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SNOMED International Glossary

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The SNOMED CT Glossary provides consistent definitions for terms in used in SNOMED CT documentation, E-Learning presentations and related materials. In addition to terms that have specific meanings in relation to SNOMED CT, the glossary also includes more general words and phrases used in the healthcare, informatics and other related domains.

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Introduction

The SNOMED CT Glossary is used to provide consistent definitions for terms in used in SNOMED CT documentation, E-Learning presentations and related materials.

In addition to terms that have specific meanings in relation to SNOMED CT, the glossary also includes more general words and phrases used in the healthcare, informatics and other related domains.

Version Notes 2019-03-12

- Completion of a major review and update with many new entries and updated definitions.
- New entries have been added to the glossary from the Editorial Guide as well as from other documentation.
- The format for entries has been standardized so that it begins with a single sentence definition:
    - The definition
        - starts by specifying a general class
        - continues by specifying differentia that distinguish that term from the general class
        - does not include the defined term (though the definition of a term consisting of more than one word may include a words from the term when specifying the general class)
- The formal definition is followed by the following sections:
    a. Notes - that provide a less formal description or explanation of the defined term
    b. Examples - that illustrate the defined term
    c. Alternatives - other words or abbreviations that may sometimes be used in place of the defined term
    d. Related Links - links to other glossary entries and/or related documentation
    e. Disambiguation - where there are other potentially confusing uses of the same term (or a similar term).
    f. Change Notices - where changes to SNOMED CT design has resulted in changes to definitions notes are added here. These notes may be removed in future versions of the glossary as they are specific to the transitional period of the changes noted.

Version Notes 2017-12-21

1. To align with glossary practice in formal standard such as those published by ISO and CEN, the glossary has been updated to use lowercase text for all terms, except where there is a specific reason to use upper case. Upper case characters continue to be used in product names, acronyms and terms that have a specific roles in the SNOMED CT Affiliate Licence Agreement and the Articles of Association.

> ⚠ As a result of this style change, the representation of the terms used in the glossary now matches expected usage of these terms in text. Therefore, if the glossary term appears in lower case, it should be used in lowercase. The only exceptions to this should be where the term is at the start of a sentence or in another situation (e.g. within a document or section title) where capitalization rules apply. During the first half of 2018 documents in the online SNOMED CT Document Library will be updated to follow this revised style convention.

Version Notes 2016-08-01

1. The glossary was published in this new format in August 2016, to as part of a planned process of document migration. At the time of publication, the material in the glossary has been carried forward from the previous publication limited changes to fit the new format.
2. Over the next few months the glossary will be reviewed and revised as other documents are migrated to the new platform.
3. Due to the current migration process some links in the document may not reach the appropriate target documents. If a link does not work correctly, please refer to the SNOMED CT Document Library to locate the relevant document.

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Comments and Additions

The new format allows more frequent revisions and additions to keep the glossary up-to-date. It also enables you to provide feedback on existing glossary entries and to request additions to the glossary.

- To submit suggested revisions of existing definitions, please use the feedback link at the bottom of the page containing the existing definition.
- To propose additional terms and definitions that are required to understand other SNOMED CT documents and developments, please use the feedback link at the bottom of this page.

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A

ABNF

This is an abbreviation for Augmented Backus-Naur Form.

A language used to define the formal syntax of another language in computer science.

active

This is an abbreviation for active component.

A SNOMED CT component that is intended for use.

active component

A SNOMED CT component that is intended for use.

Notes

- Release files contain *active* and inactive components to provide a historical record of the terminology at different points in time.
- A component is active when the most recent row with the relevant *component.id* in the full release file has the value *component.active* =1 (one). The most recent row for a component is determined based on the *component.effectiveTime* value.

Related Links

- Inactive component
- Meaning of the Active Field
- Release Types

active concept

A concept that is intended for use.

Notes

- Release files contain *active* and inactive concepts to provide a historical record of the terminology at different points in time.
- A concept is active when the most recent row with the relevant *concept.id* in the full release file has the value *concept.active* =1 (one). The most recent row for a concept is determined based on the *concept.effectiveTime* value.

Related Links

- Inactive concept
- Meaning of the Active Field

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active description

A description that is intended for use.

Notes

- Release files contain *active* and inactive descriptions to provide a historical record of the terminology at different points in time.
- A description is active when the most recent row with the relevant *description.id* in the full release file has the value *description.active* =1 (one). The most recent row for a description is determined based on the *description.effectiveTime* value.

Related Links

- Inactive description
- Meaning of the Active Field

active reference set member

A reference set member that is intended for use.

Notes

- Release files contain *active* and inactive reference set members to provide a historical record of the terminology at different points in time.
- A *reference set member* is active when the most recent row with the relevant *id* in the full release file has the value *active* =1 (one). The most recent row for a *reference set member* is determined based on the *effectiveTime* value.

Related Links

- Inactive reference set member
- Meaning of the Active Field

active relationship

A relationship that is intended for use.

Notes

- Release files contain *active* and inactive relationships to provide a historical record of the terminology at different points in time.
- A relationship is active when the most recent row with the relevant *relationship.id* in the full release file has the value *relationship.active* =1 (one). The most recent row for a relationship is determined based on the *relationship.effectiveTime* value.

Related Links

- Inactive relationship
- Meaning of the Active Field

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Affiliate

This is an abbreviation for Affiliate Licensee.

An organization or individual that has been issued a license to use SNOMED CT by SNOMED International.

Affiliate License

This is an abbreviation for Affiliate License Agreement.

The agreement between a Affiliate Licensee and SNOMED International.

Affiliate License Agreement

The agreement between a Affiliate Licensee and SNOMED International.

Notes

- The agreement allows developers and implementers to use the SNOMED CT International Release and distribute the terminology to their sub-licensees as part of a software system.

Alternatives

- **Affiliate License**
- **SNOMED CT Affiliate License Agreement**

Related Links

- SNOMED International Affiliate Licence Agreement

Affiliate Licensee

An organization or individual that has been issued a license to use SNOMED CT by SNOMED International.

Notes

- Usage must be in accordance with the SNOMED CT Affiliate License Agreement.

Alternatives

- **Affiliate**
- **IHTSDO Affiliate**
- **SNOMED International Affiliate**

Related Links

- SNOMED CT Affiliate Licence Agreement

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alpha package

This is an abbreviation for alpha release package.

A SNOMED CT release package made available only for initial review and testing by implementers and other stakeholders.

alpha release

This is an abbreviation for alpha release package.

A SNOMED CT release package made available only for initial review and testing by implementers and other stakeholders.

alpha release package

A SNOMED CT release package made available only for initial review and testing by implementers and other stakeholders.

Notes

- An *alpha release package* must not be used in production clinical systems or in clinical settings. This includes Affiliate Licensees or any third parties, except those who have formally committed to test it.
- An *alpha release* is used to test the format and content of the SNOMED CT release. Feedback is elicited and changes are made prior to publication of the beta release.
- *Alpha releases* were formerly known as a technology preview releases.

Alternatives

- **Alpha package**
- **Alpha release**

Related Links

- Beta release package
- Production release package

American National Standards Institute

A private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

Notes

- The organization also coordinates U.S. standards with international standards.

Alternatives

- **ANSI**

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Related Links

- http://www.ansi.org

ancestor

This is an abbreviation for supertype ancestor.

A concept that is a supertype of a specified concept.

ANSI

This is an abbreviation for American National Standards Institute.

A private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

API

This is an abbreviation for Application Programming Interface.

A set of rules and specifications that enable communication between software programs.

application programming interface

A set of rules and specifications that enable communication between software programs.

Notes

- The way an *application programming interface* operates is similar to a user interface, which facilitates interaction between humans and computers.

Alternatives

- **API**

Related Links

- Wikipedia
  - Application programming interface

attribute

This is an abbreviation for concept model attribute.

A characteristic of the meaning of a concept or the nature of a refinement.

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attribute cardinality

The number of times that a specific attribute is included in the same concept definition or expression.

Notes

- May also refer to attribute cardinality constraint, which is defined as: a constraint on the number of times that a specific attribute may be included in the same concept definition or expression.

attribute cardinality constraint

A constraint on the number of times that a specific attribute may be included in the same concept definition or expression.

