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

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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 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.

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1.1 Background

This document provides a summarized description of the content changes included in the September 2018 release of the SNOMED Clinical Terms® US 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 September 2018 US Edition release (https://www.nlm.nih.gov/healthit/snomedct/us_edition.html).

1.2 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 July 2018 International Edition Release Notes.

2 Content Development Activity

2.1 Summary

The September 2018 SNOMED CT US Edition marks the third 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).

Reminder

Inactivation reason of LIMITED/WAS A will no longer be allowed for any content after the July 2018 International (and September 2018 US Edition) release. The WAS A association refset will not be updated thereafter. The US Extension (US Edition) will follow the International Editorial policy. For more information see section 3.2.1 under Technical Updates.

2.1.1 September 2018 US Edition of SNOMED CT Statistics

These statistics include the new changes from the July 2018 International Edition (20180731) as well as the new changes from the September 2018 US Extension (20180901).

	US Extension Counts
New concepts added	623

Concepts inactivated	13
Active concepts in US Extension (total)	7149
Retired concepts in US Extension (total)	445
Active descriptions in US Extension (total)	18247
Active relationships in US Extension (total)	29328

2.2 Content Highlights

In addition to 623 new concepts specific for the US, the September 2018 SNOMED CT US Edition also contains all of the content from the July 2018 SNOMED CT International Edition. Approximately 543 requests for terminology inclusions and changes were submitted via US CRS (https://us-request.ihtsdotools.org) for this release. Additionally, this latest version of the US Edition includes new CMT content involving fractures, lacerations and abrasions, and superficial injuries. Additionally, a large number of assessment instrument types and concepts to support medication therapy management were added to support US clinical health information data exchange.

See the July International Edition Release Notes for International Edition 2.2 Content Quality Improvement.

2.3 Quality Improvement

The NLM continues to work with SNOMED International on the quality and clinical validity of the SNOMED CT terminology. Any changes, corrections, or new additions can be submitted to the US SNOMED CT Content Request System (US CRS - https://us-request.ihtsdotools.org/). Additional information, including how to request access to submit, can be found on the US CRS User Guide (https://confluence.ihtsdotools.org /display/SCTCR/US+CRS+User+Guide).

2.3.1 Content Quality Improvement Statistics

	US Extension Counts
Total New Concepts Added	623
(disorder)	369
(procedure)	73
(finding)	53
(body)	43
(assessment)	43
(situation)	30
(observable entity)	5
(physical object)	3
(regime/therapy)	2
(substance)	1
(morphologic abnormality)	1

2.4 SNOMED CT derived products

2.4.1 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 (tls_Icd10cmHumanReadableMap_US1000124_20180901.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_iissscRefset_ExtendedMapSnapshot_US1000124_20180901.txt, which is in the Map folder under Refset in the Snapshot Release Type folder.

PLEASE NOTE: Starting with the 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.

Additional map refset information can be found in the SNOMED CT to ICD-10-CM Release Notes (doc_Icd10cmMapReleaseNotes_Current-en-US_US1000124_20180901.pdf) found in the Documentation folder or online. Technical information (doc_Icd10cmMapTechnicalSpecifications_Current-en-US_US1000124_20180901.pdf) for the map can also be found in the Documentation folder.

On March 26, 2018, there was 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.

2.4.2 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_20180901.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).

2.4.3 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_20180901.pl. The Transitive Closure table is located in the TransitiveClosure file within the Resources file, res2_TranstiveClosure_US1000124_20180901.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 2018 International Edition - SNOMED International Release notes), the following are Known Issues for the SNOMED CT US Edition that have been identified and will be resolved in the next editing and production cycle:

