#### **FHIMS Lab Domain:**

Order, Perform, Observe, Interpret, Store, Report, Receive Meeting Minutes (April 18<sup>th</sup>)

Agenda for the next meeting (April 25<sup>th</sup>)



#### Date/time of call:

Monday, April 18<sup>th</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, Neelima Chennamaraja Website: https://www.projects.openhealthtools.org/sf/projects/fhims/

## <u>Attendees</u>

David Bass, VA
Neelima Chennamaraja, VA
Mike Fitch, DoD
Glenn Hatfield,
Nikolay Lipskiy, CDC
Kosta Makrodimitris, FDA
Galen Mulrooney, VA
Vijay Varma, Atlanta VA Medical Center
Cindy Vinion, NG/CDC
Steve Wagner, ONC

## **Agenda**

- ALL: Milestones-Plans-Risks for modeling & use cases (3rd-4th iteration), 5'
- ALL-Kosta-Cindy S&I LRI communication and subgroups, Terminology 5'
- ALL-Galen: Information Modeling (classes, patterns, granularity),45'
- ALL-HL7 ballots May-cycle (EHR, clinical, blood, gen testing etc) 5'
- ALL-FHIMS WG Cases, Style, Maps(HL7, HITSP, CLIA, EHR, LOINC), Metrics,5'

<u>Guiding principal</u>: FHIM Lab-OO will distinguish and categorize lab tests and results, and reports based upon the data needed to:

- (1) Order the test,
- (2) Perform or process the test,
- (3) Obtain, interpret and store data/results of the test,
- (4) Report and/or release the (full/partial) results,
- (5) Receive, interpret and process the report.

**Actors:** Hospital, Clinic, Lab types, Public Health Agency (fed-state-local), Patient, Physician, Nurse

## **Summary of Discussion**

#### Milestones-Plans-Risks

- We are 2 weeks from the end of the iteration and need to complete this iteration and plan for the next iteration.
  - Galen We focused on specimen in the last iteration and test and test results for this iteration. We need to complete and clean up test and test result model areas and then move on. Suggestion is to move to pathology reporting next iteration.
  - Vijay What do you mean by "pathology"? Anatomic pathology e.g. tissue pathology, or clinical pathology such as glucose or blood testing? Anatomic pathology has largely not been modeled since the reports are currently looking for textual information (descriptions); however, more robust modeling could be done. For example, cancer biopsy and cancer resection information are often more structured.
  - o Mike We must be careful that we do not become too specific in the model.
  - Mike For the most part, we use the term "lab" to mean clinical pathology and "pathology" for anatomic pathology.
  - Kosta Vijay's help would be instrumental for modeling pathology including sharing the data model and data dictionary from the system Vijay's team built. Vijay may lead an additional subdomain related to pathology in the next iteration.
- Mike We may want to consider modeling blood banking including tracking the blood product into the recipient patient (donor information is strictly regulated by FDA).
  - Cindy That sounds like it could be a separate domain for FHIM similar to Pharmacy.
     Especially if it involves tracking blood products into patients which is similar to a substance administration of medication.
  - o Galen has been thinking about pulling substance administration out of the Pharmacy domain and making that a separate domain in FHIM.
  - Kosta, We'll create an additional sub domain and case under Lab domain to cover Mike's suggestion on blood banking related to laboratories
- Kosta would like to finalize the mapping of C36 and C37 by the end of April.
  - Galen has looked at C37 (CDA for lab) to map that to the FHIM model and/or identify any missing information. However, C37 isn't very clear as to what data elements needed but he has able to glean some criterion for selecting the appropriate reference range from the document.
- Ira Genetics has some use cases they could submit for inclusion in FHIM Lab; how should they be prepared for submission?
  - Kosta Whatever you have would work; from a user story to diagrams. S&I has a template to consider (actors, preconditions, post conditions). We'll need to create at the end artifacts useful to our models(information-terminology)
- Nikolay FHIM is starting a Public Health domain; who from Lab would like to participate?
   Kosta? Cindy? Others?
  - Kosta Kosta and Neelima would like to participate.
  - o Cindy Would need to check with her client.

