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 2017 release of SNOMED Clinical Terms® (SCT) International Release.

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

This document is available alongside the July 2017 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 2017 International Edition release.

2 Content Development Activity

2.1 Summary

Continuous quality improvement and enhancement of existing content is ongoing based on requests received via the Content Request System (CRS).

As well, the July 2017 International Release has seen a continuation of the work driven by contributions from: Kaiser Permanente Convergent Medical Terminology (CMT), Global Medical Device Nomenclature Agency (GMDNA), World Health Organization (WHO) ICD-11 Beta, International Classification for Nursing Practice (ICNP®) and Orphanet to add new content to SNOMED CT.

Additionally, member-identified priority projects, have driven enhancements in the anatomy hierarchy, while other project-driven changes have resulted in new content additions and enhancements to existing content detailed below.
2.2 Content Quality Improvement

**Summary of changes**

In total: **10770 new concepts were authored with an additional 15993 changes made to existing concepts.**

<table>
<thead>
<tr>
<th>SCT Statistics</th>
<th>New concept additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNOMED CT Concept (SNOMED RT+CTV3)</td>
<td>10773</td>
</tr>
<tr>
<td>Body structure (body structure)</td>
<td>5994</td>
</tr>
<tr>
<td>Clinical finding (finding)</td>
<td>2144</td>
</tr>
<tr>
<td>Event (event)</td>
<td>10</td>
</tr>
<tr>
<td>Observable entity (observable entity)</td>
<td>25</td>
</tr>
<tr>
<td>Organism (organism)</td>
<td>123</td>
</tr>
<tr>
<td>Pharmaceutical / biologic product (product)</td>
<td>83</td>
</tr>
<tr>
<td>Physical object (physical object)</td>
<td>224</td>
</tr>
<tr>
<td>Procedure (procedure)</td>
<td>665</td>
</tr>
<tr>
<td>Qualifier value (qualifier value)</td>
<td>735</td>
</tr>
<tr>
<td>Record artifact (record artifact)</td>
<td>13</td>
</tr>
<tr>
<td>SNOMED CT Model Component (metadata)</td>
<td>76</td>
</tr>
<tr>
<td>Situation with explicit context (situation)</td>
<td>198</td>
</tr>
<tr>
<td>Social context (social concept)</td>
<td>2</td>
</tr>
<tr>
<td>Specimen (specimen)</td>
<td>27</td>
</tr>
<tr>
<td>Staging and scales (staging scale)</td>
<td>19</td>
</tr>
<tr>
<td>Substance (substance)</td>
<td>435</td>
</tr>
</tbody>
</table>

2.2.1 Anatomy

1. Two new association reference sets have been developed and included in this release. The new refsets will help to identify missing concepts, ensure quality of concept modeling and enable systematic application of naming convention for S, E, and P concepts. refsets represent the associations between anatomy Structure, Entire and Part:
   - Anatomy Structure and Entire Association Reference Set
   - Anatomy Structure and Part Association Reference Set

2. The Lateralizable Body Structure reference set has been updated in the SNOMED International refset tool as follows:
   - 3728 new refset members added and 5 refset members inactivated for the July 2017 release

3. New content has been added as required for the development of a new concept model for anatomy, as well as alignment with other anatomy terminology standards as follows:
   - 5,768 new concepts; 5,427 are Entire concepts which have been added to ensure the completeness of SEP model.
   - 200 (approx.) new lateralized body structures and
   - 800 new lateralized procedures and disorders
   - 11 new enthesis concepts added to support the revision of sub-hierarchy of 23680005|Enthesopathy (disorder)| which were incorrectly modeled by two body structures
2.2.2 Clinical finding

- Added 13 new concepts for clinical findings and morphological abnormalities used to represent laboratory findings
- Crohn’s disease - review and/or remodelling of 55 concepts plus addition of 2 new concepts

2.2.3 Convergent Medical Terminologies (CMT)

A total of 668 new concepts were added as follows:

- CMT Cardiology - 12 concepts
- CMT Emergency Department - 12 concepts
- CMT Endocrine - 6 concepts
- CMT Hematology Oncology - 6 concepts
- CMT Hx and Family Hx - 82 concepts
- CMT Injuries - 14 concepts
- CMT Mental Health - 31 concepts
- CMT Miscellaneous - 104 concepts
- CMT Musculoskeletal - 272 concepts
- CMT Neurology - 2 concepts
- CMT Obstetrics and Gynecology - 2 concepts
- CMT Ophthalmology - 52 concepts
- CMT Orthopedics Extremity Fractures - 2 concepts
- CMT Pediatrics - 2 concepts
- CMT Radiology - 66 concepts
- CMT Top 2500 - 3 concepts

2.2.4 Diagnostic Imaging Procedures

- 342 (approx.) including:
  - MRI 120
  - CT 102
  - X-ray 12
  - Venography 2
  - Fluoroscopy 31
  - Ultrasonography guided 59
  - Ultrasonography 16
  - Laterality concepts across MRI, CT, X-ray and ultrasonography and interventional radiology
2.2.5 Disorders

2.2.5.1 Orphanet

- As a result of collaboration with Orphanet (http://www.orpha.net/consor/cgi-bin/index.php) 485 new concepts have been created to represent rare diseases in the disorder hierarchy.

2.2.5.2 ICD-11 Harmonization plan

- 1200 ICD-11 concepts added from the Mortality and Morbidity Linearization

2.2.5.3 Revision of 12962009|Histoplasmosis (disorder) - re-work hierarchy to fix inheritance issues and ensure consistent use of attributes.

2.2.6 LOINC

- 114 new concepts were added to support the mapping of LOINC Parts to SNOMED CT concepts for the LOINC - SNOMED CT Cooperation Project. This included properties, techniques, population of cells, cells, etc.

2.2.7 Morphologic Abnormality

- 114 new morphologic abnormality concepts added and then mapped to International Classification of Diseases for Oncology Third Edition (ICD-O First Revision, or ICD-O-3.1) 2011

2.2.8 Observables

- Renamed 5 “X detail observables (observable entity)” concepts to “X observable” for clarity and retired 1 “X detail observable” as ambiguous. Retired 1 ambiguous Observable entity grouper concept and 1 related ambiguous Clinical finding concept.
2.2.9 Organisms

- 605 changes were made to terms which used an incorrect case in a Salmonella serovar name.
- 170 changes were made to support Microbiology reporting. The majority of these were new organism concepts.

Of these, 532 term updates were made in the Organism hierarchy and 73 term replacements were made in other hierarchies (Procedure, Substance, Product, Disorder).

2.2.10 Pharmaceutical / biologic product

Added >15 new descriptions with “medication” where “drug” was already used

<table>
<thead>
<tr>
<th>Drug model project</th>
</tr>
</thead>
<tbody>
<tr>
<td>For further details on the planned changes in this area, please refer to the Drug Model Working Group Directory section.</td>
</tr>
<tr>
<td>Please note, you may have to register for Confluence user account in order to access this project.</td>
</tr>
</tbody>
</table>

Summary of changes

| New hierarchies | Number (qualifier value) - descendants only
|                 | • Existing concepts updated (n 20)
|                 | • New concepts created (n 625)
|                 | • Unit of presentation (unit of presentation) - root concept and descendants
|                 | • New concepts created (n 50)

| New semantic tags | [Qualifier value (qualifier value)] hierarchy:
|                  | • unit of presentation
|                  | [Pharmaceutical / biologic product (product) hierarchy]:
|                  | • medicinal product
|                  | • medicinal product form
|                  | • clinical drug

| New attribute types | Has basis of strength substance
|                    | Has presentation strength numerator value
|                    | Has presentation strength numerator unit
|                    | Has presentation strength denominator value
|                    | Has presentation strength denominator unit

| Attribute description changes | [Has dose form]
|                               | • Existing FSN and Preferred Term were inactivated and replaced with [Has manufactured dose form]

| Grouper | Descriptions for 10 existing concepts that represent groupers base on dose form by site prepared for updated in accordance with new terming guidelines.
|         | Concepts were fully defined using proximal primitive modeling pattern.
Medicinal product (MP)

- Descriptions for 1300 existing concepts updated in accordance with new terming guidelines, including new "medicinal product" semantic tag
- Existing concept IDs, stated parents and definition status were retained
- Missing [Has active ingredient] attributes were added; errors in existing content were corrected as they were identified

Medicinal product form (MPF)

- Descriptions for 1300 existing concepts updated in accordance with new terming guidelines, including new "medicinal product form" semantic tag
- Existing concept IDs, stated parents and definition status were retained
- Missing [Has active ingredient] and [Has manufactured dose form] attributes were added; errors in existing content were corrected as they were identified

Clinical drug (CD)

- Descriptions for 3000 existing concepts representing oral tablets and oral capsules were updated in accordance with new terming guidelines, including new "clinical drug" semantic tag
- Existing concept IDs, stated parents and definition status were retained
- Missing [Has active ingredient] and [Has manufactured dose form] attributes were added
- New [Has basis of strength substance], [Has presentation strength numerator value], [Has presentation strength numerator unit], [Has presentation strength denominator value], and [Has presentation strength denominator unit] attributes were added

2.2.11 Physical objects

- 218 new device concepts added.

