

**FHIMS Lab-Orders and Observation Domain  
Meeting Minutes (January 3<sup>rd</sup>)  
Agenda for the next meeting (January 10<sup>th</sup>)**



**Date/time of call:**

Monday, January 3<sup>rd</sup>, 2011, 10-11:30 AM (EST)

**Call:** 1-800-767-1750, **Passcode:** 84287

Microsoft Office Live Meeting

**Leadership team**

Kosta Makrodimitris, Galen Mulrooney, Cindy Vinion

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

**Agenda**

- ALL: Milestones-Plans-Risks for modeling & use cases/Final Report 2010 iteration
- ALL-Galen: Information Modeling and patterns
- ALL-Kosta-Cindy-Anne: Discuss use case and scenarios

## January 3, 2011 Meeting Minutes

### Attendees

Neelima Chennamaraja, VA  
Ira Lubin, CDC  
Kosta Makrodimitris, FDA  
Galen Mulrooney, VA  
Anne Pollock, CDC  
Steve Wagner, FHA

### Summary of Discussion

#### Information Modeling and Design Patterns

Galen clarified the HITSP(C32 profile on IHE of HL7 CCD) and IHE are two profiles came after HL7 to lock it down further. NIEM is a more restricted version of HL7 CCD that we try to implement. HL7 CCD allows all the possibilities and then each agency come up with specific profiles (IEPD process).

Kosta opened a discussion on how we can apply certain design patterns (strategy, bridge...GOF) that allows to implement commonalities for each agency and particular 'strategies' customized for specific agencies cases. This will allow cases to coexist in the static information modeling framework but will give the flexibility for each agency to have their own concrete implementation or categorization of their lab scenarios.

Galen liked the idea and we may think if we need structural or behavioral patterns and we can have a separate WG to talk about. In this way we don't need to eliminate the VA baseline or case but coexist with other agencies cases. Perhaps this will bring a lot of possibilities and complexity but it seems that this is the real word we need to capture.

#### Use cases and updates

Anne discussed with the group a HIMSS article about order (Appendix)

*All orders need to have the possible scenarios for times of completion, locations of completion, and completing personnel carefully thought out so the possible permutations of the order can be designed. There also needs to be a methodology for finding orders that never get completed*

#### Planning Discussion

Galen will be in HL7 meeting in Australia the next couple meetings. We will focus on definitions and terminology of the current models and classes(attributes) and Galen will automatically generate an Excel relevant table. In addition Kosta, Cindy and Anne will focus on some specific use cases and discuss the ISDS papers and work.

## Action Items

Start Date	Priority	Action Item	Status
11/22/10	Low	7) Wendy-Kosta-Galen-Cindy: Clarify Specimen-Sample filler and placer order number, test identifier, placer group number and universalServiceIdentifier. The Pathology Laboratory uses specs from DICOM (Supplement 122) to describe the various units (specimen, accession number, etc) in workflow.	In process
11/22/10	Low	8) Kosta-Steve: Services Aware Interoperability Framework and Lab-OO FHIMS relevance (Lab-OO HL7 domain has done some work, Cindy)	In process
11/15/10	High	9)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.	
11/8/10		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	11)Tim (ICLN) to determine if they would like to participate in FHIMS.	
11/1/10	Low	12)Cindy will update sample accessioning scenarios.	In process
11/1/10	Med	13)Anne will write up lab processes to include as additional scenarios.	In process
11/1/10		14)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.	Not started
11/1/10	Med	15) Kosta/Cindy to transform flowchart of outpatient scenario to BPMN. The first BPMN 1.2 draft is done and need to review and add data objects.	In process
10/25/10	Low	16)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	Med	17)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	18)Kosta to present relevant material for Automated Laboratory Management, FERN, eLEXNET . Kosta may invite some experts for Medical Countermeasures from the FDA agency and collaborating contractors.	In process
11/08/10	Low	19)Galen to update weekly the FHIMS Lab-OO model and collaborate with Kosta to update about changes from baseline(map .xls-overview)	In process (recurring)
11/17/10	Low	20)Kosta-Galen-Cindy-Steve-Neelima to prepare and design a FHIMS-Lab-OO poster accepted for AAAS meeting in DC(Feb-20th 2011)	In process
11/17/10	Low	21)Kosta to invite CFSAN statisticians to present possible scenario for lab collaboration with CDC (sample hygiene-diseases)	In process
11/17/10	Low	22)Kosta to prepare sample use case for FDA/ORL lab automation and model in BPMN(draft completed). Present and organize library of BPMN cases.	In process
11/17/10	High	23) Kosta-Cindy-Galen-Steve: Plans and documentation of modeling efforts and cases during the next 3 meetings as the end of the 2 <sup>nd</sup> iteration of the Lab-OO. Schedule and plan the 3 <sup>rd</sup> iteration Jan-April 2011	Not started

