

# SNOMED CT July 2020 International Edition - SNOMED International Release notes

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# 1. Introduction

## 1.1. 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.

## 1.2. Purpose

This document provides a summarized description of the content changes included in the July 2020 release of SNOMED Clinical Terms® (SCT) International Release.

It also includes technical 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 2020 International Edition release.

## 1.3. 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 during the release.

## 1.4. 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 2020 International Edition release.

# 2. Content Development Activity

## 2.1. Summary

Continuous quality improvement and enhancement of existing content is an ongoing process undertaken by SNOMED International in preparation for every release. The July 2020 International Release 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 at this link <http://confluence.ihtsdotools.org/display/DOCICD10>

## 2.2. Important - Content Changes Introduced After the July 2020 Member Release, and before the July 2020 Production Release

Two additional concepts (plus their related components) were added to the July 2020 release after the Member release on 30 June 2020. They are therefore included in the final, Public release of the July 2020 International Edition.

The two new concepts are detailed elsewhere in these release notes however for information the new concepts are:

- 895231008|Not detected in pooled specimen (qualifier value)|
- 890195008|International Health Terminology Standards Development Organisation Global Patient Set module (core metadata concept)|

### Inactivation reason: Limited/WAS\_A

Inactivation reason of LIMITED/WAS\_A is not allowed for any new content inactivations after the July 2018 release. The WAS\_A association refset has not been updated thereafter.

At the Editorial Advisory Group meeting in April 2019, agreement was reached to discontinue the maintenance of WAS\_A relationships when inactivating concepts that have a historical association to an inactive concept. When changes are made to a historical relationship for a concept that was previously inactivated using WAS\_A, effort will be made to assign a new historical relationship that facilitates traceability of the concept (e.g. DUPLICATE or AMBIGUOUS) as opposed to NON-CONFORMANCE TO EDITORIAL POLICY.

Existing WAS\_A relationships will be inactivated in a future release once a plan for batch reassignment of historical relationships has been developed. Until then, SNOMED International will not continue to use or maintain WAS\_A relationships.

## 2.3. COVID-19

An **INTERIM** International Edition Release was produced in March 2020 as part of the ongoing global effort to tackle the Coronavirus outbreak and included the updated Coronavirus descriptions for Members and implementers.

| New components March 2020 Interim release |            |  |
|---|------------|--|
| 840544004                                 | 3947197012 | Suspected disease caused by severe acute respiratory coronavirus 2 (situation) |
| 840544004                                 | 3947195016 | Suspected disease caused by SARS-CoV-2   |
| 840544004                                 | 3947196015 | Suspected disease caused by severe acute respiratory coronavirus 2             |
| 840544004                                 | 3950926016 | Suspected COVID-19   |
| 840534001                                 | 3947192018 | Severe acute respiratory syndrome coronavirus 2 vaccination (procedure)        |
| 840534001                                 | 3947193011 | SARS-CoV-2 vaccination   |
| 840534001                                 | 3947194017 | Severe acute respiratory syndrome coronavirus 2 vaccination                    |
| 840534001                                 | 3950925017 | COVID-19 vaccination   |
| 840533007                                 | 3947189017 | Severe acute respiratory syndrome coronavirus 2 (organism)                     |
| 840533007                                 | 3947190014 | SARS-CoV-2   |
| 840533007                                 | 3947191013 | Severe acute respiratory syndrome coronavirus 2                                |
| 840546002                                 | 3947186012 | Exposure to severe acute respiratory syndrome coronavirus 2 (event)            |
| 840546002                                 | 3947187015 | Exposure to SARS-CoV-2   |
| 840546002                                 | 3947188013 | Exposure to severe acute respiratory syndrome coronavirus 2                    |
| 840539006                                 | 3947183016 | Disease caused by severe acute respiratory syndrome coronavirus 2 (disorder)   |
| 840539006                                 | 3947184010 | Disease caused by severe acute respiratory syndrome coronavirus 2              |
| 840539006                                 | 3947185011 | COVID-19   |
| 840536004                                 | 3947180018 | Antigen of severe acute respiratory syndrome coronavirus 2 (substance)         |
| 840536004                                 | 3947181019 | Antigen of severe acute respiratory syndrome coronavirus 2                     |

|           |            |   |
|-----------|------------|---|
| 840536004 | 3947182014 | Antigen of SARS-CoV-2   |
| 840535000 | 3947177019 | Antibody to severe acute respiratory syndrome coronavirus 2 (substance) |
| 840535000 | 3947178012 | Antibody to severe acute respiratory syndrome coronavirus 2             |
| 840535000 | 3947179016 | Antibody to SARS-CoV-2  |

A further set of new concepts have been added for the July 2020 release

| <b>New concepts July 2020 release</b>   |
|---|
| <b>Clinical finding hierarchy:</b>  |
| 138389411000119105  Acute bronchitis caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                                       |
| 870590002  Acute hypoxemic respiratory failure due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)              |
| 870589006  Acute kidney injury due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                              |
| 674814021000119106  Acute respiratory distress syndrome due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)     |
| 189486241000119100  Asymptomatic Severe acute respiratory syndrome coronavirus 2 infection (finding)  |
| 870577009  At increased risk of exposure to Severe acute respiratory syndrome coronavirus 2 (finding)   |
| 119731000146105  Cardiomyopathy due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                             |
| 119741000146102  Conjunctivitis due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                             |
| 119981000146107  Dyspnea caused by Severe acute respiratory syndrome coronavirus 2 (disorder)   |
| 1240561000000108  Encephalopathy due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                            |
| 119751000146104  Fever caused by Severe acute respiratory syndrome coronavirus 2 (disorder)   |
| 1240541000000107  Infection of upper respiratory tract caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                     |
| 880529761000119102  Lower respiratory infection caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                            |
| 866151004  Lymphocytopenia due to Severe acute respiratory syndrome coronavirus 2 (disorder)  |
| 1240531000000103  Myocarditis due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                               |
| 1240521000000100  Otitis media due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                              |
| 882784691000119100  Pneumonia caused by Severe acute respiratory syndrome coronavirus 2 (disorder)  |
| 870591003  Rhabdomyolysis due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)                                   |
| 870588003  Sepsis due to disease caused by Severe acute respiratory syndrome coronavirus 2 (disorder)   |
| 1240581000000104  Severe acute respiratory syndrome coronavirus 2 detected (finding)  |
| 1240591000000102  Severe acute respiratory syndrome coronavirus 2 not detected (finding)  |
| 866152006  Thrombocytopenia due to Severe acute respiratory syndrome coronavirus 2 (disorder)   |
| <b>Observable entity hierarchy:</b>   |
| 871555000  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 (observable entity)                                 |
| 871559006  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 in bronchoalveolar lavage fluid (observable entity) |
| 871556004  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 in nasopharyngeal swab (observable entity)          |
| 871557008  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 in oropharyngeal swab (observable entity)           |
| 871558003  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 in sputum (observable entity)                       |
| 871560001  Detection of ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 using polymerase chain reaction (observable entity) |

|  |
|--|
| 871562009  Detection of Severe acute respiratory syndrome coronavirus 2 (observable entity)                  |
| 871552002  Detection of Severe acute respiratory syndrome coronavirus 2 antibody (observable entity)         |
| 871553007  Detection of Severe acute respiratory syndrome coronavirus 2 antigen (observable entity)          |
| 124046100000109  Measurement of Severe acute respiratory syndrome coronavirus 2 antibody (observable entity) |
| 124047100000102  Measurement of Severe acute respiratory syndrome coronavirus 2 antigen (observable entity)  |
| <b>Situation with explicit context hierarchy:</b>  |
| 688232241000119100  Disease caused by Severe acute respiratory syndrome coronavirus 2 absent (situation)     |
| 292508471000119105  History of disease caused by Severe acute respiratory syndrome coronavirus 2 (situation) |
| <b>Specimen hierarchy:</b>   |
| 461911000124106  Swab specimen from oropharynx (specimen)  |
| <b>Substance hierarchy:</b>  |
| 870361009  Immunoglobulin G antibody to Severe acute respiratory syndrome coronavirus 2 (substance)          |
| 870362002  Immunoglobulin M antibody to Severe acute respiratory syndrome coronavirus 2 (substance)          |
| 124041100000107  Ribonucleic acid of Severe acute respiratory syndrome coronavirus 2 (substance)             |
| <b>Qualifier value hierarchy:</b>  |
| 895231008 Not detected in pooled specimen (qualifier value)  |

Updates about content relating to COVID-19 can be found here [SNOMED CT COVID-19 Related Content](#)

Any concepts in scope for SNOMED CT to ICD-10 mapping have been mapped and adhere to the World Health Organization current guidelines.

