Clinical Decision Support

GELLO - GLIF - TEMPLATES - vMR Overview

GELLO is an object oriented, declarative decision support language. It is a HL7 standard. Revision 2 has been balloted successfully twice and is ANSI approved. Medical Objects (MO) continues to lead the development and implementation of this standard. GELLO is closely related to Object Constraint language (OCL). As a constraint language, GELLO can capture or query data from a virtual medical record (vMR). Its is 'side effect free', which means it does not alter anything in the patient's record, merely provides a result from a CDS script. We prefer a VMR based on existing HL7 v2 messages however FHIR and bespoke models are ok as well. We also can use GELLO to query ISO:13606 archetypes. On the ontology side of modelling, GELLO can query and process a concept model such as SNOMED-CT. Methods exist for SNOMED CT concept creation (as a Concept Descriptor - CD type), post coordinated expression validation and subsumption through a GELLO language *implies* method.

GLIF is a specification for interchangeable electronic guidelines. It presents through a UI as a smart flowchart.

ISO:13606 is an international Electronic Health record (EHR) extract standard and is an ISO standard. It employs archetypes which in turn may be combined as Templates .

The virtual medical record (VMR) is a HL7 project. In general, it specifies an abstraction of existing EHR information structures, for the purposes of clinical decision support. It is platform independent in its implementation, dynamic, and in our case, can be Gello class based. Alternative VMR models exist. Medical Objects uses a VMR based on existing V2 messages. Other VMR packages can be enabled, for example FHIR. Bespoke GELLO models would allow implementations in non health domains. GELLO can also utilize a database data and HL7 v2 messages.

GELLO

GLIF

ARCHETYPES and TEMPLATES

VMR - Virtual Medical Record

Presentations

Gello and vMR in Relation To HL7V3 Pedigree Model.pdf (Presented at HL7 International Workgroup Meeting in Sydney January 2011)