Notes

- Constraints on *attribute cardinality* apply only to non-redundant attributes. A redundant attribute is an attribute with a value that is subsumed by another attribute in the same *concept* definition or *expression*.

Examples

- The following expression constraint is satisfied by any clinical finding whose definition has two or more non-redundant finding sites, irrespective of the attribute group in which they are contained.

```
< 404684003 |Clinical finding| : [2..*] 363698007 |Finding site| =< 91723000 |Anatomical structure|
```

Related Links

- Attribute in group cardinality constraint
- Expression Constraint Language
  - Cardinality
  - Attribute Cardinality

attribute group

An association between a set of attribute value pairs that causes them to be considered together within a concept definition or postcoordinated expression.

Notes

- When an *attribute group* is represented as a group of defining relationships it is usually referred to as a *relationship group.*

Example

- |Cholecystectomy with exploration of common duct| has two different attribute groups:
  - |Method| |Exploration - action| *is grouped with* |Procedure site - Direct (attribute)| |Common bile duct structure|
  - |Method| |Excision - action| *is grouped with* |Procedure site - Direct (attribute)| |Gallbladder structure|
- If these attributes were not grouped, this procedure would incorrectly classified as a subtype of |Excision of common bile duct|.

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Alternatives

- **Relationship group**
- **Role group**

References

- Relationship Group

attribute group cardinality constraint

A constraint on the number of times that an attribute group may be included in the same concept definition or expression.

Notes

- *Attribute group cardinality* is NOT the same as attribute in group cardinality.

  > Attribute in group cardinality constraint is defined as:
  > - A constraint on the number of times that a specific attribute may be included in the same attribute group.

Examples

- The expression constraint below is satisfied only by products with one, two or three attribute groups, which each contain at least one active ingredient relationship.

```
< 373873005 |Pharmaceutical / biologic product| :
  [1..3] { 127489000 |Has active ingredient| = < 105590001 |Substance| }
```

Related Links

- Attribute cardinality constraint
- Attribute in group cardinality constraint
- Expression Constraint Language
  - Attribute Group Cardinality

attribute hierarchy

A hierarchy in which a set of concept model attributes are linked to a more general *attribute.*

Notes

- Attribute hierarchies are represented in release files:
  - as subtype relationships in the relationship file.
  - as OWL SubObjectPropertyOf() axioms in the OWL axiom reference set file.

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Examples

- **Attribute hierarchy for "Proper part of"**

  774081006 |Proper part of|
  733931002 |Constitutional part of|
  733930001 |Regional part of|
  733932009 |Systemic part of|

- **Attribute hierarchy represented as three "is a" relationships**

  733931002 |Constitutional part of| 116680003 |is a| 774081006 |Proper part of|
  733930001 |Regional part of| 116680003 |is a| 774081006 |Proper part of|
  733932009 |Systemic part of| 116680003 |is a| 774081006 |Proper part of|

- **Attribute hierarchy represented by three OWL expressions**

```
SubObjectPropertyOf(:733930001 :774081006)
SubObjectPropertyOf(:733931002 :774081006)
SubObjectPropertyOf(:733932009 :774081006)
```

Related Links

- Attribute
- Release File Specification
  - 4.2.3 Relationship File Specification
  - 5.2.21 OWL Expression Reference Set

attribute in group cardinality

The number of times that a specific attribute is included in the same attribute group.

Notes

- This term may sometimes be used as an informal abbreviation for attribute in group cardinality constraint which is defined as follows:
  - A constraint on the number of times that a specific attribute may be included in the same attribute group.
- *Attribute in group cardinality* is **not** the same as attribute cardinality or attribute group cardinality.

Alternatives

- **Cardinality in group**

Related Links

- attribute in group cardinality constraint
- attribute cardinality
- attribute group cardinality

attribute in group cardinality constraint

A constraint on the number of times that a specific attribute may be included in the same attribute group.

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Notes

- Constraints on *attribute in group cardinality* apply only to non-redundant attributes. A redundant attribute is an attribute with a value that is subsumed by another attribute in the same group.
- *Attribute in group cardinality* is NOT the same as attribute group cardinality.

> Attribute group cardinality constraint is defined as:
>
> - A constraint on the number of times that an attribute group may be included in the same concept definition or expression.

Examples

- The following expression constraint restricts *cardinality in-group* and would require a clinical finding whose definition has no more than one finding site in each group. However, it permits multiple groups to exist as there are cardinality constraints on the group.

```
< 404684003 |Clinical finding| :
    {[0..1] 363698007 |Finding site| =< 91723000 |Anatomical structure| }
```

- In contrast, the following expression constraint is satisfied by any clinical finding whose definition has two or more non-redundant finding sites, irrespective of the attribute group in which they are contained.

```
< 404684003 |Clinical finding| : [2..*] 363698007 |Finding site| =< 91723000 |Anatomical structure|
```

- A clinical finding could satisfy both the above constraints by have two or more groups each of which contains one finding site.

Related Links

- Attribute cardinality constraint
- Expression Constraint Language
  - Cardinality
  - Attribute Cardinality in Groups

attribute name

The concept that represents the attribute type in a defining relationship or postcoordinated expression.

Notes

- An *attribute name* with an attribute value is referred to as an attribute value pair.
- An attribute value pair can represent a defining characteristic of a concept or an expression refinement.
- In the *relationship file*, the *attribute name* is represented by the relationship.*typeId* and the attribute value by the relationship.*destinationId*.
- The concepts that can be used to name attributes are:
  - 116680003 |Is a (attribute)| and
  - subtypes of 410662002 |Concept model attribute|

Alternatives

- **Relationship type**

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attribute relationship

A relationship between two concepts in which one concept specifies the value of a defining characteristic of the other concept.

Notes

- The attribute (defining characteristic) is specified by the relationship.*Typeid* field, which has a value that is a subtype of 410662002 |Concept model attribute|.

Related Links

- Attribute
- Attribute name
- Attribute value
- Subtype relationship

attribute value

A concept that represents the target of a relationship or the value of an expression refinement in a postcoordinated expression.

Notes

- An *attribute value* applied to an attribute name is referred to as an attribute value pair.
- An attribute value pair can represent a defining characteristic of a concept or an expression refinement.
- In the *Relationship file*, the attribute name is represented by the Relationship.*typeId* and the *attribute value* by the Relationship.*destinationId*.

attribute value pair

A combination of an attribute name and an attribute value used to specify a defining characteristic of a concept.

Notes

- The attribute name identifies the type of information and the attribute value provides a value.
- An attribute value pair can represent a defining characteristic of a concept or an expression refinement.
- In the *relationship file*, the *attribute name* is represented by the relationship.*typeId* and the attribute value by the relationship.*destinationId*.

Related Links

- Attribute name
- Attribute value

Augmented Backus-Naur Form

A language used to define the formal syntax of another language in computer science.

Notes

- *Augmented Backus-Naur Form* is:
  - used to define syntax for Internet specifications.
  - defined by Internet Standard 68, RFC 5234.

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Alternatives

- ABNF

Related Links

- Internet Engineering Task Force
  - Augmented BNF for Syntax Specifications
- Wikipedia
  - Augmented Backus-Naur form

author

This is an abbreviation for SNOMED CT author.

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

authoring

This is an abbreviation for SNOMED CT authoring.

The process of creating or editing SNOMED CT concepts, concept definitions and descriptions.

authoritative concept

A concept with a specific meaning defined by an authoritative source.

Notes

- National or international professional bodies or standards organizations are sources of authoritative concepts.

Examples

- Taxonomic groupings of organisms are only added to the *SNOMED CT* International Release where an appropriate authoritative source reference is provided (see Organism groupings)

automatic classification

This is a synonym for description logic classification.

A process that generates a set of logically consistent inferences by applying description logic rules to the stated view of concept definitions.

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axiom

A true statement that serves as a premise or starting point for further reasoning.

Notes

- The *axioms* that specify SNOMED CT concept definition release files as SNOMED CT relationships or as OWL axioms that conform to the OWL Functional Syntax.

Change Notices

- Before July 2018, all *axioms* were represented as relationships.
- During a transitional period commencing with the July 2018 release of the International Edition, some *axioms* in stated view will be represented using the OWL functional syntax and at the end of the transitional period all stated view *axioms* will be represented in this way.
- Inferred view *axioms* will continue to be represented as relationships.