Key	Summary	Description

ISRS-420	RVF Assertion failure: 8e70ea3e-c4dd-4ae3-8b75-0f0567e42f71	assertionUuid: "8e70ea3e-c4dd-4ae3-8b75-0f0567e42f71" assertionText: "Active extended IFA rule maps reference active concepts and terms", failureCount: 8, firstNInstances: [conceptId: "298091008", detail: "ExtendedMap: id=8169066e-7146-5813-8395-e8bc77c43b81 : IFA map rule references an inactive term"}, conceptId: "298066008", detail: "ExtendedMap: id=c96c5239-04c9-5385-996e-c5eb3b3ba858 : IFA map rule references an inactive term"}, conceptId: "298086007", detail: "ExtendedMap: id=e07121fd-71a5-5697-bc6c-4c13c7ebaade : IFA map rule references an inactive term" conceptId: "298086007", detail: "ExtendedMap: id=06ebbc6e-6bfd-5303-81c5-a09764fda93a : IFA map rule references an inactive term" conceptId: "298090009", detail: "ExtendedMap: id=1c1efeed-9745-5ca4-b60f-fdec217fce0d : IFA map rule references an inactive term" conceptId: "298090009", detail: "ExtendedMap: id=42697b8a-dc6f-5ed6-9c47-366e7490a12a : IFA map rule references an inactive term" conceptId: "298091008", detail: "ExtendedMap: id=42fbc59d-8a3d-5ef3-9f4a-43da5a3e856c : IFA map rule references an inactive term" conceptId: "11852781000119106", detail: "ExtendedMap: id=4510da3e-c45a-5c8c-8852-aaec5e9fe163 : IFA map rule references an inactive term"], ORIGINAL FAILURE: assertionUuid: "8e70ea3e-c4dd-4ae3-8b75-0f0567e42f71" assertionText: "Active extended IFA rule maps reference active concepts and terms", failureCount: 83, firstNInstances: [conceptId: "298091008", detail: "ExtendedMap: id=8169066e-7146-5813-8395-e8bc77c43b81 : IFA map rule references an inactive term"}, {conceptId: "15111002", detail: "ExtendedMap: id=86eea16d-5741-51a8-ac00-0cbe0837d210 : IFA map rule references an inactive term"} {conceptId: "234591005", detail: "ExtendedMap: id=86f4df96-1370-5583-b8e6-1b7e9de80785 : IFA map rule references an inactive term"} {conceptId: "76046001", detail: "ExtendedMap: id=875c8244-9827-5dff-9c26-2e97d9e7da12 : IFA map rule references an inactive term"} KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the September 2018 release. These issues will therefore be carried over as Known Issues to be fixed in the March 2019 editing cycle.
ISRS-494	RVF Assertion failure: c3249e80-84f0-11e1-b0c4-0800200c9a66	assertionUuid: "c3249e80-84f0-11e1-b0c4-0800200c9a66", assertionText: "Terms that contain en-us specific words are in the en-us language refset.", queryInMilliSeconds: 2248, failureCount: 4 (plus 18 further in the US Edition due to International records), firstNInstances: [{ conceptId: "460211000124109", detail: "DESCRIPTION: id=794531000124118: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: amoebae" } { conceptId: "460691000124102", detail: "DESCRIPTION: id=801591000124116: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: entamoeba" } { conceptId: "460131000124109", detail: "DESCRIPTION: id=793871000124115: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: gonorrhoeae" } { conceptId: "460141000124104", detail: "DESCRIPTION: id=793881000124117: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: haemophilus" } KNOWN ISSUE: The NLM confirmed that due to the ambiguity in these potential issues, they should be properly reviewed by the authoring team. They will therefore be resolved as part of the next editing cycle, ready for the September 2019 US Edition release.
ISRS-495	RVF Assertion failure: d76f1430-7e9a-11e1-b0c4-0800200c9a66	assertionUuid: "d76f1430-7e9a-11e1-b0c4-0800200c9a66", assertionText: "Lang refset members are active for inactive descriptions in the language refset snapshot file.", queryInMilliSeconds: 4615, failureCount: 1, firstNInstances: [{ conceptId: "445341000124100", detail: "MEMBER: id=d9d7919a-878a-5148-9478-3cc962a02e7a: Language refset member is active for an inactive description." } KNOWN Issue: The NLM confirmed that this issue has such a small risk of impact that it will be carried over as a Known Issue, to be fixed in the September 2019 editing cycle.

