



HL7-NLM Vocabulary Project Highlights

The goal of this 3 year contract is to 1) make HL7 vocabularies available from within the Universal Medical Language System (UMLS) 2) where possible replace HL7 vocabularies with designated Consolidated Health Initiative (CHI) vocabularies 3) describe how vocabulary bindings to from specific HL7 messages to the UMLS will occur. Vocabulary access, maintenance and collaboration tooling will also be developed as required for the project. All activity will be coordinated using established HL7 processes and documented in implementation guides.

Contracts currently underway:

[Characterize HL7 V2 Vocabulary Tables and V3 Value Sets](#) Characterize and prioritize HL7 tables and value sets that are referenced in HL7 Version 2 and Version 3 messages. The characterization will be used as a guide for ordering the work of replacing HL7 table contents and value set contents with CHI approved terminologies.

[Export current HL7 Vocabulary Content into UMLS RRF tables](#) Transform the current HL7 Version 2 and Version 3 Vocabulary 'tables' into NLM Rich Release Format (RRF) for delivery to the NLM.

Contracts currently being developed:

[Map HL7 Vocabulary Values to CHI Vocabularies](#) Map HL7 V2 and V3 vocabulary to content from vocabularies specified by the CHI (Consolidated Health Initiative). This will determine where there is a direct match to HL7 vocabulary values and where new values need to be created. The goal is to be able to replace HL7 vocabulary content with content from the CHI vocabularies.

Next Steps:

[Bind HL7 message fields to CHI vocabulary value Sets](#) Develop a formal description of how bindings between HL7 message fields and attributes and their respective CHI vocabulary value sets will be represented.

Review UMLS Metathesaurus documentation and web materials and recommend additions that would benefit HL7 users.

Tooling: The structure of the HL7 Reference Information Model (RIM) and the HL7 Development Framework places a premium on the definition and maintenance of Terminology. Common Terminology Services (CTS) and Common Terminology Maintenance (CTM) tools must be easy to use and full functioned in to support current and future Health Information requirements.

Vocabulary access, maintenance and collaboration tooling will also be developed as required for the project. The project steering committee is reviewing overall HL7 community needs and working with NLM to determining the tooling subset that can be developed within the scope and resources of the project. Part of this project is one of software redesign as many of the pieces exist in various forms that do not readily bolt together. Another consideration is where to start in order to pull in those pieces which are mature enough that the cost will be low and the benefit high, recognizing that no solution will fill all requirements.

Contribution to the field Appropriate medicine requires collaboration between patients and all actors in the healthcare community. This project addresses the fundamental need to have a shared understanding of the meaning of information recorded transmitted about healthcare events. By providing the federal agencies, healthcare institutions and vendors with a well integrated common vocabulary, systems can be built to begin tackling such basic tasks as error detection and decision support.

For project description and participation information go to the www.HL7.org website and select [NLM Contract](#) under Resources or email pbarr@HL7.org.