## 2.4. Content Quality Improvement

| SCT Statistics  |               |
|---|---------------|
| Domain  | #New concepts |
| SNOMED CT Concept (SNOMED RT+CTV3)                            | 3876          |
| Body structure (body structure)                               | 306           |
| Clinical finding (finding)                                    | 2064          |
| Event (event)   | 4             |
| Environment or geographical location (environment / location) | 19            |
| Observable entity (observable entity)                         | 117           |
| Organism (organism)   | 135           |
| Pharmaceutical / biologic product (product)                   | 441           |
| Physical object (physical object)                             | 89            |
| Procedure (procedure)   | 299           |
| Qualifier value (qualifier value)                             | 66            |
| Record artifact (record artifact)                             | 2             |
| Social context (social concept)                               | 8             |
| Situation with explicit context (situation)                   | 129           |
| Specimen (specimen)   | 8             |
| Substance (substance)   | 137           |
| Staging and scales (staging scale)                            | 33            |
| SNOMED CT Model Component (metadata)                          | 19            |

| SCT Statistics for July 2020 Release                 |        |
|--|--------|
|  | #total |
| Newly inactivated concepts                           | 2073   |
| Newly reactivated concepts                           | 13     |
| Changed Fully Specified Name                         | 986    |
| Inactivated descriptions (synonym only)              | 1434   |
| New descriptions (synonym only) on existing concepts | 2251   |
| Reactivated description (synonym only)               | 15     |
| New inferred relationships                           | 4088   |
| Changed inferred relationships                       | 10766  |
| Changed definitional status                          | 1607   |

## 2.4.1. Body structure

New body structure concepts: 306

Completion of the revision of hierarchical relationships provides stable anatomy content and improves the quality of classification results in other hierarchies.

The plan is to implement the new anatomy concept model over forthcoming releases. There are approximately 35,000 anatomy concepts to be modeled by different types of 'part of' relationships. The new model will enable the automatic generation of hierarchies to further improve quality and consistency. The concept model for over 14,000 structure concepts has been tested by batch import of axioms into the authoring platform. In order to gather feedback and evaluate the potential impact on the classification to content in extensions, a demonstration release of the anatomy model changes is planned for January 2021.

### 2.4.1.1. Abdomen/Pelvis

Updated modelling for diagnostic imaging procedures related to the changes for abdomen terminology, e.g. CT, MRI, SPECT CT have been implemented.

The notion of 'abdomen' in clinical practice can vary between different specialties and circumstances; for example, 'abdomen' in natural language can be used to refer to, but is not limited to, the following concepts:

- Abdominopelvic cavity
- Abdominopelvic cavity excluding the true pelvic cavity (Abdomen proper cavity)
- Abdominopelvic cavity and/or content (Intra-abdominopelvic structure)
- Intra-abdominopelvic structure excluding intra-pelvic structure of true pelvis
- Intra-abdominopelvic structure and/or anterior abdominal wall
- Intra-abdominopelvic structure and/or anterior abdominal wall, excluding intra-pelvic structure of true pelvis (Abdomen proper)
- Abdominal segment of trunk
- Abdominal cross-sectional segment of trunk

SNOMED International considers the most commonly used clinical variant referred to as 'abdomen' to be 818983003 |Structure of abdominopelvic cavity and/or content of abdominopelvic cavity and/or anterior abdominal wall (body structure)|, which in SNOMED CT is now the only concept using 'Abdomen' as a synonym. Revision of the inguinal region, anal structures and vaginal structures have been implemented in order to address some historical sub-optimal classification results.

Further detail can be found at <https://docs.google.com/document/d/1gxkcEYf89eJI0RJG8-S2w4zOdpF8R2sn5SHx7InWxZI/edit?usp=sharing>

### 2.4.1.2. Coronary artery

Updated left coronary arteries following the pattern for branches of blood vessels.

### 2.4.1.3. Cardiac ventricle

Updated the 17 segments of left cardiac ventricle and eliminated the term 'posterior' from anatomy according to the standard from the American Heart Association.

#### 2.4.1.4. Jaw region

The missing relationship between jaw and tooth that was reported by the Dentistry Clinical Reference Group has been resolved.

#### 2.4.1.5. Peripheral artery

The peripheral arterial anatomy hierarchy has been augmented to improve a number of dependant sections including that of peripheral arterial diseases. The update has addressed over 100 incorrect classification results.

#### 2.4.1.6. Mediastinum

Disorders of mediastinum are modeled by a new anatomy concept [Structure of space and/or soft connective tissue within mediastinal cavity (body structure)]. This has addressed nearly 300 incorrect classifications, such as myocarditis being classified as a type of mediastinitis.

#### 2.4.1.7. Planned revision of Cell hierarchy in the January 2021 release

The content under 4421005 [Cell structure (cell structure)] will be updated according to the SEP model and description patterns. Descendants of 362837007 [Entire cell (cell)] will be updated to include the word 'entire' in all descriptions. The semantic tag '(cell)' will be changed to '(cell structure)'. Descriptions for the rest of the concepts will be updated to include the word 'structure'. This improvement will reduce the potential misuse of cell concepts.

Please contact [info@snomed.org](mailto:info@snomed.org) with any inquiries or to submit feedback.

#### 2.4.1.8. Reference set updates

Updated and validated release file for the lateralizable body structure reference set.  
Updated and validated release files for the SEP refsets.

## 2.4.2. Clinical finding

New concepts added for clinical finding hierarchy: 2064

#### 2.4.2.1. Quality Initiative

The Quality Initiative (QI) project is the implementation of the Quality Strategy. After a successful pilot project for the July 2018 release the next stage has been implemented for subsequent releases including July 2020.

Quality improvement tasks were 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 was carried out to accurately reflect current clinical knowledge and ensure the semantic reliability of descriptions associated with a concept.

Total count of changes for the QI project:

- Stated: A total of 6835 concepts had changes made to the Stated relationships in the model.
- Inferred: A total of 10731 concepts affected by inferred changes.

| QI Project focus for July 2020 release (work has begun or been completed)                         |   |
|---|---|
| 1806006 Eruption (morphologic abnormality)  | 41010001 Maturation defect (morphologic abnormality)                        |
| 708528005 Narrowing (morphologic abnormality)   | 107666005 Fluid disturbance (morphologic abnormality)                       |
| 112639008 Protrusion (morphologic abnormality)  | 79644001 Pigment alteration (morphologic abnormality)                       |
| 6574001 Necrosis (morphologic abnormality)  | 449735000 Structural change due to ischemia (morphologic abnormality)       |
| 708530007 Obstructive morphology (morphologic abnormality)  | 5294002 Developmental disorder (disorder)  (excluding congenital disorders) |
| 367651003 Malignant neoplasm of primary, secondary, or uncertain origin (morphologic abnormality) | 125673005 Traumatic dislocation (morphologic abnormality)                   |

#### 2.4.2.2. Revision of 129156001|Traumatic dislocation of joint (disorder)|

Traumatic dislocation concepts have been remodeled according to the new representation using DUE TO "traumatic event". This work was commenced in the January 2020 release and has been completed for the July 2020 release.

#### 2.4.2.3. Birth injury

These concepts have been remodeled according to the new representation using DUE TO 'traumatic event' to be consistent with the new traumatic injury model.

#### 2.4.2.4. Traumatic brain injury

Traumatic brain injury concepts with specified concrete ranges relating to 'loss of consciousness' have been inactivated due to their limited clinical value and lack of historical usage.

#### 2.4.2.5. Revision of Spinal Cord Syndrome

A new concept 840721004| Incomplete spinal cord syndrome (disorder) has been created as a grouper parent to the four major subtypes of this syndrome:

- 282785008 |Anterior cord syndrome (disorder)|
- 27982003|Brown-Séquard syndrome (disorder)|
- 282786009 |Posterior cord syndrome (disorder)|
- 282787000 |Central cord syndrome (disorder)|

In prior releases these syndromes had been modeled with an ASSOCIATED MORPHOLOGY = 19130008|Traumatic abnormality (morphologic abnormality)|; however, these syndromes may present due to non-traumatic etiologies such as space filling lesions (tumors, etc.) or vascular compromise (occlusions, ruptures, etc.). These syndromes have been remodeled with ASSOCIATED MORPHOLOGY = 52988006|Lesion (morphologic abnormality)|.

Incomplete cord syndromes with a traumatic cause have been remodeled to specifically represent 773760007 |Traumatic event (event)| as the DUE TO value as well as any other relationships to describe associated disorders (e.g. fractures or dislocations).

#### 2.4.2.6. Malignant neoplasm

The content relating to Primary and secondary malignant neoplasms excluding Malignant tumours of lymphoid, hemopoietic and related tissues have been updated in line with the QI project objectives. This has resulted in an increase in sufficiently defined content and minor movement of previously incorrectly placed content into their appropriate hierarchies. Malignant tumours of lymphoid, hemopoietic and related tissue concepts will be addressed in the next release cycle along with any residual malignant neoplasm content.