2.2.12 Procedures

- Revision of hierarchy 23968004|Colectomy (procedure) and subtypes
- Laterality requests for diagnostic imaging across MRI, CT, X-ray and ultrasonography and interventional radiology

2.2.13 Social concept

No significant changes for this release.

2.2.14 Specimen

- 30 new concepts were added
2.2.15 Substances

- Summary of changes:
  1. New hierarchy added with semantic tag: Disposition (disposition) 726711005
  2. New attribute added: Has disposition(attribute) 726542003
  3. Concepts containing disjunctives were inactivated, e.g:
     - Antigen of Neisseria meningitidis A + Y (substance)
     - Butyrylcarnitine + isobutyrylcarnitine (substance)
     - Immunoglobulin A antibody to Bordetella pertussis filamentous hemagglutinin + Bordetella pertussis toxin (substance)
  4. Concepts containing brand names were Inactivated e.g:
     - Horlicks drink (substance)
     - Ovaltine drink (substance)

---

2.2.16 Foundation metadata component

Descriptions that are inactivated in the International Edition will use one of the following four values:

- Not semantically equivalent component (foundation metadata concept)
- Outdated component (foundation metadata concept)
- Erroneous component (foundation metadata concept)
- Non conformance to editorial policy component (foundation metadata concept)

These values will not be applied retroactively.
2.3. Internal Quality Improvement

2.3.1 Case significance indicator

In order to align in accordance with the RF2 specification, a technical batch change was made to the case significance value for over 760,000 descriptions.

- Changed from 90000000000020002|Only initial character case insensitive (core metadata concept)| to 900000000000448009|Entire term case insensitive (core metadata concept)|.

For further details please refer to the document linked here: IHTSDO-950 Update of case significance assignment following the RF2 specification

2.3.2 OWL axiom reference set

Following the recommendation from Modeling Advisory Group, four new concepts have been added to support the development of OWL axiom reference set:

- 733073007 [OWL axiom reference set]
- 733929006 [General concept axiom]
- 734147008 [OWL ontology header]
- 734146004 [OWL ontology namespace]

2.3.3 Dentistry Odontogram refset

- Odontogram - in anticipation of release the Odontogram Refset in August 2017, all supporting concepts were added following approval at the London meeting of the Dentistry project group

2.3.4 New attributes and values
<table>
<thead>
<tr>
<th>Attribute</th>
<th>rangeConstraint</th>
<th>Domain constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>&lt;&lt; 71388002</td>
<td>Procedure (procedure)</td>
</tr>
<tr>
<td>Component</td>
<td>&lt;&lt; 123037004</td>
<td>Body structure (body structure) OR &lt;&lt; 410607006</td>
</tr>
<tr>
<td>Due to</td>
<td>&lt;&lt; 404684003</td>
<td>Clinical finding (finding) OR &lt;&lt; 272379006</td>
</tr>
<tr>
<td>During</td>
<td>&lt;&lt; 71388002</td>
<td>Procedure (procedure)</td>
</tr>
<tr>
<td>During AND/OR after</td>
<td>&lt;&lt; 404684003</td>
<td>Clinical finding (finding) OR &lt;&lt; 71388002</td>
</tr>
<tr>
<td>Finding context</td>
<td>&lt;&lt; 410514004</td>
<td>Finding context value (qualifier value)</td>
</tr>
<tr>
<td>Finding informer</td>
<td>&lt;&lt; 420158005</td>
<td>Performer of method (person) OR &lt;&lt; 419358007</td>
</tr>
<tr>
<td>Has basis of strength substance</td>
<td>&lt; 105590001</td>
<td>Substance (substance)</td>
</tr>
<tr>
<td>Has disposition</td>
<td>&lt; 726711005</td>
<td>Disposition (disposition)</td>
</tr>
<tr>
<td>Has interpretation</td>
<td>&lt;&lt; 260245000</td>
<td>Finding values (qualifier value) OR &lt;&lt; 263714004</td>
</tr>
<tr>
<td>Has presentation strength denominator unit</td>
<td>&lt; 258666001</td>
<td>Unit (qualifier value)</td>
</tr>
<tr>
<td>Has presentation strength denominator value</td>
<td>&lt; 260299005</td>
<td>Number (qualifier value)</td>
</tr>
<tr>
<td>Has presentation strength numerator unit</td>
<td>&lt; 258666001</td>
<td>Unit (qualifier value)</td>
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<tr>
<td>Has presentation strength numerator value</td>
<td>&lt; 260299005</td>
<td>Number (qualifier value)</td>
</tr>
<tr>
<td>Pathological process</td>
<td>263680009</td>
<td>Autoimmune (qualifier value) OR &lt;&lt; 441862004</td>
</tr>
<tr>
<td>Temporally related to</td>
<td>&lt;&lt; 404684003</td>
<td>Clinical finding (finding) OR &lt;&lt; 71388002</td>
</tr>
</tbody>
</table>
2.4 SNOMED CT derived products

2.4.1 ICD-10 map

The SNOMED CT to the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (© World Health organisation 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 Centres.

The SNOMED CT to ICD-10 Map is released in Release Format 2 (RF2) only. It is located in the file der2_iissccRefset_ExtendedMapFull_INT_20170131.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)|.

2.4.1.1 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.

2.4.1.2 Mapped content for July 2017

The map provided for the July 2017 release has been updated, and now represents a complete map from SNOMED CT International release to ICD-10 2016 version.

• 2373 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

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 2017 International edition, the following Known Issues were identified, and agreed to be resolved in the next editing cycle (to be published in July 2017):

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No issues found</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 - in this case the July 2017 International Edition. 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 2017 International edition can be found here:

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Description</th>
<th>Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRS-46</td>
<td>MOVED_TO status acceptability (RF1)</td>
<td>Ten RF1 descriptions for active concepts are status 10 (MOVED_TO), alongside descriptions with active status: 473038012: Hyperprolinemia type II 473040019: Hyperprolinemia, type II 357693015: Lichen planus pigmentosus 377070012: Joubert syndrome 376213010: Irapa type spondyloepimetaphyseal dysplasia 1787720010: Frontal fibrosing alopecia 473039016: Hyperprolinemia type II 473043017: Hyperprolinemia, type II 113698011: Warkany syndrome 187742012: Caroli’s disease</td>
<td>2016-Nov-21</td>
</tr>
<tr>
<td>ISRS-50</td>
<td>Open RVF failures from the Production build</td>
<td>The following failures occurred after we added new RVF assertions in to cover issues found during the Alpha/Beta feedback period. 0cc708af-6816-4370-91be-dba8da9fd227 &quot;Description: id=60213011 is in the delta file, but no actual changes made since the previous release.&quot; 4478a866-2724-4417-8bce-8986ec53c4e &quot;Concept: id=10082001 is in the delta file, but no actual changes made since the previous release.&quot; 35680574-3ac6-4b68-9fe6-de88b677eb35 &quot;Association refset id=0e23f0c4-3dfa-527b-85f-03e2cda41a7e is in the delta file, but no actual changes made since the previous release.&quot; cab60a2f-4239-4393-91d6-dc910a8ac08b &quot;Stated relationship: id=3862464027 is in the delta file, but no actual changes made since the previous release.&quot; These failures can be safely ignored for this release, as they are simply highlighting the results of the manual fixes that we had to implement as part of the Alpha/Beta feedback period, in order to resolve some teething issues with the SCA. They therefore simply need to be verified after the final release has been deployed, in order to ensure that, as expected, they have not re-occurred.</td>
<td>2017-May-15</td>
</tr>
<tr>
<td>ISRS-102</td>
<td>Two concepts in scope from the ICD-11 perspective that aren't mapped</td>
<td>There are 2 concepts that after new type of validation have been shown to not have any equivalent ICD-10 maps: 722302009 Glycogen storage disease type II infantile onset (disorder) 722343009 Glycogen storage disease type II late onset (disorder) This was not reported until very late in the January 2017 release cycle. It was therefore discussed with the relevant Stakeholders, and the potential risk of impact involved in implementing a change to the content at this late stage in the release cycle was decided to be far greater than the perceived benefit of adding in just two map records. This will therefore be resolved in the July 2017 editing cycle, in order to preserve the quality of the January 2017 International edition. REsOLUTION: SNOmed International Mapping Team have now mapped both concepts in the July 2017 editing cycle, and so these will be included in the July 2017 International Edition release.</td>
<td>2019-Jun-20</td>
</tr>
</tbody>
</table>
ISRS-149  Removal of the SNOMED Identifier refset from the International Edition package as per the planned deprecation

As per the planned deprecation of antecedent SNOMED works (https://confluence.ihtsdotools.org/download/attachments/12779613/Antecedent%20SNOMED%20versions_External%20Newsletter%202017_v1.0.docx?version=1&modificationDate=1438866649000&api=v2), the SNOMED CT Identifier refset will be removed from the International Edition package as of the July 2017 International Edition.