ISRS-496	RVF Assertion failure: 03cf9850-7857-11e1-b0c4-0800200c9a66	assertionUuid: "03cf9850-7857-11e1-b0c4-0800200c9a66", assertionText: "Preferred Term exists exactly once in each language refset for each concept.", failureCount: 51, firstNInstances: [{ conceptId: "421000119103", detail: "Concept: id=421000119103 has duplicate language refsets for descrioption id=3301000119117" } { conceptId: "421000119103", detail: "Concept: id=421000119103 has duplicate language refsets for descrioption id=686401000124114" } { conceptId: "314591000119101", detail: "Concept: id=314591000119101 has duplicate language refsets for descrioption id=693411000124118" } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-498	RVF Assertion failure: 44916964-5b78-4842-81d8-e8293ee93bea	assertionUuid: "44916964-5b78-4842-81d8-e8293ee93bea", assertionText: "There must be actual changes made to previously published inferred relationships in order for them to appear in the current delta.", queryInMilliSeconds: 8122, failureCount: 2, firstNInstances: [{ conceptId: "202945006", detail: "Inferred relationship: id=2693005021 is in the detla file, but no actual changes made since the previous release." } { conceptId: "197926005", detail: "Inferred relationship: id=6778616029 is in the detla file, but no actual changes made since the previous release." } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-499	RVF Assertion failure: 57d910b4-b5c9-459e-8bae-ae0ea9035585	assertionUuid: "57d910b4-b5c9-459e-8bae-ae0ea9035585", assertionText: "No active Terms contain leading or trailing spaces.", failureCount: 1, firstNInstances: [{ conceptId: "428191000124101", detail: "Description: id=610361000124115 has active term with leading or trailing spaces." } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-502	RVF Assertion failure: 5c6b6bc0-79b9-11e1-b0c4-0800200c9a66	assertionUuid: "5c6b6bc0-79b9-11e1-b0c4-0800200c9a66", assertionText: "All relationships inactivated in current release must have been active in the previous release.", failureCount: 494, firstNInstances: [{ conceptId: "202945006", detail: "Relationship: id=2693005021 should not have a new inactive state as it was inactive previously." } { conceptId: "197926005", detail: "Relationship: id=6778616029 should not have a new inactive state as it was inactive previously." } { conceptId: "200942004", detail: "Relationship: id=22099020 is inactive but no active state found in previous release." } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-504	RVF Assertion failure: 7c406d6c-7e30-4aa1-b99d-e00b4e2d52a5	assertionUuid: "7c406d6c-7e30-4aa1-b99d-e00b4e2d52a5", assertionText: "There is an equivalent definition in the en-us and en-gb language when provided.", failureCount: 1, firstNInstances: [{ conceptId: "416715006", detail: "ConceptId=416715006 has definition in EN-US but no equivalent found for EN-GB" } KNOWN Issue: The NLM confirmed that this issue has such a small risk of impact that it will be carried over as a Known Issue, to be fixed in the September 2019 editing cycle.

ISRS-506	RVF Assertion failure: d9f8a8d6-2c02-11e7-b0e7-3c15c2c6e32e	"assertionUuid": "d9f8a8d6-2c02-11e7-b0e7-3c15c2c6e32e", "assertionText": "The FSN term should be unique in active content when case sensitivity is ignored.", "queryInMilliSeconds": 36892, "failureCount": 12, "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": "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": "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" } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-507	RVF Assertion failure: eead9964-67ce-11e7-b7e7-3c15c2c6e32e	"assertionUuid": "eead9964-67ce-11e7-b7e7-3c15c2c6e32e", "assertionText": "There is only one active member per description per dialect in the language refset snapshot file.", "queryInMilliSeconds": 7804, "failureCount": 91, "firstNInstances": [{ "conceptId": "15666641000119107", "detail": "Description: id=749431000124113: has multiple active language refset members for a given dialect." } { "conceptId": "421000119103", "detail": "Description: id=686401000124114: has multiple active language refset members for a given dialect." } { "conceptId": "10823291000119101", "detail": "Description: id=678281000124113: has multiple active language refset members for a given dialect." } KNOWN ISSUE: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle, and will be resolved naturally as a result of the resolution for ISRS-496.
ISRS-509	RVF Assertion failure: bd27d80a-42f1-4412-8111-fdf72fa32904	"assertionUuid": "bd27d80a-42f1-4412-8111-fdf72fa32904", "assertionText": "The current data in the Language refset snapshot file are the same as the data in the current delta file.", "queryInMilliSeconds": 6022, "failureCount": 1, "firstNInstances": [{ "conceptId": "660011000124116", "detail": "LANGUAGE REFSET: id=4621691a-1842-5acb-85ff-ae5a3f48eb01 is in delta but not in snapshot file." } KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.
ISRS-517	Pre-release QA - Missing map advice	In icd10cm.20190206, the following concepts are missing map advice "CONSIDER LATERALITY SPECIFICATION". (The target code C34.00 is included in file LATERALITY_ADVICE_CODELIST_2019). • 187857006 Malignant neoplasm of carina of bronchus • 369883002 T3: Lung tumor of any size in the main bronchus < 2 cm distal to the carina but without involvement of the carina • 372065009 Malignant neoplasm of main bronchus • 372120003 Carcinoma of main bronchus • 93827000 Primary malignant neoplasm of hilus of lung • 93882009 Primary malignant neoplasm of main bronchus KNOWN Issue: NLM confirmed that these issues are too minor to risk impact to the US Edition content by fixing at this late stage for the March 2019 release. These issues will therefore be carried over as Known Issues to be fixed in the September 2019 editing cycle.

12 issues

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 for this September 2018 US Edition. These can be issues found during the Pre-Production or Production phases of the testing of the current release, which were resolved before the final deployment of the final production release. Finally these can be issues which were reported or found during the testing phase, but which have been closed without any action taken.

In addition to the Resolved Issues reported by the IHTSDO for SNOMED CT International Edition (SNOMED CT July 2018 International Edition - SNOMED International Release notes), the following Resolved Issues for the Snomed CT September 2018 US Edition:

Key	Summary	Description	Resolved
ISRS-259	RVF Assertion failure: eff30fb0-7856-11e1-b0c4-0800200c9a60	assertionText: "Reference componentId and valueId pair is unique in the ATTRIBUTE VALUE snapshot.", failureCount: 14907, firstNInstances: conceptId: "347012", detail: "Reference component id:347012 valueid=900000000000495008 pair is not unique in the Attribute Value snapshot conceptId: "954008" detail: "Reference component id:954008 valueid=900000000000484002 pair is not unique in the Attribute Value snapshot" conceptId: "258001", detail: "Reference component id:258001 valueid=900000000000482003 pair is not unique in the Attribute Value snapshot" RESOLUTION: Fixed in time for the September 2018 US Edition release	2018-Aug-10
ISRS-419	RVF Assertion failure: 89ceaf00-79b9-11e1-b0c4-0800200c9a66	assertionUuid: "89ceaf00-79b9-11e1-b0c4-0800200c9a66" assertionText: "All stated relationships inactivated in current release must have been active in the previous release.", failureCount: 4, * firstNInstances: [conceptId: "10871571000119102", detail: "Stated relationship: id=1276411000124126 is inactive in the current release but no active state found in the previous snapshot." conceptId: "10871621000119104", detail: "Stated relationship: id=1276441000124127 is inactive in the current release but no active state found in the previous snapshot." conceptId: "11799731000119109", detail: "Stated relationship: id=1315991000124124 is inactive in the current release but no active state found in the previous snapshot." conceptId: "11799771000119107", detail: "Stated relationship: id=1316021000124126 is inactive in the current release but no active state found in the previous snapshot." RESOLUTION: Born inactive relationships removed in time for US Production releases.	2018-Aug-10
ISRS-422	RVF Assertion failure: 1852b9d6-38cf-11e7-8b36-3c15c2c6e32e	assertionUuid: "1852b9d6-38cf-11e7-8b36-3c15c2c6e32e" assertionText: "Previously published historical association components should not be modified.", failureCount: 1, firstNInstances: [conceptId: "442631000124109", detail: "Association refset id=035b9e38-217e-4299-8cd0-98fbb2e93e33 has historical association components changed since the previous release. RESOLUTION: Association Refset data fixed in time for the Sept 2018 US Production releases.	2018-Aug-10
ISRS-423	RVF Assertion failure: 2ddc9a28-150d-47a4-9b0e-7dbff2efdd72	assertionUuid: "2ddc9a28-150d-47a4-9b0e-7dbff2efdd72" assertionText: "There is a 1:1 relationship between the id and the key values in the ASSOCIATION REFSET snapshot file.", failureCount: 1, firstNInstances: [conceptId: "1111000119100", detail: "ReferencedComponentId:1111000119100 targetComponentId:52298009 and refsetId: 900000000000527005 are duplicated in the association refset snapshot file. RESOLUTION: This is a permanent whitelisted issue in the US Edition - and can be ignored permanently for all future US releases, as per ISRS-332	2018-Aug-08