#### 2.4.2.7. Update Allergy to substance (finding)

As part of the QI project review of the 419199007 |Allergy to substance (finding)| sub-hierarchy and per the Allergies Clinical Reference Group recommendation, the concepts in this sub-hierarchy that represent allergy to "role groupers" and "Structure + role groupers" are being inactivated starting from the July 2020 release. Examples of these concepts are provided below:

- 294450008 Allergy to anthelmintic agent (finding)
- 294461000 Allergy to antibacterial drug (finding)

#### 2.4.2.8. Content Tracker Project Updates

Work **on hold** on the following Content Project:

- IHTSDO- 393 Diabetes Complications - The Diabetes Project Group comprises practicing clinicians. As a result of the COVID-19 pandemic the majority of the participating clinicians have been drafted into supporting the response to this health care crisis. Consequently this project has been put on temporary hold until the pandemic is under control and healthcare staff are able to return to their normal duties.

Work **completed** for the following Content Project:

- IHTSDO-1157 Distinction between Pain and Tenderness. Improvement in the modeling of the Tenderness (finding) sub-hierarchy.

#### 2.4.2.9. Improve modeling for 404177007|Angioedema and/or urticaria (disorder)| and descendants

Remodel 404177007|Angioedema and/or urticaria (disorder)| and descendants.  
New morphology concept added 846575004 |Angioedema (morphologic abnormality)|

#### 2.4.2.10. Changes for 'On Examination' and 'Complaining of' concepts

The 'on examination' and 'complaining of' content is being returned to the UK as part of the work for the January 2021 release. As part of this work, where no suitable replacement concept existed (without the examination or complaint component of the meaning) and the clinical meaning

met editorial guidelines new concepts were added. This work was done over the January 2020 and July 2020 releases. For the July 2020 release this included the addition of 230 new concepts.

#### 2.4.2.11. Update 17602002 Amyloidosis (disorder) and descendants

The modeling and terming of many amyloidosis disorder concepts were updated in the 17602002 Amyloidosis (disorder) sub-hierarchy.

#### 2.4.2.12. Reactivation of 419952004 |Dermoid cyst (disorder)|

Existing concepts using the fully specified name "Cystic dermoid choristoma" have been inactivated and replaced with new concepts using the fully specified name "Dermoid cyst of X".

These concepts have all been inactivated:

- 441459009 |Cystic dermoid choristoma (disorder)| and all subtypes
- 416529009 |Cystic dermoid choristoma (morphologic abnormality)|
- 417137001 |Dermoid choristoma (morphologic abnormality)|

#### 2.4.2.13. Rename FSN for concepts using 'Ecstasy' to Methylenedioxyamphetamine

Ecstasy is not synonymous with Methylenedioxyamphetamine (MDMA). Where "Ecstasy" is used in FSN and Causative agent is MDMA the concept has been replaced with a new or existing concept with FSN that contains MDMA. When "Ecstasy type drug" is used in FSN, regardless of causative agent the concept is replaced with a concept with FSN for "Amphetamine and amphetamine derivative (substance)."

#### 2.4.2.14. Remodel 397803000 |Impotence (disorder) and descendants

397803000 |Impotence (disorder) has been inactivated and replaced with a new concept 860914002 |Erectile dysfunction (disorder). Subtype concepts that used the word 'impotence' have also been replaced with concepts that use the term 'erectile dysfunction.'

#### 2.4.2.15. New concept 840358001 |High body weight (finding)| and realignment of subtypes

A new concept 840358001 |High body weight (finding)| has been added and has 2 subtypes that are siblings:

- 414915002 |Obese (finding)|
- 238131007 |Overweight (finding)|

The two latter findings of 'Obese' and 'Overweight' are mutually exclusive terms in the classification of BMI.

#### 2.4.2.16. New concepts - Mental health

2 new concepts have been added after liaison with the Mental and Behavioural Health Clinical Reference Group:

- 'Depressive episode' has been removed as a synonym on 35489007 |Depressive disorder (disorder)|.
- New concept has been added 871840004 |Episode of depression (finding)|.
- New concept added: 833326008 |Cortical vascular dementia (disorder)|

##### Notice: 'Co-occurrent and due to' pattern:

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 to" and update the Editorial Guide for this area.

The Editorial Guide and all concepts that are currently modeled as 'Co-occurrent and due to' will be updated over future release cycles.

## 2.4.3. Convergent Medical Terminologies (CMT)

New CMT concepts: 714

- Injury - 162 concepts added.
- Ophthalmology - 552 concepts added.

## 2.4.4. Procedure

New concepts for procedure hierarchy: 299

### 2.4.4.1. Implantation and Insertion procedures

Work continues on content tracker IHTSDO-175. There are ongoing structural changes for the Procedure concepts related to the content tracker. Work on this project will continue for future releases after July 2020.

### 2.4.4.2. Content Inactivation - Anesthesia

These concepts have been inactivated from the International release and moved to the US extension:

- 67902001 |Anesthesia for a normal healthy patient (procedure)|
- 23102000 |Anesthesia for a patient with mild systemic disease (procedure)|
- 22211001 |Anesthesia for a patient with severe systemic disease (procedure)|
- 112989003 |Anesthesia for a moribund patient requiring operation (procedure)|
- 71191009 |Anesthesia for a patient with severe systemic disease, life threatening (procedure)|

### 2.4.4.3. Content Inactivation - Monitoring

These concepts have been inactivated from the International release and moved to the UK extension:

- 391023009|Osteoporosis - no treatment (regime/therapy)|
- 391030003|Osteoporosis - no treatment response (regime/therapy)|
- 391028000|Osteoporosis - treatment response (regime/therapy)|
- 391003008|Osteoporosis monitoring administration (regime/therapy)|
- 391004002|Attends osteoporosis monitoring (regime/therapy)|
- 391006000|Osteoporosis monitoring default (regime/therapy)|
- 391012005|Osteoporosis monitoring deleted (regime/therapy)|
- 391007009|Osteoporosis monitoring first letter (regime/therapy)|
- 391008004|Osteoporosis monitoring second letter (regime/therapy)|
- 391011003|Osteoporosis monitoring telephone invitation (regime/therapy)|
- 391009007|Osteoporosis monitoring third letter (regime/therapy)|
- 391010002|Osteoporosis monitoring verbal invitation (regime/therapy)|

### 2.4.4.4. Evaluation Procedure

- New evaluation procedure concepts - 10 (respiratory procedures, specimen processing and laboratory panels).
- Concept inaction - 13 (inactivated due to duplication or ambiguity).

## 2.4.5. Collaboration/Harmonization Projects

### 2.4.5.1. Orphanet

Working in collaboration with Orphanet (<http://www.orpha.net/consor/cgi-bin/index.php>), creation of new concepts for the original set of prioritized rare diseases has been completed. The alpha release is now available for feedback, for more information please see **April 2020 SNOMED CT Orphanet Simple Map package ALPHA release available**

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

### 2.4.5.2. ICD-11 Update

A total of 593 new concepts were added for the July 2020 release.

### **2.4.5.3. Global Medical Device Nomenclature Agency (GMDNA)**

62 new device concepts were added to the physical object hierarchy for GMDN.

For the GMDN mapping equivalence tables:

- 62 new concepts have been added to in scope and mapped.
- 156 concepts have been modified and removed from the mapping tool as out of scope.
- 95 concepts have been deemed obsolete and removed from the mapping tool and flagged as out of scope.

### **2.4.5.4. ICD-O-3.2 Update**

A full Impact analysis of both updating the existing SNOMED CT content and updating the current ICD-O-3.1 map has been carried out. In particular this relates to changes to the 400177003 |Neoplasm and/or hamartoma (morphologic abnormality)| sub-hierarchy in SNOMED CT. The impact analysis utilized the final IACR ICD-O-3.2 (WHO IARC) morphology code listing and the new pdf changes documents on their website ([http://www.iacr.com.fr/index.php?option=com\\_content&view=category&layout=blog&id=100&Itemid=577](http://www.iacr.com.fr/index.php?option=com_content&view=category&layout=blog&id=100&Itemid=577)).

For the July 2020 release only minor changes have been made, and 14 new morphologies have been added to the 108369006 |Neoplasm (morphologic abnormality)| sub-hierarchy.

Note - The published maps to ICD-O-3.1 are being updated only for maintenance purposes for the July 2020 release. The maps to ICD-O-3.2 are out of scope for the July 2020 release and are planned for a future release.

## **2.4.6. Event**

New concepts added: 4

## **2.4.7. Qualifier Value**

New concepts added: 65

## **2.4.8. Occupation**

Concepts representing "other" occupations e.g. 79445009 |Other clerk (occupation)| have been inactivated as ambiguous as these represent classification constructs.

## 2.4.9. Situation with explicit context

New concepts added: 129

## 2.4.10. Physical object

New concepts added: 89

- Approximately 200 device concepts in the physical object hierarchy were modeled with the new device attributes in the areas of breast implants, shunts, stent, and cardiac valve prosthesis. Some of these concepts also had FSN and description changes.
- 25 concepts in the physical object hierarchy were inactivated.
- Approximately 630 attribute-value relationships were added to the physical object hierarchy including device characteristic such as sterility, absorbability, and custom-made.
- Editorial guidelines developed and documented and noted content updated accordingly. The guidelines are found on the project space: [Reference Documentation - Devices](#) (*Please note, you may have to register for Confluence user account in order to access this project and the relevant link*).

