# SNOMED CT Managed Service - US Edition Release Notes - September 2017

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|---|---|
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# 1 Introduction

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. The SNOMED CT US Edition is a combination of the full July 2017 SNOMED CT International Edition and the US Extension of SNOMED CT. The US Edition eliminates the need for implementers to manually combine the US Extension and International releases.

The International Health Terminology Standards Development Organisation (IHTSDO®), trading as 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. SNOMED CT US Edition is developed and maintained by the United States National Library of Medicine and is available to authorized Unified Medical Language System (UMLS) Metathesaurus Licensees. This material includes SNOMED CT which is used by permission of the IHTSDO. All rights reserved.

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## 1.2 Background

This document provides a summarized description of the content changes included in the September 2017 release of the SNOMED Clinical Terms® US Edition package.

It will 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.

## 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.

# 2 Content Development Activity

## 2.1 Summary

This release cycle NLM moved off of the IHTSDO Workbench for authoring SNOMED CT content and migrated to SNOMED International Managed Service, which includes authoring tooling and release production. Quality assurance of the September 2017 SNOMED CT US Edition was completed by both NLM and SNOMED International.

In addition to the new content from the July 2017 SNOMED CT International Edition, this release includes content from prior versions of the US extension as well as content requested by US SNOMED CT users via the US SNOMED CT Content Request System (USCRS, https://uscrs.nlm.nih.gov/) since the last release.

### 2.1.1 September 2017 US Extension of SNOMED CT

| | Count |
|---|---|
| New Concepts Added (total) | 514 |
| Concepts Inactivated | 17 |
| Concepts Moved to Core (this release) | 0 |
| Concepts Moved to Core (all time) | 53 |
| Concepts Promoted to Core (all time and not defaulted back to extension) | 370 |
| Concepts Defaulted to Core (this release) | 0 |
| Concepts Defaulted to Core (all time and not promoted back to extension) | 0 |
| Active concepts in US Extension | 6209 |
| Retired concepts in US Extension | 397 |
| Active Descriptions in US Extension | 15816 |
| Synonyms of International Edition Concepts | 465 |
| Active (inferred) relationships in US Extension | 25847 |
| Between of International Edition Concepts | 77 |

| | |
|---|---|
| Active (inferred IS A) relationships in US Edition | 512688 |
| Retired (inferred IS A) relationships in US Edition | 364559 |

## 2.2 Content Highlights

In addition to 514 new concepts specific for the US, the September 2017 SNOMED CT US Edition also contains all of the content from the July 2017 International Release of SNOMED CT. Over 1000 requests for terminology inclusions and changes were submitted via USCRS. Additionally, this latest version of the US Edition includes new CMT content in the musculoskeletal, ophthalmology, cardiology, neurology and emergency department areas.

## 2.3 SNOMED CT derived products

### 2.3.1 SNOMED CT to ICD-10-CM map

The purpose of the SNOMED CT to ICD-10-CM map is to support semi-automated generation of ICD-10-CM codes from clinical data encoded in SNOMED CT for reimbursement and statistical purposes. All current pre-coordinated SNOMED CT concepts within three hierarchies, (Clinical findings, Events, and Situations with Explicit Context) are potentially in scope for mapping to ICD-10-CM.

The SNOMED CT to ICD-10-CM map is released in RF2 format within the US Edition, as well as a standalone download. The map is also available in a human readable format (tls_Icd10cmHumanReadableMap_US1000124_20170901.tsv) contain within the documentation folder in both the US Edition release and standalone download.

The SNOMED CT to ICD-10-CM map is released as Refset 6011000124106 | ICD-10-CM extended map reference set (foundation metadata concept)|. The map data are in the file xder2_iisssccRefset_ExtendedMapSnapshot_US1000124_20170901.txt, which is in the Map folder under Refset in the Snapshot Release Type folder.

**PLEASE NOTE: The SNOMED CT to ICD-10-CM map data have NOT been updated and are the same as were released in 20170301 SNOMED CT US Edition.** The SNOMED CT to ICD-10-CM map file found in this release is synchronized with the 20170301 SNOMED CT US Edition. The map will be updated and released as a standalone later in 2017 and updated in the March 2018 SNOMED CT US Edition release.

Additional map information can be found in the SNOMED CT to ICD-10-CM Release Notes (doc_Icd10cmMapReleaseNotes_Current-en-US_US1000124_20170901.pdf) found in the Documentation folder. Technical information (doc_Icd10cmMapTechnicalSpecifications_Current-en-US_US1000124_20170901.pdf) for the map can also be found in the Documentation folder.