ISRS-424	RVF Assertion failure: 5c37bee7-62ad-41f9-93e3-12eb4803e612	assertionUuid: "5c37bee7-62ad-41f9-93e3-12eb4803e612" assertionText: "The current full extended map file consists of the previously published full file and the current delta file", failureCount: 125652, firstNInstances: [conceptId: "164304001", detail: "ExtendedMap: id=8001c899-0084-581b-a594-8cff4498f4e2 is in current full file, but not in prior full or current delta file." {conceptId: "365404006", detail: "ExtendedMap: id=8001f2ad-64d8-5b7a-b220-7312a2831603 is in current full file, but not in prior full or current delta file." conceptId: "446156008", detail: "ExtendedMap: id=80025519-f772-5148-b512-98e968be3e29 is in current full file, but not in prior full or current delta file." RESOLUTION: RVF assertion fixed to prevent false positives - no action was required to fix the content	2019-Jun-20
ISRS-426	RVF Assertion failure: 7a961c22-3f51-4f72-9b5e-1dc99c298719	assertionUuid: "7a961c22-3f51-4f72-9b5e-1dc99c298719" assertionText: "There must be actual changes made to previously published extended map refset components in order for them to appear in the current delta.", failureCount: 69, firstNInstances: [{conceptId: "234591005", detail: "ExtendedMap: id=86f4df96-1370-5583-b8e6-1b7e9de80785 is in the detla file, but no actual changes made since the previous release."}, {conceptId: "76046001", detail: "ExtendedMap: id=875c8244-9827-5dff-9c26-2e97d9e7da12 is in the detla file, but no actual changes made since the previous release."}, {conceptId: "366449000", detail: "ExtendedMap: id=8ac192a4-5ff4-5638-bda6-6995f1ebf44c is in the detla file, but no actual changes made since the previous release."}, RESOLUTION: Map files fixed in time for the September 2018 US Edition release.	2018-Aug-13
ISRS-427	RVF Assertion failure: c3249e80-84f0-11e1-b0c4-0800200c9a66	Failing in US Edition only (not Extension): assertionUuid: "c3249e80-84f0-11e1-b0c4-0800200c9a66", assertionText: "Terms that contain en-us specific words are in the en-us language refset.", failureCount: 23, firstNInstances: conceptId: "444612005", detail: "DESCRIPTION: id=3664839011: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba" conceptId: "699398006", detail: "DESCRIPTION: id=3670580019: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: acanthamoeba" conceptId: "699404001", detail: "DESCRIPTION: id=2984211013: Synonym is prefered in en-us language refset but refers to a word that has en-gb spelling: dientamoeba RESOLUTION: This matches exactly the International Edition issue, where SNOMED International Content team confirmed that this is a warning only (that has been whitelisted), and so no further action is required.	2018-Aug-08
ISRS-428	RVF Assertion failure: dd0d0406-7481-444a-9f04-b6fc7db49039	Failing in the US Edition only (not Extension): assertionUuid: "dd0d0406-7481-444a-9f04-b6fc7db49039", assertionText: "The first letter of the FSN should be capitalized.", failureCount: 22, firstNInstances: [{conceptId: "258682000", detail: "DESC: id=650128014:First letter of the active FSN of active concept not capitalized."}, {conceptId: "258691001", detail: "DESC: id=650138016:First letter of the active FSN of active concept not capitalized."}, {conceptId: "258717005", detail: "DESC: id=2609641018:First letter of the active FSN of active concept not capitalized." } RESOLUTION: This matches the International Edition issue, where the SNOMED International Content team confirmed that this is a warning only (that has been whitelisted for all historical records as approved by the TMO), and so no further action is required.	2018-Aug-08

ISRS-429	RVF Assertion failure: 03cf9850-7857-11e1-b0c4-0800200c9a66	Failing in the US Edition only (not Extension): assertionUuid: "03cf9850-7857-11e1-b0c4-0800200c9a66", assertionText: "Preferred Term exists exactly once in each language refset for each concept.", failureCount: 2, firstNInstances: [conceptId: "444741000124100", detail: "Concept: id=444741000124100 has multiple active preferred terms in language refset=900000000000509007" conceptId: "445341000124100",detail: "Concept: id=445341000124100 has multiple active preferred terms in language refset=900000000000509007" RESOLUTION: Fixed in time for the September 2018 US Edition release.	2018-Aug-10
ISRS-430	RVF Assertion failure: 44916964-5b78-4842-81d8-e8293ee93bea	Failing in the US Edition only (not Extension): assertionUuid: "44916964-5b78-4842-81d8-e8293ee93bea", assertionText: "There must be actual changes made to previously published inferred relationships in order for them to appear in the current delta.", failureCount: 3, firstNInstances: [{conceptId: "425630003", detail: "Inferred relationship: id=3187444026 is in the detla file, but no actual changes made since the previous release."}, {conceptId: "425630003", detail: "Inferred relationship: id=3192499027 is in the detla file, but no actual changes made since the previous release."}, {conceptId: "425630003", detail: "Inferred relationship: id=3574321020 is in the detla file, but no actual changes made since the previous release." } RESOLUTION: This matches the International Edition issue exactly, where the SNOMED International Content Team confirmed that these are warnings only, and can therefore be closed down with no action required.	2018-Aug-08
ISRS-431	ModuleDependency files being created incorrectly in SRS	Looks like we have an issue with the SRS and moduleDependency records - when I run the Edition with 6 records in the Delta (see file in S3 externallyMaintainedrefset folder), the actual Delta that comes out in the package has 9 records - it seems to be adding new 20180901 records for each of the International records which should be 20180731. See the build here: https://release.ihtsdotools.org/api/v1/centers/us/products/snomed_ct_managed_service_20180901_us_edition_preproduction_release_package/builds/2018-08-10T15:46:40 RESOLUTION: Export system fixed to provide correct files in time for September 2018 US Edition.	2019-Jun-20
ISRS-432	RVF Assertion failure: 7e70ea3e-c4dd-4ae3-8b75-0f0567e42f66	assertionUuid: "7e70ea3e-c4dd-4ae3-8b75-0f0567e42f66" assertionText: "Active extended maps that are rule based have sequentially ordered mapPriority values without gaps within each mapGroup", failureCount: 25, firstNInstances: [{conceptId: "262648004", detail: "ExtendedMap: id=80b0fa77-0bac-588f-807b-26b9762704f5: Non-sequential mapPriority:8"}, {conceptId: "187371000119108", detail: "ExtendedMap: id=80ff109d-599e-5bb3-88f4-372c06edfe31: Non-sequential mapPriority:8"}, {conceptId: "285834000", detail: "ExtendedMap: id=83f808b2-b451-53e0-bf34-3b006db58842: Non-sequential mapPriority:4"}, RESOLUTION: Map files updated in time for the September 2018 US Edition.	2019-Jun-20
ISRS-433	US Relationships seemingly with both inactive and active status	I think we've seen this before - when our snapshot file shows a relationship is **both** retired (earlier effectivetime) and active (later effectivetime). Or in the case of the examples 2 & 3 where the same relationship is active and retired in the same release. But if you look in the Full release, the data are okay as the appropriate relationshipid has been retired and the new relationshipid has been created for the ISA relationship. This is all ringing a bell…. If we've discussed this before forgive me and I can dig through my email a bit more… Also, FYI – these are all INT data rows…	2018-Aug-13

