

SNOMED CT Managed Service - US Edition Release Notes - March 2018



Leading healthcare
terminology, worldwide

This document forms part of the March 2018 SNOMED CT® US Edition release distributed by the US National Library of Medicine, and is subject to the SNOMED CT® Affiliate License, details of which may be found at https://www.nlm.nih.gov/healthit/snomedct/snomed_licensing.html.

This material includes SNOMED Clinical Terms® (SNOMED CT®) which is used by permission of the International Health Terminology Standards Development Organisation (IHTSDO). All rights reserved. SNOMED CT®, was originally created by The College of American Pathologists. "SNOMED" and "SNOMED CT" are registered trademarks of International Health Terminology Standards Development Organisation, trading as SNOMED International.

Date	20180301
Document Version	1.0
Release Status	PRODUCTION

Page At A Glance

- 1 Introduction
 - 1.2 Background
 - 1.3 Scope
- 2 Content Development Activity
 - 2.1 Summary
 - 2.1.1 March 2018 US Extension of SNOMED CT Statistics
 - 2.2 Content Highlights
 - 2.3 SNOMED CT derived products
 - 2.3.1 SNOMED CT to ICD-10-CM map
 - 2.3.2 Route of administration
 - 2.3.3 Transitive closure file
- 3 Technical Notes
 - 3.1 Known Issues
 - 3.2 Technical Updates
 - 3.2.1 WAS A attribute inactivation and Association Reference set retiring
 - 3.2.2 Improved Association Reference set naming convention
 - 3.2.3 Improved SNOMED CT to ICD-10-CM Reference set data
 - 3.2.4 Updated SNOMED CT to ICD-10-CM Reference set
 - 3.3 Feedback and suggestions

- 1 Introduction
 - 1.2 Background
 - 1.3 Scope
- 2 Content Development Activity
 - 2.1 Summary
 - 2.1.1 March 2018 US Extension of SNOMED CT Statistics
 - 2.2 Content Highlights
 - 2.3 SNOMED CT derived products
 - 2.3.1 SNOMED CT to ICD-10-CM map
 - 2.3.2 Route of administration
 - 2.3.3 Transitive closure file
- 3 Technical Notes
 - 3.1 Known Issues
 - 3.2 Technical Updates
 - 3.2.1 WAS A attribute inactivation and Association Reference set retiring
 - 3.2.2 Improved Association Reference set naming convention
 - 3.2.3 Improved SNOMED CT to ICD-10-CM

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 January 2018 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.

SNOMED CT was originally created by the College of American Pathologists. "SNOMED" and "SNOMED CT" are registered trademarks of IHTSDO. You must have a UMLS Metathesaurus license to access SNOMED CT US Edition data files. License information is available from NLM (https://www.nlm.nih.gov/healthit/snomedct/snomed_licensing.html).

1.2 Background

This document provides a summarized description of the content changes included in the [March 2018 release of the SNOMED Clinical Terms® U S Edition](#).

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 as a web resource as well as alongside the March 2018 US Edition release (https://www.nlm.nih.gov/healthit/snomedct/us_edition.html).

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. These Release Notes should be used in combination with the [SNOMED CT January 2018 International Edition Release Notes](#).

2 Content Development Activity

2.1 Summary

The March 2018 SNOMED CT US Edition marks the second release with content authoring tooling and release production provided by SNOMED International Managed Service. Quality assurance of the release was completed by both NLM and SNOMED International. Additionally, in October 2017, NLM sunset the United States SNOMED CT Content Request System and migrated to the SNOMED International hosted and maintained US CRS (<https://us-request.ihtsdotools.org>).

2.1.1 March 2018 US Extension of SNOMED CT Statistics

	Count
New Concepts Added (total)	363
Concepts Inactivated	33
Active concepts in US Extension	6539
Retired concepts in US Extension	432

Active Descriptions in US Extension	16865
US Extension Synonyms of International Edition Concepts	489

2.2 Content Highlights

In addition to 363 new concepts specific for the US, the March 2018 SNOMED CT US Edition also contains all of the content from the [January 2018 SNOMED CT International Edition](#). Approximately 200 requests for terminology inclusions and changes were submitted via [US CRS \(https://us-request.ihtsdotools.org\)](#). Additionally, this latest version of the US Edition includes new CMT content in the vascular procedures area and other areas requested by users to support US clinical health information data exchange.

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 from the US Edition (US Extension + International release) 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 (https://www.nlm.nih.gov/research/umls/mapping_projects/snomedct_to_icd10cm.html). The map is also available in a human readable format (tts_lcd10cmHumanReadableMap_US1000124_20180301.tsv) contained 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_20180301.txt, which is in the Map folder under Refset in the Snapshot Release Type folder.

