

# Minutes

Laboratory LOINC Meeting  
June 7, 2005

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## 1 News

- 1.1 California Clinical Data Project – new version released for comments - [Handout A](#)  
This is one of several activities taking place in California. Eric Haas and Ray Aller expressed concerns about this particular project.
- 1.2 The Notice of Proposed Rule Making (NPRM) for XML attachment. The 10<sup>th</sup> HIPPA standard deals with clinical attachments which will be used to support claims. A request by a payer for additional information will use LOINC codes. The NPRM should be released soon.
- 1.3 New RELMA features
- Can create a local term file from a huge set of HL7 messages.
  - Captures OBR and OBX names and codes, units, normal ranges and sample value data. (Per request Utah). HL7 message digester (creates synthetic master file with sample data from huge number of HL7 messages).
  - Now provides option for showing only a sample of the results process and statistical information about the values and bug fixes in intelligent mapper
  - HL7 Lint - [Handout B](#)  
Finds bad messages based on finding units of measure strings that are out of place. We will add more semantics problems and classifiers with time. This will be distributed under the same license as RELMA.
- 1.4 LOINC language support
- Updates to the Simplified Chinese (glyphs) for all lab tests
  - Complete Spanish translation from Dr. Guillermo Reynoso in Argentina

- Spanish translation of the user guide has been created. We are waiting for a copy to post to the LOINC website.
- German mirror site
  - German Institute of Medical Documentation and Information (DIMDI) has created a mirror site of the LOINC web site (<http://www.dimdi.de/static/en/ehealth/loinc/index.html>).
  - A German translation of the users guide is expected soon.

- 1.5 Further addition to and improvement of Radiology terms
- 1.6 Mapping of CPT to LOINC has started with blessings of AMA and NLM. The mapping will only be available to those with a CPT license. AMA will distribute with their release and NLM will distribute. We hope we can distribute in the RELMA tool because it will facilitate mapping (alternatively will need to provide an import mechanism from CPT).
- 1.7 MEPAC report encouraged the requirement of LOINC for lab reporting. [Handout C](#)
- 1.8 Economist mentioned LOINC in a recent article. [Handout D](#)
- 1.9 VA mapping effort – More than 200K terms mapped.
- 1.10 Other requests for usage from Saudi Arabia & Korea.
- 1.11 Interest in non lab LOINC
  - GE wants to use Radiology terms
  - DICOM wants to propose Cardiac cath terms
  - Interest from Pulmonary function groups too

## 2 Issues and discussions

- 2.1 Report on progress in Ontario Pediatric Network (Gil Hill). eCHN (Electronic Children's Health Network) continues to expand to link all organizations involved in pediatric care.
- 2.2 Report from CDC and Washington (Steve Steindel) background from Dr. McDonald

### 2.2.1 CDC effort to organize HIV tests

CDC (Laurie Kamimoto) will be requested 4 new tests for viral load based on units (Copies/ml vs. Log copies) and two specific detection thresholds. They will also include vendor and kit names for the tests that fit in each category.

### 2.2.2 Hierarchies **Handouts [E1](#), [E2](#), [E3](#) & [E4](#)**

These can be generated in RELMA. Should probably make “complete” (at least in lab) using methodless as parent of methodful tests –this would imply some hand re-arranging- and would be available for Attachment queries e.g. specific proteins from organisms would be sorted below a specific method – not as separate entities and FLD or XXX as parent for specimen related tests. (There are other issues).

Probably would like to include organism – lumping DNA, antigen and cultures under organism but separate category for antibodies.

## 2.3 Panels

Pam Banning submitted a large file containing panels with attached LOINC codes - [Handout F](#).

We would like to get additional submissions of panels from referral labs that include test elements along with their respective LOINC codes.

Committee members requested guidance on what to submit and how to submit requests. The establishment of rules was recommended.

Some committee members questioned the value of panel codes, while others felt that there was a need for panel codes.

## 2.4 Point of care testing. [Handout G](#)

If laboratories use the term in their testing and it is a common test, we can create a separate LOINC term- with POC added to the method and explanation that it implies a different (usually small) instrument with direct loading of blood into the instrument and often a different level of supervision by the lab, and often include reports of the QC test in the kit. (New terms)

The committee moved to accept proposals for POC testing.

## 2.5 Fractions vs. Percent

Distinguishing fractions reported as percent vs. those reported as absolute fractions. Hemoglobin A1c reported in Canada is most often as absolute fraction.

On one hand this is no different than the problem of values with two units scaled by powers of ten. On the other hand % and nothing- can be easily confounded because percent is not in some sense a unit.

One solution would be to add the string % to existing terms with Hemoglobin A1c and create new terms for absolute percent. Note we have included % in the short names for all fractions. The problem is that a widely known symbol for the other case (pure fraction) does not exist. To keep people from being confused, we could solve this in short term by being specific about Hgb A1c, but the problem could apply to any fraction.

This also relates to questions about unit specific LOINC codes. Many requests for them- Tests come in as unit specific. And most receivers store as unit specific test. Worth exploring. But how to represent – build a structure into LOINC code- so folks who want to ignore units could and add 7<sup>th</sup> part to LOINC name

The committee decided to pursue the creation of distinct codes for SI units. Gil Hill will bring suggestion to the next meeting.

Related discussion about creating distinct LOINC codes for each variants of units (mg/dL vs ug/dL). It was decided that we would not proceed with this at this time.

## 2.6 “Brand name tests” with special processing and or algorithms How to deal with

Examples:

- StaClot Lupus anticoagulant testing
- VAP cholesterol fractions and risk analysis
- Fibrosure – estimate of liver damage in Hepatitis C infections based on 5-6 enzyme tests – [Handout H](#)
- HIV computed susceptibility tests (virtual phenotype)

Would propose to distinguish variables that are “unique” without using brand name-either by use of

- special characteristics (egg. hexagonal phospholipids for StaClot)
- the published reference (author year as we have for estimated gestational age)
  - E.g. fibro sure algorithm: Imbert-Bistmut F 2001 lancet (as part of method)

We would define a panel to package them together and use brand name as a synonym.

2.7 D-Dimer

It has come to our attention that there are different methods for D-dimer testing with two different threshold sensitivities with 2 different units – ng/mL FEU and ng/mL DDU. Different LOINC codes will be required.

3 Other Business

3.1 We frequently have had requests from customers of reference laboratories for information on who to contact for information about the tests that they perform.

According to the representatives at the meeting, Quest Diagnostics is in the process of consolidating all of their laboratories with the aim of eliminating legacy systems

3.2 Pam Banning reported that 3M Terminology Consulting Services is available to provide mapping and software tools at a modest price.

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HANDOUTS

Handout A	EHR-Laboratory Interoperability and Connectivity Specification
Handout B	HL7 LINT
Handout C	MEPAC report
Handout D	Economist article
Handout E1	LOINC Class Hierarchy
Handout E2	LOINC Component Hierarchy
Handout E3	LOINC System Hierarchy
Handout E4	LOINC Method Hierarchy
Handout F	Proposed Panels – selected terms
Handout G	Proposed Point of Care Terms
Handout H	The Lancet article - Biochemical markers of liver fibrosis in patients with hepatitis C virus infection: a prospective study