



Health Level 7 An Overview

W. Ed Hammond, Ph.D., FACMI

Immediate Past Chair, HL7

Director, Duke Center for Health Informatics

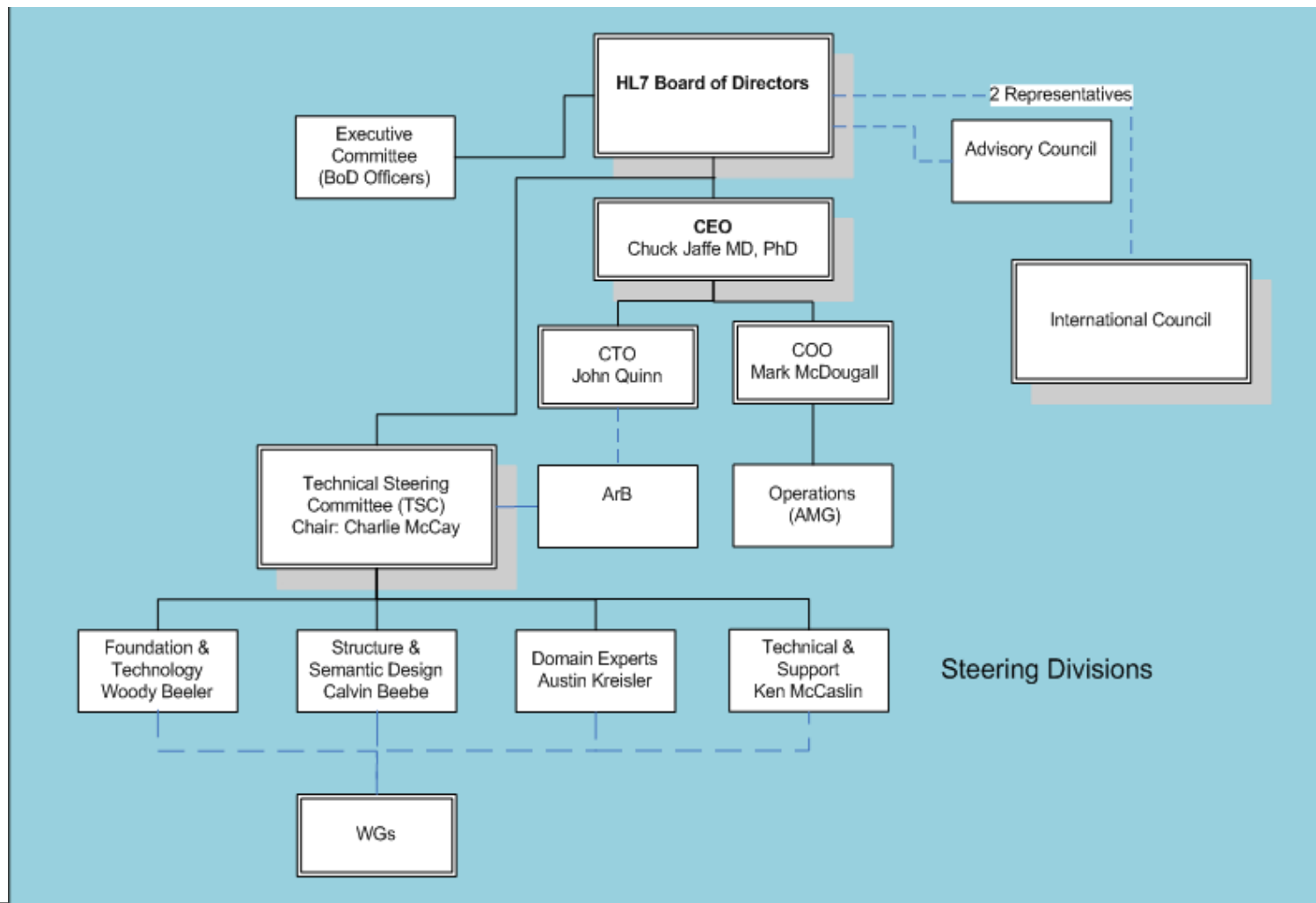
What does the name HL7 mean?

- "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.

