August 22, 2012

Health Level Seven International – Response – RFI iEHR Joint Immunization Capability

Capability Statement

Health Level Seven International (HL7) provides standards for interoperability that improve care delivery, optimize workflow, reduce ambiguity and enhance knowledge transfer among all of our stakeholders, including healthcare providers, government agencies, the vendor community, fellow Standard Development Organizations (SDOs) and patients. In all of our processes we exhibit timeliness, scientific rigor and technical expertise without compromising transparency, accountability, practicality, or our willingness to put the needs of our stakeholders first.

A current HL7 project called the Cross Paradigm Interoperability Implementation Guide for Immunizations (“X Paradigm”) is designed to provide guidance on using HL7 and other standards in a complex environment such as that described in the RFI. Based upon HL7’s Service Aware Interoperability Framework (SAIF), the completed “X Paradigm” project is expected to provide a method of creating immunization use case deployments that include numerous legacy systems of disparate interface capabilities as well as any “greenfield” specifications for services needed to enable this interoperability.

HL7 X Paradigm project materials can be found at: http://hssp.wikispaces.com/Cross+Paradigm+Interoperability+Implementation+Guide+for+Immunization

As HL7 members, DoD and VA have access to the HL7 X Paradigm standards ballot material at: http://www.hl7.org/ctl.cfm?action=ballots.home (Ballot id: HL7 Implementation Guide: Immunization; Cross-Paradigm Interoperability Implementations, Release 1). Please consult with your organization's HL7 representatives for access to this content.

Specifically, the Project Scope Statement sets forth:

**Project Scope**

This implementation guide will explore the Service-Aware Interoperability Framework (SAIF) methodology to show how various HL7, Integrating the Healthcare Enterprise (IHE) and Object Management Group (OMG) immunization-related artifacts can be deployed to satisfy immunization interoperability use cases. The project will provide feedback to the HL7 Modeling and Methodology (MnM) SAIF Implementation Guide project regarding artifacts and governance necessary to develop this project's deliverables. It will build upon existing standards artifacts rather than create anything new. Previous standards work includes: The Practical Guide to Service Oriented Architecture (SOA) in Healthcare Part II: the Immunization Case Study; the Immunization
Domain Analysis Model (DAM); HL7 Version 2 immunization messages; HL7 Version 3 POIZ messages; HL7 Version 3 Care Record document; HL7 Version 3 Care Record message; HL7 Virtual Medical Record (vMR); Entity Identification Service (IXS); Retrieve, Locate, Update Service (RLUS); Decision Support Service (DSS); hData Record Format; Arden Syntax; GELLO, A Common Expression Language; IHE profiles including Patient Identifier Cross-Referencing (PIX), Patient Demographic Query (PDQ), and Immunization Content; IHE Service Oriented Architecture (SOA) White Paper. The scope of the immunization use case will be limited to use cases specifically related to interoperability; primarily patient identification, immunization data exchange and decision support (recommendations, adverse reactions, contraindications).

**Project Need**

Currently, several HL7 and other Standards Development Organization (SDO) standards apply to the immunization use case, including messages (HL7 Version 2 and Version 3) documents (Version 3 Clinical Document Architecture (CDA)), and services (IXS, RLUS, DSS, etc.). Some, such as HL7 Version 2 and Version 3 messaging, and CDA/Continuity of Care (CCD) models including the IHE Immunization Content profile, are fairly mature. However, the issue of achieving interoperability in an environment of diverse standards remains. A key lesson of Meaningful Use Stage I in the U.S. has been that mismatched sender and receiver capabilities in some localities have inhibited public health reporting objectives. The practical use of SAIF is of interest in European interoperability projects as well, for immunizations and beyond. What is missing is something to tie the various standards together in an interoperable fashion to satisfy the use case.

**Success Criteria**

A successful project will help implementers select from the available artifacts and deploy them across a set of interoperating systems to satisfy the immunization use case. It will help policymakers provide clear guidance on how existing standards may be used to implement their policy objectives. A successful effort will also provide a template with overlap for similar exercises in other domains. The format of this deliverable will be aligned with existing SAIF artifacts as appropriate and will be conformant with the SAIF Implementation Guide. The output will also show a clear path for meeting Meaningful Use and/or European interoperability project requirements using the Guide.

The full Project Scope Statement is found at:
http://www.hl7.org/Special/committees/soa/projects.cfm?action=edit&ProjectNumber=863

**Completed Immunization Questionnaire**

N/A.

**Recommended Approaches**

The resulting X Paradigm product will be a standard to which HL7 member open source and vendor organizations may build their implementations. X Paradigm is in its first cycle of HL7 ballot review at this writing (ballot signup closes August 28 and comments are due September 4). HL7 encourages the DoD to review the current draft and make comments. As further revisions are expected to follow, HL7 encourages DoD participation through the sponsoring Service Oriented Architecture workgroup to ensure that the final product meets its needs.
Past Experience with Contracts of Similar Scope and Magnitude

Founded in 1987, Health Level Seven International (HL7) is a not-for-profit, ANSI-accredited standards developing organization dedicated to providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services. HL7’s 2,300+ members include approximately 500 corporate members who represent more than 90% of the information systems vendors serving healthcare.

HL7 has experience working with the National Library of Medicine on a multi-year, multi-million dollar contract for two major projects:

1. Vocabulary: Align HL7 message standards with CHI standard vocabularies; support the EHR side of project to develop implementation guides with prototype vocabulary inclusion; develop syntax for binding of vocabularies to HL7 V3 messages; develop tooling for vocabulary/value set distribution
2. EHR: Develop and pilot test an HL7 Implementation Guide for the transmission of patient information between disparate electronic health record (EHR) systems using HL7 Messaging Standards

Central Contractor Registration Information

HL7 will not bid on a Request for Proposals (RFP); this RFI response is solely to provide information to the government.

Should you have any questions, please contact me at markmcd@HL7.org. Thank you!

Sincerely,

Mark D. McDougall
Executive Director