## 2.4.11. Specimen

New concepts added: 8

Concepts inactivated: 2

## 2.4.12. Observable Entity

New concepts added: 117

- 30 new concepts were added in the areas of novel coronavirus detection, insulin rates and doses, test due dates, minimum alveolar concentration.
- Estimate intake of X = 30 concepts new concepts
- Measured intake of X = 30 concept new concepts
- Proportion of X = 3 new concepts
- Target = 4 new concepts

## 2.4.13. Organism

New organism concepts added: 135.

Updated descriptions for 60 concepts.

## 2.4.14. Pharmaceutical / biologic product

### Drug model project

For further details on the planned changes in this area, please refer to the Drug Model Working Group Directory section.

*Please note, you may have to register for Confluence user account in order to access this project and the relevant link*

| Changes for the July 2020 International Release |   |
|---|---|
| <b>Concrete domain</b>                          | Information about upcoming changes to implement concrete domains in lieu of concepts representing numeric values will be available on the Modeling Advisory Group Confluence space located at:<br><a href="https://confluence.ihtsdotools.org/display/mag/Modeling+Advisory+Group">https://confluence.ihtsdotools.org/display/mag/Modeling+Advisory+Group</a>   |
| <b>Vaccine products</b>                         | Editorial guidelines developed and documented and existing content updated accordingly. The guidelines will be found on the project space <a href="#">Reference Documentation - Drug Model</a> ( <i>Please note, you may have to register for Confluence user account in order to access this project and the relevant link</i> ).<br><br>The updated Vaccine product concepts have been used to remodel content throughout SNOMED.<br><br>Vaccine product "containing" concepts have been used in modeling "Allergy to X vaccine" and "Adverse reaction to X vaccine" patterns.<br><br>Vaccine product "containing only" concepts have been used in modeling "Administration of X vaccine" pattern.<br><br>Substance concepts referring to vaccines have been inactivated in lieu of the Vaccine product concepts.<br><br>Product role attributes added to products used for passive immunization. |

## 2.4.15. Veterinary Extension

23 concepts were moved to the Veterinary Extension.

## 2.4.16. Metadata concept

In order to support the upcoming RF2 version of the GPS (Global Patient Set) refset, the GPS requires its own moduleID.

A new concept has been added to support this use case 890195008|International Health Terminology Standards Development Organisation Global Patient Set module (core metadata concept)|

## 2.4.17. Substances

New concepts added: 137

- New disposition concepts: 7
- Inactivated Allergen class groupers from the Substance hierarchy.
- Inactivated Vaccine substance groupers from the Substance hierarchy.

### Release plans, Substance hierarchy

For further details on the planned changes in this area, please refer to the Substances project.

*Please note, you may have to register for Confluence user account in order to access this project and the relevant links above.*

## 2.5. Internal Quality Improvement

### 2.5.1. Replacement of the Stated Relationship files with the new OWL Axiom refset files

A set of documentation has been developed to support the Logic Profile Enhancements.

- [SNOMED DL Profile Enhancements](#)
- [SNOMED CT Logic Profile Specification](#)
- [SNOMED CT OWL Guide \(OWL Refsets specification\)](#)
- 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](https://youtu.be/sfFbMMioA_4)

For any questions, please contact SNOMED International at [support@snomed.org](mailto:support@snomed.org) with "OWL Axiom refset files implementation question" in the subject line.

### 2.5.2. Machine Readable Concept Model (MRCM) Changes

Changes to the MRCM for the July 2020 release include:

- MRCM for new attribute 860779006 |Has ingredient characteristic (attribute)|
- MRCM for new attribute 246196007 |Has surface characteristic (attribute)|
- MRCM for new attribute 827081001 |Has filling (attribute)|
- MRCM for new attribute 836358009 |Has device intended site (attribute)|
- MRCM for new attribute 840560000 |Has compositional material (attribute)|
- MRCM for new attribute 840562008 |Has device characteristic (attribute)|
- MRCM for new attribute 860781008 |Has product characteristic (attribute)|
- Expand the range of 246075003 |Causative agent (attribute)| to include << 373873005 |Pharmaceutical / biologic product (product)|

Further detail can be found at <https://confluence.ihtsdotools.org/display/IAP/MRCM+changes+in+the+July+2020+release> (Please note, you may have to register for Confluence user account in order to access this project and the relevant links above).

### 2.5.3. Improvement for the Representation of Role Groups

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. Two key changes have been implemented since the July 2019 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 is only applied to attributes that are not logically grouped. The attribute is not a value of 609096000|Role group (attribute)| in an OWL axiom. Or the attribute has grouped = 0 in the MRCM. This addresses the potential confusion whether an attribute is grouped or not in role group 0.

The improvements provide consistent representation for role groups in the OWL axioms, inferred relationship file and diagramming of the concept model.

### 2.5.4. Concrete Domains and Numeric Representation

The Modeling Advisory Group is working on concrete domains and how they will be represented in the inferred RF2 relationship file format. The following is a note on the interim solution relating to concrete domain for the medicinal product model:

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. We are progressing the development of the specification for the inferred relationship file in consultation with the community of practice. When ready, strength in the medicinal product model can be transformed to concrete domains. The transformation will be completed by technical changes without impact to classification results.

Further information about current progress on Concrete Domains can be found at:

<https://confluence.ihtsdotools.org/display/mag/Modeling+Advisory+Group> (Please note, you may have to register for Confluence user account in order to access this link).

## 2.6. SNOMED CT derived products

## 2.6.1. 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 release 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_iisssccRefset_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 |ICD-10 complex map reference set (foundation metadata concept)|.

### 2.6.1.1. 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.

### 2.6.1.2. Mapped content for July 2020

The map provided for the July 2020 release has been updated, and now represents a complete map from SNOMED CT International release to ICD-10 2016 version.

- 2223 new concepts added  
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](mailto:mapping@snomed.org)

### 2.6.1.3. Technical Guide Exemplars

The Technical Guide Exemplars document has now been moved from the International Edition release package to a Confluence page. This page can be found as part of the ICD-10 Mapping Technical Guide (see Appendix B), which is hosted here: <http://snomed.org/icd10map>

## 2.6.2. ICD-O Map

For the July 2020 release only minor changes have been made, and 14 new morphologies have been added to the 108369006 |Neoplasm (morphologic abnormality)| sub-hierarchy.

The published maps to ICD-O-3.1 are being updated only for maintenance purposes for the July 2020 release. The maps to ICD-O-3.2 are out of scope for the July 2020 release and are planned for a future release.

## 2.6.3. 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](mailto:support@snomed.org) if you would like to provide any feedback on ways to extend and improve the new toolkit.

## 3. Technical notes

### 3.1. 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 capacity within the current editing cycle, 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 SNOMED CT July 2020 International edition, the following Known Issues were identified, and agreed to be resolved in future editing cycles:

| Key      | Summary                  | Description   |
|----------|--------------------------|---|
| ISRS-807 | Primitive Stated parents | <p>Australia have reported the following potential issue with the modelling, which requires valid source concepts:</p> <p><i>"These concepts fail. I think the problem is their stated parent is primitive... and not a subtype of [433590000  Administration of substance via specific route (procedure)] http://snomed.info/id/433590000</i></p> <ul style="list-style-type: none"><li>• 427633002 Intravenous injection of vaccine (procedure)</li><li>• 787016008 Administration of vaccine product containing only Influenza virus antigen in nasal dose form (procedure)</li><li>• 871728006 Administration of vaccine product containing only live attenuated Salmonella enterica subspecies enterica serovar Typhi antigen in oral dose form (procedure)</li><li>• 871899004 Administration of vaccine product containing only live attenuated Human alphaherpesvirus 3 antigen via subcutaneous route (procedure)</li><li>• 572391000119109 Administration of vaccine product containing only Rabies lyssavirus antigen via intramuscular route (procedure)</li><li>• 572431000119104 Administration of vaccine product containing only Salmonella enterica subspecies enterica serovar Typhi capsular polysaccharide Vi antigen via intramuscular route (procedure)</li><li>• 626061000119109 Administration of pentavalent vaccine product containing only live attenuated Rotavirus antigen via oral route (procedure)</li><li>• 16292691000119104 Administration of vaccine product containing only inactivated whole Japanese encephalitis virus antigen (procedure)</li><li>• 16292731000119106 Administration of vaccine product containing only inactivated whole Japanese encephalitis virus antigen adsorbed via intramuscular route (procedure)</li></ul> <p>KNOWN ISSUE: The SNOMED CT Content Team have confirmed that the reason for this being reported as an issue is that all of these concepts use a DIRECT SUBSTANCE of &lt;&lt;Vaccine product as opposed to substance. This is technically not an error, however, as it is the "Administration of <b>product</b> via specific route". As the parent in question is a non-clinical grouper, there is no concern about the loss of this parent. Administration by a specific route can be easily handled using ECL. However, further investigation will be conducted into the classification of these and other concepts, with the aim to resolve any issues for the July 2021 International Edition.</p> |