Alternatives

- **OWL axiom**

Related Links

- SNOMED CT Logic Profile Specification
- SNOMED CT OWL Guide

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B

baseline

Superseded by - Production release package.

A final, formally endorsed SNOMED CT release package intended for live use in appropriately licensed operational systems.

beta package

This is a synonym for beta release package.

A SNOMED CT release package made available for review and testing only.

beta release

This is an abbreviation for beta release package.

A SNOMED CT release package made available for review and testing only.

beta release package

A SNOMED CT release package made available for review and testing only.

Notes

- Implementers and other stakeholders review and test the *beta release*.
- The *beta release package* is made available prior to the production release. It must not be used in production clinical systems or in clinical settings. This includes Affiliate Licensees or any third parties, except those who have formally committed to test it.
- The *beta release* status indicates it is expected to subsequently be confirmed as a production release. If there is significant issue in format or content, it may be withdrawn, or replaced with an updated *beta release package*. Whether or not it becomes a production release is decided shortly before the due date for the next release. If a *beta release* is subsequently confirmed as a production release, all updates are fully version-tracked from the date of the *beta release*.
- Beta releases were formerly known as candidate baseline releases.

Alternatives

- **Beta package**
- **Beta release**

Related Links

- Alpha release package
- Production release package

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binomial format

This is a synonym for binomial nomenclature.

The formal system for the two-part names of species.

binomial nomenclature

The formal system for the two-part names of species.

Notes

- The *binomial nomenclature* is standardized and internationally accepted.
- The two parts of the *binomial nomenclature* are the genus and species.
- SNOMED CT includes the *binomial nomenclature* name for organism species and follows the convention of using uppercase for the initial letter of the genus name and lowercase for the initial letter of the species name.

Example

- The concept 24224000 |Brucella abortus (organism)| has the following associated terms:

  Fully specified name
  |Brucella abortus (organism)|
  Preferred term
  |Brucella abortus|
  Other synonyms
  |Brucella melitensis biovar abortus|
  |Bacillus abortus|

  Note that both the fully specified name and the preferred term use the binomial nomenclature .

Alternatives

- **Binomial format**

Links

- International Code of Nomenclature for algae, fungi, and plants
- International Code of Zoological Nomenclature
- Wikipedia
  - Binomial nomenclature

browser

This is an abbreviation for SNOMED CT browser.

A software application that provides a user interface through which to explore SNOMED CT content.

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C

candidate baseline

Superseded by - Beta release package.

A SNOMED CT release package made available for review and testing only.

canonical form

A serialized representation of a SNOMED CT expression produced by applying a set of rules that ensure a single unique representation for any expression.

Notes

- Expressions that contain exactly the same concept identifiers and refinements, may differ from one another in the following ways:
    - Inclusion of whitespace between elements
    - Inclusion of specific terms associated with identified concepts.
    - The order in which focus concepts, refinements, attributes, and attribute groups appear.
- The *canonical form* is generated by removing whitespace and terms from an expression and arranging the focus concepts, refinements, attributes, and attribute groups in a standard order.
- If *canonical form* rules are applied to a normal form expression, the result is a single unique rendering of the meaning represented by that expression.

Alternatives

- **Canonical representation**

Related Links

- Normal form
- Compositional Grammar - Specification and Guide
- Terminology Services Guide
    - 12.4.29 Canonical Representation
- Wikipedia
    - Canonical form

cardinality

The actual or permitted number of elements in a set or other grouping.

Notes

- Modeling rules include constraints on the minimum and maximum *cardinality* of particular attributes or associations between classes.

Example

- A cardinality of *[1..5]* means that all clinical meanings that satisfy the given expression constraint must have at least one and at most five attributes, that match the given attribute criteria.

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Related Links

- Cardinality

cardinality in group

This is a synonym for attribute in group cardinality.

The number of times that a specific attribute is included in the same attribute group.

cardinality in group constraint

This is a synonym for attribute in group cardinality constraint.

A constraint on the number of times that a specific attribute may be included in the same attribute group.

CDS

This is an abbreviation for clinical decision support.

A service that assists clinicians, caregivers, or patients in healthcare and/or treatment decisions.

Notes

- A clinical decision support system is a computer system or software application designed to assist clinicians, caregivers, or patients in healthcare and/or treatment decisions.

CDSS

This is an abbreviation for clinical decision support system.

A computer system or software application designed to assist clinicians, caregivers, or patients in healthcare and/or treatment decisions.

Notes

- Typically a clinical decision support system responds to triggers, such as specific signs or symptoms, diagnoses, laboratory test results, medication selections, or complex combinations of such triggers. The system then provides information or recommendations relevant to the specific patient.

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CEN

This is an abbreviation for European Committee for Standardization.

A standards organization whose mission is to foster the economy of the European Union in global trading, the welfare of European citizens, and the environment.

CEN TC251

A technical committee of the European Committee for Standardization (CEN) with a focus on Health Information and Communications Technology (ICT).

Notes

- The full name of this committee is CEN/Technical Committee 251 - Health informatics.
- The goal of CEN TC251 is to achieve compatibility and interoperability between independent systems and to enable modularity in Electronic Health Record systems.

Related Links

- CEN/TC 251 - Health informatics
- CEN, Information and Communication Technology

check-digit

The last digit of a SNOMED CT Identifier, which is used to validate the identifier.

Notes

- Applications can use the *check-digit* to identify SNOMED CT codes that have been entered or communicated incorrectly.
- The *check-digit* is calculated using the *Verhoeff algorithm*.

Related Links

- Technical Implementation Guide
  - 3.1.4.2. Component features - Identifiers
- Release File Specification
  - 6.4 Check-digit
  - 6.4.2 Check-digit Computation

child

This is an abbreviation for subtype child.

A concept that has a direct |is a| subtype relationship to a specified concept.

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children

This is an abbreviated plural for subtype child.

A concept that has a direct |is a| subtype relationship to a specified concept.

CIS

This is an abbreviation for clinical information system.

A computer-based system that collects, stores, manipulates, and supplies clinical information to support the delivery of healthcare services to individual people and populations.

classifier

This is an abbreviation for description logic classifier.

A software tool that applies the rules of description logic to a set of axioms to infer additional relationships between concepts.

clinical decision support

A service that assists clinicians, caregivers, or patients in healthcare and/or treatment decisions.

Notes

- A clinical decision support system is a computer system or software application designed to assist clinicians, caregivers, or patients in healthcare and/or treatment decisions.

Alternatives

- **CDS**

Related Links

- Decision Support with SNOMED CT

clinical decision support system

A computer system or software application designed to assist clinicians, caregivers, or patients in healthcare and/or treatment decisions.

Notes

- Typically a clinical decision support system responds to triggers, such as specific signs or symptoms, diagnoses, laboratory test results, medication selections, or complex combinations of such triggers. The system then provides information or recommendations relevant to the specific patient.

Alternatives

- **CDSS**

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Related Links

- Decision Support with SNOMED CT

clinical information system

A computer-based system that collects, stores, manipulates, and supplies clinical information to support the delivery of healthcare services to individual people and populations.

Alternatives

- **CIS**

clinical situation

This is a synonym for situation with explicit context.

A concept that specifically defines the context of a clinical finding or procedure.

Clinical Terms Version 3

This is an abbreviation for NHS Clinical Terms Version 3.

A source terminology used to develop SNOMED CT.

C-NPU

A coded terminology used in clinical laboratory sciences.

Notes

- *C-NPU* is maintained by the International Federation of Clinical Chemists (IFCC) in collaboration with the International Union of Pure and Applied Chemistry (IUPAC).

Alternatives

- **IFCC-IUPAC**
- **Nomenclature, Properties and Units**
- **NPU**

Related Links

- Nomenclature, Properties and Units (C-NPU) in collaboration with International Union of Pure and Applied Chemistry (IUPAC)

code

⚠ This glossary does not provide a formal definition for this term as it has a wide range of meanings, and several of these meanings may be used in connection with SNOMED CT and the services, applications and organization that use SNOMED CT. For further information please see the disambiguation notes below.

