

REQUEST FOR QUOTE

Contract Name: Review Current Implementations of EHR Information Exchange

Summary

Under an NLM contract, HL7 is creating an implementation guide for the transmission of patient information between disparate electronic health record (EHR) systems. The goal is to provide as simple and straightforward a methodology as possible. The implementation guide and future extensions must be able to provide for transmission of a complete EHR record for a patient.

There are a growing number of EHR information exchange implementations currently underway using HL7 Version 3 development methodologies. GP2GP, openEHR, CCR, NICTIZ (National ICT Institute for Healthcare in The Netherlands), medEmed (a project of the NetLab group in the Department of Computer Science, University of Victoria), CEN 13606, CDA release 2, and other closely related initiatives are all at some stage in the process. Some reviews of these efforts have been done in the past, but these projects have matured significantly and HL7 is proposing to contract for a new review as input to this project.

The contractor will become familiar with the goals and scope of each EHR information exchange implementation project and with the goals and scope of this NLM-EHR project and will make both a high level and a detailed analysis and comparison of an agreed upon set of such implementations to inform the progress of the NLM-EHR project.

Task Description

1. Summarize the use case for each model.
2. Identify the level of negotiation and or built-in assumptions required for successful information transfer between participants to occur.
3. Compare process, tools, and methods used to create each model.
4. Compare handling of unstructured documents.
 - a. ability to handle variable semantic content.
 - b. document persistence.
5. Compare higher level constructs in each model such as:
 - a. episode-of-care.
6. Compare interactions in the model such as:
 - a. patient roles.
 - b. order & observations roles.
7. Compare ability of each model to handle the range of data elements specified by the ASTM Continuity of Care Record (CCR).
8. Compare model maturity – Is it currently in production? How long? Current tooling level supporting model?
9. Compare implementations where they exist.
10. Gather Implementation guides for each project.
11. Explore issues encountered in comparison.
12. Summarize disagreements between proponents of each model.

13. Participate in weekly NLM EHR conference calls and assist project manager and steering committee in accomplishment of overall project goals.

Deliverables

Elapsed time estimates	Steps
	Present review plan. Agree on set of implementations to compare.
	Present initial outline of comparison criteria
	Present draft document Including recommendations for tool sets. options for shortest path to move the NLM-EHR project forward through next full iteration
	Participate in discussion of feasibility, desirability, and capabilities of each option.
	Produce publication quality final document

Required Skills

Participant is expected to have implemented HL7 Version 3 messages and be familiar with the current set of HL7 Development Framework tools. In-depth knowledge of one or more of the existing EHR information exchange implementations is expected, as is familiarity with the activities of the EHR TC and message development activities within HL7 is desired.

Desired Skills

Technical writing experience.

Expected Start Date

February 14, 2005

Estimated Hours

150

Expected Duration

2 months

Tools, queries, programs, transforms, models, and methods used will be explicitly documented. Intellectual property will enter the public domain under the ownership of HL7.

Payment will be dependent on approval of the deliverables and payment by NLM to HL7.