RESOLUTION: SNOMED CT Identifier refset removed from the July 2017 International Edition as planned.

2019-Jun-20

ISRS-150  Refinement of ISRS-117 - Active "WAS A" historical associations that have not been updated when the target concepts are inactivated

The resolution for ISRS-117 was completed for the January 2017 International Edition.

This now needs to be further refined in order to ensure that the historical audit trail remains intact.

RESOLUTION: The 64 cases found in the current release with these issues have now been resolved in the July 2017 International Edition.

2019-Jun-20

ISRS-153  Text definition set as the en-GB preferred term of a concept

The following issue was reported during the July 2017 International edition editing cycle:

For concept 722183007 | Embolization of hepatic artery using selective internal radiation therapy (procedure) |, two descriptions were created, one for en-GB and one for en-US, due to the difference in spelling.

3331000018 is the en-GB textDefinition, and has been assigned a descriptionType of "preferred synonym", instead of "preferred definition".

RESOLUTION: The SNOMED International content team have updated the descriptionType in question, as part of the current cycle of concept changes. It will therefore be published as part of the July 2017 International Edition. The Release Validation Framework will also be updated to include a validation check to capture any similar issues going forward.

2019-Jun-20

ISRS-166  Inactive Historical Associations discovered with invalid targetComponentID's

The following Historical Associations have had invalid inactive records added in the previous release cycle: https://docs.google.com/spreadsheets/d/1X_T8zdSSFqBIrCorUYhJbl9LbpWHMeKRJBq0bMds/edit?usp=sharing

RESOLUTION: Historical Association records fixed in time for the July 2017 International Edition.

2017-May-12

ISRS-167  Delete born inactive stated relationships found in the dailybuild validation report

Born inactive stated relationships need to be deleted before alpha release.

RESOLUTION: Born inactive Stated Relationship records were removed accordingly.

2019-Jun-20

ISRS-170  Potential MRCM Validation failure - domain=Domain

The following 2 records appears to contravene the Domain constraint, as follows:

42752001=Due to (attribute) applied to 268460000=Contraceptive device (physical object)

Relationship snapshot records:

RESOLUTION: The relevant Relationships have been removed accordingly.

2019-Jun-20
"assertionUuid": "c3249e80-84f0-11e1-b0c4-0800200c9a66",
"assertionText": "Calling procedure testing that terms that contain EN-US language-specific words are in the same US language refset.",
"queryInMilliSeconds": 8862,
"failureCount": 481,
"firstNInstances": [
    {
        "conceptId": "372401005",
        "detail": "DESCRIPTION: id=1210952018: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: acanthamoeba"
    },
    {
        "conceptId": "444612005",
        "detail": "DESCRIPTION: id=2872859011: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: acanthamoeba"
    },
    {
        "conceptId": "247894000",
        "detail": "DESCRIPTION: id=370105019: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: aggrandisement"
    },
    {
        "conceptId": "391747009",
        "detail": "DESCRIPTION: id=1485745018: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: aluminium"
    },
    {
        "conceptId": "391749007",
        "detail": "DESCRIPTION: id=1485746017: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: aluminium"
    },
    {
        "conceptId": "392682000",
        "detail": "DESCRIPTION: id=1486658017: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaemia"
    },
    {
        "conceptId": "393572004",
        "detail": "DESCRIPTION: id=1487426012: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaemia"
    },
    {
        "conceptId": "393640005",
        "detail": "DESCRIPTION: id=1487494015: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaesthetics"
    },
    {
        "conceptId": "469433000",
        "detail": "DESCRIPTION: id=2942363019: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaesthesia"
    },
    {
        "conceptId": "701275000",
        "detail": "DESCRIPTION: id=2992662016: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaesthesia"
    },
    {
        "conceptId": "393358009",
        "detail": "DESCRIPTION: id=1487234016: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaesthetics"
    },
    {
        "conceptId": "394308008",
        "detail": "DESCRIPTION: id=1488063014: Synonym is preferred in US Language refset but refers to a word that has en-gb spelling: anaesthetics"
    }
],

RESOLUTION: This is just a warning and not an error and so no action is required.
Assertion failure: cc9c5340-84f0-11e1-b0c4-0800200c9a66,
"assertionText": "Calling procedure testing that terms that contain EN-GB language-specific words are in the same GB language refset.",
"queryInMilliSeconds": 46787,
"failureCount": 2036,
"firstNInstances": [ 

  { "conceptId": "426217000", "detail": "DESCRIPTION: id=2675118011: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: aleukemic" } 

  ,

  { "conceptId": "426248008", "detail": "DESCRIPTION: id=2675183013: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: aleukemic" } 

  ,

  { "conceptId": "22695001", "detail": "DESCRIPTION: id=2763854012: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: aleukemic" } 

  ,

  { "conceptId": "35750002", "detail": "DESCRIPTION: id=2765156010: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: aleukemic" } 

  ,

  { "conceptId": "70321000119108", "detail": "DESCRIPTION: id=2989886018: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: aluminum" } 

  ,

  { "conceptId": "2468001", "detail": "DESCRIPTION: id=5221017: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: analyzer" } 

  ,

  { "conceptId": "8615009", "detail": "DESCRIPTION: id=15217012: Synonym is preferred in the GB Language refset but refers to a word that has en-us spelling: analyzer" } 

  ,

  RESOLUTION: This is just a warning and not an error and so no action is required.
  ]
RVF Assertion failure: d9f8a8d6-2c02-11e7-b0e7-3c15c26e32e

"assertionUuid": "d9f8a8d6-2c02-11e7-b0e7-3c15c26e32e",
"assertionText": "The FSN term should be unique in active content when case sensitivity is ignored."

"queryInMilliseconds": 2049276,
"failureCount": 15,
"firstNInstances": [
{
  "conceptId": "15469000", "detail": "FSN=Blood group antibody p (substance) concept=15469000: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "37300006", "detail": "FSN=Blood group antibody h (substance) concept=37300006: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "3807007", "detail": "FSN=Blood group antigen c (substance) concept=3807007: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "38194003", "detail": "FSN=Weak e phenotype (finding) concept=38194003: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "45969000", "detail": "FSN=Blood group antibody i (substance) concept=45969000: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "45992000", "detail": "FSN=Blood group antigen s (substance) concept=45992000: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "47662005", "detail": "FSN=Blood group antigen h (substance) concept=47662005: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "61271006", "detail": "FSN=Blood group antibody s (substance) concept=61271006: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "62523009", "detail": "FSN=Blood group antibody e (substance) concept=62523009: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "64259001", "detail": "FSN=Blood group antigen e (substance) concept=64259001: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "64846003", "detail": "FSN=Blood group antigen i (substance) concept=64846003: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "81835007", "detail": "FSN=Weak c phenotype (finding) concept=81835007: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "8362009", "detail": "FSN=Blood group antibody c (substance) concept=8362009: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "88341002", "detail": "FSN=Blood group antibody k (substance) concept=88341002: FSN term is not unique in description snapshot when case is ignored"
}
,
{
  "conceptId": "406002002", "detail": "FSN=cde haplotype (finding) concept=406002002: FSN term is not unique in description snapshot when case is ignored"
}
]

RESOLUTION: These have been confirmed by the SNOMED International Content Team to be false positives, which can therefore be safely ignored.
The first letter of the FSN should be capitalized.

RVF Assertion failure: dd0d0406-7481-444a-9f04-b6fc7db49039

"assertionUuid": "dd0d0406-7481-444a-9f04-b6fc7db49039",
"assertionText": "The first letter of the FSN should be capitalized.",
"queryInMilliseconds": 2060,
"failureCount": 58,
"firstNInstances": [

  ("conceptId": "198030008", "detail": "DESC: id=582480013: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "228961005", "detail": "DESC: id=616608018: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "228969009", "detail": "DESC: id=616618011: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "228979009", "detail": "DESC: id=616629010: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "258259005", "detail": "DESC: id=649653011: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "258889007", "detail": "DESC: id=650356013: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "259011007", "detail": "DESC: id=650492013: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "259047008", "detail": "DESC: id=650532013: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "259048003", "detail": "DESC: id=650533015: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "259049006", "detail": "DESC: id=650534014: First letter of the active FSN of active concept not capitalized."
  )

  ("conceptId": "259060002", "detail": "DESC: id=650546013: First letter of the active FSN of active concept not capitalized."
  )

RESOLUTION: Invalid descriptions inactivated, and valid descriptions added in for July 2017 with capitalised first words.

2019-Jun-20
"assertionUuid": "f7117eb0-7cd6-11e1-b0c4-0800200c9a66",
"assertionText": "Active historical association refset members have inactive concepts as reference components.",
"queryInMilliSeconds": 1663,
"failureCount": 14379,
"firstNInstances": [
    { "conceptId": "280164007", "detail": "MEMBER: id=80024464-d5ea-4a12-b933-606a6056c06f: Historical refset member is active, but refers to an active concept." }
]

RESOLUTION: The RVF assertion needs to be updated in order to allow for the new SEP refsets in the Association Reference set. These failures can therefore safely be ignored for now.
The SNOMED International mapping team have raised the following queries with regards to the ICD-0 maps, and their place within the simpleMap files and their relation to the ICD-10 maps:

1. Why do the simpleMap files historically contain both ICD-O Morphology maps (as expected), and maps to ICD-10 neoplasms?