### 2.3.2 Route of administration

The NLM maintained Route of administration reference set (442311000124105 | Route of administration reference set) is located in the file der2_Refset_Simple(Snapshot, Delta, Full)_US1000124_20170901.txt, which is in the Content folder under Refset, in each of the three RF2 Release Type folders. The refset contains a sest of terms related to the location of administration for clinical therapeutics. The purpose of the Route of Administration refset is to define a portion of which can be used in the Drug Listing section of Structured Product Labeling (SPL), or for documentation and encoding of clinical information regarding substance administrations. Only concepts that are subtypes of the concept [284009009] Route of administration value (qualifier value) are included in the refset. There are no changes to this refset in this release.

### 2.3.3 Transitive closure file

NLM provides a transitive closure script and generated transitive closure table within the SNOMED CT US Edition release. The transitive closure is the complete set of relationships between every concept and each of its super-type concepts (parents and ancestors). The transitive closure files can be used to support SQL queries when created and stored as a table in a relational database. If applied in a full release, it will contain the full history and allow for subsumption queries to be applied based on any release. The NLM transitive closure script provides a comprehensive view of all of the supertype ancestors of a concept derived by traversing all the 116680003 | is a | relationships between that concept and the root concept. The transitive closure table represents the transitive closure of the 116680003 | is a | relationships of all active concepts. NLM provides the transitive closure table in the US Edition release to provide support for easier implementation and a reference against which to check alternative algorithms.

The Transitive Closure script is located in the TransitiveClosure file within the Resources file, tls2_TranstiveClosure_US1000124_20170901.pl. The Transitive Closure table is located in the TransitiveClosure file within the Resources file, res2_TranstiveClosure_US1000124_20170901.txt. For the table, the superTypeId is the id of the concept playing the supertype role, set to an Identifier of a concept. The subTypeId - Id of the concept playing the subtype role. Set to an Identifier of a concept.

# 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. In addition to the known issues reported by the IHTSDO for SNOMED CT International Edition (SNOMED CT July 2017 International Edition - SNOMED International Release notes), the following are known issues for the SNOMED CT US Edition.

For the SNOMED CT Managed Service - US Edition September 2017, the following Known Issues were identified, and agreed to be resolved in the next editing cycle:

| Key | Summary | Description | P |
|-----|---------|-------------|---|

No issues found

## 3.2 Technical Updates

In addition to the Technical Updates reported in the SNOMED CT July 2017 International Release, the following technical updates pertain to the US Edition:

### 3.2.1 RF1 release deprecation

In 2015, the IHTSDO announced the deprecation and withdrawal of support for Release Format 1 (RF1). The NLM has aligned with the deprecation timeline for the US Edition RF1 release and the September 2016 Release of SNOMED CT US Edition marked the final time RF1 was made available. From March 2017 on users must download the RF2 version of SNOMED CT US Edition.

### 3.2.2  RF2 package naming convention

The naming convention of the September 2017 US Edition zip file has changed to align with the July 2017 International Edition release naming. The July 2017 International Edition improved the RF2 package naming convention to align with the ISO8601 standard.

Previous convention: SnomedCT_USEditionRF2_Production_20170301T120000.zip

Going forward the US Edition zip package will be called: SnomedCT_USEditionRF2_PRODUCTION_20170731T120000Z.zip

### 3.2.3 Data Corrections

The following rows have been removed from the Full Release of SNOMED CT US Edition. This is an intentional fix for US concepts that were previously promoted to the International Core but had erroneously remained in the US maintained module.

| id | effectiveTime | active | moduleID | definitionStatusId |
|----|---------------|--------|----------|---------------------|
| 11000119105 | 20150301 | 0 | 731000124108 | 900000000000074008 |
| 1561000119105 | 20160901 | 0 | 731000124108 | 900000000000074008 |
| 441000119109 | 20150301 | 0 | 731000124108 | 900000000000074008 |
| 601000119109 | 20150301 | 0 | 731000124108 | 900000000000074008 |
| 1111000119100 | 20120901 | 1 | 731000124108 | 900000000000073002 |
| 1111000119100 | 20130301 | 0 | 731000124108 | 900000000000074008 |

## 3.3 Feedback and suggestions

We welcome questions, comments or suggestions to improve the quality, accuracy and usability of the SNOMED CT US Edition. Please send feedback to NLM Customer Support https://support.nlm.nih.gov/ics/support/default.asp?style=classic&deptID=28054&category=snomed_ct.

**Approvals**

**Draft Amendment History**

| Final Version | Date | Approver | Comments |
|---|---|---|---|
| 1.0 | | Terance Shird | |
| 1.0 | | Rory Davidson | |
| 1.0 | 31/08/2017 | Suzy Roy | Approved |

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| 0.1 | 08 Aug 2017 | Andrew Atkinson | Initial draft created |
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