**FHIMS Lab-Orders and Observation Domain**

December 6, 2010 Meeting Minutes

# Attendees

Neelima Chennamaraja, VA

Mike Fitch, DoD

Steve Hufnagel, DoD

Kosta Makrodimitris, FDA

Galen Mulrooney, VA

Anne Pollock, CDC

Cindy Vinion, CDC

Steve Wagner, FHA

# Leadership team

Neelima Chennamaraja, Kosta Makrodimitris, Galen Mulrooney, Cindy Vinion

Website: <https://www.projects.openhealthtools.org/sf/projects/fhims/>

# Summary of Discussion

## Planning

* We need to decide what we want to get done the remainder of the year (only 2 meetings remain - Dec 13 & Dec 20) & what to push to next year. Suggestions include completing specimen and doing observations (results) next.
  + What about test information? We may want to look at building out test information before doing results.
  + A quick review of the test/result area of the model currently shows the VA needed test structures. These structures may or may not be useful for other agencies; for example, some of the structures needed for VA are considered reflex tests (see definition below) in other agencies (e.g., Gram Stain Results) and could be modeled with generic or common structures.
  + Definition: reflex test - a test ordered by the testing lab due to a defined (generally, positive) result of a previous test. A reflex test is usually performed to confirm the previous result's findings.

## Information Modeling - Sample and Specimen

* Per Dec 3rd's discussion, Galen made some changes to the specimen area of the model. Specifically, he eliminated the Sample object and created Collected Specimen, Processed Specimen, and Tested Specimen objects as sub-objects to Specimen. These 3 sub-objects may not be in the final model (with any information added to Specimen) but are useful as helper objects during analysis.
* Anne and Cindy brought up a question on how detailed we want to get with this modeling. Anne feels that it should not be too detailed as that can cause 'analysis paralysis' and be too prescriptive. Cindy feels it should not be too generic (similar to HL7 v3 abstractions) as that can cause confusion because it does not relate well to the business processes. The needed detail or lack of detail depends upon the audience of the model.
* Galen: the strength and weakness of HL7, particularly v3, is the abstractness of the model. It has the ability to support virtually anything needed in healthcare, but looses linkage to business processes along the way.

## Process/Use case Modeling - Clinical Order/Result - Outpatient

* Cindy reviewed the BPMN diagram developed to illustrate a clinical order/result in an outpatient situation showing the patient going to the lab for specimen collection.
* Mike: Some test orders are written for multiple tests; for some of the tests, the specimen would be collected during the exam at the clinic while other tests would have the specimen collected at the lab (or other specimen collection location). For example, a Well Woman exam may a single order containing testing for pap smear, cholesterol, and blood glucose. The pap smear specimen is collected during the exam at the clinic while the specimens for cholesterol and blood glucose testing occur at the lab.

## General Discussion

* BPMN has added data store and data object artifacts; we may want to use these new objects especially to highlight where a data object is created or used.
* Kosta showed the DICOM document, but it is a very large document (over 1200 pages) and is focused on imaging.
  + Cindy mentioned and showed DICOM Supplement 122 which is focused on specimens for pathology. There are quite a few terms and definitions that may be useful for this Lab-OO effort. She is using DICOM to find needed terms and definitions (see action items below).
  + Anne: about 70% of decisions are based on lab results which may include imaging studies. Therefore, LIS/LIMS are built to be very flexible including being able to react to policy and guideline changes. Where is this group drawing the line on what to include in the information model?

# Action Items

| Start Date | Priority | Action Item | Status |
| --- | --- | --- | --- |
| 12/6/10 |  | Cindy: Send either DICOM Supplement 122 link or document. |  |
| 11/22/10 | Low | Mike-Wendy-Kosta-Galen-Cindy: Define-clarify Specimen-Sample filler and placer order number, test identifier, placer group number and universalServiceIdentifier. Pathology Laboratory uses specs from DICOM (Supplement 122) to describe the various units (specimen, accession number, etc) in their workflow. | In process |
| 11/22/10 | Low | Kosta-Steve : Services Aware Interoperability Framework and Lab-OO FHIMS relevance | In process |
| 11/15/10 | High | Mike, Cindy, Galen: Finalize definitions for and use of different identifiers & numbers in lab domain - filler order number, placer order number, group number, test identifier, etc. | In process |
| 11/8/10 |  | Need to discuss different scenarios involving different people (ward clerk, nurses, physicians, physician's assistants, interns, etc) and who those people would be in a data exchange. | Not started |
| 11/8/10 | Low | Tim (ICLN) to determine if they would like to participate in FHIMS. |  |
| 11/1/10 |  | Cindy will update sample accessioning scenarios. | In process |
| 11/1/10 |  | Anne will write up lab processes to include as additional scenarios. | In process |
| 11/1/10 |  | Cindy to identify and contact FBI person from LRN National Meeting for participation in the FHIMS Lab calls when we start doing Chain of Custody, slated for phase 2. | In process |
| 11/1/10 | Med | Kosta to transform flowchart of outpatient scenario to BPRN. | In process |
| 10/25/10 | Low | Keep in touch with Ted Klein and get material and links   * Update 11/1: Ted waiting for approval to release draft version of volume V | In process |
| 10/25/10 | Low | Kosta-Galen will organize the OpenHealth shared project space for Lab-OO   * Update 11/1: Steve working on organizing the OpenHealth tools project space | In process |
| 10/25/10 | High | Prepare for FHA leadership meeting to present FHIMS domains process | In process |
| 10/25/10 | Med | Contact laboratory experts, LIMS admins, HL7 OO wg   * Update 11/1: HL7 OO WG information shared with interested participants | In process |
| 11/09/10 | Med | Kosta to present relevant material for Automated Laboratory Management, FERN, eLEXNET | In process |
| 11/08/10 | Low | Galen to update weekly the FHIMS Lab-OO model and collaborate with Kosta to update about changes from baseline(map .xls-overview) | In process |

# Completed/Not Tracked Action Items

| Start Date | Priority | Action Item | Status |
| --- | --- | --- | --- |
| 11/8/10 |  | Tim (ICLN) to discuss with DHS the sharing of the Actionable Data Elements spreadsheets with definition. | Not tracked |
| 11/1/10 |  | Cindy to share meeting information for the next meeting when it is sent by the co-chairs. | Completed |
| 11/1/10 |  | Cindy to send flow chart PDF to Anne Pollack | Completed |

# Agenda Next Call: December 6, 2010

* ALL-Kosta-Cindy-Anne: Discuss use case and scenarios(UML,BPMN-Visio/RSA),15-20’