For example:

8000baeb-e1a1-50e8-b28f-7a687d3cf1c5 20020131 1 900000000000207008 446608001 2681003 C47.5 (ICD-10 code)
8006ac43-05ae-561c-b9bc-d9d8d85b1a04 20020131 1 900000000000207008 446608001 71888007 C44.6
800ac1a6-15e5-5e98-b493-a3a102379d2 20020131 1 900000000000207008 446608001 305006007 C41.3

2. In addition to them being included in the simpleMap files contrary to expectations, they also appear to have records in the extendedMap files (dating from 2013 onwards), related to ICD-10 - does this mean that the original records in the simpleMap are duplicates and should have been removed when the ICD-10 map records superseded them?

For example:

e27c70bf-dc4f-5e57-b1b9-f04de06b027b 20130731 1 449080006 447562003 188327005 1 1 TRUE ALWAYS C47.5 | MAPPED FOLLOWING WHO GUIDANCE | POSSIBLE REQUIREMENT FOR MORPHOLOGY CODE C47.5 447561005 447637006
e27c70bf-dc4f-5e57-b1b9-f04de06b027b 20130731 1 449080006 447562003 188327005 1 1 TRUE ALWAYS C47.5 | MAPPED FOLLOWING WHO GUIDANCE | POSSIBLE REQUIREMENT FOR MORPHOLOGY CODE C47.5 447561005 447637006

There is most likely a valid rationale for this approach, and so we are simply looking to understand it in order to inform decisions as to the appropriate course of action to take going forward.

RESOLUTION: SNOMED International Mapping team confirmed that they've been removed now, so not an issue any longer.

In the SimpleMap Delta we exported from the mapping file, it contained 95 new activations for ICD-0. However, in the final SimpleMap files in the release package, we're getting 105 records referencing ICD-0, including the following 10 inactivations that we've traced back to the simpleMap file exported from the termServer:

> 20170731 0 900000000000207008 446608001 128507001 C49.2
> 20170731 0 900000000000207008 446608001 128507001 C49.9
> 20170731 0 900000000000207008 446608001 244256001 C49.3
> 20170731 0 900000000000207008 446608001 245484003 C54.9
> 20170731 0 900000000000207008 446608001 303982006 C44.6
> 20170731 0 900000000000207008 446608001 361904009 C49.2
> 20170731 0 900000000000207008 446608001 367612008 C54.9
> 20170731 0 900000000000207008 446608001 56322004 C49.3
> 20170731 0 900000000000207008 446608001 76083001 C71.7
> 20170731 0 900000000000207008 446608001 84732004 C49.2

The mapping team are unaware of why these should have ben updated, and so we need to prove whether or not they are valid changes.

RESOLUTION: SNOMED International Content Team confirmed that these were expected changes, and Mapping Team confirmed everything as expected, therefore no action required.

"assertionUuid": "89ceaf00-79b9-11e1-b0c4-0800200c9a66",
"assertionText": "All stated relationships inactivated in current release must have been active in the previous release."
"queryInMilliSeconds": 24173,
"failureCount": 2,
"firstNInstances": [
  { "conceptId": "733529001", "detail": "Stated relationship: id=7002472022 is inactive in the current release but no active state found in the previous snapshot." }
  ,
  { "conceptId": "733529001", "detail": "Stated relationship: id=7002472022 is inactive in the current release but no active state found in the previous snapshot." }
]

RESOLUTION: Relevant born inactive Stated Relationships removed accordingly.
**ISRS-180**

**RVF Assertion failure:**

```
{ "assertionUuid": "ef030fb0-7856-11e1-b0c4-0800200c9a66",
 "assertionText": "All language refset members inactivated in current snapshot must have been active in the previous release.",
 "queryInMilliSeconds": 64307,
 "failureCount": 8,
 "firstNInstances": [
  { "conceptId": "3499616017", "detail": "Language Refset: id=85d31301-45a6-4344-a28e-1c357975dd62 is inactive but no active state found in previous release." }
  // More instances...
 ],

RESOLUTION: This is just a warning and not an error and so no action is required.
```

**ISRS-181**

**RVF Assertion failure:**

```
{ "assertionUuid": "2b193a88-8dab-4d19-b995-b556ed59398d",
 "assertionText": "New inactive states follow active states in the DESCRIPTION snapshot.",
 "queryInMilliSeconds": 15019,
 "failureCount": 4,
 "firstNInstances": [
  { "conceptId": "3499616017", "detail": "DESCRIPTION: id=3499616017 is inactive but no active state found in the previous snapshot." }
  // More instances...
 ],

RESOLUTION: These warnings are due to a system defect - WRP-3146 ticket has been raised to resolve. These can therefore be safely ignored for this release.
```
**ISRS-182**  
**MRCM validation failure on concepts having invalid attribute**  
**424876005 (Surgical approach)**  

The following concepts are reported by the MRCM validation to have inappropriate attributes:

- 429062005
- 448396008
- 710285001
- 428563002
- 428565009
- 448603000

Inferred view:

id effectiveTime active moduleID sourceID destinationID relationshipGroup typeid characteristicTypeID modifierID  
7001611029 20170731 1 900000000000207008 428563002 261449002 2 424876005 900000000000011006 900000000000451002  
7001616023 20170731 1 900000000000207008 428565009 261449002 2 424876005 900000000000011006 900000000000451002  
7001621021 20170731 1 900000000000207008 429062005 261449002 2 424876005 900000000000011006 900000000000451002  
7001627020 20170731 1 900000000000207008 448396008 103387006 2 424876005 900000000000011006 900000000000451002  
7001630029 20170731 1 900000000000207008 448603000 103387006 2 424876005 900000000000011006 900000000000451002  
7001638020 20170731 1 900000000000207008 710285001 103387006 1 424876005 900000000000011006 900000000000451002  

Stated view:

id effectiveTime active moduleID sourceID destinationID relationshipGroup typeid characteristicTypeID modifierID  
6994054029 20170731 1 900000000000207008 429062005 261449002 1 424876005 900000000000010007 900000000000451002  
6994436023 20170731 1 900000000000207008 448396008 103387006 1 424876005 900000000000010007 900000000000451002  

Note: MRCM rule states that 424876005(Surgical approach) applies to Domain 387713003 (Surgical procedure)


---

**ISRS-183**  
**RF2 to RF1 conversion issue**  

The RF2 to RF1 conversion is failing and it appears to be data related - attached log file gives details but it looks like there is an issue calculating the value of a description status in RF1. Whatever is in RF2 is not giving enough information to calculate the RF1 value and it is coming back as null, which fails the query.

There are two possible causes from the information in the log file:

1. An un-attached description, i.e. where we had a reference to a concept ID in the descriptions file that was no in the concepts file. Checked this and all is good...
2. Alternative was a value (or values) in the Attribute Value reference set that was not being handled by the conversion code when associated with an inactive description ID. Bingo, we have our culprits, there are two concept IDs used in the valueld field of the Attribute Value reference set that have not been used before. Next checked the actual source code on Github for the RF2 to RF1 conversion routine and found the hard coded list of maps between the valueld and RF1 description status does not have these two values in it. This is the list referenced by the getMagicNumber method. The values at issue are 723277005 ‘Nonconformance to editorial policy component (foundation metadata concept)’ and 723278000 ‘Not semantically equivalent component (foundation metadata concept)’ occurring in reference set 900000000000490003.

RESOLUTION: RF2 to RF1 conversion utility has been updated accordingly.

---

**ISRS-184**  
**SCTID's using Description ID format instead of Concept ID's**

Seven Concept ID's were found to be unexpectedly using partition ID's appropriate for Description ID's:

- 3446012016
- 3446013014
- 3446014015
- 3446015019
- 3446016018
- 3446017010
- 3446018017

This was found to be a result of these concepts having been loaded in manually through the CRS, which bypassed the standard validation and therefore allowed them to be created in the wrong format in the termServer.

RESOLUTION: Offending concepts were removed accordingly.

Several inactive descriptions have never been published, and so don’t need to be in the release files:

RESOLUTION: Synonyms changed to TextDefinitions, or inactivated as ambiguous as appropriate.

RESOLVED: Ticket closed as already resolved in ISRS-188 and ISRS-189

RESOLUTION: Several inactive language reference set records have been published as inactive, but never been published before:


RESOLUTION: Ticket closed as already resolved in ISRS-188 and ISRS-189

RESOLUTION: Several inactive description records have been published as inactive, but never been published before:

RESOLUTION: Ticket closed as already resolved in ISRS-188 and ISRS-189

RESOLUTION: Ticket closed as already resolved in TPFIX-16

RESOLUTION: Reporter happy with the level of information provided in the Release Notes to explain all of this, therefore ticket closed accordingly.
Several attributes using the attribute 371881003(During) - I've found some working documents and ECE stuff, but nothing official. Though I saw it mentioned in the MRCM refsets, so I assume it's now permissible and updated editorial rules will come out in July? (Once confirmed I'll update our checks).