PLEASE NOTE: Starting with this 2018 March SNOMED CT US Edition (20180301) release, the SNOMED CT to ICD-10-CM map refset data will be maintained as per the SNOMED CT RF2 specifications. Because this is the first release where the map refset data are to be maintained, the 6011000124106 | ICD-10-CM complex map reference set (foundation metadata concept) data are the same in the Full, Snapshot, and Delta releases. Going forward (starting with the 2018 September SNOMED CT US Edition, 20180901), new 6011000124106 | ICD-10-CM complex map reference set (foundation metadata concept) data will be found in the Delta, current status data in the Snapshot, and a historical record of the refset data in the Full Release.

Additional map refset information can be found in the SNOMED CT to ICD-10-CM Release Notes (doc_lcd10cmMapReleaseNotes_Current-en-US_US1000124_20180301.pdf) found in the Documentation folder, or online ([US Edition Release Notes - March 2018](#)). Technical information (doc_lcd10cmMapTechnicalSpecifications_Current-en-US_US1000124_20180301.pdf) for the map can also be found in the Documentation folder.

20180326 Update -

An updated version of the map (6011000124106 | ICD-10-CM complex map reference set (foundation metadata concept)) was released on March 26, 2018. This updated included an appending of the previously released mapping refset data, originally pulled from the 20180301 release. The newly released version, which includes all of the previously released data, now includes 260,749 mapped records. This is now considered the baseline for the SNOMED CT to ICD-10-CM map.

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_20180301.txt, which is in the Content folder under Refset, in each of the three RF2 Release Type folders. The refset contains a set 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. Please note the 442311000124105 | Route of administration reference set has been in static status since 2014 September US Edition release (20140901).

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_TransitiveClosure_US1000124_20180301.pl`. The Transitive Closure table is located in the TransitiveClosure file within the Resources file, `res2_TransitiveClosure_US1000124_20180301.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 January 2018 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 March 2018, the following Known Issues were identified, and agreed to be resolved in the next editing cycle:

3.2 Technical Updates

In addition to the Technical Updates reported in the [SNOMED CT January 2018 International Release](#), the following technical updates pertain to the US Edition:

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

No issues found

3.2.1 WAS A attribute inactivation and Association Reference set retiring

As per the SNOMED International decision to inactivate the 159083000 [WAS A (attribute)] and to stop updating of the 900000000000528000 [WAS A association reference set (foundation metadata concept)], the SNOMED CT US Edition will align with these new rules going forward. Additional information regarding the reason for inactivation and cessation of use of the association reference set can be found in the [SNOMED CT January 2018 International Edition - SNOMED International Release notes](#).

3.2.2 Improved Association Reference set naming convention

As per the SNOMED International decision to update and improve the Association Reference file, the March 2018 SNOMED CT US Edition has also updated the naming convention for the refset.

No longer is use:

`'der2_cRefset_AssociationReferenceSnapshot__[date].txt'`

New naming convention:

`'der2_cRefset_AssociationSnapshot_INT_[date].txt'`

Note the three newly named files in the March 2018 US Edition release package:

- `der2_cRefset_AssociationDelta_US1000124_20180301.txt`
- `der2_cRefset_AssociationFull_US1000124_20180301.txt`
- `der2_cRefset_AssociationSnapshot_US1000124_20180301.txt`

3.2.3 Improved SNOMED CT to ICD-10-CM Reference set data

As reported in section 2.3.1 SNOMED CT to ICD-10-CM map, the March 2018 US Edition will start to track all refset data going forward. Additional information can be found in the SNOMED CT to ICD-10-CM Release Notes (`doc_lcd10cmMapReleaseNotes_Current-en-US_US1000124_20180301.pdf`) found in the Documentation folder.

3.2.4 Updated SNOMED CT to ICD-10-CM Reference set

On 20180326, an updated version of the map (6011000124106 | ICD-10-CM complex map reference set (foundation metadata concept)) was released. This updated included an appending of the previously released mapping refset data, originally pulled from the 20180301 release. The newly released version, which includes all of the previously released data, now includes 260,749 mapped records. This is now considered the baseline for the SNOMED CT to ICD-10-CM map.

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

Final Version	Date	Approver	Comments
1.0		Terance Shird	
1.0		Rory Davidson	
1.0		Suzy Roy	Approved

Draft Amendment History

Version	Date	Editor	Comments
0.1	08 Aug 2017	Andrew Atkinson	Initial draft created
1.0		Suzy Roy	Final Production updates