1 issue

### 3.2. 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 the Alpha and Beta testing of the current release, which were resolved before the final deployment of the associated Member 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 Snomed CT July 2020 International edition can be found here:

| Key | Summary | Description | Resolved |
|-----|---------|-------------|----------|
|-----|---------|-------------|----------|

|          |  |   |           |
|----------|--|---|-----------|
| ISRS-575 | DROOLS assertion failure: "An axiom marked as defined must have one or more defining relationship, i.e., not is-a type relationships." | <p>assertionText: "An axiom marked as defined must have one or more defining relationship, i.e., not is-a type relationships.",<br/>failureCount: 1716,<br/>firstNInstances: [</p> <ul style="list-style-type: none"> <li>{conceptId: "403702001", detail: "An axiom marked as defined must have one or more defining relationship, i.e., not is-a type relationships."}</li> <li>{conceptId: "272634000", detail: "An axiom marked as defined must have one or more defining relationship, i.e., not is-a type relationships."}</li> <li>{conceptId: "275786006", detail: "An axiom marked as defined must have one or more defining relationship, i.e., not is-a type relationships."}</li> </ul> <p>RESOLUTION: The SNOMED International Content team confirmed that these legacy modelling issues will be resolved by the QI project (using template based editing) in future editing cycles. Therefore no tickets are required to remain open for these issues.</p>  | 2020-May- |
| ISRS-582 | DROOLS assertion failure: "It is not allowed to add a subtype as a parent."  | <p>assertionText: "It is not allowed to add a subtype as a parent.",<br/>failureCount: 51,<br/>firstNInstances: [</p> <ul style="list-style-type: none"> <li>{conceptId: "300098001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "409269001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "102553006", detail: "It is not allowed to add a subtype as a parent."}</li> </ul> <p>RESOLUTION: Resolved in time for the July 2020 International Edition.</p>  | 2021-Mar- |
| ISRS-668 | DROOLS Assertion failure: It is not allowed to add a subtype as a parent.  | <p>assertionText: "It is not allowed to add a subtype as a parent.",<br/>failureCount: 14,<br/>firstNInstances: [</p> <ul style="list-style-type: none"> <li>{conceptId: "427738001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "95378001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "421961002", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "473010000", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "333547002", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "347664008", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "609406000", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "473011001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "609405001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "64249002", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "333641007", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "702809001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "409269001", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "427640001", detail: "It is not allowed to add a subtype as a parent."}</li> </ul> <p>RESOLUTION: Resolved in time for the July 2020 International Edition.</p> | 2021-Mar- |
| ISRS-672 | Duplicates between entire concepts   | <p>This is for the Anatomy Structure and Entire refset () - the test expects that each referenced "Structure", only maps to a single "Entire".</p> <ul style="list-style-type: none"> <li>bf51906f-9436-4001-a899-33c54635c3bd Structure of abdominopelvic segment of trunk (body structure) Entire abdominopelvic segment of trunk (body structure)</li> <li>2f36f793-483f-4cd2-8e8a-827fb3c1fb49 Structure of abdominopelvic segment of trunk (body structure) Entire lower trunk (body structure)</li> <li>8cb4caae-4f4b-40bb-a6ca-2c6ff0482c1e Structure of organ within abdominopelvic cavity (body structure) Entire organ within abdominopelvic cavity (body structure)</li> <li>fc40a73b-4f65-4abb-987b-9748063a594a Structure of organ within abdominopelvic cavity (body structure) Entire abdominopelvic organ (body structure)</li> </ul> <p>RESOLUTION: The relevant inactivations have been implemented for the July 2020 International Edition release.</p>  | 2021-Mar- |
| ISRS-673 | Illegitimate use of quotation marks used in descriptions   | <p><u>Illegitimate use of quotation marks used in descriptions / +Right handed quotation mark instead of apostrophe used in descriptions:</u><br/>This is a quirky test created as a result copy paste problems with AMT authors in particular, copy/pasting terms from other applications etc.<br/>Right hand quotes, instead of apostrophes.</p> <ul style="list-style-type: none"> <li>3858413014 Mother's expressed breastmilk intake</li> <li>3858415019 Intake of mother's expressed breast milk</li> <li>3858416018 Intake of mother's expressed breast milk (observable entity)</li> </ul> <p>RESOLUTION: The SNOMED International Content Team have resolved these issues in time for the July 2020 International Edition.</p>   | 2021-Mar- |
| ISRS-700 | MRCM issues  | <p>The following MRCM issues have been reported, with the aim to fix them in time for the July 2020 International Edition:</p> <ol style="list-style-type: none"> <li>MRCM Format update - see discussion here: <a href="https://confluence.ihtsdotools.org/display/TRAG/MRCM+format+update">https://confluence.ihtsdotools.org/display/TRAG/MRCM+format+update</a></li> </ol>  | 2021-Mar- |

- The UK picked up one more error in the der2\_ssssssRefset\_MRCMDomainSnapshot\_INT\_20200131.txt file that they'd previously reviewed visually. They suspect that the error has been there for the last 12 months so is not critical, and should be corrected for July 2020.

Specifically, in the domainTemplateForPrecoordination field of the ^ 723264001 |Lateralizable body structure reference set (foundation metadata concept) domain entry (id=eb0bebd1-991a-4f69-97ab-e1c5bf64dd27), there remains a reference to the inactive attribute 123005000 |Part of|:

```
[[+id(^ 723264001 |Lateralizable body structure reference set (foundation metadata concept))]; [[0..1]]
272741003 |Laterality| = [[+id(<< 182353008 |Side (qualifier value))]]; [[0..*]] 123005000 |Part of| = [[+id(<<
123037004 |Body structure (body structure))]]; [[0..*]] 733928003 |All or part of| = [[+id(<<
123037004 |Body structure (body structure))]]; [[0..*]] 733931002 |Constitutional part of| = [[+id(<<
123037004 |Body structure (body structure))]]; [[0..*]] 733930001 |Regional part of| = [[+id(<<
123037004 |Body structure (body structure))]]; [[0..*]] 733933004 |Lateral half of| = [[+id(<<
123037004 |Body structure (body structure))]]; [[0..*]] 733932009 |Systemic part of| = [[+id(<<
123037004 |Body structure (body structure))]]]
```

References to the same attribute in the associated MRCM refset files have all been inactivated, and other similar constraints (from other anatomy domains) no longer refer to 123005000 |Part of|.

- The UK suspect this is a risk of having SCTIDs published in parsable string datatypes, and we may need to think about QA strategies to detect & review inactive identifiers published this way. We should therefore discuss this and address it as part of the new MRCM tool validation.

RESOLUTION: MRCM Refsets refined in time for the July 2020 International BETA release onwards.

| ISRS-720        | Case significance changes to the Wuhan Corona concepts                    | <p>As part of the introduction of the new concepts for the Corona virus content in January 2020, some potential case significance improvements were identified for the following concept:</p> <ul style="list-style-type: none"> <li>709904008  Antibody to Severe acute respiratory syndrome coronavirus (substance) </li> </ul> <p>RESOLUTION: Improvements completed in time for the July 2020 International Edition.</p>  | 2021-Mar- |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
|-----------------|---|---|-----------|---------------|-------------------|-----------------|-----------|----------|-----------------|----------|----------|-----------------|-----------|------------|-----------------|----------|------------|-----------|
| ISRS-739        | DROOLS Assertion failure: It is not allowed to add a subtype as a parent. | <p>assertionText: "It is not allowed to add a subtype as a parent.",</p> <p>failureCount: 5,<br/>firstNInstances: [</p> <ul style="list-style-type: none"> <li>{conceptId: "409269001", conceptFsn: "Intranasal influenza live virus vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "333547002", conceptFsn: "Diphtheria antitoxin vaccine injection (product)", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "347664008", conceptFsn: "Adsorbed tetanus vaccine injection solution ampule (product)", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "427738001", conceptFsn: "Autologous 12million chondrocyte cells injection solution vial for implantation (product)", detail: "It is not allowed to add a subtype as a parent."}</li> <li>{conceptId: "333641007", conceptFsn: "Adsorbed tetanus vaccine injection solution prefilled syringe (product)", detail: "It is not allowed to add a subtype as a parent."}</li> </ul> <p>RESOLUTION: SNOMED International Content team confirmed that these issues have been reduced down significantly since the previous cycle (down from 14 already since just the January 2020 Release), and that although the remaining 5 records should not be a subconcept of 'medicinal product', this is already being resolved as part of the vaccines project. They can therefore safely be whitelisted (for this assertion only) with no action required for this release.</p> | 2021-Mar- |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| ISRS-741        | High Role Group numbers   | <p>There are a few large Role Group numbers, which whilst they don't contravene the RF2 regulations and therefore the relationships and role groups are correct, the number is unexpectedly high. SNOMED International will therefore investigate why this has happened, prevent it from re-occurring, and also create a new RVF assertion to automatically validate for similar issues going forwards.</p> <p>Examples:</p> <table border="1"> <thead> <tr> <th>sourceId</th> <th>destinationId</th> <th>relationshipGroup</th> </tr> </thead> <tbody> <tr> <td>820511000168109</td> <td>129377008</td> <td>41631001</td> </tr> <tr> <td>820511000168109</td> <td>52940008</td> <td>41631001</td> </tr> <tr> <td>830081000168105</td> <td>257903006</td> <td>1598751763</td> </tr> <tr> <td>830081000168105</td> <td>36847003</td> <td>1598751763</td> </tr> </tbody> </table> <p>RESOLUTION: Role Group numbers have been corrected in time for the July 2020 International Edition.</p>  | sourceId  | destinationId | relationshipGroup | 820511000168109 | 129377008 | 41631001 | 820511000168109 | 52940008 | 41631001 | 830081000168105 | 257903006 | 1598751763 | 830081000168105 | 36847003 | 1598751763 | 2020-Mar- |
| sourceId        | destinationId   | relationshipGroup   |           |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| 820511000168109 | 129377008   | 41631001  |           |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| 820511000168109 | 52940008  | 41631001  |           |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| 830081000168105 | 257903006   | 1598751763  |           |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| 830081000168105 | 36847003  | 1598751763  |           |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |
| ISRS-770        | assertionText : "Active terms sharing first word with case-sensitive      | <p>testCategory: "",<br/>testType: "DROOL_RULES",<br/>assertionText: "Active terms sharing first word with case-sensitive term should share case sensitivity.",<br/>failureCount: 28,<br/>firstNInstances: [</p> <ul style="list-style-type: none"> <li>{conceptId: "871720004", conceptFsn: "Vaccine product containing only Dengue virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }</li> </ul>   | 2020-May- |               |                   |                 |           |          |                 |          |          |                 |           |            |                 |          |            |           |