RESOLUTION: Explanation of new attribute added to the Release Notes (section 2.3.5) to ensure those not reading the Editorial Guide updates are made aware of the changes.

There are 17,000 relationships for product concepts that use attributes, not in the documented model. Again, these seem to be in the MRCM – so might be fine. However, as far as I was aware, none of these had actually been approved? Though that could be a misunderstanding on my side… However, the draft circulated has been changed since the April meeting, so still seems like a work in progress?

RESOLVED: Requester agreed that the level of information in the Release Notes covered the required updates to NRC systems, and so this ticket was closed without any action required.

There are 17,000 relationships for product concepts that use attributes, not in the documented model. Again, these seem to be in the MRCM – so might be fine. However, as far as I was aware, none of these had actually been approved? Though that could be a misunderstanding on my side… However, the draft circulated has been changed since the April meeting, so still seems like a work in progress?

RESOLVED: Requester agreed that the level of information in the Release Notes covered the required updates to NRC systems, and so this ticket was closed without any action required.

There’s 6 concepts that use the surgical approach attribute, are not permitted to. They are not “surgical procedures”.

From the EG - 6.2.2.13 SURGICAL APPROACH: “The domain for | SURGICAL APPROACH | is descendants of | Surgical procedure (procedure) | 387713003.”

The MRCM refset supports this too.

These are all embolization procedures, for which we encountered the exact same problem. Part of the problem is that “What is a surgical procedure”.

The EG (6.2.5.1) gives a definition: “A surgical procedure is defined as a procedure that involves intentional non-transient alteration of structures of the body, and/or a procedure that necessarily involves cutting into the body.” – Not entirely sure what that means.

The next sentence says “From a practical standpoint, this definition is implemented to include all procedures defined by the METHOD attribute with a value of any action that is listed under surgical action.”

Our solution was to add 129335008|Embolization - action (qualifier value)| as a subtype 129284003|Surgical action (qualifier value)|.

We considered a new action “surgical embolisation”, but that seems odd “chemoembolisation”. And just about every reference described these procedures as (minimally invasive) surgical.

It worked and we didn’t violate the concept model. (though did change the stated relationship for a core concept…)

RESOLUTION: Already resolved as part of the fix for ISRS-482 - this ticket therefore closed with no action required.

There are 17,000 relationships for product concepts that use attributes, not in the documented model. Again, these seem to be in the MRCM – so might be fine. However, as far as I was aware, none of these had actually been approved? Though that could be a misunderstanding on my side… However, the draft circulated has been changed since the April meeting, so still seems like a work in progress?

RESOLVED: Requester agreed that the level of information in the Release Notes covered the required updates to NRC systems, and so this ticket was closed without any action required.

There are 17,000 relationships for product concepts that use attributes, not in the documented model. Again, these seem to be in the MRCM – so might be fine. However, as far as I was aware, none of these had actually been approved? Though that could be a misunderstanding on my side… However, the draft circulated has been changed since the April meeting, so still seems like a work in progress?

RESOLVED: Requester agreed that the level of information in the Release Notes covered the required updates to NRC systems, and so this ticket was closed without any action required.

There are 17,000 relationships for product concepts that use attributes, not in the documented model. Again, these seem to be in the MRCM – so might be fine. However, as far as I was aware, none of these had actually been approved? Though that could be a misunderstanding on my side… However, the draft circulated has been changed since the April meeting, so still seems like a work in progress?

RESOLVED: Requester agreed that the level of information in the Release Notes covered the required updates to NRC systems, and so this ticket was closed without any action required.
| ISRS-194 | Redundant entry in the refsetDescriptor file | There’s a redundant entry in the descriptor for the lateralisable refset.  
bbdcc9fc-5b6c-415a-a5ee-c5afdf569db5 2017-01-31 00:00:00 1 9000000000000207008 9000000000000456007 723264001 449608002 9000000000000461009 0 31919d48-e5a6-4993-abe1-9c2fa9658678 2017-07-31 00:00:00 1 9000000000000207008 9000000000000456007 723264001 449608002 9000000000000461009 0  
RESOLUTION: Redundant record (31919d48-e5a6-4993-abe1-9c2fa9658678) removed accordingly. |
| ISRS-195 | Invalid CT3 map records | The CT3 map includes 7 invalid entries (same 7 description Ids described before).  
id refsetId referencedComponentId  
9f652ba8-c4ca-49f1-90f8-8138e27beded 900000000000497000 3446016018  
a10530b-06da-44e6-9884-7aa86992511 900000000000497000 3446018017  
a1f400d0-bca7-454d-a37d-b503927b0078 900000000000497000 3446013014  
a86b5b16-cd16-44ae-bcf1-5457b00eaac2 900000000000497000 3446015019  
d82ce717-b9dd-4586-bc59-e15c7fc4d5dd 900000000000497000 3446017010  
53c15d4f-e988-434a-baa5-e785bca5305 900000000000497000 3446012016  
74d45743-767e-4bb7-9036-57a008b04b10 900000000000497000 3446014015  
RESOLUTION: Seven invalid records removed accordingly. |
| ISRS-196 | Attribute description not found within correct hierarchy | Attribute description not found within correct hierarchy. Attribute descriptions are expected to be subtypes of 9000000000000457003 ("Reference set attribute"). The following two records contain values outside this hierarchy:  
de04894-9aff-4d5c-8702-60eeb33b7a9e)Concept model attribute (attribute)  
de1ccbf-bf08-4740-a80e-4fe774c5a2d (9000000000000444006) Definition status (core metadata concept)  
RESOLUTION: Offending refsetDescriptor records removed accordingly. |
| ISRS-197 | refsetDescriptor record with inactive referencedComponentID | Record 62b1dab-b23-4dd1-8bf6-39fe99f97e7e contains an inactive referenced component (447564002)  
RESOLUTION: The refsetDescriptor record for the reference set 447564002 has now been inactivated accordingly. |
| ISRS-198 | Concept has no active FSN within its module | Concept 41116001 is a member of module 900000000000012004 ("SNOMED CT model component module"), while its only active FSN, 3495166019, is in module 9000000000000207008 ("SNOMED CT core module").  
RESOLUTION: FSN (3495166019) and synonym (3495165015) have both been moved to 900000000000012004 ("SNOMED CT model component module") accordingly. |
| ISRS-199 | Concepts have no active synonyms within their modules | These four concepts lack any active synonyms:  
326342007  
377398001  
377416002  
377417006  
Note that all four of these concepts are inactive.  
RESOLUTION: SNOMED International Content Team confirmed that these are inactive concepts so therefore adding new synonyms is not the correct approach. Therefore no action is required in this case. |
| ISRS-200 | Changes to caseSignificance ID's | Descriptions which have had their case significance ids altered to 9000000000000448009 ("Entire term case insensitive") for this release.  
RESOLUTION: UKTC confirmed that this issue was with the QA test rather than the content - this is therefore not a valid issue and so has been closed down without action required. |
RESOLUTION: New namespace (734535006) created as planned. |
ISRS-202  

**Assertion failure:**  
eff30fb0-7856-11e1-b0c4-0800200c9a66  

{  
"assertionUuid": "eff30fb0-7856-11e1-b0c4-0800200c9a66",  
"assertionText": "All language refset members inactivated in current snapshot must have been active in the previous release.",  
"queryInMilliseconds": 60635,  
"failureCount": 12,  
"firstNInstances": [  
{  
"conceptId": "648501000124118",  
"detail": "Language Refset: id=800c4ddb-54c1-47ec-at2e-0816b797c616 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648391000124116",  
"detail": "Language Refset: id=8146604c-2d6e-4a3f-a25a-191e4f3b0945 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648361000124112",  
"detail": "Language Refset: id=81b10a87-2ab5-41b0-b89f-e2ac70babfd8 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "638911000124112",  
"detail": "Language Refset: id=9b761d6-04f1-4b99-8ba4-79aa7b0e0401 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648571000124112",  
"detail": "Language Refset: id=bae38c7-afbf-4448-ae3b-84b184f53a4f is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648501000124118",  
"detail": "Language Refset: id=ce266e08-6be8-4fad-a2e-0800200c9a66 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "638911000124112",  
"detail": "Language Refset: id=07e5cf11-9088-40cd-97e2-d1c7bf178e3d is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648571000124112",  
"detail": "Language Refset: id=21aa1482-1a05-4852-8730-079f2b37177 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648331000124115",  
"detail": "Language Refset: id=28606ec3-edbc-4f73-953f-098f7fc15708 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648361000124112",  
"detail": "Language Refset: id=3a671dec-8667-49e1-8a65-c867fe76ef79 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648391000124116",  
"detail": "Language Refset: id=44adbe6e9-5ea0-41fa-8fb9-2f3d59698169 is inactive but no active state found in previous release."  
},  
{  
"conceptId": "648331000124115",  
"detail": "Language Refset: id=619326a5-7a54-476e-b52a-d4915fc0d663 is inactive but no active state found in previous release."  
}  
],  

