July 2019 Early Visibility Release Notices - Planned changes to upcoming SNOMED International Release packages

Overview of Current Notices

For additional Relevant links with regards to <u>Content Development</u> <u>Information</u> please click here <u>Content Development Information</u>

| ltems | Proposed improvement | Planned Release date |
|-------|----------------------|--|
| | | (*this is provisional only and is subject to change) |

| 1 | Replacement of the Stated Relationship files with the new OWL Axiom refset files Following on from all of the previous announcements providing early visibility of the transition plan, SNOMED International would now like to provide technical details of the planned migration from Stated Relationships to OWL files. This plan has been discussed and agreed with numerous stakeholders from the community, and will be implemented over the course of the next two International Releases, as follows: January 2019: • The International Edition package (<i>packageA</i>) will include both active Stated Relationships plus a <i>partial</i> OWL file containing a subset of the OWLAxioms. This file will contain both OWLAxiom + OWLOntology refsets combined into one OWLExpressionFull_INT_20190131.tt • sct2_sRefset_OWLExpressionFampshot.INT_20190131.tt • sct2_sRefset_OWLExpressionFull_INT_20190131.tt • sct2_sRefset_OWLExpression/Package (<i>packageB</i>) containing a complete set of OWL records (including all Axioms - sufficient, transitivity etc) set to January 2019 effectiveTimes, as if this was the complete O WL file that we will introduce in July 2019. This package would also contain all stated relationships from the previous release (July 2018 International Edition numked as inactive. <i>packageB</i> will therefore act as a second Demonstration release (similar to the September 2018 package), allowing everyone to thoroughly trial how the July 2019 Int Edition will work for them in practice. It will, therefore, retain the same nomenclature and formatting as the Sept 2018 Demo release, with everything x prefixed and labelled to wara agains use in Production clinical systems. <i>packageB</i> will be published in MLDS alongside the International Edition, and will therefore be available to everyone who has access to the International Edition, and will therefore the avaintice of the | January 2019 International Release + July 2019 Inte national Release |
|---|---|---|
| | Ionger required. Anyone who isn't yet ready to move forward with OWL will therefore remain on the January 2019 International Edition until they are ready to update to OWL with the July 2019 version onwards. Release Notes will be updated to clearly explain all of the above. The inferred relationship file will maintain the same format and structure, though it will no longer contain all necessary and sufficient conditions. The inferred relationship file is represented in Necessary Normal Form for distribution of relationships. It is a collection of all the necessary conditions and represents a subset of the full semantics from the 2018 July release and onwards. Most users will benefit from the improvements in the inferred relationships without requiring changes to their existing systems. A set of documentations has been developed to support the Logic Profile Enhancements. SNOMED DL Profile Enhancements SNOMED CT Logic Profile Specification SNOMED CT OWL Guide (OWL Refsets specification) | |
| 2 | Snomed OWL Toolkit - https://github.com/IHTSDO/snomed-owl-toolkit Classifying SNOMED CT using the Snomed OWL Toolkit - https://youtu.be/-91egY9mJqA Creating an OWL file containing SNOMED CT - https://youtu.be/sfFbMMioA_4 Users should carefully analyse any potential impact to their systems (upload routines, etc) and make provisions for these changes urgently (if not already done), in order to prevent any issues when these changes come into effect in January 2019. Please contact SNOMED International at support@snomed.org with "OWL Axiom refset files implementation question" in the subject line. LOINC timeline changes - please refer to Roadmap link here LOINC | July 2018 and potentially other future |

