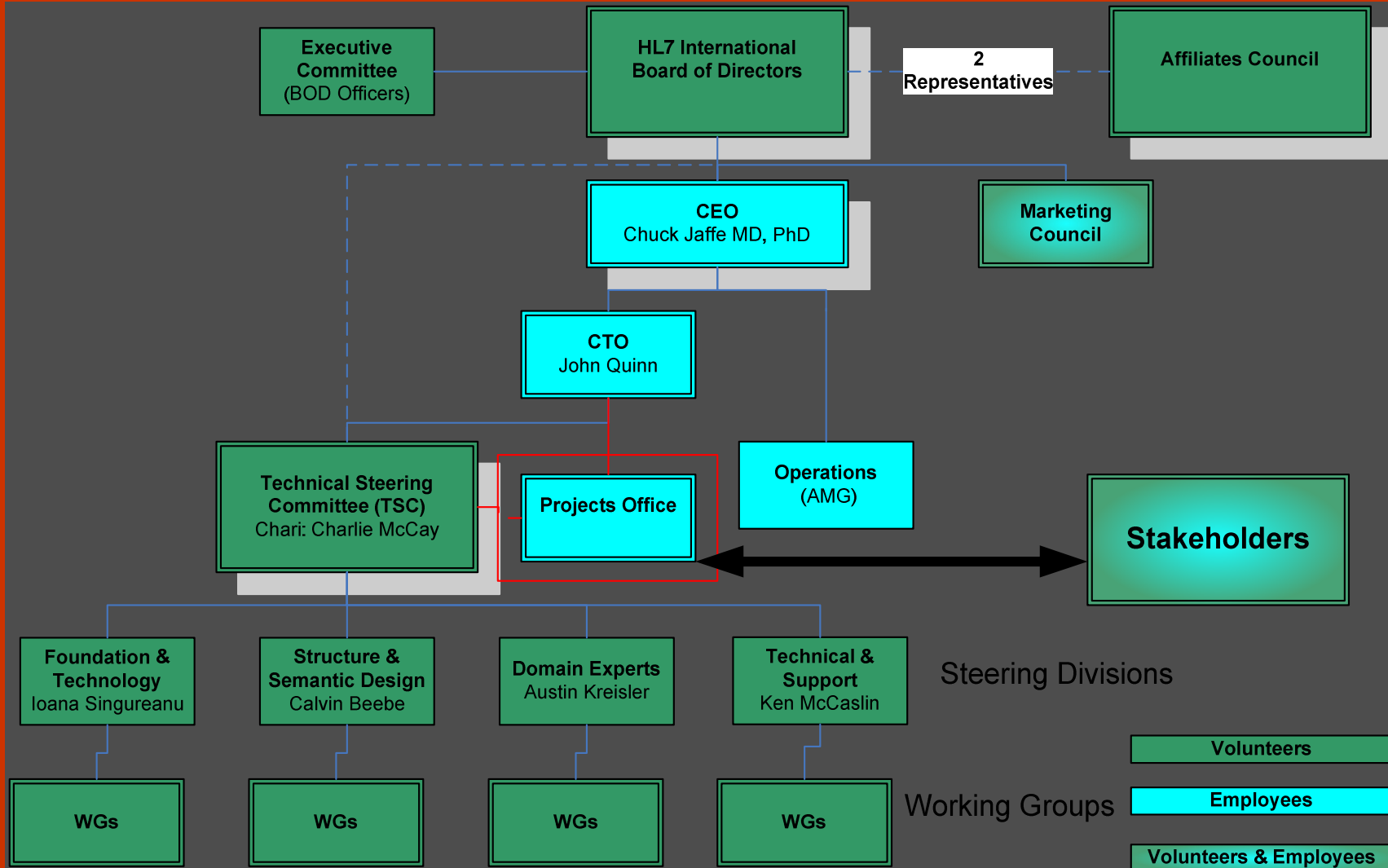


HL7's Mission

HL7 provides standards for **interoperability** that improve care delivery, optimize workflow, reduce ambiguity and enhance knowledge transfer among all of our stakeholders, including healthcare providers, government agencies, the vendor community, fellow SDOs and patients. In all of our processes we exhibit timeliness, scientific rigor and technical expertise without compromising transparency, accountability, practicality, or our willingness to put the needs of our stakeholders first.



