HL7 Standards

Health Level 7 (HL7)

Health Level 7[1] is a US-based, ANSI-accredited health information standards development organisation. It develops specifications mainly for application-level messaging between health information systems, but also in other areas such as clinical documents and decision support. Its "version 2.x" messaging standards are in wide use in US and around the world, typically between information systems inside the same hospital, and between hospitals and external laboratories.

Since 1997, HL7 has been developing a new set of standards, collectively known as "version 3", or "v3". These are still aimed primarily at defining application messages, but are based on formal models, including the "reference information model", or "RIM". Message content schemas are derived by a restriction process which starts from the Reference Information Model (RIM), and continues through domain information models (DIMs), restricted message information models (RMIMs), common message element types (CMETs), finally ending with hierarchical message definitions (HMDs) and generated message schemas in XML.

The HL7 EHR Special Interest Group

Dr Sam Heard is a past co-chair of the EHR SIG, for a 2 1/2 year period ending in 2006.

The HL7 Clinical Document Architecture (CDA)

The Clinical Document Architecture is a relatively generic model for the communication of clinical documents, very similar to the "Composition" class in CEN 13606 and *open*EHR. It was originally intended as a standardised way of communicating clinical notes, but the CDA user community tend to use it more as a persistence specification. It is regarded by some as the HL7 equivalent of a record architecture, although is does not address significant requirements in this area, such as distributed version control, flexible EHR Extract structures, archetypes, or querying. CDA release 2.0 defines the structural organisation of fine-grained information inside a document.

Work is commencing on ‘HL7 templates’, described as “constraint models for existing HL7 specifications”. HL7 templates are distinct from *open*EHR Templates in that they are essentially XML markup on the CDA and other XML-schemas, with some semantic equivalence to *open*EHR archetypes.

Harmonisation

There is a current (2006/7) effort within ISO to produce a harmonised Data Types specification for HL7, CEN and *open*EHR.

Role of HL7v3 in openEHR Development

This page [2]describes the use of HL7v3 in the development of *open*EHR.

1. http://www.hl7.org/
2. daisy:206-OE (openEHR and HL7v3)