**RESOLUTION:** This is just a warning and not an error and so no action is required.
2019-Jun-20

ISRS-203
RVF
Assertion failure:
2b193a88-8dab-4d19-b995-b556ed59398d
"assertionUuid": "2b193a88-8dab-4d19-b995-b556ed59398d",
"assertionText": "New inactive states follow active states in the DESCRIPTION snapshot."
"queryInMilliSeconds": 33619,
"failureCount": 6,
"firstNInstances": [
{ "conceptId": "435801000124108", "detail": "DESCRIPTION: id=638911000124112 is inactive but no active state found in the previous snapshot." }

{ "conceptId": "439021000124105", "detail": "DESCRIPTION: id=648331000124115 is inactive but no active state found in the previous snapshot." }

{ "conceptId": "439031000124108", "detail": "DESCRIPTION: id=648361000124112 is inactive but no active state found in the previous snapshot." }

{ "conceptId": "439041000124103", "detail": "DESCRIPTION: id=648391000124116 is inactive but no active state found in the previous snapshot." }

{ "conceptId": "439081000124109", "detail": "DESCRIPTION: id=648501000124118 is inactive but no active state found in the previous snapshot." }

{ "conceptId": "439101000124101", "detail": "DESCRIPTION: id=648571000124112 is inactive but no active state found in the previous snapshot." }

RESOLUTION: The six born inactive Descriptions above have been removed accordingly.

2019-Jun-20

ISRS-204
RVF
Assertion failure:
4478a96-2724-4417-8bce-8986ecc53c4e
"assertionUuid": "4478a96-2724-4417-8bce-8986ecc53c4e",
"assertionText": "There must be actual changes made to previously published concepts in order for them to appear in the current delta.",
"queryInMilliSeconds": 6660,
"failureCount": 1,
"firstNInstances": [
{ "conceptId": "448396008", "detail": "Concept: id=448396008 is in the detla file, but no actual changes made since the previous release." }

RESOLUTION: Concept removed from the Delta file accordingly.

2019-Jun-20

ISRS-205
New record in Concept delta for existing component with no changes
Concept 448396008 experienced issues with the branch problem during the Alpha feedback period - when it was fixed in the Alpha the termServer believed it to be new an so added another active record to the delta, thus corrupting the Full and Snapshot files.
RESOLUTION: Resolved as part of ISRS-204

2019-Jun-20

ISRS-207
One description has a full stop at the end
There’s still one description that might be text definition? Though it’s the presence of a period/full stop at the end of the description (which is unusual) is what’s causing the fail.
718089001 331128017 2017-07-31 00:00:00 Post extubation acute respiratory failure requiring reintubation.
RESOLUTION: Description inactivated, as turned out to be a duplicate.
### ISRS-208
**AttributeValue snapshot record is outdated by record in full file**

Possibly inconsequential. Members of refset 900000000000490003 ("Description inactivation indicator attribute value reference set") for which a more recent record in the Full release expresses the same relationship (but with a different id). Note that the members in question are inactive; the QA is objecting to the same relationship appearing with two different ids.

RESOLUTION: Four invalid AttributeValue records removed, plus four valid records re-activated for July 2017:

- Removed:
  - 6937d3ce-9b92-46a5-915c-105ef53a85a3 20170731 1 900000000000207008 900000000000490003 350608017 900000000000495008
  - 2b14191f-6396-4d96-b67a-bf3404e4e24f 20170731 1 900000000000207008 900000000000490003 377741012 900000000000495008
  - 52c7d2e1-05d3-4476-802c-29209a03b7d8 20170731 1 900000000000207008 900000000000490003 2737751017 900000000000495008
  - 78e492ae-9b4f-4da5-9ebb-a37f8eb70ee1 20170731 1 900000000000207008 900000000000490003 622260016 900000000000495008

- Re-activated:
  - ff7de500-472d-5380-930e-b5ddfb184d98 1 900000000000207008 900000000000490003 377741012
  - 7442794-3b09-5827-9629-81c0407c828b 1 900000000000207008 900000000000490003 350608017
  - 12a081ef-ba9-6a46-b93d-a4c9de98790 1 900000000000207008 900000000000490003 622260016
  - 66e03cc0-51d6-535c-907a-5761cd1d2e36 1 900000000000207008 900000000000490003 2737731017


---

### ISRS-210
**MRCM Cardinality constraint failure - mandatory 'attributeInGroupCardinality' of 0..1**

The 363714003 |Interprets| attribute has a mandatory 'attributeInGroupCardinality' of 0..1. However, the concept 724758000 |Manic symptoms co-occurrent and due to primary psychotic disorder (disorder)| - with an effectiveTime of 20170731 - has 3 x 363714003 |Interprets| relationships in the same relationship group (Role group 3). This therefore breaks the concept model rule.

RESOLUTION: Three extraneous Stated relationships removed and re-classified to resolve the errors.

---

### ISRS-211
**MRCM Cardinality constraint failure - concept model states all new precoordinated content must have at most 1 x 363698007 |Finding site| relationship in any relationship group (where relationshipGroup > 0). However, several concepts break this rule.**

RESOLUTION: The MRCM validation rule was proven to require refinement, in order to restrict it to the Stated view rather than Inferred. This has now been implemented and is now producing just 3 failures. The SNOMED International Content Team have therefore re-modelled the following 3 concepts:

- 15665401000119102
- 15665361000119106
- 15665321000119101

The related born-inactive components created by this re-modelling after Versioning the content have also been removed.

---

### ISRS-213
**MRCM Cardinality constraint failure - concept model states all new precoordinated content must have at most 1 x 116676008 |Associated morphology| in any relationship group (where relationshipGroup > 0). However several concepts appeared to contravene this rule.**

RESOLUTION: The MRCM validation rule was proven to require refinement, in order to restrict it to the Stated view rather than Inferred. This has now been implemented and is now producing no failures. This ticket has therefore been closed down with no action required.
The domain of 405815000 [Procedure device] is << 71388002 [Procedure]. However, there are 3 concepts, which are << 363767002 [Observable entity], which have an attribute that is a descendant of [Procedure device] (namely 424226004 [Using device]). This is valid, from a content perspective - however the MRCM rules are incorrect. The reason for this is that domain constraints are inherited by an attribute's children. And since 424226004 [Using device] has recently been added to the [Observable entity] domain, this should also have been updated to the domain of the parent attribute (ie 405815000 [Procedure device]).

RESOLUTION: 1 new row (row 103) has been added to the ‘Attribute domain’ refset for the Member Release. This has also updated the ‘attributeRule’ value in row 57 of ‘Attribute range’ refset.

734059009 Intraductal papillary neoplasm with high grade intraepithelial neoplasia (morphologic abnormality)

3482536011 20170731 1 900000000000207008 734059009 en 900000000000003001 Intraductal papillary neoplasm with high-grade intraepithelial neoplasia (morphologic abnormality) 900000000000448009
3482537019 20170731 1 900000000000207008 734059009 en 9000000000000013009 Intraductal papillary neoplasm with high-grade intraepithelial neoplasia 900000000000448009

734133009 Intraductal papillary neoplasm with high grade intraepithelial neoplasia (morphologic abnormality)

3483018012 20170731 1 900000000000207008 734133009 en 900000000000003001 Intraductal papillary neoplasm with high grade intraepithelial neoplasia (morphologic abnormality) 900000000000448009
3483019016 20170731 1 900000000000207008 734133009 en 9000000000000013009 Intraductal papillary neoplasm with high grade intraepithelial neoplasia 900000000000448009

RESOLUTION: SNOMED International Content team have resolved this for the July 2017 Member release, by removing duplicate Concept 734059009.


testCategory:"release-type-validation", assertionUuid: "89ceaf00-79b9-11e1-b0c4-0800200c9a66", assertionText:"All stated relationships inactivated in current release must have been active in the previous release.",

Delete the following 3 born inactive stated relationships:

id effectivetime active moduleid sourceid destinationid relationshipgroup typeid characteristictypeid modifierid
6905147028 20170731 0 900000000000207008 724758000 285854004 1 363714003 900000000000010007 900000000000451002
6905148022 20170731 0 900000000000207008 724758000 247774004 1 363714003 900000000000010007 900000000000451002
6905149025 20170731 0 900000000000207008 724758000 3850002 1 363714003 900000000000010007 900000000000451002

Note: This is the result of ISRS-210 fixes.

RESOLUTION: 3 Born inactive Stated Relationships removed for the July 2017 Member release.

A change in the mapping history of 121161000000105 | Chickenpox vaccination. Unsure of the main cause of this but looks like it needs to be reviewed by SNOMED International. It is marked as a duplicate to 68525005 | Varicella vaccination (procedure) this has now been made duplicate to 722215002 | Administration of herpes zoster vaccine. However, I think this is incorrect and should be mapped to one of its child concepts 57161100119101 | Administration of varicella live vaccine (procedure). Researching this, the herpes zoster vaccine is a slightly different vaccine to the varicella vaccine.