HL7 Organization



Affiliates

- Affiliates support the HL7 mission to create and promote its standards by helping to assure that the needs, issues and other input of their countries are recognized and acted on by HL7.
- The affiliates also take on the responsibilities of translations into their country's language and organizing training and other services as needed in their country.



33 HL7 Affiliates / Countries



Argentina



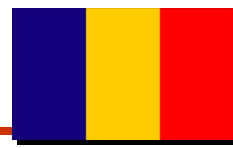
Australia



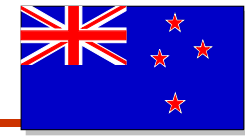
South Korea



Singapore



Rumania



New Zealand



Mexico



Austria



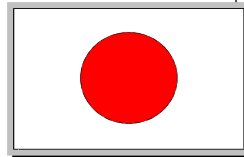
Spain

And growing



Uruguay

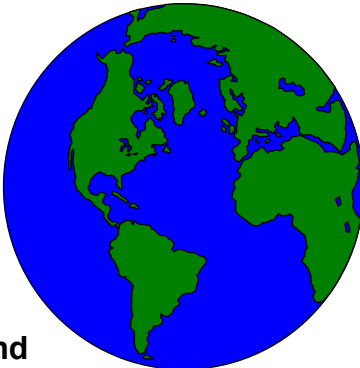
Japan



Brazil



Sweden



United States

Italy

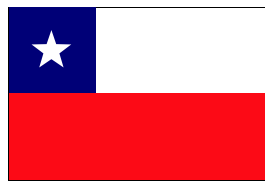


Canada

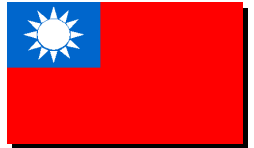


Switzerland

Ireland



Chile



Taiwan

The Netherlands

Turkey



United Kingdom

India



China



Greece



Columbia

Croatia

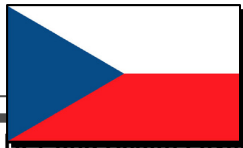
Czech Republic

Denmark

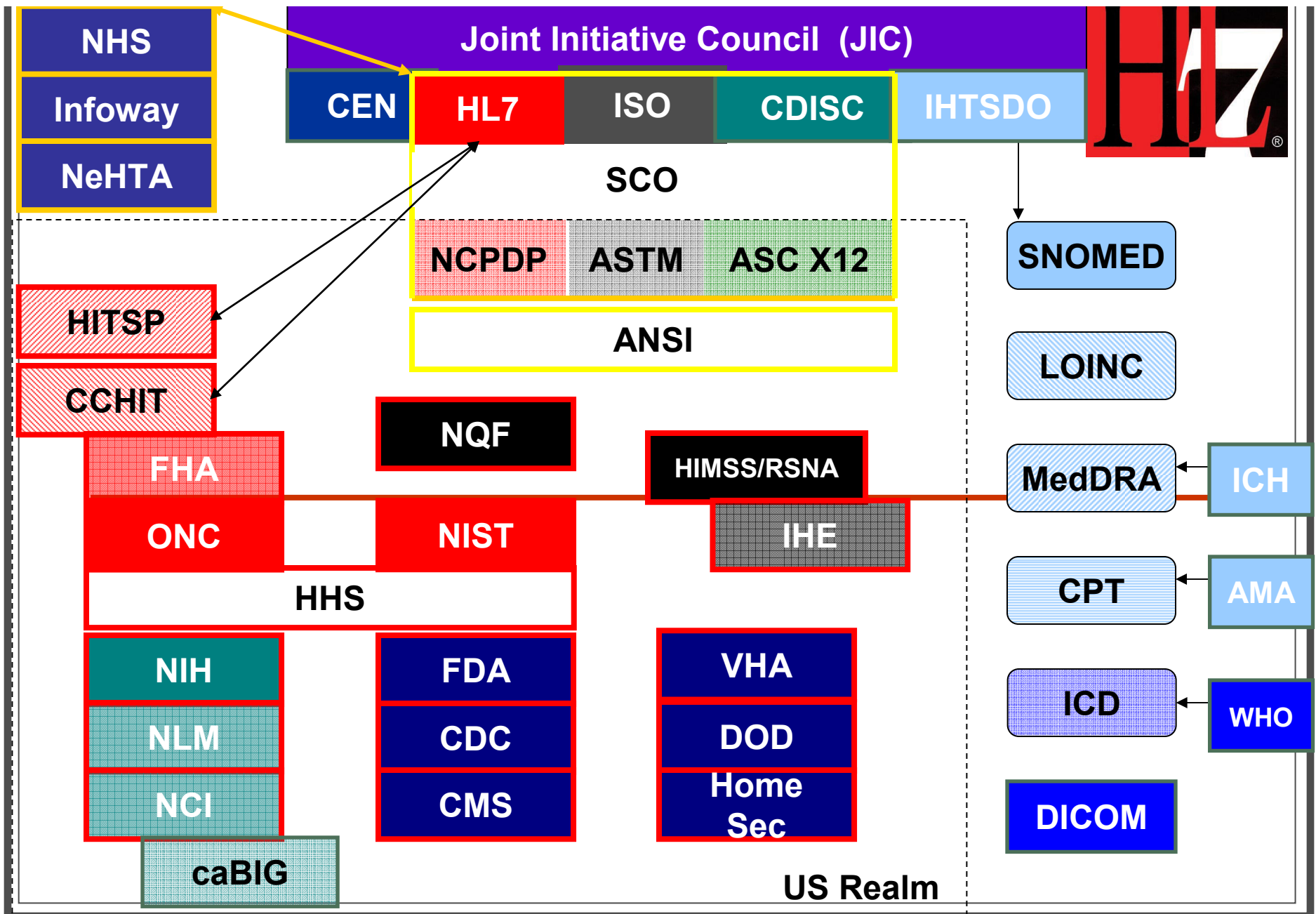
Finland

France

Germany



INTERNATIONAL HEALTHCARE STANDARDS LANDSCAPE



Standards & Implementation Guides

- Open Standards created by accredited standards organizations such as HL7, X12 and others are a “framework” of possibilities and not themselves implementation guides.
- Implementation guides or specifications must be developed from standards to meet the needs of an interface.



Products: Messaging Standards

- Version 2.x (current is 2.6 published 12/07)
- XML Encoding Rules for v2 Messages
- Shared Messages
- Transport Specification – MPPL
- Transport Specification -ebXML
