



Improvements for the OHDSI Vocabularies Support Process

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Vocabulary Management Process



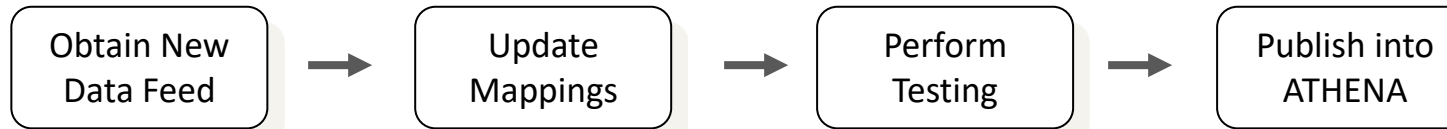
OHDSI Vocabulary Management processes

Demand



Support & Maintenance

refresh process



fixing a bug



User / Requestor



OHDSI Vocabulary Team



Maintenance Process



Raising New Vocab. Request (Step 1)

Describe the problem on forums, if discussion is needed (recommended), for example

<http://forums.ohdsi.org/t/radlex-and-standardization-of-ontology-for-radiology-procedures/4771>



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RadLex and Standardization of ontology for radiology procedures

CDM Builders

SCYou Seng Chan You Aug '18

Hi All,
Currently, I'm working on integration of radiology data with CDM.

While doing so, I found that RadLex was recently incorporated into LOINC. RadLex is a comprehensive lexicon of radiology terms for indexing and retrieval of radiology information resources, specifically aimed at representing clinical content associated with radiology reports.

ncbi.nlm.nih.gov ⓘ

The LOINC RSNA radiology playbook - a unified terminology for radiology procedures.

DJ Vreeman, S Abhyankar, KC Wang, C Carr, B Collins, DL Rubin and CP Langlotz, *Journal of the American Medical Informatics Association* : JAMIA, Jul 2018 01

This paper describes the unified LOINC/RSNA Radiology Playbook and the process by which it was produced. The Regenstrief Institute and the Radiological Society of North America (RSNA) developed a unification plan consisting of six objectives 1) develop a unified model for radiology procedure names that represents the attributes with an extensible set of values, 2) transform existing LOINC procedure codes into the unified model representation, 3) create a mapping between all the attribute values used in the unified model as coded in LOINC (ie, LOINC Parts) and their equivalent concepts in RadLex, 4) create a mapping between the existing procedure codes in the RadLex Core Playbook and the corresponding codes in LOINC, 5) develop a single integrated governance process for managing the unified terminology, and 6) publicly distribute the terminology artifacts. We developed a unified model and instantiated it in a new LOINC release artifact that contains the LOINC codes and display name (ie LONG_COMMON_NAME) for each procedure, mappings between LOINC and the RSNA Playbook at the procedure code level, and connections between procedure terms and their attribute values that are

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Raising New Vocab. Request (Step 2)

Step 2: Create a new issue on GitHub, for example:

<https://github.com/OHDSI/Vocabulary-v5.0/issues/195>

The screenshot shows a web browser displaying a GitHub issue page. The browser's address bar shows the URL <https://github.com/OHDSI/Vocabulary-v5.0/issues/195>. The page header includes the repository name 'OHDSI / Vocabulary-v5.0' and statistics: 42 Unwatch, 66 Stars, and 30 Forks. Below the header, there are navigation links for Code, Issues (43), Pull requests (2), Projects (0), Wiki, and Insights. The main content area displays the issue title 'RadLex as a independent vocabulary for standardization of radiology test #195' with 'Edit' and 'New issue' buttons. A green 'Open' button indicates the issue status. The issue was opened by 'chandryou' on Dec 5, 2018, with 0 comments. The comment content reads: 'We're trying to incorporate imaging study with structured medical information in OMOP-CDM. (https://github.com/OHDSI/Radiology-CDM) For multinational multicenter research using radiology image test, we need to standardize concept_ids for imaging test. Currently, no one knows how to store the imaging procedure (either into procedure table, or measurement table? and which vocabulary??) I proposed to add RadLex as an independent vocabulary system to OMOP for this purpose. RadLex is an standardized nomenclature system for radiology, which was proposed by RSNA (Radiological Society of North America). [Reference for RadLex] Beitia, Anton Oscar, Gilad Kuperman, Bradley N Delman, and Jason S Shapiro. "Assessing the Performance of LOINC® and RadLex for Coverage of CT Scans Across Three Sites in a Health Information Exchange." AMIA Annual Symposium Proceedings 2013 (November 16, 2013): 94–102. Mabotuwana, Thusitha, Michael C. Lee, Eric V. Cohen-Solal, and Paul Chang. "Mapping Institution-Specific'.