EXAMPLE 1

```
$ awk -F"\t" '{ if($5==1089000) {print} }' sct2_Relationship_Snapshot_US1000124_20180901.txt
```

```
26910022    20020731    0    900000000000207008    1089000
91302008    0    116680003    900000000000011006    900000000000451002

26911021    20020131    1    900000000000207008    1089000
128270001    0    116680003    900000000000011006    900000000000451002

478344027    20020731    0    900000000000207008    1089000
57855005    0    246454002    900000000000011006    900000000000451002

478345026    20090731    0    900000000000207008    1089000
36272005    0    246075003    900000000000011006    900000000000451002

478346025    20020731    0    900000000000207008    1089000
40733004    0    308489006    900000000000011006    900000000000451002

478347023    20020731    0    900000000000207008    1089000
87612001    0    363698007    900000000000011006    900000000000451002

478348029    20040731    0    900000000000207008    1089000
303112003    0    246454002    900000000000011006    900000000000451002

478349021    20130131    0    900000000000207008    1089000
55460000    0    363698007    900000000000011006    900000000000451002

1653242027    20140131    0    900000000000207008    1089000
105592009    0    116680003    900000000000011006    900000000000451002

2709456029    20160131    0    900000000000207008    1089000
303112003    0    246454002    900000000000011006    900000000000451002

3602713023    20160131    0    900000000000207008    1089000
441862004    0    370135005    900000000000011006    900000000000451002

4650713027    20140131    0    900000000000207008    1089000
442083009    0    363698007    900000000000011006    900000000000451002

4799010020    20140131    1    900000000000207008    1089000
91302008    0    116680003    900000000000011006    900000000000451002

4799011024    20140131    1    900000000000207008    1089000
409774005    0    116676008    900000000000011006    900000000000451002

6418078025    20160131    1    900000000000207008    1089000
303112003    1    246454002    900000000000011006    900000000000451002

6418079022    20160131    1    900000000000207008    1089000
441862004    1    370135005    900000000000011006    900000000000451002
```

```
$ awk -F"\t" '{ if(($5==1089000) && ($6==91302008)) {print} }' sct2_Relationship_Full_US1000124_20180901.txt
```

```
26910022    20020131    1    900000000000207008    1089000
91302008    0    116680003    900000000000011006    900000000000451002

26910022    20020731    0    900000000000207008    1089000
91302008    0    116680003    900000000000011006    900000000000451002

4799010020    20140131    1    900000000000207008    1089000
91302008    0    116680003    900000000000011006    900000000000451002
```

**

EXAMPLE 2 & 3

```
$ awk -F"\t" '{ if($5==53924004) {print} }' sct2_Relationship_Snapshot_US1000124_20180901.txt
```

```
235815029    20030731    0    900000000000207008    53924004    271150005    0    116
680003    900000000000011006    900000000000451002

235816028    20030731    0    900000000000207008    53924004    49075001    0    116
680003    900000000000011006    900000000000451002

525546021    20030731    0    900000000000207008    53924004    3380003    3    1166
76008    900000000000011006    900000000000451002
```

```
525547028    20020731    0    900000000000207008    53924004    39937001    2    363
698007    900000000000011006    900000000000451002

807363025    20020731    0    900000000000207008    53924004    34797008    1    363
698007    900000000000011006    900000000000451002

807369026    20030731    0    900000000000207008    53924004    16982005    3    363
698007    900000000000011006    900000000000451002

807370025    20020731    0    900000000000207008    53924004    339008    1    1166
76008    900000000000011006    900000000000451002

807371026    20030731    0    900000000000207008    53924004    70010000    4    116
676008    900000000000011006    900000000000451002

807372022    20020731    0    900000000000207008    53924004    281732003    0    363
698007    900000000000011006    900000000000451002

807378021    20020731    0    900000000000207008    53924004    39937001    1    363
698007    900000000000011006    900000000000451002

1677493020    20030731    0    900000000000207008    53924004    283030006    0    11
6680003    900000000000011006    900000000000451002

1770539020    20080731    0    900000000000207008    53924004    76261009    1    363
698007    900000000000011006    900000000000451002

1770540022    20030131    0    900000000000207008    53924004    53120007    1    363
698007    900000000000011006    900000000000451002

2229076027    20180731    0    900000000000207008    53924004    86926000    0    116
680003    900000000000011006    900000000000451002

2229077020    20050731    0    900000000000207008    53924004    118929006    0    11
6680003    900000000000011006    900000000000451002

2229078026    20050731    0    900000000000207008    53924004    400160003    0    11
6680003    900000000000011006    900000000000451002

2267992025    20080731    0    900000000000207008    53924004    339008    1    1166
76008    900000000000011006    900000000000451002

2771181026    20130731    0    900000000000207008    53924004    116307009    0    11
6680003    900000000000011006    900000000000451002

3357520022    20080731    1    900000000000207008    53924004    339008    1    1166
76008    900000000000011006    900000000000451002

3452175029    20080731    1    900000000000207008    53924004    76261009    1    363
698007    900000000000011006    900000000000451002

4735903024    20130731    1    900000000000207008    53924004    400160003    0    11
6680003    900000000000011006    900000000000451002

4735904029    20130731    1    900000000000207008    53924004    118929006    0    11
6680003    900000000000011006    900000000000451002

9334795026    20180731    1    900000000000207008    53924004    400164007    0    11
6680003    900000000000011006    900000000000451002
```

```
$ awk -F"\t" '{ if(($5==53924004) && ($6==339008)) {print} }'
sct2_Relationship_Full_US1000124_20180901.txt

807370025    20020131    1    900000000000207008    53924004    339008 1    11667600
8    900000000000011006    900000000000451002

807370025    20020731    0    900000000000207008    53924004    339008 1    11667600
8    900000000000011006    900000000000451002

2267992025    20030731    1    900000000000207008    53924004    339008 1    11667600
8    900000000000011006    900000000000451002

2267992025    20080731    0    900000000000207008    53924004    339008 1    11667600
8    900000000000011006    900000000000451002

3357520022    20080731    1    900000000000207008    53924004    339008 1    11667600
8    900000000000011006    900000000000451002
```

```
$ awk -F"\t" '{ if(($5==53924004) && ($6==76261009)) {print} }'
sct2_Relationship_Full_US1000124_20180901.txt

1770539020    20020731    1    900000000000207008    53924004    76261009    2    363
698007    900000000000011006    900000000000451002

1770539020    20030131    1    900000000000207008    53924004    76261009    4    363
698007    900000000000011006    900000000000451002

1770539020    20030731    1    900000000000207008    53924004    76261009    1    363
698007    900000000000011006    900000000000451002

1770539020    20080731    0    900000000000207008    53924004    76261009    1    363
698007    900000000000011006    900000000000451002

3452175029    20080731    1    900000000000207008    53924004    76261009    1    363
698007    900000000000011006    900000000000451002
```