- Version 3.0 (2008 Normative Edition in publication)



Products: Infrastructure Standards

- Master file structure infrastructure
- Role-based access control
- Infrastructure Management
- Refinement, constrain and location to v3 messages



Product: Models

- Reference Information Model
- Data Types
- Common Message Element Type
- XML Implementation Technology Specification - Structures



Products: Application

- Electronic Health Record
 - Functional EHR-S Standard today
 - Interactions for ER-S and Functional PHR-S Soon.
- EHR Behavioral Health Functional Model
- EHR Child Health Functional Model
- Scheduling
- Notifiable Condition Report
- Personnel Management



Products: Application (2)

- Implantable device cardiac – follow-up device summary
- Clinical Genomics – Pedigree
- Accounting and billing
- Claims and reimbursement
- Medical Records: Advice and consent



Products: Documents

- Clinical Document Architecture



Products: Decision Support

- Arden Syntax
- GELLO: Common Expression Language
- INFOButton



Products: Regulated Studies

- Structured Product Labeling
- Annotated ECG
- Individual Case Safety Report
- Drug Stability Study
- Regulated Product Submission
- Periodic Reporting of Clinical Trials
Laboratory Results



Products: CCOW

- Clinical Context Management
- Application Protection Package
- Manager Protection Package
- User Authenticator Package



Implementations Guides

- HL7 Claims Attachments
- Secure HL7 Transactions Using Internet Mail
- HL7 Security Service Framework
- CDA R2
- Common Audit Message
- Standard Guide for Implementing HL7 EDI Communication Security
- HL7 Version 2.x Message Profiling Specification
- Continuity of Care Document (CCD) Release 1
- *And growing...*