#### RESOURCES

- EHR-S functional profile http://www.hl7.org/ehr/
- HL7 common relevant ballots for May cycle

#### **ANNOUNCEMENTS**

- Public Health Informatics conference this summer in Atlanta: Engaging, Empowering, Evolving...Together <a href="http://www.cdc.gov/phiconference/index.html">http://www.cdc.gov/phiconference/index.html</a>
- National Medical Laboratory Professionals Week
  - o http://www.ascls.org/?page=NMLPW
  - http://www.ascp.org/mainmenu/laboratoryprofessionals/labweek.aspx
  - o http://csmls.org/en/nmlw.html
- New forum on FHIMS OHT <u>Federal Partners Standards Coordination</u> (discuss common standards, bring updates, review ballots)
- New forum on FHIMS OHT <u>FHIMS concepts & maps</u> (Describe, visualize, relate, map, trace FHIMS WG related concepts and dimensions) that will integrate with terminology/definitions/glossary documents

## Agenda Next Call: April 25th 2011

ALL: Finishing 3rd iteration (reports, EHR, C36/C37, CLIA 30'

ALL: Milestones-Plans-Risks for modeling & cases (4th iteration), 15'

ALL-Kosta S&I LRI communication and subgroups, Terminology 5'

ALL-Galen: Information Modeling (classes, patterns, granularity), 15'

ALL-FHIMS WG Cases, Style, Maps (HL7, HITSP, LOINC), Metrics, 5'

## **Action Items**

Start Date	Priority	Action Item	Status
11/22/10	Low	7) Wendy-Kosta-Galen-Cindy: Clarify Specimen-Sample filler and placer order nr, test	In process
		identifier, placer group number and universalServiceIdentifier. The Pathology Lab uses	
		specs from DICOM (Supplement 122, specimen, accession number, etc) in workflow.	
11/22/10	Low	8) Kosta-Steve Hufnagel: Services Aware Interoperability Framework and Lab-OO	In process
		FHIMS relevance (Lab-OO HI7 domain has done some work, Cindy)	
11/15/10	High	9) Mike, Cindy, Galen: Finalize definitions for and use of different identifiers & numbers	In process
		in lab - filler order number, placer order number, group number, test identifier, etc.	
11/8/10	Med	10) Need to discuss different scenarios involving different people (ward clerk, nurses,	Not started
		physicians, physician's assistants, interns, etc) and people in a data exchange.	
11/8/10	Low	11) Tim (ICLN) to determine if they would like to participate in FHIMS.	In process
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	Low	14) Cindy to identify and contact FBI person from LRN National Meeting for	Not started
		participation in the FHIMS Lab calls when we start doing Chain of Custody, phase 2.	
11/1/10	Low	15) Kosta/Cindy to transform flowchart of outpatient scenario to BPMN. The first BPMN	In process
		1.2 draft is done and need to review and add data objects.	
10/25/10	Low	16) Keep in touch with Ted Klein and get material and links	In process
		Update 11/1: Ted waiting for approval to release draft version of volume V	
10/25/10	Med	17) Cindy- Contact laboratory experts, LIMS admins, HL7 OO WG	In process
		Update 11/1: HL7 OO WG information shared with interested participants	
11/09/10	Med	18) Kosta to present relevant material for Automated Laboratory Management, FERN,	In process
		eLEXNET, Sentinel and Medical Countermeasures (FDA/contractors/partners)	
11/08/10	Med	19) Galen to update weekly the FHIMS Lab-OO html model and collaborate with Kosta	In process
	1.	to update about changes from baseline(map .xls-overview)	(reccuring)
11/17/10	Low	21) Kosta to invite CFSAN statisticians, lab experts to present possible scenario for	In process
44/47/40	1.	Lab collaboration with CDC (sample hygiene-diseases)	
11/17/10	Low	22) Kosta to prepare sample business case for FDA/ORA ALM lab automation and	In process
00/4/44	10.1	model (draft). Organize library of BPMN cases, EHR functional mapping	
03/4/11	High	28) ALL Business cases diagrams, EHR functional model mapping, robustness model	In process
03/18/2011	1111-	and data exchange elements to standardize	
03/18/2011	High	29) Dr. Varma introduced by W.Scharber communicated with Lab-FHIMS to join the	In process
03/25/2011	High	domain and learn more about the modeling efforts at ONC/FHA	In manage
03/25/2011	High	30) Maps to our classes, domains, agencies(strategy, framework, spreadsheets)	In process
03/25/2011	High	31) Galen will send email to Vijay-Mike to research isUrineScreenPositive" and	In process
03/23/2011	Iligii	"sputumScreenResult" attributes	iii piocess
04/04/2011	High	32) Galen-Neelima evaluate and report on HL7 2.X c36, c37 coverage so far	In process
04/04/2011	High	33)Kosta reports on FHIM-EHR mapping and coverage	In process
04/04/2011	High	34) Anne reports on CLIA conformance	In process
04/04/2011	High	35) Cindy-Anne prepares definitions and document on ambiguous terms (ELR, EHR)	In process
04-14-2011	High	37) Cindy-Kosta-Galen- prepare presentation for PHI-CDC conference in August	In process
U P I T EUI I	9	or, order carent property production for the objective in August	procoos

