SNOMED CT July 2024 International Edition - SNOMED International Release notes

Content Tracker

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Introduction

Background

SNOMED CT terminology provides a common language that enables a consistent way of indexing, storing, retrieving, and aggregating clinical data across specialties and sites of care.

SNOMED International maintains the SNOMED CT technical design, the content architecture, the SNOMED CT content (includes the concepts table, the descriptions table, the relationships table, a history table, and ICD mappings), and related technical documentation.

Purpose

This document provides a summarized description of the content changes included in the July 2024 release of SNOMED Clinical Terms® (SCT) International Edition.

It also includes notes detailing the known content or technical issues where the root cause is understood, the fix has been discussed and agreed to, but has yet to be implemented.

The SNOMED International release notes are available alongside the July 2024 International Edition.

Scope

This document is written for the purpose described above and is not intended to provide details of the technical specifications for SNOMED CT or encompass every change made.

Audience

The audience includes National Release Centers, WHO-FIC release centers, vendors of electronic health records, terminology developers and managers who wish to have an understanding of changes that have been incorporated into the July 2024 International Edition.

Please note, you may have to register for a Confluence user account in order to access the links included in these release notes.

Important Information

NOTICE

PUBLISHED JUNE 2024 RELEASE - CHANGES TO THE ANNOTATIONS REFSET FORMAT

After discussions with the community, SNOMED International has made changes to the coverage of language in the Annotations refsets in the following way:

- The languageCode field was specified as the two characters of ISO-639-1 code for the language of the annotation text. The change is to include support for specifying dialect when it is applicable by adhering to RFC 5646, which allows the combination of two characters of ISO 639-1 code and two uppercase letters of country code (ISO 3166) separated by a hyphen.
- The column "languageCode" has therefore been changed to "languageDialectCode".
- The concept *1296895003|Language code (foundation metadata concept)|* has been inactivated and replaced by *1304275002 |Language or dialect code (foundation metadata concept)|*
- The changes apply to both the Member Annotations String Value Reference Set + Component Annotation String Value reference set

The addition of content for the Annotations refset has commenced for the July 2024 International Edition release.

Content Development Activity

Summary

Continuous quality improvement and enhancement of existing content is an ongoing process undertaken by SNOMED International in preparation for every release. The July 2024 International Edition has seen a continuation of the work driven by contributions from: Kaiser Permanente i.e. Convergent Medical Terminology (CMT), Global Medical Device Nomenclature Agency (GMDNA), Orphanet and other domain specific collaborations as well as requests received via the Content Request System (CRS).

Additionally quality improvement activities are advanced via project driven initiatives summarized below. Additional work items impacting every release are updates to the SNOMED CT derived maps such as ICD-10 and ICD-O; details are included in these release notes.

Information about editorial decisions may be found in the SNOMED CT Editorial Guide; mapping guidance for ICD-10 can be found here.

Changes to Role Grouping for International Edition

NOTICE

ROLE GROUPING CHANGES - OBSERVABLE ENTITY AND EVALUATION PROCEDURE CONCEPTS

Previously, Observable Entity concepts' attributes were self-grouped in the International Edition. Based on recommendation by the Modeling Advisory Group (MAG), the policy has changed to group these attributes together in order to support modeling concepts with multiple observations and address inconsistent modeling between evaluation procedures and observable entities.

The same changes have been applied to the concepts in the evaluation procedure hierarchy that are modeled with applicable self-grouped attributes. Please see this briefing note for details.

Please note that the scope of this change is limited to implementation of the updated role grouping MRCM rules for the observable entity and evaluation procedure hierarchies. There are areas in these subhierarchies that require content improvements, including but not limited to the following areas: complement assays, autoantibody measurements, concepts that refer to more than one Component (examples: ratios and concepts with "And"), Components including "Free" and "Total," concepts with fully defined parents, and procedure concepts modeled with a combination of evaluation procedure attributes and general procedure attributes.

Some of the issues were already known and some were identified during this work. These improvements are not in the scope of this work and will be undertaken in future work including the QI project and improvements in other hierarchies including substance and specimen. Some of the issues require feedback from SMEs and/or communication with the Members. If required, editorial guidelines will be updated accordingly.

Quality Initiative

The Quality Initiative (QI) project is the implementation of the Quality Strategy. After a successful pilot project for the July 2018 Edition release, the next stage has been implemented for subsequent releases including July 2024.