Segment of Roadmap

ID	Due Date	Milestone	Sub Group	Proposed Priority	Category	Leader	Support
20	2009 Q2	Create a Revenue Development Task Force, comprised of members of the Finance Committee, other HL7 Board members, and non-Board members, and charged with assessing the existing revenue streams and with proposing new opportunities to the Board	Finance, Marketing & Education	1	Financial	CEO	Task Force
59	2009 Q1	The Board to approve funding of at least \$250,000 to deliver the first phase of the investment plan. We must determine how to get the 1 st phase funded.	Strategic / Operations	2	Tooling Financial	Chair	Board
44	2008 Q4	Position the ArB to work with all relevant committees of HL7 to proactively champion the adoption of an approved HL7 Reference Architecture and establish a process for its continuous review and update.	Technical	3	Technical	CTO	ArB
47	2009 Q2	Deliver a first balloted reference architecture document to include a services delivery approach as a means of using HL7 Standards in SOA.	Technical	4	Technical	CTO	TSC
54	2008 Q4	The CTO will develop a plan for ballot publishing of each HL7 product from ballot through final product. The plan will include a description of publishing approach and methodology, documentation for the individuals involved and a catalogue of computer-based tools that are used to accomplish each step of the methodology if applicable.)	Technical	5	Tooling	CTO	CTO

Projects management

- All proposed projects from Working Groups are now first approved by the TSC with a formal approval and tracking process.
- HL7 will transition to routinely adding new projects from the “roadmap” through the TSC within the next year.
- Working Groups that start work on projects without approval will experience rejection of their ballots by the TSC.



SAEAF

- SAEAF is a framework for accommodating inter/intra systems communications through services much as we support messages (*both version 2 and 3*) and electronic documents (*i.e., CDA*) today.
- Transition to this framework will occur in a standard way and with standard expected properties where and when it makes sense.



Working with ANSI & the US Government

- HL7 works closely with ANSI's Health Information Technology Standards Panel and the US Department of Health and Human Services and its organizations (e.g., ONCHIT, VA, FDA, CDC, etc.) and the US Department of Defense Military Health System (MHS).

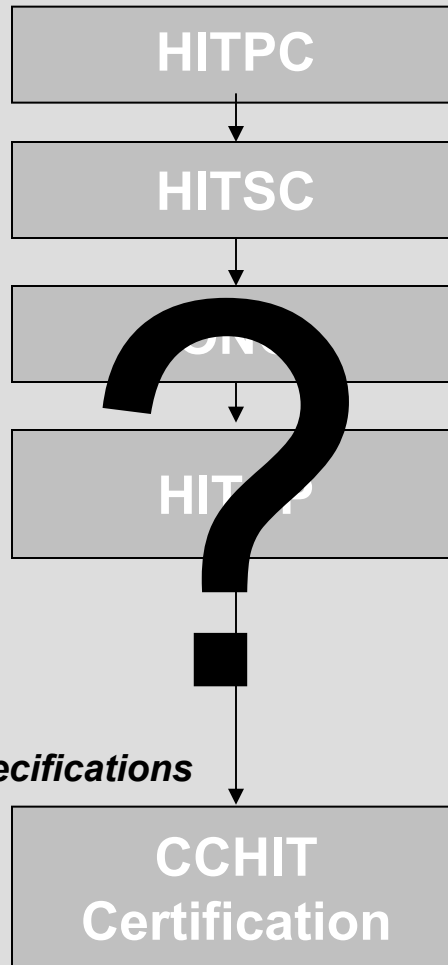


US Federal Healthcare ONCHIT Interoperability Initiatives

SDOs & Standards Content Providers, e.g.

- ASTM
- DICOM
- HL7
- SNOMED
- LOINC
- NCPDP
- X12N
- NUBC / NUCC
- OMG
- W3C
- WS-I

Select Incorporate
Influence



Standards Users, e.g.

- Integrated Delivery Systems
- Network Operators
- Independent Practitioners
- Regional Labs
- HIT Vendors
- Payers

Certifies

Reports Certification

Modified from Wes Rishel, HL7 Presentation

HL7: To Learn More...

<http://www.hl7.org>

