



Planned Updates to Release Artifacts

Daniel J. Vreeman, PT, DPT, MSc

Regenstrief-McDonald Scholar in Data Standards, Indiana University School of Medicine
Director, LOINC and Health Data Standards, Regenstrief Center for Biomedical Informatics



INDIANA UNIVERSITY

SCHOOL OF MEDICINE

Department of Medicine



Regenstrief Institute

Center for Biomedical Informatics

Better Care. Better Health.

Artifacts We'll Discuss

LOINC Table

LOINC Answers

LOINC Parts

LOINC Multiaxial Hierarchy

LOINC representation in FHIR

LOINC Table

Based on prior Committee recommendation, we are planning the idea of releasing two formats:

LOINC Table Core

LOINC Table Full

Idea is that Core would be a more stable format over the long term. (sort of analogous to Ubuntu LTS)

Draft Core Field List

LOINC_NUM

COMPONENT

PROPERTY

TIME_ASPCT

SYSTEM

SCALE_TYP

METHOD_TYP

CLASS

CLASSTYPE*

VersionLastChanged

CHNG_TYPE*

STATUS

EXTERNAL_COPYRIGHT_NOTICE

VersionFirstReleased

Questions

1. Recommendations for/against draft
Core field list
2. Drop “MIN” as a change type?
3. How long should this format be stable?
 1. 3 years? Rolling pre-announced changes, or just a new version published 2017, 2020, etc.
4. Mass change field names and sizes
before/when this goes live

LOINC Answers

Current State

We publish bindings of LOINCs to answers in the LOINC Panels and Forms File.

Answers/answer lists are becoming more important, useful, and used

Some issues:

- Not all LOINCs that have answer lists are published

- Binding type not published as discrete field

- LOINCs can have only one answer list

Proposed New Artifact

LOINC Answers File (zip of 2 CSVs)

Draft file specification

<http://bit.ly/2gVukvL>

LOINC Parts

Current State

We publish some LOINC Parts in several files:

- LOINC Multiaxial Hierarchy File

- LOINC Document Ontology File

- LOINC/RSNA Radiology Playbook File

- LOINC/SNOMED CT Map Sets File

Allowed use of LOINC Parts is for organizing/being constituents of LOINC terms (not as a standalone terminology)

Since the dawn of time, users have been begging us to release LOINC Parts and their connections to LOINC terms.

In particular, the FHIR community is eager to use them as attributes for selecting/navigating LOINC via FHIR terminology services

Many Issues

LOINC Parts are not managed as stringently as LOINC terms

LOINC Parts are not managed as pure concepts

There are more LOINC Parts than people have seen

The connection between LOINC terms and LOINC Parts is by string matching, so it is dynamic

Haven't historically had Parts for all things

Users are willing to accept this and still really want to use them

Proposed New Artifact

LOINC Parts File (zip of 3 CSVs)

Draft file specification

<http://bit.ly/2gDgknn>

Questions

1. General comments for/against the proposed approach
2. Do you foresee problems with the “overlapping” collection of Parts with the same type for a given LOINC term

LOINC Multiaxial Hierarchy

Current State / Issues

Modest use (240 downloads/yr)

Not all LOINC terms are in the
Multiaxial hierarchy

About 26,000 LOINC terms are not there. (Including about 2,900 active lab terms)

This is problematic for using it as a starting point for aggregating terms or building flowsheets

Proposal

Include all LOINC terms (all classes) in the Multiaxial hierarchy file...even if at a rudimentary level,

For example, just list them under the Class, or a generic misc subclass (e.g. Chem Misc) until we get the attention to place them properly. (Which may be hard in some areas)

Canonical LOINC Representation in FHIR

FHIR Terminology Services

We are collaboratively defining a canonical representation of LOINC for use in FHIR

Specifies generic filters/attributes:

parent, child, ancestor, descendant

Specifies LOINC-specific filters/attributes:

STATUS, COMPONENT, PROPERTY, etc

Highlights our strange field names (fix before release?)

People want to use Part codes here (e.g. compose/decompose)