Quality improvement tasks are being deployed to improve internal structural consistency and ensure compliance with editorial policy related to the stated modeling of content. Additionally, correction or addition of defining relationships is being carried out to accurately reflect current clinical knowledge and ensure the semantic reliability of descriptions associated with a concept.

Update Head and Neck

18 concepts were identified with FSN of “head and neck” but modeled with 774007 |Structure of head and/or neck (body structure)|. For some concepts the intention had always been disjunctive “and/or” so to minimise disruption the FSN’s have been changed to reflect this intended meaning with therefore no change in descendants.

Procedures such as 430215009 |Biopsy of head and neck structure (procedure)| have been inactivated and replaced with distinct concepts for each body site as a disjunctive in this instance would be a grouper of no clinical significance and non-conformance to editorial policy. This impacted the descendants who have become children of the distinct concepts.

Examples of concepts inactivated and replaced with two distinct concepts:

- 430215009 |Biopsy of head and neck structure (procedure)|
- 431056007 |Fine needle aspiration biopsy of head and neck structure (procedure)|
- 430220009 |Specimen from head and neck structure (specimen)|

Examples of concepts with model change to two role groups (finding/disorder can occur in both structures at the same time):

- 255057000 |Benign tumor of head and neck (disorder)|
- 716659002 |Squamous cell carcinoma of head and neck (disorder)|
- 274755005 |Head and neck swelling (finding)|

Examples of concepts with FSN change to 'and/or':

- 301871007|Lipoma of head and neck (disorder)|
- 441535001|Adenocarcinoma of head and neck (disorder)|
- 1197313009|Metastatic adenocarcinoma to lymph node of head and neck (disorder)|

Number of concepts edited (approx): 18

Update Clinical Finding Caused by Radiation

1335858009 |Effect of radiation (finding)| and subtypes have been reviewed to apply consistency to descriptions and model. Radiation is a physical force and thus uses the pattern 'caused by' for descriptions.

The causative agent for this set of concepts has been evaluated for appropriateness as only ionizing radiation can cause damage to internal structures, i.e. beyond skin and/or eyes. Conditions caused by radiotherapy were also included in this review, and standardized descriptions have been applied.

Number of concepts edited (approx): 350

Update Anterior Cord Syndrome

282785008|Anterior cord syndrome (disorder)| and descendants previously modeled with the most common ischemic etiology have been remodeled to include all causes, including radiation, trauma, intervertebral disc prolapse. With the exception of a number of pre-existing spinal artery compression and traumatic concepts, concepts including etiology are restricted to upper level concepts without a specified vertebral level.

Update Construction of Stoma

75506009|Construction of stoma (procedure)| and subtypes have been reviewed and a consistent approach to modeling has been implemented.

A small number of concept inactivations and description changes have been implemented as part of this review.

Number of concepts edited (approx): 100

Update Glomus Tumor

403969002|Glomus tumor (disorder)| has been inactivated and replaced with new concept 1340052006 |Benign glomus tumor (disorder).

10438002 |Glomus tumor (morphologic abnormality)| has been inactivated with reason ambiguous and replaced with 1340048006 |Benign glomus tumor (morphologic abnormality)|.

6 disorder concepts referring to 'glomus tumor' have been inactivated and replaced with 'benign glomus tumor' concepts. 4 procedure concepts have been inactivated and replaced with procedure concepts that specify 'benign'.

Concepts in the morphology hierarchy have been aligned with ICD-O-3.2 and are informed by the WHO Blue Books.

Update Intracranial Aneurysm and Repair of Aneurysm

Intracranial aneurysms and related concepts have been remodeled with 281138005 |Intracranial vascular structure (body structure)| to include conditions or procedures that involve either arteries or veins.

75087007 |Repair of aneurysm (procedure)| has been remodeled with GCI axioms to address missing subconcepts that are achieved by specified methods, such as embolization, ligation, excision, and coagulation.

Number of concepts edited (approx): 36

Body Structure

Update Cardiac Wall

New concepts have been added to support the 16, 17, and 18-segment models that specify the apical segments of particular models.

- Segment of 16-segment model includes 4 apical segments, 6 mid segments, 6 basal segments
- Segment of 17-segment model includes 5 apical segments, 6 mid segments, 6 basal segments
- Segment of 18-segment model includes 6 apical segments, 6 mid segments, 6 basal segments

- The existing apical segments, anterior, inferior, lateral, and septal, are kept as groupers subsuming apical segments of each model and they should only be used when the segment model is unspecified.