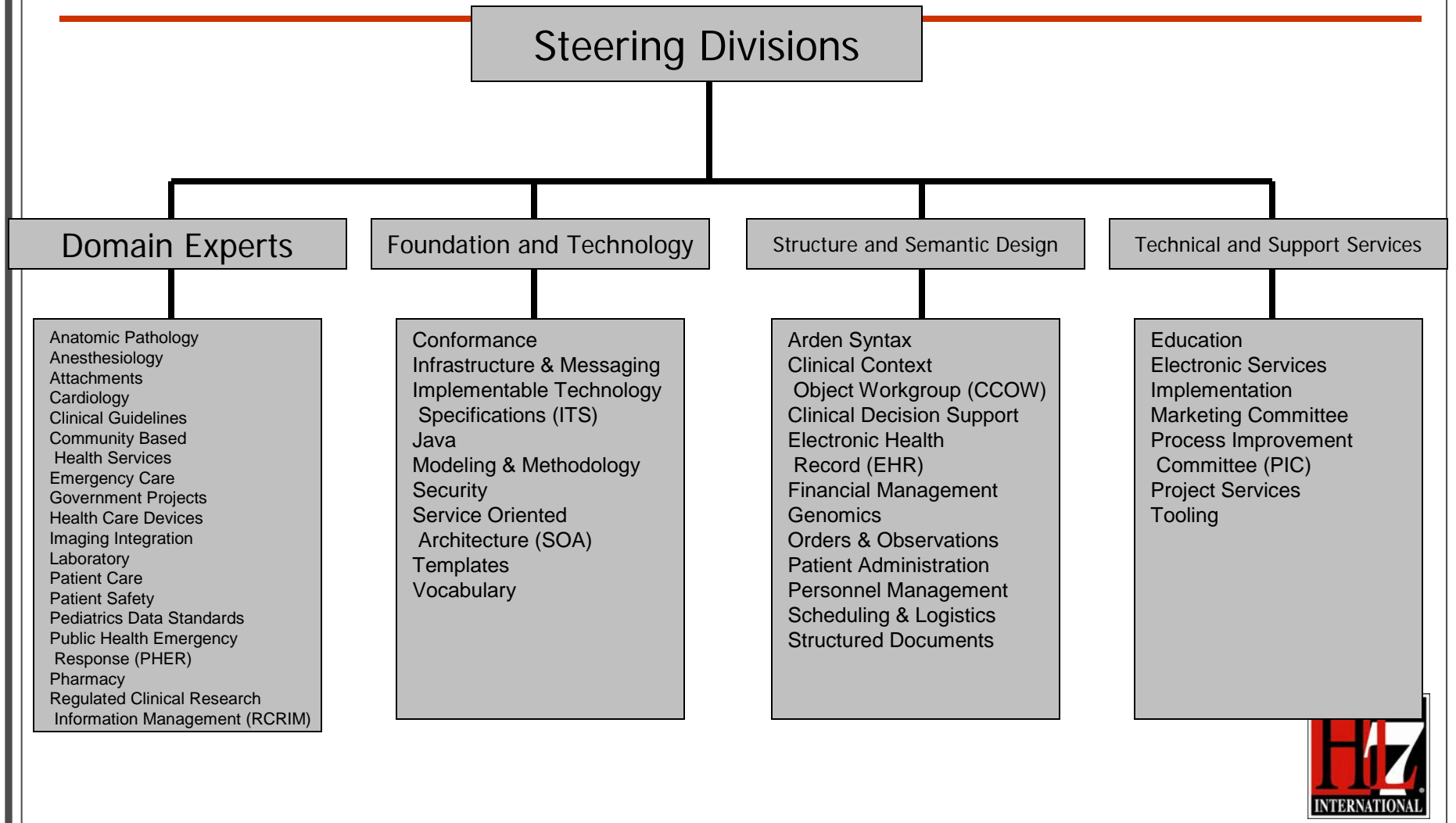
Health Level Seven is an American National Standards Institute (ANSI - accredited Standards Developing Organizations (SDOs).