RESOLUTION: SNOMED International Content team have resolved this for the July 2017 Member release, by amending the mapping to 57161100119101
Delete born inactive Stated relationships after ISRS-211 fix

RVF failed several Stated Relationships which have been born inactive in July 2017:

```
"assertionText": "All stated relationships inactivated in current release must have been active in the previous release.",
"failureCount": 12,
"firstNInstances":

["conceptId": "15665361000119106", "detail": "Stated relationship: id=6807693029 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665361000119106", "detail": "Stated relationship: id=6807695020 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665361000119106", "detail": "Stated relationship: id=6807696021 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665321000119101", "detail": "Stated relationship: id=6807707026 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665321000119101", "detail": "Stated relationship: id=6807709028 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665321000119101", "detail": "Stated relationship: id=6807710022 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665401000119102", "detail": "Stated relationship: id=6807712025 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665401000119102", "detail": "Stated relationship: id=6807714029 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665401000119102", "detail": "Stated relationship: id=6807715028 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665401000119102", "detail": "Stated relationship: id=6807716027 is inactive in the current release but no active state found in the previous snapshot.",
"conceptId": "15665401000119102", "detail": "Stated relationship: id=6807719023 is inactive in the current release but no active state found in the previous snapshot."]
```


Retired concepts must have a historical relationship of the appropriate type (RF1)

Retired concepts must have a historical relationship of the appropriate type (unless their concept status is 1 or 3)

RESOLUTION: The majority of these issues were proven by the SNOMED International Content team to be valid, with the root cause being invalid QA routines. One historical association (for concept 192203002) was proven to be invalid, and has now been amended accordingly for the July 2017 Member release.

Concepts with multiple historical relationships (RF1)

Concepts may not have more than one historical relationship (except MAY_BE_As, MOVED_TOs OR WAS_As). The following concepts have all come through RF2 to RF1 conversion with more than the expected number of historical relationships attached to them:

<table>
<thead>
<tr>
<th>RULEID</th>
<th>SCTID</th>
<th>DETAILS</th>
<th>TERMLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>2667050</td>
<td>2 historical relationships</td>
<td>266705004: Preoperative/postoperative procedures (procedure)</td>
</tr>
<tr>
<td>43</td>
<td>2871030</td>
<td>3 historical relationships</td>
<td>287103000: Open wound of chest/back/buttock (disorder)</td>
</tr>
<tr>
<td>43</td>
<td>2310350</td>
<td>2 historical relationships</td>
<td>231035007: Destruction of spinal nerve root or ganglion (procedure)</td>
</tr>
<tr>
<td>43</td>
<td>1931570</td>
<td>2 historical relationships</td>
<td>193157005: Hereditary and idiopathic peripheral neuropathy (disorder)</td>
</tr>
<tr>
<td>43</td>
<td>3979670</td>
<td>2 historical relationships</td>
<td>397967003: Thermal/explosive injury (disorder)</td>
</tr>
<tr>
<td>43</td>
<td>1573790</td>
<td>3 historical relationships</td>
<td>157379003: Open wound of chest/back/buttock (disorder)</td>
</tr>
</tbody>
</table>

This may be another RF2 to RF1 conversion issue, rather than any problem with the RF2 source.

RESOLUTION: All concepts changed to have AssociationReference refsetId equal to "POSSIBLY EQUIVALENT TO", and their AttributeValue valueld equal to "AMBIGUOUS"
### ISRS-223
#### Active concepts with invalid historical relationships (RF1)

Historical relationships must belong to concepts of appropriate status. Three active concepts have come through conversion with odd historical relationships attached:

<table>
<thead>
<tr>
<th>Rule ID</th>
<th>SCT ID</th>
<th>Details</th>
<th>TermList</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>6592024</td>
<td>422221005: Bacterial infection caused by Klebsiella mobilis (disorder)</td>
<td>168666000: SAME AS (attribute)</td>
</tr>
<tr>
<td>44</td>
<td>6599922</td>
<td>154100119106: Skin ulcer associated with type II diabetes mellitus (disorder)</td>
<td>149016008: MAY BE A (attribute)</td>
</tr>
<tr>
<td>44</td>
<td>659962026</td>
<td>192203002: [X] (Unspecified organic personality and behavioural disorder due to brain disease, damage and dysfunction) or (organic psychosyndrome) (disorder)</td>
<td>149016008: MAY BE A (attribute)</td>
</tr>
</tbody>
</table>

These may be odd entries in the RF2 reference sets or another group of RF2 to RF1 conversion issues.

**RESOLUTION:** Concepts inactivated, plus historical associations corrected.

---

### ISRS-226
#### Concepts not inheriting the necessary attribute from the parent concept

Children of concepts with the "Has active ingredient" attribute must also have that attribute. The following concepts are not inheriting the necessary attribute from the parent concept:

<table>
<thead>
<tr>
<th>Rule ID</th>
<th>SCT ID</th>
<th>Details</th>
<th>TermList</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>316943005</td>
<td>316943005: Compound magnesium trisilicate 250 mg tablet (product)</td>
<td>423714001: Aluminum hydroxide + magnesium trisilicate (product)</td>
</tr>
<tr>
<td>107</td>
<td>326342007</td>
<td>326342007: Ethinylestradiol+norethisterone 35 micrograms/1mg tablet (product)</td>
<td>412256008: Product containing ethinyl estradiol and norethisterone (medicinal product)</td>
</tr>
<tr>
<td>107</td>
<td>329167003</td>
<td>329167003: Calcium compound 400mg effervescent tablet (product)</td>
<td>421178007: Calcium carbonate + calcium lactate gluconate (product)</td>
</tr>
<tr>
<td>107</td>
<td>329168008</td>
<td>329168008: Calcium compound 1000mg effervescent tablet (product)</td>
<td>421178007: Calcium carbonate + calcium lactate gluconate (product)</td>
</tr>
<tr>
<td>107</td>
<td>329297004</td>
<td>329297004: Vitamin B compound tablet (product)</td>
<td>424828009: Niacinamide+riboflavine+thiamine (product)</td>
</tr>
<tr>
<td>107</td>
<td>347900004</td>
<td>347900004: Sodium chloride 1.5% compound mouthwash (product)</td>
<td>421774002: Sodium bicarbonate + sodium chloride (product)</td>
</tr>
</tbody>
</table>

**RESOLUTION:** UKTC confirmed that after further investigation this issue was specific to the UK extension, and therefore requires no action for the International Edition. Issue therefore closed without action.
Postfix metamodel rule: Only known FSN postfix values may occur as children of other FSN postfix values. The table below gives the issues from the International content. In the details column the child is the first code and the parent the second.

<table>
<thead>
<tr>
<th>RULE</th>
<th>SCT ID</th>
<th>DETAILS</th>
<th>TERMLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6777</td>
<td>010011</td>
<td>9107 (finding): 75971007: Subretinal neovascularization of right eye (finding): 75971007: Choroidal retinal neovascularization (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>1621</td>
<td>920100</td>
<td>119101: Behavioral disturbance co-occurrent and due to late onset Alzheimers dementia (finding) 26929004: Alzheimer's disease (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>7334</td>
<td>65009</td>
<td>733465009: Naldemedine (substance): 14103001: Opiate antagonist (product)</td>
</tr>
<tr>
<td>1</td>
<td>7333</td>
<td>42000</td>
<td>733342000: Ischemic contracture of kidney (finding): 609411003: Drug withdrawal seizure (finding): 118940003: Disorder of nervous system (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>6776</td>
<td>710010</td>
<td>6776710011: Subretinal neovascularization of left eye (finding) 75971007: Choroidal retinal neovascularization (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>4190</td>
<td>6002</td>
<td>41906002: Drug withdrawal seizure (finding): 118940003: Disorder of nervous system (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>4190</td>
<td>6002</td>
<td>41906002: Drug withdrawal seizure (finding): 363101005: Drug withdrawal (disorder)</td>
</tr>
<tr>
<td>1</td>
<td>7333</td>
<td>42000</td>
<td>733342000: Ischemic contracture of kidney (finding): 709978007: Contracted kidney (disorder)</td>
</tr>
</tbody>
</table>

RESOLUTION: All relevant descriptions and Stated Relationship amended as per the noted in the table above.
ISRS-228  
Delete 9 born inactive historical associations  

RVF failure:  

"assertionText": "New inactive states follow active states in the ASSOCIATION REFSET snapshot file.",  
"failureCount": 9,  
"firstNInstances":  

[  
{"conceptId": "157379003","detail": "ASSOC RS: id=a0e20ebe-a5dc-4cb6-a226-a3b4441b0dc8 is inactive but no active state found in the previous release."},  
{"conceptId": "157379003","detail": "ASSOC RS: id=c03e2672-3d0e-4e5a-b61e-d43021b90810 is inactive but no active state found in the previous release."},  
{"conceptId": "287103000","detail": "ASSOC RS: id=d4f62913-bdbb-467c-811f-08250a7661d is inactive but no active state found in the previous release."},  
{"conceptId": "157379003","detail": "ASSOC RS: id=df96b92e-76b1-42f3-aa6f-01e3a9a80eb is inactive but no active state found in the previous release."},  
{"conceptId": "413138007","detail": "ASSOC RS: id=e806ed49-531d-4f1ed-bebf-2ec699500a is inactive but no active state found in the previous release."},  
{"conceptId": "287103000","detail": "ASSOC RS: id=f1c1179f-80c-947-f1c2-954955c7ec2 is inactive but no active state found in the previous release."},  
{"conceptId": "397967003","detail": "ASSOC RS: id=df96b92e-76b1-42f3-aa6f-01e3a9a80eb is inactive but no active state found in the previous release."},  
{"conceptId": "157379003","detail": "ASSOC RS: id=df96b92e-76b1-42f3-aa6f-01e3a9a80eb is inactive but no active state found in the previous release."},  
{"conceptId": "287103000","detail": "ASSOC RS: id=df96b92e-76b1-42f3-aa6f-01e3a9a80eb is inactive but no active state found in the previous release."}  
]

RESOLUTION: The relevant Association refset components removed accordingly.