Duplicate concepts of segments have been inactivated. The descriptions have been updated to include the "left cardiac ventricle" for FSNs. Approximately 16 duplicate concepts have been inactivated.

The left ventricular (LV) wall is divided into four regions, anterior, inferior, lateral and septal. These four regions are further divided into 16, 17, and 18-segments. There are additional four regions (inferolateral, anterolateral, anteroseptal, apex) for modeling diseases. Missing relationships between regions and segments have also been added:

- Myocardium of anterior region of left ventricle subsumes apical, mid, and basal anterior segments (Note, anterolateral and anteroseptal segments are not included)
- Myocardium of inferior region of left ventricle subsumes apical, mid, and basal inferior segments (Note, inferolateral and inferoseptal segments are not included)
- Myocardium of septal region of left ventricle subsumes:
  - Myocardium of Inferoseptal region of LV: apical septal segments of 16 and 17-segment models, apical inferoseptal segment of 18-segment model, mid inferoseptal and basal inferoseptal segments
  - Myocardium of anteroseptal region of LV: apical septal segments of 16 and 17-segment models, apical anteroseptal segment of 18-segment model, mid anteroseptal and basal anteroseptal segments
- Myocardium of lateral region of left ventricle subsumes:
  - Myocardium of inferolateral region of left ventricle: apical lateral segments of 16 and 17-segment models, apical inferolateral segment of 18-segment models, mid inferolateral and basal inferolateral segments
  - Myocardum of anterolateral region of left ventricle: apical lateral segments of 16 and 17-segment models, apical anterolateral segment of 18-segment model, mid anterolateral and basal anterolateral segments
- Myocardiaum of apex of left ventricle subsumes apical segments of left ventricle

The general notion of "Anterior myocardium" subsumes the myocardium of anterior, anteroseptal and anterolateral regions of the left ventricle to support the classification of anterior myocardial infarction.

"Septal" has been added as a synonym for Inferoseptal segment (i.e. basal septal is a synonym for basal inferoseptal).

"Posterior" has been added as a synonym for inferolateral region/segments because the Inferolateral (posterior) is the bottom portion of the left ventricular wall lateral to inferior segment - also called posterior wall.

- "Basal posterior" has been added as synonym for basal inferolateral segment
- "Mid posterior" has been added as synonym of mid inferolateral segment
- "Apical posterior" has been added as synonym of apical inferolateral segment
- 33272004 |Structure of myocardium of posterolateral region (body structure)| has been inactivated as a duplicate of the inferolateral region. However, the concepts for posterolateral myocardial infarction are kept and need future review to confirm they are true duplicates.

"Lateral" has been added as a synonym for anterolateral segment (i.e. basal lateral is a synonym for basal anterolateral).

A new concept "myocardium of apex of left ventricle" has been added. The existing concept "myocardium of apex of heart" has been moved from "myocardium of left ventricle" to "myocardium of heart", as it is a more general concept. The concepts modeled by "myocardium of apex of heart" have been updated with the new concept for the left ventricle to ensure no changes to the published hierarchical relationships.

284358004 |Structure of left ventricle lateral segment (body structure)| has been inactivated and replaced by a new concept 1335824001 |Structure of myocardium of lateral region of left ventricle (body structure)|.

"Diaphragmatic region of left ventricle" has been added as a synonym for the inferior region of left ventricle because "Inferior" is the lower or diaphragmatic portion of the left ventricular wall.

72542009 |Structure of myocardium of diaphragmatic region (body structure)| has been inactivated and replaced by 1335800009 |Structure of myocardium of diaphragmatic region of left and right cardiac ventricles (body structure)| and 367598003 |Structure of myocardium of inferior region of left ventricle (body structure)|.

A new concept for epicardium has been added which is part of the cardiac wall and the visceral pericardium. Related procedures and disorders have been updated with this new anatomy concept.

There are changes to disorders because of inactivations of anatomy concepts. These concepts have been remodeled to minimise the changes to their existing classifications. The model of myocardial infarction is suboptimal and it does not reflect the updates in terminology and segment models of cardiac wall. They will be addressed in a separate project.