term should share case sensitivity."

- { conceptId: "871720004", conceptFsn: "Vaccine product containing only Dengue virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871761004", conceptFsn: "Vaccine product containing only Rotavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871761004", conceptFsn: "Vaccine product containing only Rotavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871738001", conceptFsn: "Vaccine product containing only live attenuated Mumps orthorubulavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871738001", conceptFsn: "Vaccine product containing only live attenuated Mumps orthorubulavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871768005", conceptFsn: "Vaccine product containing only Influenza virus antigen in nasal dose form (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871768005", conceptFsn: "Vaccine product containing only Influenza virus antigen in nasal dose form (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871732000", conceptFsn: "Vaccine product containing only Rubella virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871732000", conceptFsn: "Vaccine product containing only Rubella virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871804001", conceptFsn: "Vaccine product containing only Hepatitis A virus and Salmonella enterica subspecies enterica serovar Typhi antigens (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871804001", conceptFsn: "Vaccine product containing only Hepatitis A virus and Salmonella enterica subspecies enterica serovar Typhi antigens (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871737006", conceptFsn: "Vaccine product containing only Mumps orthorubulavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871737006", conceptFsn: "Vaccine product containing only Mumps orthorubulavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871726005", conceptFsn: "Vaccine product containing only Rabies lyssavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871726005", conceptFsn: "Vaccine product containing only Rabies lyssavirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871817003", conceptFsn: "Vaccine product containing only Measles morbillivirus and Rubella virus antigens (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871817003", conceptFsn: "Vaccine product containing only Measles morbillivirus and Rubella virus antigens (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871772009", conceptFsn: "Vaccine product containing only Influenza A virus subtype H1N1 antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871772009", conceptFsn: "Vaccine product containing only Influenza A virus subtype H1N1 antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871765008", conceptFsn: "Vaccine product containing only Measles morbillivirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871765008", conceptFsn: "Vaccine product containing only Measles morbillivirus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "1181000221105", conceptFsn: "Vaccine product containing only Influenza virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "1181000221105", conceptFsn: "Vaccine product containing only Influenza virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871717007", conceptFsn: "Vaccine product containing only Yellow fever virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871717007", conceptFsn: "Vaccine product containing only Yellow fever virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871719005", conceptFsn: "Vaccine product containing only Tick-borne encephalitis virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }
- { conceptId: "871719005", conceptFsn: "Vaccine product containing only Tick-borne encephalitis virus antigen (medicinal product)", detail: "Active terms sharing first word with case-sensitive term should share case sensitivity." }

RESOLUTION: SNOMED CT Content Team confirmed that these are false positives and reflect the terming pattern for the vaccine concepts where the PT begins with the name of the organism and is CS and the synonym begins with the disorder (which may share the same name as the genus) and is ci or cl. These concepts will therefore be whitelisted for this particular assertion.

ISRS-771 RVF Assertion failure: 805ab37c-33fa-45aa-876b-f86365a828c8

assertionUuid: "805ab37c-33fa-45aa-876b-f86365a828c8",  
 assertionText: "Case-sensitive terms that share initial words also share caseSignificancelid value.",  
 failureCount: 3,  
 firstNInstances: [

- {conceptId: "871772009", detail: "DESC: conceptid=871772009:has terms not sharing case-sensitivity."}
- {conceptId: "871804001", detail: "DESC: conceptid=871804001:has terms not sharing case-sensitivity."}
- {conceptId: "871822003", detail: "DESC: conceptid=871822003:has terms not sharing case-sensitivity."}

2020-May-

RESOLUTION: SNOMED CT Content Team confirmed that these are false positives and reflect the terming pattern for the vaccine concepts where the PT begins with the name of the organism and is CS and the synonym begins with the disorder (which may share the same name as the genus) and is ci or cl. These concepts will therefore be whitelisted for this particular assertion.

|          |   |  |           |
|----------|---|--|-----------|
| ISRS-772 | RVF Assertion failure: c3249e80-84f0-11e1-b0c4-0800200c9a66 | <p>assertionUuid: "c3249e80-84f0-11e1-b0c4-0800200c9a66",<br/> assertionText: "Terms that contain en-us specific words are in the en-us language refset.",<br/> failureCount: 7,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "15698881000119100", detail: "DESCRIPTION: id=3901312018: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "156988841000119105", detail: "DESCRIPTION: id=3901342015: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "840484006", detail: "DESCRIPTION: id=3914867019: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "15693241000119100", detail: "DESCRIPTION: id=3944777019: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "15693281000119105", detail: "DESCRIPTION: id=3944800014: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "15693201000119102", detail: "DESCRIPTION: id=3944807012: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> <li>• {conceptId: "840444002", detail: "DESCRIPTION: id=3977842014: Synonym is preferred in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba"}</li> </ul> | 2020-May- |
|----------|---|--|-----------|

RESOLUTION: SNOMED CT Content Team confirmed that these are false positives as all instances checked, matches spelling for organism, Acanthamoeba is a proper name. These concepts will therefore be whitelisted for this particular assertion.

|          |   |  |           |
|----------|---|--|-----------|
| ISRS-773 | RVF Assertion failure: c82246b1-a137-40c5-8653-554c9ce82c6b | <p>assertionUuid: "c82246b1-a137-40c5-8653-554c9ce82c6b",<br/> assertionText: "Active preferred terms for active concepts are unique in the same hierarchy",<br/> failureCount: 2,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "420559008", detail: "Preferred term=L is duplicated in hierarchy (qualifier value)"}</li> <li>• conceptId: "258770004", detail: "Preferred term=L is duplicated in hierarchy (qualifier value)"}</li> </ul> | 2020-Apr- |
|----------|---|--|-----------|

RESOLUTION: The SNOMED International Content team have investigated these potential duplicates (as part of the International Edition validation) and confirmed that they are all valid terms. These potential issues have therefore been permanently whitelisted (see [ISRS-737](#)), and can be safely ignored with no action currently required.

|          |   |   |           |
|----------|---|---|-----------|
| ISRS-774 | RVF Assertion failure: cc9c5340-84f0-11e1-b0c4-0800200c9a66 | <p>assertionUuid: "cc9c5340-84f0-11e1-b0c4-0800200c9a66",<br/> assertionText: "Terms that contain en-gb specific words are in the en-gb language refset.",<br/> failureCount: 7,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "870186005", detail: "DESCRIPTION: id=3968402013: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: behavior"}</li> <li>• {conceptId: "870187001", detail: "DESCRIPTION: id=3968406011: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: behavior"}</li> <li>• {conceptId: "870179002", detail: "DESCRIPTION: id=3968381016: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: dyspnea"}</li> <li>• {conceptId: "870180004", detail: "DESCRIPTION: id=3968385013: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: dyspnea"}</li> <li>• conceptId: "870181000", detail: "DESCRIPTION: id=3968387017: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: esophageal"}</li> <li>• {conceptId: "870182007", detail: "DESCRIPTION: id=3968391010: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: esophageal"}</li> <li>• {conceptId: "870185009", detail: "DESCRIPTION: id=3968399012: Synonym is preferred in the en-gb language refset but refers to a word that has en-us spelling: pediatric"}</li> </ul> | 2020-May- |
|----------|---|---|-----------|