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Disambiguation

- Meanings of the word *code* commonly used in connection with SNOMED CT and the services, applications and organizations that use SNOMED CT include:
    a. SNOMED CT concept identifiers and expressions used to represent clinical meanings may sometimes be informally referred to as "SNOMED codes".
    > **Recommendation**
    > - Instead of referring to a "code" or "SNOMED code" use concept identifier (or where appropriate SNOMED CT expression) to minimize the risk of misunderstanding.

    b. Codes in code systems or classifications that are used with or mapped to/from SNOMED CT.
    c. Software code written in a computer programming language (or compiled as machine executable code) that determines the operation of an application or device.
    d. Codes used to represent characters and symbols in computer storage and communication (e.g. UTF-8).
    e. Cryptographic codes used to support secure access to and/or communication of data.

References

- SNOMED CT concept identifier
    - A SNOMED CT identifier that uniquely identifies a concept.
- SNOMED CT expression
    - A structured combination of one or more concept identifiers used to express a clinical idea.

collaborative space

A web resource that assists organizations with communication and collaboration.

Notes

- SNOMED International collaborative spaces powered by Confluence:
    - Support communication within the organization and with its Members, Affiliates, and Advisory Groups.
    - Enable maintenance and publication of the SNOMED CT Document Library containing specifications, guides and other documents related to SNOMED CT.

Related Links

- SNOMED International Confluence Space
- Confluence User Guide

Common Terminology Services 2

An application programming interface (API) specification of the basic functional requirements used to query and access terminological content.

Notes

- *CTS2*
    - Is an abbreviation for *Common Terminology Services 2.*
    - Is used by healthcare software implementers.
    - Defines the functional requirements of a set of service interfaces to allow the representation, access, and maintenance of terminology content either locally, or across a federation of terminology

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services nodes.
- Is specified as an API, rather than a set of data structures. This enables a wide range of terminological content to be integrated within a common framework, without the need for significant migration or revision.
- Was developed from the original HL7 CTS specification and is now a joint initiative between HL7 and the Object Management Group (OMG).

Alternatives

- **CTS2**
- **HL7 CTS2**

complement

The set of elements that are **not** in a specified set.

Notes

- In set theory, the *complement* of set ***A*** refers to all elements not in set ***A***.
- In SNOMED CT, the *complement* of a subset of concepts consists of all concepts that are not in that subset.

Example

- The following expression constraint language defines the set of concepts that are subtypes of 442083009 |Anatomical or acquired body structure| that are also part of the *complement* of the 723264001 |Lateralizable body structure reference set|. The "MINUS" instruction excludes members of the reference set, so only concepts that are part of the *complement* of that set are included.

```
< 442083009 |Anatomical or acquired body structure|
MINUS ^ 723264001 |Lateralizable body structure reference set|
```

Related Links

- Intersection
- Union
- Wikipedia
    - Complement (set theory)

component

This is an abbreviation for SNOMED CT component.

A concept, description, or relationship that conforms with the SNOMED CT logical model.

component history

A record of creation or modification of a component between SNOMED CT versions.

Related Links

- Component

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- Component version

component version

A representation of a SNOMED CT component at a particular point in time.

Notes

- In SNOMED CT release files each *component version* is represented as a single row with a unique combination of *component.id* and *component.effectivetime.*
- The *component.id* uniquely identifies the component and is shared by other versions of that component.
- The *component.effectiveTime* distinguishes different versions of the same component. It indicates the point in time at which that version became the authoritative version of that component. The *effectiveTime* of the first version of a component represents the time when it first became available for use. The *effectiveTime* of each subsequent version of a component represents the time when that version superseded the previous version.

compositional grammar

This is an abbreviation for SNOMED CT compositional grammar.

The set of rules that govern the way in which SNOMED CT expressions are represented as a plain text string.

concept

This is an abbreviation for SNOMED CT concept.

A clinical idea to which a unique concept identifier has been assigned.

Disambiguation

Not to be confused with:

- **Concept**, in its more general dictionary usages, referring to an idea or to a class of real-world entities. When working with SNOMED CT, the words "idea" or "meaning" are suggested instead of this more general use of concept.
- **Concept identifier.** For clarity when referring to the identifier of a SNOMED CT concept, specifically refer to the "concept identifier", "concept id" or "code" rather than using the word concept.

concept definition

This is an abbreviation for SNOMED CT concept definition.

A set of one or more axioms that partially or sufficiently specify the meaning of a SNOMED CT concept.

concept enumeration

A set of SNOMED CT concept identifiers used to represent values for a property of a SNOMED CT component or reference set member.

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Notes

- *Concept enumeration* serves the same purpose as more general approaches to providing enumerated lists of values (i.e. assigning a number to a value). However, the use of SNOMED CT concept identifier allows access to the human readable meaning of each enumeration using descriptions in the same way for other concepts.
- The SNOMED CT concepts used to represent *concept enumerations* are usually subtype children (or descendants) of concepts in the SNOMED CT metadata hierarchy. Each possible value is represented by a single child concept. This allows updates to the permitted values to be tracked using the component history mechanism.

Example

- Concept enumerations for description.typeId:

```
900000000000446008 |Description type (core metadata concept)|
   900000000000003001 |Fully specified name (core metadata concept)|
   900000000000013009 |Synonym (core metadata concept)|
   900000000000550004 |Definition (core metadata concept)|
```

concept equivalence

This is a synonym for semantic equivalence.

> The relationship between two classes that have the same logical meaning.

concept identifier

A SNOMED CT identifier that uniquely identifies a concept.

Notes

- The *concept identifier* uniquely identifies the clinical idea represented by the concept.
- The *concept identifier* is used in expressions and other information artefacts to represent the identified concept.

Related Links

- Concept
- SNOMED CT identifier
- Description identifier

concept model

This is an abbreviation for SNOMED CT concept model.

> The set of rules that determines the permitted sets of relationships between particular types of concepts.

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concept model attribute

A characteristic of the meaning of a concept or the nature of a refinement.

Notes

- An *attribute* is assigned a value (attribute value pair) when used in the definition of a concept or in a postcoordinated expression.
- The *attributes* that can be used in *definitions* or *refinements* are represented by a concepts that is are subtypes of the concept 410662002 |Concept model attribute (attribute)|.
- The SNOMED CT concept model specifies:
  - The concept model domains which each specific *attribute* can be applied; and
  - The concept model range of values that can be applied to each specific *attribute*.

Example

- The attribute 116676008 |Associated morphology|
  - is one of the *attributes* that can be applied to concepts in the 404684003 |Clinical finding| domain; and
  - its range includes 49755003 |Morphologically abnormal structure (morphologic abnormality)| and its subtypes.

Alternatives

- **Attribute**
- **Role**

Related Links

- SNOMED CT concept model
- Concept model domain
- Concept model range
- Attribute relationship
- Concept Model Overview
- SNOMED CT Machine Readable Concept Model

concept model domain

A set of concepts which the concept model permits to be defined or refined, using a particular set of attributes and ranges.

Notes

- A domain to which an attribute can be applied typically includes concepts in one or more branches of the subtype hierarchy.

Examples

- Section 2.4.10.1 Procedure Attributes Summary of the SNOMED CT Editorial Guide defines the *domain*, attributes and ranges for |Procedure|.
- The |Procedure| *domain* is defined as follows:

```
<< 71388002 |Procedure|    /* the concept "Procedure" or any of its subtypes */
```

- The table row below shows how |Procedure site|, one of the many attributes applicable to the |Procedure| domain, is specified together with its range of permitted values.

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Attribute	Grouped	Cardinality	In Group Cardinality	Range Constraint
363704007 |Procedure site|	1	0..*	0..*	<< 442083009 |Anatomical or acquired body structure| /* "Anatomical or acquired body structure" or any of its subtypes. */

Alternatives

- **Domain**

Related Links

- SNOMED CT concept model
- Concept model attribute
- Concept model range
- Grouped attribute
- Attribute in group cardinality constraint
- Attribute cardinality constraint

concept model range

A set of values that the concept model permits to be applied to a specific attribute.

Notes

- The *range* of permitted values that can be applied to an attribute is formally specified using the expression constraint language.
- The *range* is typically limited to concepts that are subtypes of one concept. However, in some cases a *range* may be specified to include subtypes of several concepts or members of a specified reference set.

Example

- The *concept model range* for the attribute 116676008 \|Associated morphology\| is limited the concept 49755003 \|Morphologically abnormal structure\| and its subtypes. This is specified by the following constraint:

```
<< 49755003 |Morphologically abnormal structure|
```

Alternatives

- **Range**
- **Range constraint**

Related Links

- Concept Model Overview
- Machine Readable Concept Model

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Confluence

This is the system that currently provides the SNOMED International collaborative space.