- 33272004 |Structure of myocardium of posterolateral region (body structure)| has been inactivated. Disorders are remodeled by "myocardium of left ventricle" and marked as primitive, e.g. 35571000087100 |Ischemia of myocardium of posterolateral region (disorder)|, 35441000087109 |Old infarct of myocardium of posterolateral region (disorder)|
- 72542009 |Structure of myocardium of diaphragmatic region (body structure)| has been inactivated. Disorders are remodeled by 367598003 |Structure of myocardium of inferior region of left ventricle (body structure)|. The concept 73795002 |Acute myocardial infarction of inferior wall (disorder)| and 76593002 |Acute myocardial infarction of inferoposterior wall (disorder)| are identified as duplicates because they are modeled by 367598003 |Structure of myocardium of inferior region of left ventricle (body structure)|. 76593002 |Acute myocardial infarction of inferoposterior wall (disorder)| has been remodeled by myocardium of left ventricle and marked as primitive to minimise the changes to classifications.
- 371938002 |Structure of basal inferior segment of cardiac ventricle (body structure)| has been inactivated and replaced by 264846001 |Structure of basal inferior segment of left cardiac ventricle (body structure)|. Disorders are remodeled by 264846001 |Structure of basal inferior segment of left cardiac ventricle (body structure)|, e.g. 15713201000119105 |Acute ST segment elevation myocardial infarction of posterobasal wall (disorder)|
- 371938002 |Structure of basal inferior segment of cardiac ventricle (body structure)| has been inactivated and replaced by 264846001 |Structure of basal inferior segment of left cardiac ventricle (body structure)|. The change has identified 233838001 |Acute posterior myocardial infarction (disorder)| and 70998009 |Acute myocardial infarction of basal inferior segment of left ventricle (disorder)| as duplicates. 233838001 |Acute posterior myocardial infarction (disorder)| is remodeled by myocardium of ventricle and marked as primitive to minimize the changes to classifications.
- 73795002 |Acute myocardial infarction of inferior wall (disorder)| has been changed to primitive to avoid classification of posterior myocardial infarction as its subconcept.

Information about these changes is available via Confluence here and a briefing note is available here.

Update Subtypes of Oropharynx

The incorrect superconcept 31389004 |Oropharyngeal structure (body structure)| has been removed from the concepts: 10537009|Structure of anterior epiglottis (body structure)| and 67298002|Structure of anterior surface of epiglottis (body structure)|. The related neoplasm disorders have been remodeled.

47975008|Structure of root of tongue (body structure)| should not be a subtype of 372241003|Supraglottis part (body structure)| and this relationship has been removed.

Update Infrapopliteal Artery

The hierarchy relating to 870190007|Structure of infrapopliteal artery (body structure)|' has been reviewed in response to user feedback. The 'crural arteries' clinically are frequently referred to as 'infrapopliteal' - this relates to the trunk segments of arteries below the popliteal that are often used in interventions - the current notion of infrapopliteal artery includes all arteries that are branches of anterior tibial artery and tibioperoneal trunk. The tibioperoneal trunk is also modeled as a branch of popliteal artery because the continuity of an artery is a direct branch.

In order to clarify the relationship between the crural arteries and infrapopliteal arteries:

- 244336000 |Structure of crural artery (body structure)| has been given synonyms of Infrapopliteal arterial trunk and Infrapopliteal artery segment.
- 870190007 |Structure of infrapopliteal artery (body structure)| has been given synonyms of Artery of infrapopliteal distribution and Artery of infrapopliteal arterial tree.

The hierarchy members of the class of these two concepts has been reviewed and grouper concepts where already existing have also been remodeled as appropriate.

Two additional concepts of ‘Deep plantar artery’ and 'first plantar metatarsal artery’ have been added which are the terminal branches of the dorsalis pedis artery.

Number of concepts edited (approx): 30

Update Upper Back

Following user feedback, 35549004 |Upper back structure (body structure)| has been inactivated as a duplicate of 304037003 |Structure of back of thoracic segment of trunk (body structure)|. The FSN of 37822005 |Structure of back of abdominopelvic segment of trunk (body structure)| has been updated to reflect the intended meaning in SNOMED CT.

Update Posterior Abdominal Wall

22577007 |Posterior abdominal wall structure (body structure)| has been remodeled as a subtype of 822992007 |Structure of wall of abdominal proper segment of trunk (body structure)| to improve accuracy for this area of content.

Number of concepts edited (approx): 10

SEP and Laterality Anatomy Reference Sets

The release file for the lateralizable body structure reference set has been updated and validated.

The release file for the SEP reference set has been updated and validated.

Clinical Finding

Update Eosinophilic Gastritis

66329006 |Eosinophilic gastritis (disorder)| and subtypes have been remodeled as allergic conditions based on recent findings that these conditions are generally accepted as a Th2-mediated allergic reactions.

