

Minutes
Laboratory LOINC Meeting
March 12, 2004

Committee Members and Guests in Attendance:

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|------------------------|-------------------------------------|
| McDonald, Clem - Chair | Regenstrief Institute |
| Autry, Susan | LabCorp |
| Banning, Pam | 3M |
| Case, Jim | AAVLD, AVMA & UCDAVIS |
| Dale, Jane | Mayo |
| Ellison, Dwain | LabCorp |
| Forrey, Arden | University of Washington |
| Gajda, Andy | Consultant |
| Ganczak, Beverly | AML |
| Hill, Gilbert | Hospital for Sick Children, Toronto |
| Huff, Stan | Intermountain Healthcare |
| Johnson, Cessily | Intermountain Healthcare |
| Leland, Diane | Riley Hospital for Children |
| Mercer, Kathy | Regenstrief Institute |
| Steindel, Steve | CDC |

News and Discussion

- HHS adopts LOINC - Follow up
 - CHI has now adopted LOINC for orders, as well as, for observation reporting
 - HL7 balloted 2nd version of attachment standard (this one is CDA XML) and permits scanned documents as well as structured reports.
 - LOINC codes are used to specify the test sets sought, and identify the actual values of returns
 - Await an NPRM
- Early discussion with AMA regarding possibility of mapping some categories of LOINC to CPT
 - It is a many to many mapping
- HEDIS wants to include LOINC in its definitions
 - **Handout**- new guidelines ([A1](#)) - our past mappings ([A2](#) & [A3](#))
- A group at a hospital southwest of Beijing has translated the August 2002 users guide into Simplified Chinese ([Handout B](#)). They are also interested in translating much of the LOINC database. They have indicated an interest in setting up a Chinese website for LOINC.
- DIMDI is interested in producing German translations of LOINC, RELMA and the users' guides (in addition to CUMUL translations). They are also interested in setting up a mirror web site. [Handout C](#) (email and response)
- We've been getting requests for LOINC discs from the French

- New initiatives are brewing to stimulate the inclusion of LOINC in instrument message streams and test kits.
- CDISC and (likely) FDA commitment to LOINC as part of new drug submission package
 - We have created of some substance/mass indifferent terms for pharmaceutical industry – the property for these terms is MSCNC
- Report from Toronto on progress in Ontario wide reporting (Gill Hill)
 - Electronic Child Health Network (eCHIN) is continuing to expand. In operation for 5 years, it now has 20 partners. The network includes result reporting for laboratory, radiology and discharge notes.
 - Ontario Laboratory Information System (OLIS), operated by the Ontario Ministry of Health and Long Term Care is being created to collect all laboratory results. The family physician project is driving the resurrection of the OLIC project.
- Changes to the LOINC website – <http://www.loinc.org>
 - New - LOINC Change File can be downloaded ([Handout D](#)). This file contains the changes that have been made to the database since the last release.
 - New – Direct web installation of RELMA
 - Download time a bit faster than downloading the zip file
 - But...
 - size is 57,754 kilobytes zipped
 - 10 minutes on high-speed university line (100 Megabit)
 - 25-45 minutes on (200 Kbit/sec) cable link
 - Worse with telephone.
 - Install from CD is 3 minutes
 - Users are warned of the potential time
 - Advantage is ability to install patches and parts of things very fast. So believe we should encourage use of web install.
 - Future additions to the website may include the Chinese version of the manuals and Gil Hill's words of wisdom.
- New RELMA - [Handout E](#)—the summary explanation
 - Differences
 - Map local terms screen has been expanded to contain three interlinked screens
 - Mapping/browsing screen
 - Can enter words all in one field with logic (#, |)
 - Can use, hide and show word input and word count form
 - Better organization and placement of buttons, etc
 - Automatics display of options per term in grid
 - Display of parts and part synonyms for any given term
 - Local file screen
 - Dedicate to contents of local file
 - Can sort, re-arrange columns, and print parts or all of the local file
 - Can include sample data (extract from HL7) as well as units and lab sections to help the mapping
 - Set limits screen
 - Provides same tabs as included in main mapping screen in past
 - Remember to use force consistency with local units- if units included in the local file