RESOLUTION: This is not an issue due to the fact that the relationship ID's are different -
therefore effective dates show these are relationships which were re-created instead of being
reactivated well in the past. This is how previous tooling dealt with inactivations historically. No action
is therefore required for this ticket.

| ISRS-439 | US extension concept has more than one active FSN | 445341000124100 | 2019-Jun-20 |

Example:

```
3657292019    20180731    1    900000000000207008    445341000124100
en    900000000000003001    Modification of nutritional regime (regime
/therapy)    900000000000448009

3657293012    20180731    1    900000000000207008    445341000124100
en    900000000000013009    Modification of nutritional regime    900000000000448009

665211000124115 20140901    1    731000124108    445341000124100
en    900000000000003001    Modification of nutrtional regime (regime
/therapy)    900000000000448009

665221000124111 20140901    1    731000124108    445341000124100
en    900000000000013009    Modification of nutrtional regime    900000000000448009
```

RESOLUTION: Fixed in time for September 2018 US Edition - related Language Refset record
for 665221000124111 will be inactivated for the March 2019 US Edition (see linked ticket ISRS-440)

14 issues

3.2 Technical Updates

In addition to the Technical Updates reported in the SNOMED CT July 2018 International Release, the following technical updates pertain to the US Edition:

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)|.

Background

In 2015, a proposal was made to inactivate 159083000 |WAS A (attribute)| relationship and stop updating the 900000000000528000|WAS A association reference set (foundation metadata concept)| at the Editorial Advisory Group.

Since these recommendations were made, a formal proposal for the technical approach to batch updating the terminology was created and a notice of the proposed inactivation sent to the Community of Practice.

The implementation of changes was postponed following feedback on utility for implementation and the potential impact to customers who were still using RF1.

The matter was discussed again at the meeting of the SNOMED International Editorial Advisory Group in Bratislava in October 2017. Since the requirements and potential issues can be addressed by deriving such information from the RF2 release format, the recommendation is to proceed the decision after the July 2018 release.

The US Extension (US Edition) will follow the International Editorial policy.

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/.

Approvals

Final Version	Date	Approver	Comments
1.0		Terance Shird	
1.0		Rory Davidson	
1.0	28 Aug 2018	Suzy Roy	Approved

Draft Amendment History

Version	Date	Editor	Comments
0.1	08 Aug 2017	Andrew Atkinson	Initial draft created
1.0	28 Aug 2018	Suzy Roy	Final Production updates