Procedure

Radiographic Imaging

Work is progressing for this content tracker. A summary of some of the changes made for the July 2024 release is included below.

- 42687005|Lymphangiogram (procedure)| and subtypes have been reviewed as part of the tracker:
  - Based on user feedback and review, 'lymphangiography' uses fluoroscopy and contrast unless an alternative imaging method such as MRI is specified. The content in this hierarchy that currently states 'lymphangiography' with method 278110001|Radiographic imaging - action (qualifier value)| has been inactivated and replaced with a new concept which specifies the imaging modality and the use of contrast.
  - For example: 48858003 |Lymphangiography of lower extremity (procedure)| has been inactivated and replaced by a new concept: Fluoroscopic lymphangiography of lower limb with contrast (procedure)|

    - A new supertype concept has been added: 1336147007 |Imaging of lymphatic system (procedure).
- 75014006|Pelvimetry (procedure)| has been reviewed and missing subtypes added.
- Subtypes of 33148003|Arthrography (procedure)| that were modeled with 260686004|Method (attribute)|= 278110001|Radiographic imaging - action (qualifier value)| have been reviewed to update the method value and improve subsumption.
- 1251645009|Discography with injection of contrast into intervertebral disc (procedure)| and subtypes that were modeled with 260686004|Method (attribute)|= 278110001|Radiographic imaging - action (qualifier value)| have been updated.

Work for this content tracker continues, for information please see the informational briefing note here.

Update Endodontic Procedure

In consultation with the Dentistry Clinical Reference Group, updates have been made to the hierarchy 55670007 |Endodontic procedure (procedure)|. Approximately 25 concepts have been inactivated or remodeled. Where appropriate, replacement concepts have been added.

Inactivation Anesthesia Related Concepts

A further set of 11 anesthesia related procedure concepts have been inactivated. This update is part of the work being undertaken to inactivate 'Administration of anesthesia for X' concepts, this set of inactivations includes:

- 15624001 |Anesthesia for spinal fluid shunting procedure (procedure)|
- 85948003 |Manual reduction of dislocation of sacroiliac joint under anesthesia (procedure)|
- 5065000 |Reduction of closed traumatic hip dislocation with anesthesia (procedure)|
- 69534008 |Tympanostomy with general anesthesia (procedure)|

Pharmaceutical/Biological Product

Addition of Count of active ingredient (attribute) to Valproic Acid Subtype Clinical Drugs

As per the drugs model, once any concept in a hierarchy requires more than the usual Count of base of active ingredient all the siblings of that concept should also have the additional count added. In order for clinical drugs concepts to classify correctly as descendants of the single “valproic acid” parent Medicinal Product Form concept and for consistency, they required both a Count of base of active ingredient (signifying one base moiety substance (valproic acid)) plus a Count of active ingredient so that any new concepts added classify correctly.

Reviewed and count added if missing:

- Subtypes of 780748001 | Product containing only valproic acid in parenteral dose form (medicinal product form) | = 5 Clinical drugs (CD) had Count of active ingredient added (4 sodium valproate concepts,1 valproic acid concept)
- Subtypes of 780747006 | Product containing only valproic acid in oral dose form (medicinal product form) | = 25 CD had Count of active ingredient added (13 sodium valproate concepts, 9 valproic acid concepts, 3 valproic acid (as valproate semi-sodium) concepts).

Number of concepts edited (approx): 25

Social Context

Inactivation Race and Ethnicity Concepts

Based on discussions with the Member Forum, all subtypes of 372148003 |Ethnic group (ethnic group)| and most subtypes of 415229000 |Racial group (racial group)| have been inactivated as out of scope for the International Edition release.

While all subtypes of 372148003 |Ethnic group (ethnic group)| have been inactivated, the top level concept has been retained for extensions to add their local concepts.

All subtypes of 415229000 |Racial group (racial group)| have been inactivated except for the following:

- 413464008 |African race (racial group)|
- 413773004 |Caucasian (racial group)|
- 413582008 |Asian race (racial group)|
- 413491005 |American Indian race (racial group)|
- 414752008 |Mixed racial group (racial group)|
- 415794004 |Unknown racial group (racial group)|
- 1336109002 |Pacific islander (racial group)|

Further information about these changes is available here.

Collaboration/Harmonization Agreements

Convergent Medical Terminology (CMT)

86 new concepts have been added. The focus area was ophthalmology with smaller additions to other domains such as musculoskeletal.