A web resource that assists organizations with communication and collaboration.

Confluence is a commercial software solution provided by Atlassian for further information see https://www.atlassian.com/software/confluence

conjunction

An operator used to assert that two (or more) parts of a concept definition or expression constraint must both be true.

Notes

- *Conjunction* can be represented by the **AND** operator. A conjunction of *A* with *B*, means that both *A* **AND** *B* must be true.
- *Conjunction* gives the same result as an *intersection* between the set of *concepts* or *expressions* for which *A* is true and the set of *concepts* or *expressions* for which *B* is true.

Example

- The following *expression constraint* is satisfied by clinical findings which are subtypes of both 19829001 |Disorder of lung (disorder)| **AND** 301867009 |Edema of trunk (disorder)|.

```
< 19829001 |Disorder of lung| AND < 301867009 |Edema of trunk|
```

Related Links

- Disjunction
- Expression Constraint Language
  - Conjunction and Disjunction

constraint

A rule that limits the attributes, values, and associations that may be applied to a particular component.

Examples

- A modeling *constraint* may limit the permissible defining relationships applied to a particular type of concept.
- An instance data *constraint* may limit the permissible refinements that may be applied to a particular concept.

context

The circumstances that form the setting in which a concept can be appropriately interpreted.

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Notes

- Clear recording and appropriate interpretation of *context* is essential for safe use and accurate analysis of electronic health records.
- The *context* in which a concept is used can be represented in various ways. Some of the possible representation are shown in the examples section below.
- Appropriate interpretation of different representations of *context* can be facilitated by terminology binding techniques that resolve multiple models of use into a common model of meaning.

Examples

- A disease such as "asthma" might be referred to in various *contexts*.
  - A current presenting problem needing treatment
  - A past history recorded during assessment for treatment of another condition
  - A family history recorded routinely during a consultation
- Family history of asthma can be recorded using SNOMED CT in several ways three of which are illustrated here.
  - Use of a single *concept* from the situation with explicit context domain:

    160377001 |Family history: Asthma (situation)|

  - Application of a context wrapper to the *concept* 195967001 |Asthma (disorder)|:

    57177007 |Family history with explicit context (situation)| :
    { 246090004 |Associated finding (attribute)| = 195967001 |Asthma (disorder)| }

  - Use of features of an electronic health record model, such as separate record sections for information with different *contexts*.

    Family History Record Section
    195967001 |Asthma (disorder|)

  - Based on the definitions of these concepts, a description logic classifier will infer that first two representations above have precisely the same meaning. The third representation can be similarly resolved if the "Family History Record Section" has a *model or meaning binding* to the 57177007 |Family history with explicit context (situation)| wrapper.

Related Links

- Situation with explicit context
- Context wrapper
- Domain
- Terminology binding
- Model of use
- Model of meaning
- Safely representing the context of recorded codes

context wrapper

The part of the SNOMED CT expression specifying the context of the focus concept.

Examples

- *Family history of asthma* can be represented by an expression in which the 195967001 |Asthma| is nested within a *context wrapper* indicating family history.

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```
281666001 |Family history of disorder (situation)| :          ← Context wrapper
    { 246090004 |Associated finding| = 195967001 |asthma|     ← Focus concept
    }
```

- Addition information can be added in the *context wrapper* to specify the family member affected by asthma.

```
281666001 |Family history of disorder (situation)| :                    ← Context wrapper
   { 408732007 |Subject relationship context| = 72705000 |Mother| ,     ←    ...
     246090004 |Associated finding|  =  195967001 |asthma|              ← Focus concept
    }
```

Related Links

- Focus concept
- Refinement
- Expression
- Situation with explicit context
- Modeling semantic context
- Compositional Grammar - Specification and Guide

core file

This is an abbreviation for SNOMED CT core file.

A distribution file used to represent the main SNOMED CT components (concepts, descriptions and relationships).

core table

This is a synonym for SNOMED CT core file.

A distribution file used to represent the main SNOMED CT components (concepts, descriptions and relationships).

cross mapping

This may sometimes be used to refer to mapping.

The process of converting data from one code system, classification, or terminology to another code system, classification, or terminology.

CTS2

This is an abbreviation for Common Terminology Services 2.

An application programming interface (API) specification of the basic functional requirements used to query and access terminological content.

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CTV3

This is an abbreviation for NHS Clinical Terms Version 3.

A source terminology used to develop SNOMED CT.

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D

DAG

This is an abbreviation for directed acyclic graph.

A set of nodes connected to one another by lines (edges) in which each connection has a specified direction such that no route that follows the direction of the connections enters a loop (cycle).

Data Analysis System

A computer system that is used to analyze records or other data that is encoded using SNOMED CT, but not if that system is also a Data Creation System.

Notes

- The above definition is copied from the Affiliate License Agreement.
- *Data Analysis Systems* and Data Creation Systems are fee-based in Non-Member Territories.

Related Links

- Data Creation System
- SNOMED International Affiliate Licence Agreement

Data Creation System

A computer system that is used to create records or other data that is encoded with SNOMED CT.

Notes

- The above definition is copied from the Affiliate License Agreement.
- *Data Creation Systems* and Data Analysis Systems are fee-based in Non-Member Territories.

Related Links

- Data Analysis System
- SNOMED International Affiliate Licence Agreement

data migration

A process that allows legacy data to be accessible in a system that uses SNOMED CT.

Notes

- *Data migration* allows retrieval and reuse of data that was recorded prior to the introduction of SNOMED CT. This may be accomplished through actual conversion of the data or provision of methods to access data in its original form.

Related Links

- Migration
- Operational migration
- Predicate migration
- General considerations for data migration

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defining characteristic

This is a synonym for defining relationship.

A relationship to a target concept that is always necessarily true for any instance of the source concept.

defining relationship

A relationship to a target concept that is always necessarily true for any instance of the source concept.

Notes

- All *defining relationships* represent necessary conditions. However, some necessary conditions that can be represented by OWL Axioms cannot be represented by *relationships*.

Example

- The *defining relationships* of the concept 53442002 |gastrectomy| include
  - 260686004 |method| = 129304002 |excision - action| and
  - 405813007 |procedure site - Direct| = 69695003 |stomach structure|.

Alternatives

- **Defining characteristic**

Related Links

- Necessary condition

delta release

A release type in which the release files contain only rows that represent component versions and reference set member versions created since the previous release date.

Notes

- Each *row* in a *delta release* file represents either a new component or reference set member, or a change to an existing component or reference set member since the previous release date.
- A *delta release* identifies differences between two versions of the same release package.
- A *delta release* added to the previous full release is identical to the full release of the new version.
- The previous *release date*, on which a *delta release* is based, is usually the date of the most recent previous release. However, that may not always be the case. For example, where interim releases are made between two major releases there may be a combined *delta release* covering a period since a previous major release.

Related Links

- Delta view
- Other Release Types
  - Full release
  - Snapshot release
- Release File Specification
  - 3.2 Release Types

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derivative

This is a synonym for SNOMED CT derivative.

A document, subset, set of maps, or other resource that includes references to, or is derived from, one or more SNOMED CT components.

descendant

This is an abbreviation for subtype descendant.

A concept that is a subtype of a specified concept.

description

This is an abbreviation for SNOMED CT description.

An association between a human-readable phrase (term) and a particular SNOMED CT concept.

description identifier

A SNOMED CT identifier that uniquely identifies a description.

Related Links

- Description
- SNOMED CT identifier
- Concept identifier

description type

An indication of the intended use of a term of a SNOMED CT description when applied to the associated concept.

Notes

- The *description type* is represented by the value of the description.*typeId* attribute.
- Permitted values include the following (other types may be defined in future):

typeId (with term)	Further information
900000000000003001 |Fully specified name|	fully specified name • A description that represents the meaning of a concept in a way that is unambiguous and independent of the context in which is it used.
900000000000013009 |Synonym|	synonym • A word or phrase that expresses the meaning of a SNOMED CT concept in a specified language.

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typeId (with term)	Further information
900000000000550004 |Definition|	textual definition • A narrative text explanation of the meaning of a concept that may exceed the maximum permitted length for a fully specificied name.

- ⚠ The Preferred term is **not** a distinct description type, it is the synonym marked as preferred for use in the *language reference set* for a specified language context.

Related Links

- Description Format Reference Set
- Fully specified name
- Synonym
- Textual definition
- Language context
- Language reference set

description logic

A representation of semantic knowledge that allows formal reasoning to be applied based on axioms.

Notes

- *Description logic* definitions of SNOMED CT concepts are represented in two ways, as:
  - OWL Functional Syntax in an OWL Expression Reference Set
  - Defining relationships in the Relationship File.
- The formal rules of *description logic* can be applied to concept definitions by software tools (description logic classifiers) to interpret the meaning of concepts. This enables confirmation of the logical integrity of the terminology, and can also be used to support meaning-based retrieval from records containing SNOMED CT expressions or concepts.

Alternatives

- **DL**

Related Links

- Description logic classification
- Description logic classifier
- Concept Definitions
- Web Ontology Language
- SNOMED CT OWL Guide
- SNOMED CT Logic Profile Specification
- Wikipedia
  - Description logic

description logic classification

A process that generates a set of logically consistent inferences by applying description logic rules to the stated view of concept definitions.

Alternatives

- **Automatic classification**

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Related Links

- Description logic classifier

description logic classifier

A software tool that applies the rules of description logic to a set of axioms to infer additional relationships between concepts.

Notes

- SNOMED CT concept definitions are processed by a *description logic classifier* to generate inferred subtype hierarchies.
- SNOMED CT expressions can also be processed by a *description logic classifier* to make inferences that enable more complete and precise selective retrieval to support analytics.

Alternatives

- **Classifier**

Related Links

- Description logic
- Description logic classification

destination concept

A concept that provides the value of a relationship.

Notes

- The *destination concept* is identified by the destinationId in the *relationship.*
- The *destination concept* represents the value of a defining characteristic of the source concept.

Related Links

- Source concept
- Relationship type

destinationId

A field in the relationship release file containing a SNOMED CT identifier that represents the destination concept or attribute value of the associated relationship.

Related Links

- Relationship file
- SourceId

dialect

A modification of the language of a particular geography or culture by means of the vocabulary and grammatical conventions applied to it.

Example

- English has British and American dialects.

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Related Links

- Dialect

directed acyclic graph

A set of nodes connected to one another by lines (edges) in which each connection has a specified direction such that no route that follows the direction of the connections enters a loop (cycle).

Notes

- The SNOMED CTsubtype hierarchy is a *Directed Acyclic Graph*. SNOMED CT concepts are nodes and subtype relationships are the directed lines that connect them. All subtype relationships lead from a more specific concept to a more general concept, so a cycle would be a logical error (e.g. if "rubella virus" is a type of "virus" and "virus" is a type of "microorganism", then "microorganism" cannot be a type of "rubella virus").

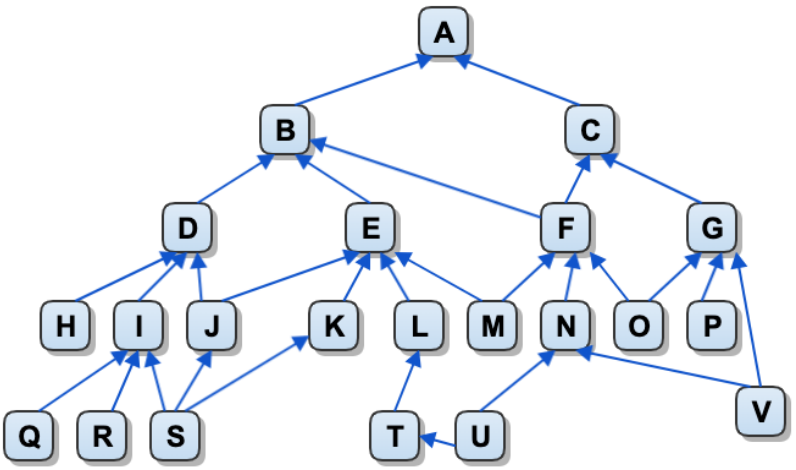

Figure 1: Illustrative Example - Directed Acyclic Graph

Alternatives

- **DAG**

Related Links

- Wikipedia
  - Directed Acyclic Graph

disjunction

An operator used to assert that at least one of two (or more) parts of a concept definition or expression constraint must be true.

Notes

- *Disjunction* can be represented by the **OR** operator. A disjunction of *A* with *B*, means that either *A* **OR** *B* must be true.

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- *Disjunction* gives the same result as an **UNION** between the set of *concepts* or *expressions* for which *A* is true and the set of *concepts* or *expressions* for which *B* is true.

Example

- The following *expression constraint* is satisfied by clinical findings that are subtypes of either 19829001 |Disorder of lung (disorder)| **OR** 301867009 |Edema of trunk (disorder)|.

```
< 19829001 |Disorder of lung| OR < 301867009 |Edema of trunk|
```

Related Links

- Conjunction
- Expression Constraint Language
    - Conjunction and Disjunction

disjunctive

This is a synonym for disjunction.

An operator used to assert that at least one of two (or more) parts of a concept definition or expression constraint must be true.

distribution normal form

Replaced in 2019 by the necessary normal form.

An inferred view of a concept definition that includes only defining relationships that are necessarily true.

Historical Reference

- Distribution normal form - obsolete-definition

distribution normal form - obsolete-definition

An inferred view of a concept definition from which redundant subtype relationships have been removed.

In January 2019, enhancements to concept definitions resulted a change in the view represented by the relationships file. The content of this file now represents the necessary normal form, rather than the *distribution normal form.* Therefore, this glossary definition is retained for historical purposes only.

Notes

- The *distribution normal form* allows non-redundant subtype relationships to readily display a hierarchical view of the terminology.
- The *distribution normal form* was distributed in the SNOMED CT relationship file until July 2018.

Alternatives

- **DNF**

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Related Links

- Inferred view
- Necessary normal form
- Generating Necessary Normal Form Relationships from the OWL Refsets

DL

This is an abbreviation for description logic.

A representation of semantic knowledge that allows formal reasoning to be applied based on axioms.

DNF

An abbreviation for the now obsolete "distribution normal form" replaced by necessary normal form.

An inferred view of a concept definition that includes only defining relationships that are necessarily true.

Historical Reference

- Distribution normal form - obsolete-definition

domain

This is an abbreviation for concept model domain.

A set of concepts which the concept model permits to be defined or refined, using a particular set of attributes and ranges.

Draft Standard for Trial Use

A specification and process to allow implementers to test a standard.

Notes

- At the end of the trial period, the *standard* may be balloted, revised, or withdrawn.

Example

- TermInfo, the joint project between HL7 International and SNOMED International, is an example of an HL7 DSTU.

Alternatives

- **DSTU**

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DSTU

This is an abbreviation for Draft Standard for Trial Use.

A specification and process to allow implementers to test a standard.

duplicate term

A *term* that occurs in more than one active description.

Notes

- *Duplicate terms* are valid as synonyms since these *terms* enable clinicians to use of familiar terms to find or express concepts.
- *Duplicate terms* are not valid as fully specified names, as these *terms* represent the unique formal name of each concept.

Related Links

- Term
- Synonym
- Fully specified name

dynamic snapshot view

A snapshot view that can be specified at run time.

Notes

- A snapshot view is generated by filtering a full view so that it only includes the most recent version of each SNOMED CT component as at a specified date.
- Access to a current *snapshot* view is essential for data entry. However, it is also useful to be able to set alternative snapshot dates for some types of analysis. For example, to determine whether current and previous results of similar queries have been affected by more recent enhancements to the terminology.

Related Links

- Snapshot view
- Release File Specification
    - 3.2 Release Types

delta view

A view of SNOMED CT that contains only rows that represent changes to components and reference set members since a specified date or between two specified dates in the past.

Notes

- The *delta view* between the most recent release date and the immediately preceding release date matches the content of the most recent delta release.
- A full release can be filtered to provide *delta views* for the current release or between any two release dates in the past.

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References

- Other Views
  - Full view
  - Snapshot view
- Release Types
  - Delta release
  - Full release
  - Snapshot release

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E

edition

This is an abbreviation for SNOMED CT edition.

A complete set of SNOMED CT components and reference set members that belong to an identified SNOMED CT module and all of the modules on which that *module* depends.

editor

This is a synonym for SNOMED CT author.

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

EHR

This is an abbreviation for electronic health record.

A systematic collection of health information about individual patients or populations that is stored in digital form.

electronic health record

A systematic collection of health information about individual patients or populations that is stored in digital form.

Notes

- An *Electronic health record* may contain a complete and detailed record of a patient's health or may consist of a summary of information of particular relevance to continuing delivery of care.

Alternatives

- **EHR**

EN13606

A European Standard developed by CEN TC251 that defines a rigorous and stable information architecture for communicating all or part of an electronic health record (EHR) of a patient.

Notes

- *EN13606* supports the interoperability of systems and components that communicate (access, transfer, add, or modify) EHR data via electronic messages or as distributed objects while:
    - preserving the clinical meaning
    - maintaining the confidentiality of the patient's data.

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Related Links

- International Organization for Standardization

enabled application

This is an abbreviation for SNOMED CT enabled application.

A software application designed to support the use of SNOMED CT.

enabled implementation

This is an abbreviation for SNOMED CT enabled implementation.

An implementation of an information system that is able to make effective use of SNOMED CT in an organization or region.

entire

This is part of structure-entire-part.

A modeling approach used in SNOMED CT to represent anatomical entities such as body organs, systems, or regions.

eponym

This is an abbreviation for eponymous term.

A term that includes or is derived from the name of a person or place.

ⓘ The word *eponym* is also used refer to the name or the person from which an *eponymous term* is derived (see definition of eponym in Merriam-Webster and Oxford Dictionaries).

eponymous term

A term that includes or is derived from the name of a person or place.

Notes

- The *eponym* is typical the name of a person who invented, discovered or created the original description of the concept to which the *eponymous term* applies.
- SNOMED CT Editorial Guidelines encourage inclusion of *eponymous terms* as synonyms but deprecate their use in fully specified names.

Examples

- Down syndrome

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- Moro reflex
- Whipple procedure

Alternatives

- **Eponym**

Related Links

- Editorial Guide
    - 3.5 Eponyms

equivalence

This is an abbreviation for semantic equivalence.

The relationship between two classes that have the same logical meaning.

Disambiguation

Not to be confused with:

- Word equivalents
- Phrase equivalents

European Committee for Standardization

A standards organization whose mission is to foster the economy of the European Union in global trading, the welfare of European citizens, and the environment.

Notes

- The European Committee for Standardization is a major provider of European standards and technical specifications.

Alternatives

- **CEN**
- **Comité Européen de Normalisation**
- **Europäiches Komitee für Normung**

Related Links

- European Committee for Standardization
- CEN TC251 - Health informatics

explicit context

This is an abbreviation for situation with explicit context.

A concept that specifically defines the context of a clinical finding or procedure.

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expression

This is an abbreviation for SNOMED CT expression.

A structured combination of one or more concept identifiers used to express a clinical idea.

expression constraint

A computable rule that is used to define a set of clinical meanings.

Notes

- *Expression constraints* can be used as:
  - formal constraints on the content of a particular data element in an electronic health record.
  - intensional definitions of concept-based reference sets.
  - machine processable queries that identify a set of matching precoordinated expressions or postcoordinated expressions.
  - constraints that restrict the range of an attribute defined in the SNOMED CT concept model.

Related Links

- Expression Constraint Language - Specification and Guide

expression constraint template

A SNOMED CT expression constraint containing template slots that can be populated by specific values when in use.

Notes

- An *expression constraint template* is particularly useful when non-technical users need to create structured constraints or queries. A technically competent designer creates the template and users enter values in the template slots. A form-driven query tool may also be used to create structured constraints or queries.

Related Links

- Expression constraint
- SNOMED CT template slot
- Expression Constraint Language - Specification and Guide
  - Form-Based Authoring

expression refinement

The part of a SNOMED CT expression that applies qualifying details to a focus concept.

Example

- A *spiral fracture of the left humerus* can be represented by an expression in which the concept *fracture of humerus* is made more specific by the addition of a refinements containing attributes that more precisely indicate the location and morphology.