- We've made a first pass on distinguishing tests that can only be used only as orders, only as observations or both. An option to constrain on that is now available on the set limits screen.
 - Some places send entire report as a text glob (NOT IDEAL). In this case an order only term may be the only choice for carrying the glob.
- Can constrain on nodes in hierarchies for class, core component, system and method. (more coming)
 - All trees are complete for laboratory terms. Others are still under development.
 - We have defined other trees (property, challenge, scale) that can only be seen in parts connections and in "Propose new term" that have no yet included as constraints
- Deprecated terms can be viewed by setting the control on limits screen.
- Improved entry of suggested new terms
 - Can use existing LOINC as template
 - Heads down keyboard entry now much faster and smoother.
- Continue work with UMLS / MESH , NDF-RT drug links
 - Of 10,000+ part concepts, 7,700 can be found in UMLS.
 - The LOINC parts table was sent to NLM in January for inclusion in UMLS. [Handout F](#) - sample of the parts table file description
 - The plan is to eventually include CUI codes, Mesh codes and NDR-RT codes in parts table. The parts related to a given LOINC term can be viewed in the Parts/Synonyms section of the details screen.
- Continued development of Panels/battery codes and status of "blank/ general" panels
 - [Handout G](#) - table of current panels defined panels
 - We need more panel submissions.
 - Recall that most single tests can also serve as orders.
 - We have flagged terms for which this is true- but needs review and input
 - Blank panels
 - There is a need for panels that will initially be undefined, but will eventually become defined. For instance, in the early stages of an outbreak such as SARS, the panel might initially be called "Unknown respiratory disease screen" and might eventually be called "SARS screen" as more is learned about the agent.
 - We will need to see some specific examples with text description.
 - Although it is recommended that the panels be used for order only, the panel code could be used in the OBX segment to results that are reported as text globs.

Creatinine clearance

- Gil Hill has examined the Creatinine clearance terms and offered suggestions for changes that reflect the current National Kidney Disease Education Program (NKDEP) recommendations. **Handouts – (H1 & H2)** - 2 documents from Gil and NKDEP ([H3_1](#); [H3_2](#))

Newborn/neonatal screens

- We need to verify that we have all of the needed terms [Handout – I](#)
- Testing is usually performed by tandem mass spectrometry. The analyte might be a precursor or a product involved in the disease. Results are usually reported as yes/no for _____ deficiency.
- We would like to see reports from different states and provinces.
- Partners & Mayo will be providing examples as well.

Discussion of LOINC codes for bioterrorism/outbreak agendas

- CDC Agents, Diseases, and other Threats – [Handouts J1 , J2, & J3](#)
- Would/could define “panels” that contained the list of relevant tests per disorder/chemical. E.g. Yesinia Species Tests (using panel format), Benzene tests then group these under a larger panel
- Would this be a special case/extension of the Dwyer/Sable tables?
- We could add defining constraints to the panel structure (and support Dwyer/Sable too) if useful.
- Issues
 - For which diseases should antibodies be included? Which antibodies - IgG, IgM? In Indiana, the interest is IgM only.
 - What new tests do we need? Believe there are DNA tests for almost of the important organisms
 - Viruses are missing
 - Have to remember to look for some organism in routine cultures, e.g. Anthrax in blood cultures. Again harkens back to Dwyer tables.
 - Would define the answers as SNOMED codes
- CDC is working on a terminology distribution system.

Miscellaneous problems and corrections

- Suggestions for expansion/correction of susceptibility terms has been received from John Stelling - [Handout K](#)
- Nucleic acid sequence report – example report from Jim Case – [Handout L](#) (Avian myxovirus fusion protein nucleotide cDNA sequence)
 - Challenge: Sequence is usually a limited part of the genome, and some times a part of a named gene. How to specify that sub?
 - New property = SEQUENCE
 - System = ISLT
 - Component = _____ VIRUS FUSION PROTEIN CDNA
- Automated Protimes are often confirmed manually, so there is a need for new LOINC codes with method of COAG CONFIRM.
- It was suggested that the neutrophil cytoplasmic antibody terms be renamed - [Handouts– M1 & M2](#).
 - NEUTROPHIL CYTOPLASMIC AG.C-ANCA changed to NEUTROPHIL CYTOPLASMIC AB.CLASSIC (synonym = c-ANCA)
 - NEUTROPHIL CYTOPLASMIC AG.P-ANCA changed to NEUTROPHIL CYTOPLASMIC AB.PERINUCLEAR (synonym = p-ANCA)