Orphanet

Working in collaboration with Orphanet (**http://www.orpha.net/consor/cgi-bin/index.php**), efforts are ongoing to update rare disease concepts in SNOMED CT to maintain alignment with Orphanet for the annual update of the SNOMED CT to Orphanet Maps. Work has commenced to annotate content added for the Orphanet project with attribution. 101 new concepts that have been added for the Orphanet project have been attributed with text 'Inserm Orphanet.'

All of the concepts added for the Orphanet project have been mapped to ICD-10.

Cancer Synoptic Reporting

Cancer synoptic reports are used by many member countries to record pathology examination of cancer specimens including the College of American Pathologists (US and Canada), Royal College of Pathology (UK), Royal College of Pathology Australasia (Australia, New Zealand), PALGA (The Netherlands), Swedish Society of Pathology, and others.

For more information about this project, please see Cancer Synoptic Reporting Clinical Project Group

International League Against Epilepsy (ILAE)

In line with approved harmonized terminology, this project is working on alignment including restructuring to update the hierarchy << 313307000 |Epileptic seizure (finding)|.

Further information about the project is available here

Gravity Project

Work for this project is ongoing.

Internal Quality Improvement

Machine Readable Concept Model (MRCM) Changes

There are no changes for the MRCM in the July 2024 International Edition.

Future changes that are currently in progress can be viewed via the MRCM Daily Build Browser

Please see early visibility for future planned changes to MRCM.

OWL Axiom Expressions for Annotation Properties

The new annotation properties are represented in the OWL expression axiom refset as follows:

- The 1295447006 |Annotation attribute (attribute)| is correctly represented as subClassOf
  - 01300ccd-d1d7-417d-a70a-f688e72c4d8c 20231201 1 900000000000012004 733073007 1295447006 SubClassOf(:1295447006 :246061005)
- All subconcepts of 1295447006 |Annotation attribute (attribute)| are represented as "SubAnnotationPropertyOf", instead of "subClassOf" as they previously were
  - e6cd65fe-cb81-4db4-9ac4-040dc74fce28 20231201 1 900000000000012004 733073007 1295448001 SubClassOf(:1295448001 :1295447006)
  - 3729ce47-a96e-4dc7-9eff-83c34740c414 20231201 1 900000000000012004 733073007 1295449009 SubClassOf(:1295449009 :1295447006)

These axiom updates are published in the March 2024 International Edition release. The authoring tool has been updated to ensure all new subconcepts of 1295447006 |Annotation attribute (attribute)| are represented as SubAnnotationPropertyOf(). The remaining changes required for other tools to correctly consume the updated syntax were completed for the June 2024 International Edition release. The addition of content for the Annotations refset has commenced for the July 2024 International Edition release.

SNOMED CT derived products

ICD-10 map

The SNOMED CT to the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (© World Health Organization 1994) 2016 Version map (SNOMED CT to ICD-10 Map) is included in the SNOMED CT International Edition as a Baseline. The SNOMED CT to ICD-10 Map was created to support the epidemiological, statistical and administrative reporting needs of SNOMED International member countries and WHO Collaborating Centers.

The SNOMED CT to ICD-10 Map is released in Release Format 2 (RF2) only. It is located in the file der2_iissscRefset_ExtendedMapFull_INT_20200731.txt, which is in the Map folder under Refset, in each of the three RF2 Release Type folders.

The SNOMED CT to ICD-10 Map is released as Refset 447562003 |SNOMED CT to ICD-10 extended map (foundation metadata concept).

The ICD-10 Mapping Technical Guide (including exemplars) is hosted here https://confluence.ihtsdotools.org/display/DOCICD10

Content Development Activity Summary

The map is a directed set of relationships from SNOMED CT source concepts to ICD-10 target classification codes. The SNOMED CT source domains for the MAP are limited to subtypes of 404684003 |clinical finding|, 272379006 |event| and 243796009 |situation with explicit context|. The target classification codes are ICD-10 2016 release.

Mapped content for July 2024

The map provided for the July 2024 International Edition has been updated, and now represents a complete map from SNOMED CT International Edition to ICD-10 2016 version.

- 376 newly authored concepts have been added and mapped.
- The SNOMED to ICD-O (morphology) map has 4 additional concepts added as a result of the ICD-O 3.2 review or added due to CRS requests.