On the right side of the issue, there are settings for Assignees (No one—assign yourself), Labels (None yet), Projects (None yet), Milestone (No milestone), and Notifications (Unsubscribe button). A note at the bottom states: 'You're receiving notifications because you're watching this repository.'



Raising a vocabulary bug (Step 1)

Describe the problem on forums, if discussion is needed (recommended), for example

<http://forums.ohdsi.org/t/missing-icd-9-10-codes/4508>

The screenshot shows a web browser window displaying a forum post on the OHDSI forums website. The browser's address bar shows the URL <http://forums.ohdsi.org/t/missing-icd-9-10-codes/4508>. The website header includes the OHDSI logo and navigation links for Home, Forums, Wiki, and Github. The forum post is titled "Missing ICD-9/10 codes" and is categorized under "Vocabulary Users". The post is authored by "esholle" (Evan Sholle) and is dated "Jun '18". The post content discusses a problem with missing ICD-9 and ICD-10 codes in a vendor's crosswalk and the CONCEPT table in the CDM. It mentions specific codes like 044, 320.4, and K07, and discusses the "dagger-and-asterisk" coding convention. The post concludes by asking for input from others familiar with ICD-9/10 codes. The forum interface shows a date filter for "Jun 2018" and a page indicator "1 / 4".

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Missing ICD-9/10 codes

■ Vocabulary Users

 **esholle** Evan Sholle Jun '18

Hi all,

In working on an i2b2 ontology, we recently came across a number of ICD-9 and ICD-10 codes that seem to be "missing" from our vendor's crosswalk between interface terminology and reference terminology.

Looking into this further, we also found that many (but not all!) of these codes are "missing" from the CONCEPT table in the CDM as well. For example, ICD-9 codes 044 and 320.4 aren't there (and don't seem to be in Athena either), but K07 does exist in Athena.

They all seem to be well-covered by other codes: for example, ICD-9 code 320.4 ("Tuberculous meningitis") is also covered by ICD-9 013.00. Likewise, ICD-10 code K07 (dentofacial anomalies) is also covered by M26.

While trying to get to the bottom of this, I came across the concept of the "dagger-and-asterisk" coding convention in ICD-9/10. Many or most of these seem to fall into this category - conditions where two codes exist, one for the etiology and one for the manifestation. But some don't.

This isn't posing any grave issue for us - it's not like we have anything in our source systems that needs to be mapped from these codes. But I am curious about it. Is there anyone out there with more familiarity with ICD-9/10 who can shed some light on this issue? I'm including some (but not all) of the codes below for reference.

ICD-10

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Raising a vocabulary bug (Step 2)

Step 2: Create a new issue on GitHub, for example:

<https://github.com/OHDSI/Vocabulary-v5.0/issues/274>

The screenshot shows the GitHub interface for the repository 'OHDSI / Vocabulary-v5.0'. The issue title is 'Lymphocytic Leukemia Incorrect Descendants #274'. The issue is marked as 'Open' and was created by 'clairblacketer' on 17 Dec 2019. The issue description states: 'It seems that the concept_id 440059 (recurrent disease) is listed as a SNOMED to MedDRA equivalent in the CONCEPT_RELATIONSHIP table to 6 different leukemia preferred terms. This causes 4282316 (recurrent major depression) to become a descendant of 35104382 (lymphocytic leukemia)'. The issue has 0 comments and 0 assignees. The repository has 42 watchers, 97 stars, and 43 forks.