**Completed/Not Tracked Action Items** 

	Oompicted/Not Tracked Action items				
Start Date	Priority	Action Item	Status		
11/8/10	Low	6) Tim (ICLN) to discuss with DHS the sharing of the Actionable Data Elements spreadsheets with definition.	Completed		
11/1/10	Low	5) Cindy to share meeting information for the next meeting when it is sent by the co- chairs (ICLN).	Completed		
11/17/10	Low	20) Kosta-Galen-Cindy-Steve-Neelima to prepare and design AND PRESENT a FHIMS-Lab-OO poster accepted for AAAS meeting in DC(Feb-20th 2011)	Completed		
2/28/11		25) Kosta - Develop definitions for structured and unstructured data (S& LRI WG)	Completed		
2/28/11	High	27) Develop overview and plan for Lab domain using the Report of 2010 document.  Deliver to Steve 3/18/11	Completed		
03/4/11	High	24) Kosta-Galen Create space for 6 sub-WG under Lab domain(HITSP-EHR, FERN, Sentinel, cancer-pathology, genetics, lab report exchanges)	Completed		
11/17/10	High	23) Kosta-Cindy-Galen-Steve: Plans and documentation of modeling and cases during the last 3 meetings the 2 <sup>nd</sup> iteration. Schedule the 3 <sup>rd</sup> iteration Jan-April 2011	Completed		
04-14-2011	High	36) Cindy-Kosta-Galen-Nikolay prepare abstract for PHI-CDC conference in August	Completed		

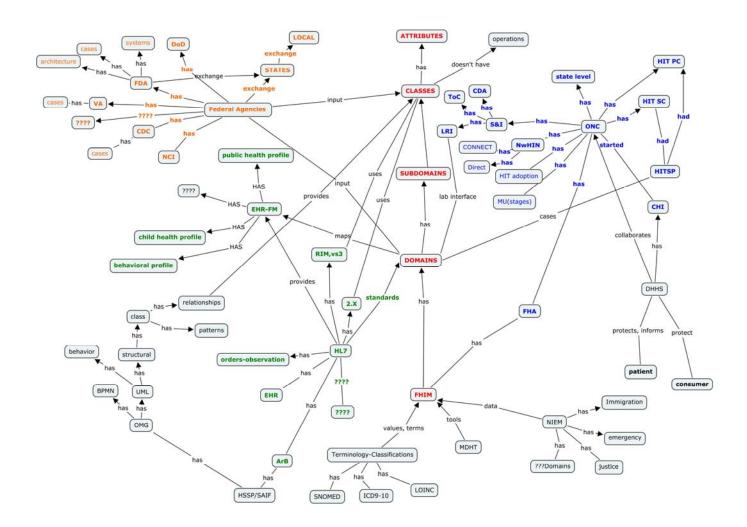
# **Appendix**

By Kosta Makrodimitris (conceptual maps for FHIM, General FHIMS meeting 2011-04-15)

I created a forum in OHT on FHIMS high level concepts-map

The goal is to update/maintain this <u>graph</u> and have similar specific ones for domains and subdomains in the future.

Anyone can reply with comments to the forum in order to finalize a first version for the process-style guide this/next month.



**Abstract submitted to** Public Health Informatics conference this summer in Atlanta: Engaging, Empowering, Evolving...Together <a href="http://www.cdc.gov/phiconference/index.html">http://www.cdc.gov/phiconference/index.html</a>

## Harmonizing Federal Health Information Models and Standards in Laboratory Domain for Public Health

#### **Abstract Text:**

Federal partners have identified information modeling as one of the foundational elements of long term interoperability and have asked Federal Health Architecture (FHA) which is managed by the ONC for Health Information Technology to initiate the FHIMS WG to produce a logical, business-focused health information model along with a terminology model. This effort aims to support interoperability by harmonizing information from the Federal partners and standards organizations. In order to accomplish this goal, FHIMS WG has established several domains with each focused on a specific area of health information exchange and modeling.

Utilizing existing reference models, FHIMS Laboratory domain seeks to identify the information and terminology requirements needed to exchange laboratory information between healthcare organizations, government agencies, and laboratories inclusive of laboratory testing for people, animals, environment, and inanimate objects. In performing this activity, FHIMS Laboratory domain will explore and document the business processes and scenarios that require the transmission of laboratory information.

FHIMS Laboratory domain has identified public health use cases and sub-domains which include but not limited to, genetic testing, disease registries (cancer), public health laboratory data exchange, testing for active (sentinel, medical products), syndromic (diseases) and passive surveillance purposes, and laboratory interoperability and response networks(food safety).

In addition to providing a logical information model, the FHIMS Laboratory domain collaborates with other ONC efforts such as the Standards & Interoperability (S&I) Framework Laboratory Results Initiative (LRI) established to promote Meaningful Use. Working from a common set of use cases, the information models from our project will be utilized by S&I LRI as the basis for selecting appropriate data exchange formats, i.e., HL7 messages, and terminology for use in those messages. Collaboration between these ONC efforts ensures that these efforts result in consistent, harmonized products.