| 3 | Revision of IS A relationships for anatomy concepts | July 2019 |
|---|--|--|
| | The new anatomy concept model implemented the enhanced Description Logic features, e.g. reflexive and transitive properties, additional axioms, for consistent logical modeling. The inferred IS A relationships from the OWL anatomy ontology have been reviewed and the changes have been implemented in the production. The potential impact to other hierarchies, such as disorders, procedures, observables, situations etc are also reviewed as part of the project. | International Release |
| | The revision of sub-hierarchy 26107004 Structure of musculoskeletal system (body structure) has been planned for the January 2019 release. The rest body systems will be revised in the future releases. | |
| | The subject area for revision of IS A relationships will be determined and updated in the following confluence page. https://confluence.ihtsdotools.org/display/IAP/Revision+of+IS-A+relationships+for+anatomy | |
| 4 | Improvement for the representation of role groups | July 2019 International |
| | It is important to clearly indicate if an attribute is grouped or not because role grouping has impact to semantics and classification results. The majority of the Modeling Advisory Group members recommended explicit representation for role groups. There will be two key improvements for representation in the July 2019 release. The changes are demonstrated in the January 2019 Demo release package. | Release |
| | Firstly, role groups are explicitly stated and represented by the concept 609096000 Role group (attribute) as an object property in the OWL axiom refset. | |
| | Secondly, for the inferred relationship file, role group 0 will be only applied to attributes that are not logically grouped, e. g. not a value of 609096000 Role group (attribute) in an OWL axiom or grouped = 0 in the MRCM. This addresses the potential confusion whether an attribute is grouped or not in the role group 0. | |
| | The improvements will provide consistent representation for role groups in the OWL axioms, inferred relationship file, and diagramming of the concept model. | |
| 5 | MRCM Changes | July 2019 International |
| | MRCM changes in the July 2019 release | Release |
| 6 | Changes to 64572001 [Disease (disorder)] hierarchy | July 2019 Inter national |
| | A bulk operation has been run against 17308 concepts in the << 64572001 Disease (disorder) hierarchy which has copied any inferred attributes into the stated view where they did not already exist. In addition where the Proximal Primitive Parent could be correctly calculated to be 64572001 Disease (disorder) the existing immediate fully defined parents have been inactivated and replaced with Disease. | Release |
| | This process brings these concepts into line with SNOMED International's Editorial Policy of using a Proximal Primitive Parent where all appropriate attributes are stated and classification ensures that the correct parents are assigned in the inferred view. This is considered to be an efficient authoring style as the hierarchy is maintained mostly automatically by the classifier, rather than requiring authors to manually curate parent child relationships within hierarchies. | |
| 7 | Planned changes to 'Co-occurrent and due to' pattern | July 2019 Inter national |
| | During the implementation of the new Description Logic features a conflict was uncovered between the modeling of 'Co- occurrent and due to' and General Concept Inclusions (GCIs). This has resulted in the need to reconsider the modeling of "Co-occurrent and due' and update the Editorial Guide for this area. | Release January 2020 |
| | There are a number of new concepts in the January 2019 release that are based upon the existing guidance for 'Co- occurrent and due to'. The plan is to update the Editorial Guide and all concepts that are currently modeled as 'Co- occurrent and due to' starting from the July 2019 release. | International Release |
| 8 | Revision of 7890003 [Contracture of joint (disorder)] | July 2019 Inter |
| | Contracture of joint and its subtypes have been remodeled to more precisely represent the anatomical structures associated with contracture. Joint contractures are due to abnormal shortening of the soft tissues surrounding a joint as opposed to an abnormal morphology of the bony structure of a joint, so the finding site has been changed to "Structure of X joint region". | national Release |
| | This has resulted in the removal of the previously inferred parent of "Arthropathy" and replaced by "Disorder of joint region" and "Finding of joint movement". | |
| 9 | Revision of 298180004 Finding of range of joint movement (finding) | July 2019 International Release |
| | The concepts under the subhierarchy 298180004 Finding of range of joint movement (finding) are being remodeled to represent the finding site of <<785818007 Structure of joint region (body structure) instead of <<39352004 Joint | |
| | structure (body structure)]. Range of movement of a joint region can be impacted by both bone and soft tissues, therefore the use of 39352004 | January 2020 International Release |
| | [Joint structure (body structure)] was too restrictive and caused issues in other areas of the terminology. These changes will be made over the course of two releases due to the number of affected concepts. | 1000000 |

| 10 | Planned changes to 432119003 Aneurysm (disorder) and descendants Review of the hierarchy with parent concept of 432119003 Aneurysm (disorder) It was noted that there were 4 potential ways of expressing the presence of an aneurysm: • Aneurysm of xxx artery • Unruptured aneurysm of xxx artery • Non-ruptured aneurysm of xxx artery • Non-ruptured aneurysm of xxx artery • Nonruptured aneurysm of xxx artery • A decision was taken to inactivate those concepts of the form 'unruptured/non-ruptured/nonruptured aneurysm of xxx artery' as duplicates and point to their 'aneurysm of xxx artery' equivalents where available and to create new concepts where they were not. | July 2019 Inter national Release |
|----|---|---|
| 11 | Planned changes to Implantation and Insertion procedures | July 2019 International |
| | Work commenced on content tracker IHTSDO-175 | Release January 2020 International Release |
| | Review of FSN to align Implantation and Insertion procedures by adding the method that corresponds with that stated in the FSN. Work on this project will continue for future releases after July 2019. | |
| 40 | | 1 1 0010 |
| 12 | Planned Inactivation of 186005001 Other ethnic non-mixed (NMO) 186005001 Other ethnic non-mixed (NMO) and children will be inactivated with a status of MOVED ELSEWHERE. | July 2019 International Release |
| 13 | Summary of Substances Changes 420934007 Skin graft material (substance) will be significantly revised and additional concepts created to comprehensively capture both the origin of the skin graft and thickness (full thickness, split thickness etc). Text definitions will be included. 304040003 Skin graft operation (procedure) and descendants will be significantly revised as a result of changes to the substance hierarchy. | July 2019 International Release |
| 14 | Summary of Changes for the Drug Project For 2019-January, CDs that had not yet been sufficiently defined were relocated to be descendants of 770654000 [TEMPORARY parent for CDs that are not updated (product)] (n2700). Concepts that could not be mapped to a corresponding dm+d or RxNorm concept have been inactivated as Outdated for the 2019-July Release with a historical relationship to a corresponding MPF-only concept (or to a MP-only concept if no appropriate MPF-only concept existed at the time of inactivation). (n870). The remainder of the concepts (n1800) being reviewed and most are expected to be sufficiently defined for the 2019-July Release. Further early visibility updates will be provided as work progresses. | July 2019 International Release |
| 15 | Inactivation of 121278003 [Drug measurement (procedure) | July 2019 |
| | 121278003 Drug measurement (procedure) has been inactivated for the 2019-July Release and descendant concepts have been updated accordingly. Because exposure to the substance being measured may or may not be due to the substance being used in a medicinal product, the grouper was inactivated as Ambiguous with Possibly equivalent to relationship to 430925007 Measurement of substance (procedure) . | International Release |
| 16 | Summary of Organism Changes | July 2019 |
| | Content tracker IHTSDO-1003 - Clarification, simplification and correction of the top levels of the SNOMED CT Organism hierarchy. | International Release |
| 17 | Quality Initiative | July 2019 |
| | Information about the project can found here - Quality Initiative - Progress | International Release |
| | Note: There are changes to the Service Level Agreement for the CRS as a result of the Quality Initiative: | January 2020 |
| | https://www.snomed.org/SNOMED/media/SNOMED/documents/Early-Visibility-of-Changes-to-Service-Level- Agreement-International-Content-Request-Service-(CRS).pdf | International Release |

| 18 | Abrasion As a result of changes made during the QI project for the January 2019 release, there are now 2 concepts which have the same preferred term. 781488002 Abrasion of foot (finding) and 211402004 Abrasion of foot (disorder) 782201009 Abrasion (finding) and 399963005 Abrasion (disorder) These concepts will be addressed as part the QI project for the July 2019 release. | July 2019 International Release |
|----|---|---------------------------------------|
| 19 | Concrete domains and numeric representation Numerics are represented by concepts in the Medicinal product concept model in SNOMED CT, which is an interim solution before the implementation of concrete domains to support data types, such as decimal, integer, string and date /time. The implementation of concrete domains depends on the OWL expression reference set and the update of inferred relationship file. The first complete OWL expression refset will be available in the July 2019 international release. It will take time to update the specification for the inferred relationship file and consult with the community of practice. When they are ready, strength in medicinal product model can be transformed to concrete domains. The transformation will be completed by technical changes without impact to classification results. | July 2019 International Release |