

HL7 Working Group Meeting Report – Bryn Lewis

CCOW

Attended first meeting only. Ballot on the next specification passed on the first round. Discussion around the wording (not the intent) of some clauses. The birds of a feather services meeting indicated CCOW is the primary area in which a service oriented view is represented in HL7.

XML

2 meetings only. Less than 10 in each, which was odd I thought given the centrality of XML. Seemed like a can-do kind of group. W3C update and evidence of a link between W3C and HL7 in this wg at least. XML schema generation of R-MIM is in progress with work on the implementation guide being current. A desire to synchronise versioning (at least) of the toolset to include the schema generator evident.

Clinical Decision Support and Clinical Guidelines

First CDS meeting was with EHR, at which the EHR functional specification was presented as being a hierarchy of opportunities for DS development or DS types. The intention being to clarify what DS intervention is likely to be effective in satisfying particular requirements.

The vMR (Virtual Medical record) is a mechanism for interface to the EHR. The intention being to reduce the complexity as far as is possible, thus, a variety of vMRs, each for a particular purpose, could be defined. Robert Greenes methodology is to use a top down (reduction/convergence of existing models) and bottom up (reverse engineer the requirements of existing DS applications). This is suggested as a way of expediting development of what is not meant to be a complex end product.

I didn't quite understand the explanation of the vMR as being a view into the RIM, given that the RIM is free of clinical concepts.

The completed GELLO specification was presented. This specification addresses issues raised at the previous meeting. At present there are no implementations. GELLO is an expression and query language independent of any particular vMR, though dependent on the presence of some vMR. It is a restriction of OCL, with small additions.

Now has built-in basic, collection and tuple data type. Recently added '.' (model type) and '->' (collection) operators.

Temporary variables, variable assignment and additional operators have also been added to this specification version.

An evaluation of the specification concluded:

- can express statements
- not clear how to specify patient context
- limitations, can't deal with uncertainty or fuzziness.

There is an implication that terminologies will be the means of determining data values, eg hierarchies of conditions. The values could be pre-coordinated, or post-coordinated with a terminology service.

A joint session with the Patient Safety sig left the impression that in comparison with CDS, PS appears to be less technical but would probably usefully serve as a means of setting a context for some of the activities in CDS. PS seems to be connecting with a large number of other sigs.

The Infobutton proposal was presented and didn't raise much controversy. The Infobutton is a poc application that retrieves context-specific information from content providers using patient data extracted from the electronic medical record. The standard implementation is of a http request with query parameters embedded in the URL. It is an asynchronous request and so has no mechanism to dynamically alter the responses generated. The parameters are being restricted to a simple set.

The next steps for the infobutton are to develop a glossary, formal data model (class diagram), perhaps terminologies and activity diagrams and will be discussed at a conference call in early March.

The Order sets interchange model is intended to facilitate exchange of order set knowledge but not necessarily plug and play for any given CPOE. (Although there is no definition of an order set as yet). The main intent appears to be to reduce administrative tasks. The content of the order set is not deconstructed into individual recommendations. Hence, most of the detail of the order set is in the header, not in the body.

The CDS and CG meetings were overlapped, with the result being that the last 2 meetings (2 Qs) were not held.

Tutorials

Tools training

A CD of the tools and a set of self guided tutorials were provided. The explanation and demonstration went from developing a (simple) R-MIM in the HL7 Visio tools (.mdb) through to a browsable version in RoseTree (.hmd) and producing a schema in the XSL Schema generator. The place of MIF was given and it was described in conversation.

OWL

The Web Ontology Language allows the definition of ontologies (an organisation of concepts for which one can make a rational argument). The intent is to represent knowledge on the web such that its semantics is machine processable. OWL is a W3C standard underpinning the semantic web.

This was a good overview of OWL and how it may be useful. Peter Elkin indicated a willingness to collaborate/provide advice to anyone wishing to work with OWL.