We would welcome feedback on any issues that users of the map may detect when using the map. Issues should be submitted via mapping@snomed.org

SNOMED CT to OWL conversion and classification

The repository containing the toolkit enabling simple SNOMED CT to OWL conversion and classification can be found here, including documentation on its use: **https://github.com/IHTSDO/snomed-owl-toolkit**

Please contact SNOMED International at support@snomed.org if you would like to provide any feedback on ways to extend and improve the new toolkit.

Technical notes

Known Issues

Known Issues are content or technical issues where the root cause is understood, and the resolution has been discussed and agreed but has yet to be implemented. This can be due to a number of reasons, from lack of time within the new monthly editing cycles, to the risk of impact to the stability of SNOMED CT if the fix were to be deployed at that stage in the Product lifecycle.

For the current SNOMED CT International Edition, the following Known Issues were identified, and agreed to be resolved in future editing cycles:

Key	Summary	Description
No issues found		

Resolved Issues

Resolved issues are Known Issues which were not fixed as part of the previous release lifecycle, but which have now been resolved in the latest release. They can also be issues found during testing of the current release, which were resolved before the final deployment of the Production release. Finally they can be issues which were reported or found during the testing phase, but which have been closed without any action taken.

The Resolved Issues for the current SNOMED CT International Edition can be found here:

Key	Summary	Description	Resolved
ISRS-6985	International Edition releases, 2024-07-01, SQL, 8e70ea3e-c4dd-4ae3-8b75-f0567e42f670, 2024-06-10T09:13:41	Active extended maps should not have the same mapTarget and mapRule in different groups for a given referenced component Total number of failures: 1 Report URL: https://prod-rvf.ihtsdotools.org/api/result/1718012032981?storageLocation=international/international_edition_releases/2024-06-10T09:13:41 First 1 failures: • { "conceptId": "1340018008", "conceptFsn": null, "detail": "ExtendedMap: id=f8ac7db9-d5ee-5cc2-ba76-414c47761199: mapTarget=U12.9 is in more than one mapGroup", "componentId": "f8ac7db9-d5ee-5cc2-ba76-414c47761199", "fullComponent": "1,449080006,447562003,1340018008,2,1,TRUE,ALWAYS U12.9,U12.9,447561005,447637006..." } RESOLUTION: This issue was already exception-listed during the authoring cycle for the July 2024 release, in ticket ~~INFRA-13128~~. No action is therefore required, other than to refine the exception-listing process to prevent those items listed during authoring from re-appearing in the Release validation reports.	2024-Jun-10

1 issue

Technical updates

RF2 package format

The RF2 package convention dictates that all relevant files are included, regardless of whether or not there is content to be included in each release. Therefore, the package contains a mixture of files which contain both header rows and content data, and files that (intentionally) include only header records. The reason that these "empty" files are included in the package is to draw a clear distinction between:

1. ...files that have been deprecated (and therefore removed from the package completely), due to the content no longer being relevant to RF2 in future releases
2. ...files that happen to contain no data in this particular release (and are therefore included in the package with just a header record), but are still relevant to RF2, and could therefore contain content in future releases.

This allows users to easily distinguish between the two scenarios, as otherwise if files in option 2 were left out of the package it could be interpreted as an error, rather than an intentional lack of content in that release.

Changes to the International Edition package format

In line with the new implementation of Annotations, two new refsets have been added to the International Edition Release package, from December 2023 onwards:

- der2_scsRefset_ComponentAnnotationStringValueSnapshot_INT_20240101.txt
- der2_sscsRefset_MemberAnnotationStringValueSnapshot_INT_20240101.txt

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- The languageCode field was specified as the two characters of ISO-639-1 code for the language of the annotation text. The change is to include support for specifying dialect when it is applicable by adhering to RFC 5646, which allows the combination of two characters of ISO 639-1 code and two uppercase letters of country code (ISO 3166) separated by a hyphen.
  - The column "languageCode" has therefore been changed to "languageDialectCode".
  - Component Annotations (1292992004)
    - **OLD:** id effectiveTime active moduleId refsetId referencedComponentId languageCode typeId value
    - **NEW:** id effectiveTime active moduleId refsetId referencedComponentId languageDialectCode typeId value
  - Member Annotations (1292995002)
    - **OLD:** id effectiveTime active moduleId refsetId referencedComponentId referencedMemberId languageCode typeId value
    - **NEW:** id effectiveTime active moduleId refsetId referencedComponentId referencedMemberId languageDialectCode typeId value
- The concept *1296895003|Language code (foundation metadata concept)|* has been inactivated and replaced by *1304275002 |Language or dialect code (foundation metadata concept)|*
- The changes apply to both the Member Annotations String Value Reference Set + Component Annotation String Value reference set

The addition of content for the Annotations refset has commenced for the July 2024 International Edition release.