RESOLUTION: SNOMED CT Content Team confirmed that these are false positives as all instances relate to the proper name of an assessment scale and therefore conform to the editorial guidance. These concepts will therefore be whitelisted for this particular assertion.

|          |   |  |           |
|----------|---|--|-----------|
| ISRS-775 | MRCM issues: fe14346d-fd26-49ab-a9db-ba74f8eca9ee | <p>assertionUuid: "fe14346d-fd26-49ab-a9db-ba74f8eca9ee",<br/> assertionText: "MRCM rule must be applied to attribute:246075003 for content type:723594008 within attribute domain range constraint: &lt;&lt; 410607006  Organism (organism)  OR &lt;&lt; 105590001  Substance (substance)  OR &lt;&lt; 260787004  Physical object (physical object)  OR &lt;&lt; 78621006  Physical force (physical force) ",<br/> failureCount: 49,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "294650000", detail: "MRCM rule must be applied to attribute:246075003 for content type:723594008 within attribute domain range constraint: &lt;&lt; 410607006  Organism (organism)  OR &lt;&lt; 105590001  Substance (substance)  OR &lt;&lt; 260787004  Physical object (physical object)  OR &lt;&lt; 78621006  Physical force (physical force) "}</li> <li>• {conceptId: "294651001", detail: "MRCM rule must be applied to attribute:246075003 for content type:723594008 within attribute domain range constraint: &lt;&lt; 410607006  Organism (organism)  OR &lt;&lt; 105590001  Substance (substance)  OR &lt;&lt; 260787004  Physical object (physical object)  OR &lt;&lt; 78621006  Physical force (physical force) "}</li> </ul> | 2021-Mar- |
|----------|---|--|-----------|

- conceptId: "294652008", detail: "MRCM rule must be applied to attribute:246075003 for content type:723594008 within attribute domain range constraint: << 410607006 [Organism (organism)] OR << 105590001 [Substance (substance)] OR << 260787004 [Physical object (physical object)] OR << 78621006 [Physical force (physical force)]"

RESOLUTION: Resolved in time for the July 2020 International Edition.

|   |  |   |           |
|---|--|---|-----------|
| ISRS-776  | RVF Assertion failure: 0cc708af-6816-4370-91be-dba8da99d227                        | <p>assertionUuid: "0cc708af-6816-4370-91be-dba8da99d227",<br/> assertionText: " There must be actual changes made to previously published descriptions in order for them to appear in the current delta.",<br/> failureCount: 3,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "255083005", detail: "Description: id=380131010 is in the delta file, but no actual changes made since the previous release."}</li> <li>• {conceptId: "255083005", detail: "Description: id=380132015 is in the delta file, but no actual changes made since the previous release."}</li> <li>• {conceptId: "255083005", detail: "Description: id=646067016 is in the delta file, but no actual changes made since the previous release."}</li> </ul>   | 2021-Mar- |
| RESOLUTION: Resolved in time for the July 2020 International Edition. |  |   |           |
| ISRS-777  | RVF Assertion failure: 31f5e2c8-b0b9-42ee-a9bf-87d95edad83b                        | <p>assertionUuid: "31f5e2c8-b0b9-42ee-a9bf-87d95edad83b",<br/> assertionText: "There is only one member id per description per dialect in the language refset snapshot file.",<br/> failureCount: 4,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "255083005", detail: "Description: id=646067016: has multiple language refset members for a given dialect."}</li> <li>• {conceptId: "255083005", detail: "Description: id=646067016: has multiple language refset members for a given dialect."}</li> <li>• {conceptId: "255083005", detail: "Description: id=380132015: has multiple language refset members for a given dialect."}</li> <li>• {conceptId: "255083005", detail: "Description: id=380131010: has multiple language refset members for a given dialect."}</li> </ul> | 2021-Mar- |
| RESOLUTION: Resolved in time for the July 2020 International Edition. |  |   |           |
| ISRS-778  | RVF Assertion failure: 44916964-5b78-4842-81d8-e8293ee93bea                        | <p>assertionUuid: "44916964-5b78-4842-81d8-e8293ee93bea",<br/> assertionText: "There must be actual changes made to previously published inferred relationships in order for them to appear in the current delta.",<br/> failureCount: 136,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "21142001", detail: "Inferred relationship: id=182567028 is in the delta file, but no actual changes made since the previous release."}</li> <li>• {conceptId: "21142001", detail: "Inferred relationship: id=182568022 is in the delta file, but no actual changes made since the previous release."}</li> <li>• {conceptId: "52913008", detail: "Inferred relationship: id=234157029 is in the delta file, but no actual changes made since the previous release."}</li> </ul>             | 2021-Mar- |
| RESOLUTION: Resolved in time for the July 2020 International Edition. |  |   |           |
| ISRS-779  | RVF Assertion failure: 5c6b6bc0-79b9-11e1-b0c4-0800200c9a66                        | <p>assertionUuid: "5c6b6bc0-79b9-11e1-b0c4-0800200c9a66",<br/> assertionText: "All relationships inactivated in current release must have been active in the previous release.",<br/> failureCount: 113,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "21142001", detail: "Relationship: id=182567028 should not have a new inactive state as it was inactive previously."}</li> <li>• {conceptId: "21142001", detail: "Relationship: id=182568022 should not have a new inactive state as it was inactive previously."}</li> <li>• {conceptId: "52913008", detail: "Relationship: id=234157029 should not have a new inactive state as it was inactive previously."}</li> </ul>  | 2021-Mar- |
| RESOLUTION: Resolved in time for the July 2020 International Edition. |  |   |           |
| ISRS-780  | DROOLS Assertion failure: Active concepts must have at least one IS A relationship | <p>testType: "DROOL_RULES",<br/> assertionText: "Active concepts must have at least one IS A relationship.",<br/> failureCount: 1,<br/> firstNInstances: [</p> <ul style="list-style-type: none"> <li>• {conceptId: "138875005", conceptFsn: "SNOMED CT Concept (SNOMED RT+CTV3)", detail: "Active concepts must have at least one IS A relationship."}</li> </ul> <p>RESOLUTION: SNOMED International Content Team confirmed that as this is the root concept (138875005 [SNOMED CT Concept (SNOMED RT+CTV3)]) it is the only exception to this rule, and will therefore never have an IS_A relationship. The rule now appears to be running correctly, and so no editing changes are required - this one concept just needs to be manually whitelisted in all future validation runs.</p>                               | 2020-Apr- |
| ISRS-781  | DROOLS Assertion   | <p>testType: "DROOL_RULES",<br/> assertionText: "Inactive concepts must not have active stated relationships.",</p>   | 2021-Mar- |

failure:  
Inactive  
concepts  
must not  
have active  
stated  
relationships

failureCount: 3,  
firstNInstances: [

- {conceptId: "255083005", conceptFsn: "Malignant tumor of anus and anal canal (disorder)", detail: "Inactive concepts must not have active stated relationships."}
- {conceptId: "255083005", conceptFsn: "Malignant tumor of anus and anal canal (disorder)", detail: "Inactive concepts must not have active stated relationships."}
- {conceptId: "255083005", conceptFsn: "Malignant tumor of anus and anal canal (disorder)", detail: "Inactive concepts must not have active stated relationships."}

RESOLUTION: Resolved in time for the July 2020 International Edition.

ISRS-  
782

DROOLS  
Assertion  
failure: It is  
not allowed  
to add a  
subtype as a  
parent

testType: "DROOL\_RULES",  
assertionText: "It is not allowed to add a subtype as a parent.",  
failureCount: 5,  
firstNInstances: [

2021-Mar-

- {conceptId: "326303007", conceptFsn: "Lactobacill acidophil vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}
- {conceptId: "428601009", conceptFsn: "Paratyphoid vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}
- {conceptId: "13178004", conceptFsn: "Rickettsial vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}
- {conceptId: "407737004", conceptFsn: "Varicella-zoster vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}
- {conceptId: "346313005", conceptFsn: "Allergen extract vaccine (product)", detail: "It is not allowed to add a subtype as a parent."}

RESOLUTION: Resolved in time for the July 2020 International Edition.

ISRS-  
786

MRCM issue

An issue has been identified in the MRCM, whereby with the representation of the new 'Physical object' domain, all instances of what should be the << 260787004 | Physical object (physical object) | "constraintOperator conceptId | term |" structure are instead represented as <<260787004 Physical object (physical object) (no space between << and Id, no pipes around the term) in the 723560006 refset. This is not cosmetic. The missing space is optional, but the missing pipes break the constraint/template syntax so need fixing.

2021-Mar-

RESOLUTION: SNOMED International Content Team resolved the issue in time for the July 2020 International Edition release.

ISRS-  
803

Physical  
object  
(physical  
object)  
domain  
constraint is  
missing a  
space

A space needs to be added after << in domain constraint and proximal primitive constraint for physical object (physical object) domain - the space is missing after << in attached screenshot.