ISRS-229  
Fix assertion (1852b9d6-38cf-11e7-8b36-3c15c2fe32e) validation issue  

RVF failure:  

"assertionText": "Previously published historical association components should not be modified.",  
"failureCount": 1,  
"firstNInstances":  

[  
{"conceptId": "413138007","detail": "Association refset id=84eb1cc8-23b9-5112-8ad1-9a075be4d13 has historical association components changed since the previous release."}  
]

RESOLUTION: Association Reference record fixed as follows:  

<table>
<thead>
<tr>
<th>id effectiveTime active moduleId sourceId destinationId relationshipGroup typeId characteristicTypeId modifierId</th>
</tr>
</thead>
<tbody>
<tr>
<td>84eb1cc8-23b9-5112-8ad1-9a075be4d13</td>
</tr>
<tr>
<td>2120b5b4-5a52-11e7-8261-3c15c2fe32e</td>
</tr>
</tbody>
</table>

ISRS-230  
MRCM regression failure - attribute group contains multiple records for the same attribute  

According to the attribute group rule there should not be more than one attribute per group as it is [0..1] group. This one only exists in the stated relationship but not in the inferred view:  

<table>
<thead>
<tr>
<th>id effectiveTime active moduleId sourceId destinationId relationshipGroup typeId characteristicTypeId modifierId</th>
</tr>
</thead>
<tbody>
<tr>
<td>4428858023</td>
</tr>
<tr>
<td>7111885023</td>
</tr>
</tbody>
</table>

RESOLUTION: Stated Relationship inactivated as follows, to leave only 1 relationships in the group:  

<table>
<thead>
<tr>
<th>id effectiveTime active moduleId sourceId destinationId relationshipGroup typeId characteristicTypeId modifierId</th>
</tr>
</thead>
<tbody>
<tr>
<td>4428858023</td>
</tr>
</tbody>
</table>

ISRS-231  
3 MRCM failures for multiple Stated Relationship records per group  

The following 3 born inactive Stated Relationship records have failed the MRCM tests:  

<table>
<thead>
<tr>
<th>id effectiveTime active moduleId sourceId destinationId relationshipGroup typeId characteristicTypeId modifierId</th>
</tr>
</thead>
<tbody>
<tr>
<td>6937579029</td>
</tr>
<tr>
<td>6937585020</td>
</tr>
<tr>
<td>6937613027</td>
</tr>
</tbody>
</table>

RESOLUTION: The three Stated Relationship records in question were removed by the SNOMED International Content team.
SNOMED International’s continuous Content quality review identified a change within the terminology that requires wider consideration - namely the addition of the following Stated Relationship:

6842860029 20170731 1 900000000000207008 80400009 3898006 0 116680003 900000000000010007 900000000000451002

RESOLUTION: This Stated relationship and the related Inferred relationships have therefore been removed pending further review, to ensure that the impact of this change within the hierarchy is fully communicated with appropriate consultation with the wider community of practice.

The following textDefinition records have been found to have unexpected control characters contained within the text (just before the number of degrees in each case):

3476134011 20170731 1 900000000000207008 733525007 en 900000000000550004 Left anterior fascicular block is characterized by all of the following: Left-axis deviation with frontal QRS axis between 45° and 90°; Q wave in lead aVL; rS in inferior leads; QRS duration is 120 ms. 900000000000017005

3476135012 20170731 1 900000000000207008 733525007 en 900000000000550004 Left anterior fascicular block is characterized by all of the following: Left-axis deviation with frontal QRS axis between 45° and 90°; Q wave in lead aVL; rS in inferior leads; QRS duration is 120 ms. 900000000000017005

3476139018 20170731 1 900000000000207008 733524006 en 900000000000550004 Right-axis deviation with frontal QRS axis between 90° and 180°; rS in leads I and aVL and qR in inferior leads (Q waves 40 ms); QRS duration 120 ms; Exclude other causes of right-axis deviation. 900000000000017005

RESOLUTION: The 3 textDefinition records have been updated accordingly, to remove the special characters.

64 issues
3.3 Technical updates

3.3.1 RF2 package naming convention

The naming convention of the RF2 package zip file has been improved, in order to bring it into line with the ISO8601 standard. A "Z" suffix has therefore been added to this package name (but not to internal file names), and will be added to all release package names going forward. This ensures that the time in the release package name is set in the correct context, namely UTC. In this case then, instead of the July 2017 International Edition release package being called:

- SnomedCT_InternationalRF2_Production_20170731T120000.zip

It has instead been called:

- SnomedCT_InternationalRF2_Production_20170731T120000Z.zip

3.3.2 Update to case significance assignment, in line with the RF2 specification

The incorrect assignment of case significance for descriptions has been fixed according to the RF2 specification. The issue was that the value 900000000000448009 |Entire term case insensitive| had not been used due to the data migration from RF1 and limitation of authoring tools. In fact, a majority of SNOMED CT descriptions should have been ‘Entire term case insensitive’. These terms can be freely switched to lower or upper case without impact to meaning. The technical batch changes have therefore been made to the case significance value to address this issue. For full details please see the document here: IHTSDO-950 Update of case significance assignment following the RF2 specification

3.3.3 Addition of the MRCM Refsets to the International Edition package

The MRCM Refsets, which were published in February 2017 as a Beta release, have now been included in the International Edition Release package. The following four new files have been incorporated into the Metadata folder, which is a sub-folder of the Refset folder in the Release package:

1. der2_sssssssRefset_MRCMDomainDelta_INT_20170731.txt
2. der2_cissccRefset_MRCMAttributeDomainDelta_INT_20170731.txt
3. der2_sssccRefset_MRCMAttributeRangeDelta_INT_20170731.txt
4. der2_cRefset_MRCMModuleScopeDelta_INT_20170731.txt
3.3.4 Improvements to the RefsetDescriptor file

The refsetDescriptor file has been improved in order to include descriptors for the pre-defined reference set types. It also now includes refsetDescriptor records to described the four new MRCM refsets now included in the International Edition from July 2017 onwards. Please see section 3.3.3. for further details of these refsets.

3.3.5 Addition of a new SEP refset to the International Edition package

This refset is being added in order both to assist with the interim solution for the Additional, non-defining Relationships, and also to enable us to further improve our Quality Assurance processes. Please see the following page for details of the proposed new Refset: SEP maps and refset

3.3.6 Removal of the SNOMED CT RT Identifier refset from the International Edition package

As has been communicated previously (across various forums) over the past several years, in 2009 SNOMED International's General Assembly decided that effective April 26, 2017 SNOMED International would no longer license the use of SNOMED antecedent (old) works. This decision received the clinical support of the World Association of Societies of Pathology and Laboratory Medicine, as they had identified the same risks. From April 26, 2017, therefore, SNOMED International is no longer maintaining antecedent versions of SNOMED, including SNOP, SNOMED, SNOMED II, SNOMED International (3.x), and SNOMED RT. Since both clinical science and terminology have evolved considerably since its development, the use of these older versions may involve risk to patients and safety issues.

SNOMED International cannot be responsible for this risk, and therefore in the original announcement strongly urged users of these antecedent versions to migrate to SNOMED CT as soon as possible.

As part of this process, the antecedent SNOMED Identifier reference set will be withdrawn and no longer be available in the International Edition release.

To provide a shared resource and a single source of truth on these antecedent issues we have assembled a set of FAQs available at our SNOMED International website here: https://ihtsdo.freshdesk.com/support/solutions/folders/4000013539

3.3.7 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
1. ...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
2. ...files that just 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.

3.3.8 Early visibility of impending change in the January 2018 International edition

Please see the following page for details of all upcoming changes planned for January 2018 and beyond: January 2020 Early Visibility Release Notices - Planned changes to upcoming SNOMED International Release packages

NOTE: To access any of the links in the pdf document, please visit the Release Notes online here: