FHIMS Lab-OO WG

Meeting Minutes (September **20th)**
Agenda for the next meeting (September 27th)

Date/time of call: Monday, September 20th, 2010, 10:00 - 11:00 AM (EST) VANTS 1-800-767-1750 Code 84287

Attendees:

Andrew Regiec – DoD-MHS
Cindy Vinion – CDC
Galen Mulrooney - VA/VHA
John McKim – DoD
Kosta Makrodimitris – FDA
Leeanne Walls - VA
Minal Agrawal - CDC
Neelima Chennamaraja – VA
Robert Crawford – VA/VHA
Sandy Jones – CDC
Steve Hufnagel – DoD
Wendy Blumenthal - CDC
Wendy Scharber - CDC

Leadership team

Neelima Chennamaraja, Kosta Makrodimitris, Galen Mulrooney

Agenda: Sep 20th

- Kosta: Present about the Papyrus tool, and Survey Monkey tool
- Galen-Kosta-ALL: HITSP C36/C37 constructs and maps to FHIMS-Lab-OO baseline
- Galen-Kosta-Neelima-CDC: Analysis-Plans about Pathology cancer models (5-10')
- ALL: Discussion, questions and relevance of the EHR-Lab case to agencies/FHA(5')
- ALL: Milestones-Plans-Risks for modeling and agency use cases (next iterations) (5')
- Kosta-Galen: HL7 Normative 2010, RIM, tutorial, wiki and relevant workgroups (5')

Summary of Discussions

- Kosta gave a brief status report on open health Papyrus tool that it does not have enough views like RSA, the information on the properties of the associations, & etc. are hidden in the HTML view or .PDF view. Galen mentioned that creating FHIM lab HTML is very easy but the problem is that we do not have a good place to upload it. RSA does create quite a few files and the zipped file is too large to email. For now the plan is that Galen would zip the existing Lab models and post it to the wiki space under Lab folder. We will

look at other user friendly open health tools later. Kosta asked whether the entire lab FHIM group is able to access the polling Survey Monkey tool, and we need to respond to the survey by end of this week. If there are any problems accessing it, please let Kosta know. Kosta also mentioned to create accounts in the open health tools since all the documents and the minutes are being uploaded at the site.

- Galen gave a brief overview of the HL7 implementation guide "Interoperability Specification Lab result Message_v2.5.1.pdf" which is referenced by HITSP C36 standard. HL7V2 messages are Electronic Data Interchange (EDI) standard which is made up of a limited text that is organized into segments. Galen will work on the MSH segment offline. The new mapping spreadsheet created by Galen will be pre-populated with the HL7 Element Name, description and FHIM lab attributes baseline model. The SetID will be mapped as N/A in the PID segment since it is not needed by FHIM because FHIM is a logical model. Also, Patient ID and Alternate Patient ID are deprecated. LabTestPromise is linked to the Patient in the FHIM lab model. At the very least the cardinality near the LabTestPromise is changed from 1 to 0..1 since the LabTestPromise is more likely not associated with a patient. Often, it is going to be some other class like Subject that represents a food product, animal, etc. HL7 indicates that a LabTestPromise is associated with a subject, and subject can be a patient or anything. Galen suggested that he could create a separate subject class and it could have the cardinality of 0..1 or 0..* but it may or may not be Exclusive OR.
- Cindy asked how to define an accession for a new person in the lab? Galen stated that the definition of accession is "The act of accepting the laboratory tests and that is entering into workload". Steve Hufnagel mentioned that Lab can have a reflex testing, e.g., Test B and Test C are dependent on the results from TestA. Leanne defined the accession is a unique identifier for a particular event for a patient with a particular encounter. When lab acts on orders, an accession number is assigned to a single test or group of tests and defined as the unique identifier for this patient for a particular timeframe. Thus, a patient can have multiple samples throughout the day. So each sample is accessioned into the Lab for processing. Accessions are generally separated by specimens. For Example, chemistry tests such as Basic Metabolic, Lipid, RNTIBC, etc., can be grouped under one accession number, but Hematology for a CBC is a different specimen with another accession number, and UA is another accession number. Cindy indicated that uniqueness is on an order where the specimen is coming from a patient. She indicated that the direct link between Patient to LabTestPromise should come from specimen. Leanne mentioned that the sample for chemistry panel typically will receive either serum or plasma and not both. Cindy asked if there are any cases for one order with multiple samples for a patient.
- Galen walked through the following use cases:

  One order, one accession and one specimen collection event – the sample is split out since the specimen could be blood, and the sample could be plasma of the blood.

  For basic chemistry test - One specimen for one sample.

  Glucose Tolerance Test (GTT) - In a case where we have one order, one patient, but two Specimen Collection Events that are four hours apart, the cardinality on the SpecimenCollectionEvent is incorrect since it is 0..1.

Galen also asked will a GTT have one accession number or two accession numbers. Leanne replied that there will be two accession numbers for GTT since one accession number is used for fasting baseline, and the other accession number is used for another specimen two hours later. For a TSH reflex testing, the test is based on the value of TSH

test result. Generally, there is a policy in all the labs indicating that if the TSH is outside the limit/values, then it will reflex to free T4 at the point that happens internally then it is one accession number. There will be three accession numbers where a GTT order with one, two, and three hour intervals, it will break down due to the outcome of the initial order. On reflex testing, collection date/time is the same as the original specimen data/time. Cindy wanted to know if there are two accession numbers, then does it mean it is equivalent to two promises for GTT. LabTestRequest and LabTestpromise should have a cardinality of 1..* on the LabTestPromise side. We will review the accession, accessionDate in the LabTestpromise in the next lab modeling call. The LabTest (choice group) class needs to be ironed out as well as the accession numbers. The cardinality on the tail end of the LabTestPromise is changed from one to 0..*. There is a need to review the name change for the accessionId to LabOrderId or FillerOrderId.

- Author – Galen mentioned that FHIM is a Logical model for broader audience. We need to compromise and clarify the definition. He also mentioned that the placer order number is the number the clinical system would see and the filler order number is the number that the order is filled. The identifier the lab system is using to identify the clinicians order which is separate from accession Ids is the concept we are struggling with.
- Kosta asked the group to look at the slides regarding the placer and filler from HL7 that he sent to us some weeks ago. He emphasized that we need to be on the same page. The information for placer and filler can be found in the HL7 Chapter 4 & 7 Orders and Observation (OO) power point at the following link:
    - www.hl7.org/Library/Committees/orders/ordobsv.ppt

Action Items:

- Cindy and Leeanne will research on the following attributes and present the conclusions to the team on Monday's Call (09/27/2010)
    - Order no (provider order no/placer order number)
    - Filler number (lab order number)
    - Placer number
    - Accession number
    - Report number
- Wendy will talk to her group about how they handle an order having multiple accession numbers.
- Galen will zip the existing Lab models and post it to the wiki space under Lab folder.
- ALL: We need to respond to the polling survey monkey by end of this week
- Study and analyze the Pathology cancer models and cases (Fri meetings)

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