Changes to the RefsetDescriptor records

NOTICE

PUBLISHED JUNE 2024 RELEASE - Changes to the RefsetDescriptor records

In line with the changes to the Annotations refsets (see above for details), the following refinements have also been made to the RefsetDescriptor records:

- 1. The AttributeType for the (attributeOrder=0) refsetDescriptor record for both Member + Component Annotations has been changed from:
  - 900000000000461009 |Concept type component| to
  - 900000000000460005 |Component type (foundation metadata concept)|
  - (eg)
    - ***OLD:*** *6cc1d4ca-32fd-44cb-8ad3-e49f23ec7760 20231201 1 900000000000012004 900000000000456007 1292992004 900000000000518009 900000000000461009 0*
    - ***NEW:*** *6cc1d4ca-32fd-44cb-8ad3-e49f23ec7760 20240601 1 900000000000012004 900000000000456007 1292992004 900000000000518009 900000000000460005 0*
    - ***OLD:*** *f6d9647b-6ee6-400d-9c7f-77818fa1f986 20231201 1 900000000000012004 900000000000456007 1292995002 900000000000518009 900000000000461009 0*
    - ***NEW:*** *f6d9647b-6ee6-400d-9c7f-77818fa1f986 20240601 1 900000000000012004 900000000000456007 1292995002 900000000000518009 900000000000460005 0*
- 2. The languageDialect column for a) the (attributeOrder=2) refsetDescriptor record for Member Annotations + b) the (attributeOrder=1) refsetDescriptor record for Component Annotations has been changed from:
  - 1296895003 |Language code (foundation metadata concept)| to the new concept
  - 1304275002 |Language or dialect code (foundation metadata concept)|
  - (eg)

- ***OLD:*** *2c0d0378-c28c-4705-b8af-f5f0f8276dfd 20231201 1 900000000000012004 900000000000456007 1292992004 1296895003 900000000000465000 1*
- ***NEW:*** *2c0d0378-c28c-4705-b8af-f5f0f8276dfd 20240601 1 900000000000012004 900000000000456007 1292992004 1304275002 900000000000465000 1*
- ***OLD:*** *afe9824b-1323-4407-a0b7-a028ae2b780a 20231201 1 900000000000012004 900000000000456007 1292995002 1296895003 900000000000465000 2*
- ***NEW:*** *afe9824b-1323-4407-a0b7-a028ae2b780a 20240601 1 900000000000012004 900000000000456007 1292995002 1304275002 900000000000465000 2*

- 3. The AttributeType for a) the (attributeOrder=4) refsetDescriptor record for Member Annotations (1292995002) + b) the (attributeOrder=3) refsetDescriptor record for Component Annotations (1292992004), needs to be changed from:
  - 900000000000459000 (AttributeType) to
  - 900000000000465000 (String)
  - (eg)
    - ***OLD:*** *54af9962-2a35-4538-86f3-a8c38de9200b 20231201 1 900000000000012004 900000000000456007 1292995002 900000000000519001 900000000000459000 4*
    - ***NEW:*** *54af9962-2a35-4538-86f3-a8c38de9200b 20240601 1 900000000000012004 900000000000456007 1292995002 900000000000519001 900000000000465000 4*
    - ***OLD:*** *b46405ec-5ff1-46a3-a9cc-b2ef2bba23cc 20231201 1 900000000000012004 900000000000456007 1292992004 900000000000519001 900000000000459000 3*
    - ***NEW:*** *b46405ec-5ff1-46a3-a9cc-b2ef2bba23cc 20240601 1 900000000000012004 900000000000456007 1292992004 900000000000519001 900000000000465000 3*

Early visibility of impending changes in the upcoming 2024 Monthly International Edition releases

Please see the early visibility Confluence page for details of forthcoming changes.

Document links

All links provide information that is correct and current at the time of this Release. Updated versions may be available at a later date, but if so these will need to be requested from the relevant SNOMED International teams.

NOTE: To access any of the links in the pdf document, please visit the Release Notes @ https://confluence.ihtsdotools.org/display/RMT/SNOMED+CT+july+2024+International+Edition+-+SNOMED+International+Release+notes(see page 2)