```
66308002 |fracture of humerus| :                          ← Focus concept
 { 363698007 |finding site| = 20760004 |shaft of humerus| ,      ← Refinement
   116676008 |associated morphology| = 73737008 |Fracture, spiral| } ←  ...
```

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Alternatives

- **Refinement**

Related Links

- Expression
- Postcoordinated expression
- Focus concept
- Compositional Grammar - Specification and Guide

expression template

A SNOMED CT expression containing SNOMED CT template slots that can subsequently be populated with appropriate values.

Notes

- An *expression template* represents an expression that includes one or more predefined variables. Values can be assigned to these variables to fully populate the expression.

Related Links

- SNOMED CT expression
- SNOMED CT template slots
- Expression Template Language

extension

This is an abbreviation for SNOMED CT extension.

A set of terminology components and reference set members that add to and are dependent on the SNOMED CT International Edition.

extension namespace identifier

A seven digit number allocated by SNOMED International to an organization that is permitted to maintain a SNOMED CT Extension.

Notes

- The *namespace identifier* enables an authorized organization to generate a unique SNOMED CT identifier (SCTID) for each of their SNOMED CT components. It forms part of the SCTID assigned to every component created by that organization.
- Short format SCTIDs, which are used for components that originate from SNOMED International, do not include a *namespace identifier*. For these SCTIDs the partition identifier provides sufficient information about the origin of the component.

Alternatives

- **Namespace identifier**
- **NamespaceId**

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Related Links

- SNOMED CT Extension
- Extensions Practical Guide
- Representing SNOMED CT identifiers

extensional subset definition

A subset in which the members are represented by enumeration.

Notes

- An extensional subset definition of SNOMED CT components may be represented by a list of the identifiers of the components.
- The standard format for distributing an extensionally defined subset of SNOMED CT components is a simple reference set.

Related Links

- Extensional and Intensional definitions
- Extensionally defined subset
- Intensional subset definition
- Intensionally defined subset
- Practical Guide to Reference Sets

extensionally defined subset

A subset whose membership is defined by an extensional subset definition.

> An extensional subset definition is defined as
>
> - A subset in which the members are represented by enumeration.

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F

Fast Healthcare Interoperability Resources

This is the full name for FHIR.

An HL7 standards framework that defines a set of resources that represent granular clinical concepts.

FHIR

An HL7 standards framework that defines a set of resources that represent granular clinical concepts.

Notes

- FHIR combines features of HL7's V2, V3, and CDA products.
- FHIR is web-based and its resources are based on simple XML or JSON structures.
- FHIR has an http-based RESTful protocol, where each resource has a predictable URL.
- Where possible, open internet standards are used for data representation.
- The abbreviation FHIR, is pronounced *fire.*

Alternatives

- **Fast Healthcare Interoperability Resources**

Related Links

- FHIR Release 3 (STU)

field

This is an abbreviation for release file field.

A property of a SNOMED CT component or reference set member represented by a column in a release file.

FMA

This is an abbreviation for Foundational Model of Anatomy.

A domain ontology that represents a coherent body of knowledge about human anatomy.

focus concept

The part of a SNOMED CT expression that represents the primary clinical idea.

Note

- Typically the *focus concept* is a clinical finding, procedure, observable entity. However, it may be a concept from any domain that can be refined in accordance with concept model rules.

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- The *focus concept* may have a refinement that provides more detailed information.
- The *focus concept* may be given context by a surrounding context wrapper.

Examples

- The 66308002 |Fracture of humerus| is the *focus concept* in the following three examples:
- Example 1: Focus concept with a refinement that indicates the type and location of the fracture.

```
66308002 |fracture of humerus| :                                  ← Focus concept
 { 363698007 |finding site| = 20760004 |shaft of humerus| ,       ← Refinement
   116676008 |associated morphology| = 73737008 |Fracture, spiral| }  ←  ...
```

- Example 2: Focus concept in a context wrapper the fracture of the humerus is past history rather than a current condition.

```
312850006 |History of disorder (situation)| :      ← Context wrapper
   { 66308002 |fracture of humerus| }              ← Focus concept
```

- Example 3: Focus concept in a context wrapper with a refinement to add more detailed information.