OHDSI / Vocabulary-v5.0

Watch 42 Star 97 Fork 43

Code Issues 67 Pull requests 9 Actions Projects Wiki Security Insights

Lymphocytic Leukemia Incorrect Descendants #274

New issue

Open clairblacketer opened this issue on 17 Dec 2019 · 0 comments

clairblacketer commented on 17 Dec 2019

It seems that the concept_id 440059 (recurrent disease) is listed as a SNOMED to MedDRA equivalent in the CONCEPT_RELATIONSHIP table to 6 different leukemia preferred terms. This causes 4282316 (recurrent major depression) to become a descendant of 35104382 (lymphocytic leukemia).

Assignees
No one assigned

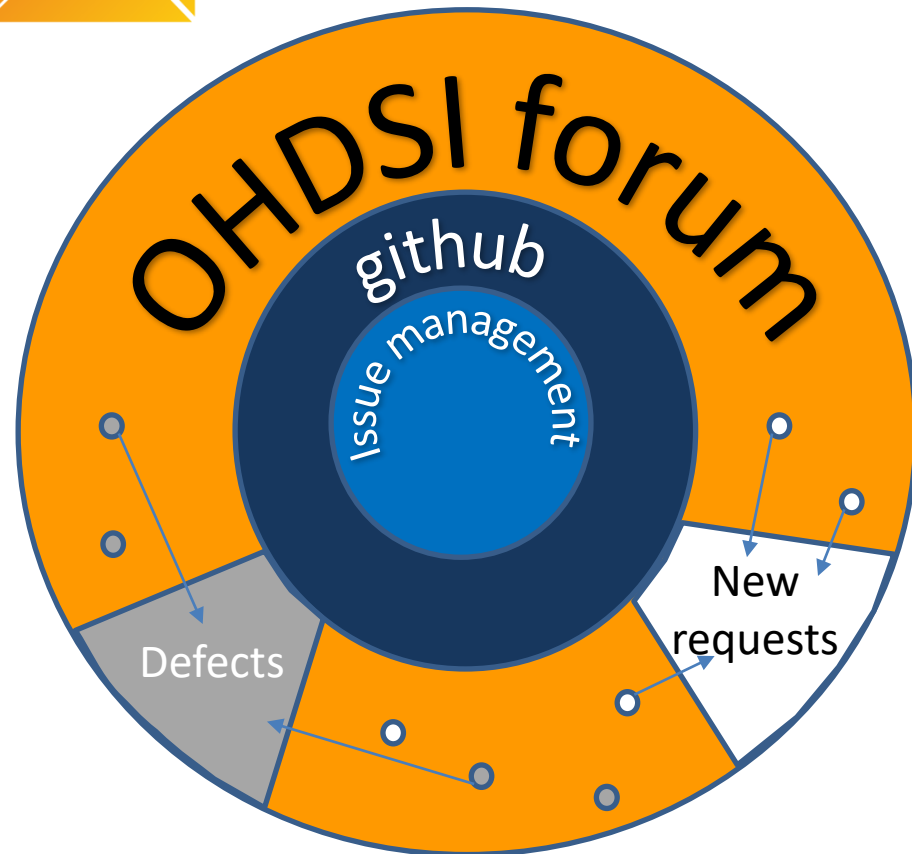
Labels
None yet



Possible improvements



Proposed Adjustments for Support



- Provide dedicated forum category for defect handling and new requests?
- Vocabulary team monitors and responds to as a priority
- Try to avoid posting requests in various places
- Vocabulary team monitors and responds to github issues



Enhanced Transparency

- Improve github issue reflection into Forum post
 - Publish status for pending requests and refresh schedule for existing vocabularies
 - Future Improvement idea: Create extension to ATHENA to provide access to vocabulary metadata (readme, release notes)
 - Continuous improvement in consolidating documentation and related artifacts
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Take home message

- New vocabulary demand
 - Find convincing arguments & get allies at the Forum
 - Present the demand to OHDSI decision making
- Suspected vocabulary defect
 - Start a discussion at the Forum
 - high probability of a defect > github issue



Decision for new demand

- CDM Working Group reviews requests*
 - Every 1st Tuesday of the month
 - Meeting notes reflect decision steps

* “OMOP CDM and Vocabulary Development” or “CDM and THEMIS”