2021-Mar-

Domain Constraint

<<260787004 |Physical object (physical object)|

Proximal Primitive Constraint

<<260787004 |Physical object (physical object)|

Guide URL

http://snomed.org/dom373873005

Precoordination Domain Template

[[+id(<<260787004 |Physical object (physical object)|)]]: [[0..\*]] 24619600...

RESOLUTION: SNOMED International Content Team resolved the issue in time for the July 2020 International Edition release.

ISRS-  
808

Concepts  
with  
Equivalent  
Classes are  
marked  
defined

Australia had these concepts fail, but when they double checked in the daily build they appeared to be correct. They asked if perhaps they've been fixed since the Alpha release, so maybe they're already fixed for January 2021:

2020-Jun-

- 17204006 Pneumoperitoneum (disorder)
- 276534008 Neonatal pulmonary air leak (disorder)
- 277636009 Perinatal pneumoperitoneum (disorder)

RESOLUTION: Concepts fixed in [ISRS-812](#), the version of the related Axioms in the July 2020 RF2 files has been confirmed by the SNOMED International Content Team to be the correct new state. No changes are therefore required to the Axioms in this cycle.

|          |  |  |            |
|----------|--|--|------------|
| ISRS-810 | Concepts to be removed completely from the Alpha release content | <p>The SNOMED International Content Team have decided that the following concepts need to be removed from the release as they are going to be 'sent back' to the requestor rather than including them in the International content. It's therefore been agreed that it's best to do this in time for the July 2020 International edition, rather than publishing them erroneously in July and then having to inactivate them for the January 2021 release.</p> <ul style="list-style-type: none"> <li>• 27391000175106  At increased risk for housing insecurity constraint (finding) </li> <li>• 22651000175107  At increased risk for utilities constraint (finding) </li> <li>• 22641000175105  At increased risk for transportation constraint (finding) </li> <li>• 22631000175104  At increased risk for phone constraint (finding) </li> <li>• 22621000175102  At increased risk for healthcare constraint (finding) </li> <li>• 22611000175106  At increased risk for food insecurity constraint (finding) </li> <li>• 22591000175104  At increased risk for clothing constraint (finding) </li> <li>• 22581000175102  At increased risk for child care constraint (finding) </li> <li>• 830218003  At increased risk for financial constraint (finding) </li> <li>• PLUS two synonyms added to 52702003  Chronic fatigue syndrome (disorder)  that similarly need to be removed /deleted: <ul style="list-style-type: none"> <li>◦ 3902795018 - SEID - systemic exertion intolerance disease</li> <li>◦ 3902796017 - Systemic exertion intolerance disease</li> </ul> </li> </ul> <p>RESOLUTION: Concepts and Synonyms removed from the Release content from the BETA Release onwards. They will therefore not appear in the final July 2020 Public release, and so from an RF2 perspective will never have been "published".</p> | 2021-Mar-  |
| ISRS-812 | 3 concepts have an old definition status                         | <p>The following concepts are still Primitive in the International Edition, where they need to be Defined according to the latest state in the termServer:</p> <pre>17204006 20020131 1 900000000000207008 900000000000074008 276534008 20130131 1 900000000000207008 900000000000074008 277636009 20020131 1 900000000000207008 900000000000074008</pre> <p>RESOLUTION: Delta files corrected to include the latest changes - concepts updated as expected to the following in the Member release snapshot:</p> <pre>17204006 20200731 1 900000000000207008 900000000000073002 276534008 20200731 1 900000000000207008 900000000000073002 277636009 20200731 1 900000000000207008 900000000000073002</pre>  | 2021-Mar-  |
| ISRS-815 | GPS Module required in International Edition                     | <p>In order to support the upcoming RF2 version of the GPS refset, GPS needs to have its own moduleID in the International Edition.</p> <p>RESOLUTION: Concept and related components added to the July 2020 International Edition in time for the Production release on 31st July 2020.</p>   | 2021-Mar-  |
| ISRS-838 | New terminology for pooled testing of specimens for SARS-CoV-2   | <p>On the FDA SHIELD call the urgent need for new terminology for pooled testing of specimens for SARS-CoV-2 was discussed. After input from a number of vendors, implementers and standards organisations, it was determined that the most pragmatic approach was to add a new SNOMED CT qualifier value of "Not detected in pooled specimen (qualifier value)".</p> <p>Given that the only other option was to push it into the US Edition and then later promote it up to the International Edition in January 2021, and that other members would likely need to use these concepts sooner than 2021, it was decided to implement an urgent change to the July 2020 International Edition in order to incorporate this new content.</p> <p>RESOLUTION: Concept and related components added to the July 2020 International Edition in time for the Production release on 31st July 2020.</p>  | 2020-Jul-2 |

29 issues

### 3.2.1. Technical updates

### 3.2.1.1. RF2 package format

For future reference, the RF2 package convention dictates that it contains all relevant files, regardless of whether or not there is content to be included in each particular release. Therefore, the package contains a mixture of files which contain both header rows and content data, and also files that are intentionally left blank (including only a header record). The reason that these files are not removed from the package is to draw a clear distinction between files that:

- have been deprecated (and therefore removed from the package completely), due to the content no longer being relevant to RF2 in this or future releases, and
- happen to contain no data in this particular release (and are therefore included in the package but left blank, with only a header record), but are still relevant to RF2, and could therefore potentially contain data in future releases.

This allows users to easily distinguish between files that have purposefully been removed or not, as otherwise if files in option 2 above were left out of the package it could be interpreted as an error, rather than an intentional lack of content in that release.

### 3.2.1.2. New Configuration file in the RF2 package, containing Release Metadata

A new file will be included in the July 2020 International Edition (and all subsequent releases), containing metadata about the Release package itself. This has been created in conjunction with feedback from the community, and as such will initially contain the following fields:

- effectiveTime
- deltaFromDate
- deltaToDate
- languageRefset(s)
- humanReadableLanguageRefset(s)
- licenceStatement

The file will be in .JSON format, to ensure that it is both machine-readable and human-readable. It will be named "**release\_package\_information.json**".

The metadata will be extended and refined going forward, in order to ensure that it contains the most useful information possible. If anyone has any ideas about any other useful information to include, please send them to [info@snomed.org](mailto:info@snomed.org), along with a business case explaining how the information would benefit stakeholders. Please be aware that this use case will then be assessed by SNOMED International, and the new metadata will only be included in the configuration file if the business case is strong enough.

### 3.2.1.3. Additional Rollup Delta Release package



As part of the July 2020 International Edition Release, SNOMED International will also be publishing an additional, optional package.

For those users who did **NOT** use the March 2020 Interim International Edition release in their systems, the advise on bringing systems up to date is as follows:

1. The best option is to first apply the March 2020 Interim release Delta files (relative to the January 2020 release), and after that apply the official July 2020 Delta files (relative to the March 2020 Interim release).
2. If this is not feasible, then please use the July 2020 International Edition additional Rollup Delta package - please see the Release Notes for full details:
  - a. <https://confluence.ihtsdotools.org/display/RMT/SNOMED+CT+July+2020+International+Edition+additional+Rollup+Delta+package+-+SNOMED+International+Release+notes>

### 3.2.1.4. Early visibility of impending change in the July 2020 International edition

Please see the following page for details of all upcoming changes planned for July 2020 and beyond: <https://confluence.ihtsdotools.org/display/RMT/July+2020+Early+Visibility+Release+Notice+-+Planned+changes+to+upcoming+SNOMED+International+Release+packages>.

### 3.2.1.5. Release Notes naming convention

The Release notes naming convention has been refined to bring it in line with other documentation standards - from this release onwards the files will have the following naming format:

- doc\_SnomedCTReleaseNotes\_Current-en-US\_INT\_[date].pdf

Instead of the previous underscore after "Current":

- doc\_SnomedCTReleaseNotes\_Current\_en-US\_INT\_[date].pdf

### 3.2.1.6. 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+2020+International+Edition+-+SNOMED+International+Release+notes>

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### Approvals

| Final Version | Date     | Approver      | Comments |
|---------------|----------|---------------|----------|
| 1.0           | 20200728 | Rory Davidson | Approved |
| 1.0           | 20200728 | Monica Harry  | Approved |
| 1.0           | 20200729 | Kelly Kuru    | Approved |

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### Draft Amendment History

| Version | Date     | Editor                              | Comments   |
|---------|----------|-------------------------------------|--|
| 0.1     | 20200502 | Andrew Atkinson                     | First draft for review and comment                         |
| 0.11    | 20200511 | Maria Braithwaite                   | Addition of detailed notes on content changes              |
| 0.12    | 20200513 | Monica Harry                        | Minor edits and content detail changes                     |
| 0.2     | 20200610 | Andrew Atkinson + Maria Braithwaite | Updates for Beta changes + additional Rollup Delta package |
| 0.3     | 20200629 | Andrew Atkinson                     | Final technical and resolution refinements                 |
| 0.3     | 20200629 | Maria Braithwaite                   | Final content refinements                                  |
| 1.0     | 20200728 | Andrew Atkinson                     | All final updates completed                                |