## Completed/Not Tracked Action Items

Start Date	Priority	Action Item	Status
11/8/10		6)Tim (ICLN) to discuss with DHS the sharing of the Actionable Data Elements spreadsheets with definition.	Not tracked
11/1/10	Low	5) Cindy to share meeting information for the next meeting when it is sent by the co-chairs(ICLN).	Completed
11/1/10	Low	4) Cindy to send flow chart PDF to Anne Pollock	Completed
10/25/10	Low	3) Kosta-Galen will organize the OpenHealthTools shared project space for Lab-OO, Update 11/1: Steve working on organizing the OpenHealth tools project space	Completed
10/25/10	High	2) Prepare for FHA leadership meeting to present FHIMS domains process (Steve-Sean presented,Nov-2010)	Completed
10/25/10	Low	1) Initiate a dictionary of terms and definitions for Lab (Cindy, draft)	Completed
12/3/10	Low	24) Kosta updated minutes, material, HL7 2.5.1 resources, HITSP cases in OHT shared space	Completed

## **Agenda Next Call: January 3<sup>rd</sup> 2011**

- ALL-Kosta-Anne: ISDS(International Society for Disease Surveillance) documentation
- ALL: Lab class definitions for the models
- ALL: Milestones-Plans-Risks for modeling & use cases(3rd iteration)
- ALL-Kosta-Neelima-Cindy: Discuss use case and scenarios

# Appendix

## News

### What's So Hard about Order Entry? part 3

by R. David Allard, MD

*Following is the third and final article of a three-part series on Computerized Practitioner Order Entry or CPOE. Check the October and November editions of the HIMSS Digital Office to read the other articles about this important component of the electronic health record.*

#### **I placed the order, where is the meal?**

Simply allowing providers to place orders isn't enough. Those orders need to be correctly routed to whatever group will carry out the instructions. Sometimes, this can be very straightforward. If the radiology department has decided to schedule all MRIs centrally, routing those orders to one task list may be sufficient. However, there are many times when the provider may not know who will execute an order.

If the patient is asked to get lab work done next week, and they can walk into any of several different possible locations, routing the order to a task list may just be unwanted noise since the order is useless until the patient returns. At that time, it may be easier to just look at the patient chart and find the order there.

Some orders should be flexible. If a lab test or immunization is desired in the office or on the hospital unit right now, then the order should be routed to the person or persons responsible. If that order is for a later date or at a different location, it should be routed elsewhere or only be viewable in the patient chart. All orders need to have the possible scenarios for times of completion, locations of completion, and completing personnel carefully thought out so the possible permutations of the order can be designed.

There also needs to be a methodology for finding orders that never get completed. It is well-documented that patients do not always carry out their physician's instructions. Any order entry system needs to allow for what happens when an order is "orphaned."

#### **Does this ever end?**

Consideration needs to be given for what marks an order as complete.

- Is a CBC order finished once the blood is drawn and sent to the lab?
- Is the order marked as complete only once the result is returned?
- Is the order only complete when the ordering provider has reviewed the result-or even communicated that result to the patient?

The circumstances by which orders can be finished and forgotten need to be carefully delineated.

One reason is so we are not continually looking at work that is already done but also so we may not lose work which is incomplete. This is also a significant consideration for workflow so staff are not spending inordinate amounts of time "checking the box" when they could be going on to other work.

Placing and fulfilling orders is the cornerstone of care, but we can't keep the doors open unless orders can lead to a billable charge as well. Therefore, each order needs to be able to map to the correct charge, ideally with the correct edits (e.g., authorizations for big-ticket items, modifiers). In one sense, that means creating a second order catalog because there are a number of rules about charging. Some orders require additional information or extra steps, like a prior authorization. Others can just be completed as is.

Certain orders with certain diagnoses require different information. In addition, each order and the charge it spawns needs to be assigned to the correct encounter so the charge can be mapped against the right insurance. There are also billing rules to determine if certain orders are allowed by a given insurance and diagnosis. This is called medical necessity checking.

The back-end work of charge capture based on orders has similar complexity and depth to the orders themselves. Matching the need for this information with the necessity to not turn providers into coders requires a fine balance.

#### **The better the order, the tastier the meal**

The training of medical professionals gives a broad base of knowledge on which to draw when placing, interpreting and fulfilling orders in the paper world. Moving to CPOE means including much of that knowledge, and the assumptions people use every day, in a strictly outlined, black-and-white setting. Even though this is a Herculean task, the promise of CPOE is compelling and has inspired enthusiasm from the government, payers, providers and patients.

So, we will keep going to meetings and doing this transformational work. Finally, remember to put your foot into the shoe before pulling both laces tight and looping the left over the right.