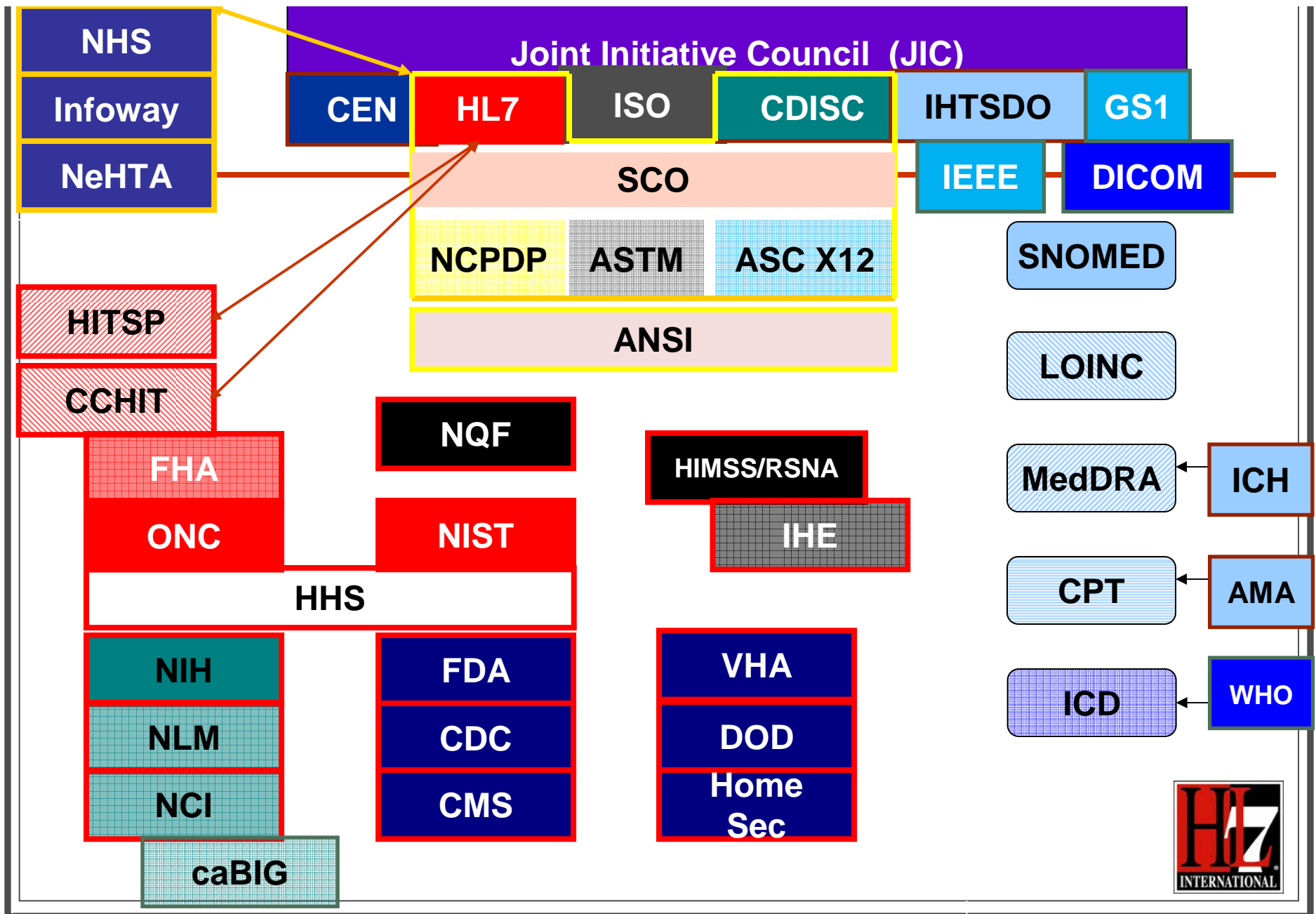
HL7 Organization



HL7 Steering Divisions



INTERNATIONAL HEALTHCARE STANDARDS LANDSCAPE



Products: Messaging Standards

- Version 2.x (current is 2.6 published 12/07)
- XML Encoding Rules for v2 Messages
- Shared Messages
- Transport Specification – Minimum Lower Level Protocol (v2 and v3)
- 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



Products: Application

- Electronic Health Record
 - Functional EHR-S Standard today
 - Interactions for ER-S and Functional PHR-S
- 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
- Virtual Medical Record
- GELLO: Common Expression Language
- INFOButton



Products: Regulated Studies

- Structured Product Labeling
- Annotated ECG
- Individual Case Safety Report
- Drug Stability Study
- Regulated Product Submission
- Common Product Model
- 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)
- *And growing...*



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.