```
312850006 |History of disorder (situation)| :                          ← Context wrapper
{ 246090004 |Associated finding| = 66308002 |fracture of humerus| :     ← Focus concept
     { 363698007 |finding site| = 20760004 |shaft of humerus| ,         ← Refinement
       116676008 |associated morphology| = 73737008 |Fracture, spiral| }  ←  ...
}
```

Related Links

- Context wrapper
- Refinement
- Expression
- Compositional Grammar - Specification and Guide

focus module

A module that defines the content of a SNOMED CT edition.

Notes

- The *edition* defined by a *focus module* includes all the modules on which that *module* depends.

Related Links

- SNOMED CT module
- SNOMED CT edition
- Extensions Practical Guide
  - 4.2.2 Module Dependencies
  - 4.4 Editions

Foundational Model of Anatomy

A domain ontology that represents a coherent body of knowledge about human anatomy.

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Notes

- The abbreviation for *Foundational Model of Anatomy* is FMA.
- FMA is a computer-based knowledge source for use in biomedical informatics.
- FMA was developed and is maintained by the Structural Informatics Group at the University of Washington.
- SNOMED CT uses FMA definitions for some concepts.

Alternative

- FMA

Related Links

- Foundational Model of Anatomy

FSN

This is an abbreviation for fully specified name.

A description that represents the meaning of a concept in a way that is unambiguous and independent of the context in which is it used.

full release

A release type in which the release files contain every version of every component and reference set member ever released.

Related Links

- Full view
  Other Release Types
  - Delta release
  - Snapshot release

  Release File Specification
  - 3.2 Release Types

full view

A view of SNOMED CT that includes all of the components in a full release.

Notes

- A *full view* includes the history of all components ever released.
- A *full view* can be filtered to provide a snapshot view of the components at the current date or at any date in the past.
- A *full view* can also be filtered to provide a delta view of changes to components between any two dates in the past.

References

- Other Views
  - Delta view
  - Snapshot view
- Release Types

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- Delta release
- Full release
- Snapshot release

fully defined concept

This is a synonym for sufficiently defined concept.

A concept with one or more sufficient definitions.

fully specified name

A description that represents the meaning of a concept in a way that is unambiguous and independent of the context in which is it used.

Notes

- *Fully specified names* are represented by *descriptions* with the typeId 900000000000003001 |Fully specified name|.
- Every concept must have at least one active *fully specified name.*
- Language reference sets must a single preferred *fully specified name* for each concept in a language context.
- The US English *fully specified name* is the point of reference for the meaning of concepts in the SNOMED CT International Edition. For concepts that are part of an extension, the preferred *fully specified name* in a language specified by that *extension* may be the point of reference.

Alternatives

- **FSN**

Related Links

- Term
- Description
- Preferred term
- Synonym
- Language context
- Language reference set

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G

grouped

This may be an abbreviation for grouped attribute.

A rule defining whether or not an attribute belongs to a relationship group when applied to a concept in a specific domain.

grouped attribute

A rule defining whether or not an attribute belongs to a relationship group when applied to a concept in a specific domain.

Notes

- A description logic classifier defines whether or not an attribute is *grouped*.
- In SNOMED CT, all attributes are considered *grouped* by default except: laterality, part of, has dose form, and attributes used for observable entities.

Related Links

- Process for the maintenance of MRCM rules

grouper

This is an abbreviation for grouper concept.

A concept definition that provides a definition for subtypes that are always and necessarily true.

grouper concept

A concept definition that provides a definition for subtypes that are always and necessarily true.

Notes

- The *grouper concept* must be sufficiently defined and clinically useful for the purpose of organizing content for an intensional reference set or in expression constraint language (ECL).

Examples

- An intensional reference set: *disease of colon and all of its descendants*
- Expression constraint language (ECL): 128524007 |Disorder of colon (disorder)|

Alternatives

- **Grouper**

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H

Health Level 7

A standards development organization that provides a comprehensive framework for the exchange, integration, sharing, and retrieval of electronic health information.

Notes

- *Health Level 7* supports clinical practice and health services.
- *Health Level 7* is not-for-profit and ANSI-accredited.

Alternatives

- **HL7**

Related Links

- Health Level Seven International
- HL7 FHIR
- Health Level 7 Version 3
- Health Level 7 Version 3 Reference Information Model

Health Level 7 Version 3

A standard for communication of electronic health information developed by HL7.

Notes

- Version 3 is based on a formal development framework in which the communication structures are derived as refinements from a Reference Information Model (HL7 V3 RIM).

Alternatives

- **HL7 V3**

Health Level 7 Version 3 Reference Information Model

The reference information model on which HL7 Version 3 is based.

Alternatives

- **HL7 V3 RIM**

hierarchy

An arrangement of nodes in which each node is linked to one or more parent nodes.

Notes

- In SNOMED CT the nodes are concepts linked to their more general parent concepts by |is a| relationships.
- Concepts with the most general meanings are presented at the top of the *hierarchy*, with the concepts linked to them at the level beneath, and so on. At each level down, the meanings of the concepts are increasingly more specific or specialized.

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Related Links

- Directed Acyclic Graph
- Monohierarchical classification
- Polyhierarchical classification
- Subtype hierarchy

hierarchy tag

A parenthetical notation at the end of a fully specified name indicating the relevant domain.

Notes

- The purpose of *hierarchy tags* is to disambiguate concepts which have the same commonly used word or phrase.

Examples

- 55903007 |Acute atrophy (morphologic abnormality)| with the *hierarchy tag*, morphologic abnormality in the body structure domain
- 89305009 |Abdominal paracentesis (procedure)| with the *hierarchy tag*, procedure

Alternatives

- Semantic tag

HL7

This is an abbreviation for Health Level 7.

A standards development organization that provides a comprehensive framework for the exchange, integration, sharing, and retrieval of electronic health information.

HL7 CTS2

This is an abbreviation for Common Terminology Services 2.

An application programming interface (API) specification of the basic functional requirements used to query and access terminological content.

HL7 TermInfo

An HL7 project that developed the "HL7 Version 3 Implementation Guide: Using SNOMED CT in HL7 Version 3" as a Draft Standard for Trial Use (DSTU).

Notes

- The guide is an the HL7 Version 3 draft standard for achieving semantic interoperability to communicate clinical information represented by SNOMED CT concepts.

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Alternatives

- **TermInfo**

Related Links

- SNOMED CT in HL7 Version 3

HL7 V3

This is an abbreviation for Health Level 7 Version 3.

A standard for communication of electronic health information developed by HL7.

HL7 V3 RIM

This is an abbreviation for Health Level 7 Version 3 Reference Information Model.

The reference information model on which HL7 Version 3 is based.

HRCM

This is an abbreviation for human readable concept model.

A rendering of the machine readable concept model rules designed to be included in guidance documents.

human readable concept model

A rendering of the machine readable concept model rules designed to be included in guidance documents.

Notes

- The *human readable concept model* is generated by processing the machine readable concept model to ensure that it accurately reflects the rules.
- The *human readable concept model* is presented in tables that organize the information from the perspective of concept model domains and attributes. These tables include:
    - Expression constraint language representations of domains and ranges;
    - Constraints on attribute cardinality and attribute in group cardinality.
- Selected *human readable concept model* tables are included in the SNOMED CT Editorial Guide and will also appear where relevant in other SNOMED CT guides.

Alternatives

- **HRCM**

Related Links

- SNOMED CT concept model
- Machine readable concept model
- SNOMED CT Editorial Guide

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- Compositional Grammar
- Expression Constraint Language

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I

ICD

This is an abbreviation for International Classification of Diseases.

A system of coding diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases, as classified by the World Health Organization (WHO).

ICD-9

The ninth revision of a system of coding of diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Notes

- *ICD-9* is an abbreviation for The International Classification of Diseases, 9th Revision.
- *ICD-9* was replaced by ICD-10.

Related Links

- International Classification of Diseases
- World Health Organization, Classifications

ICD-9-CM

A modification of the ninth revision, ICD-9, of a system of coding of diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Notes

- *ICD-9-CM* is an abbreviation for the International Classification of Diseases, 9th Revision, Clinical Modification.
- *ICD-9-CM* is maintained jointly by the U.S. National Center for Health Statistics (NCHS) and Centers for Medicare & Medicaid Services (CMS).

Related Links

- Classification of Diseases, Functioning, and Disability

ICD-10

The tenth revision of the system of coding of diseases, signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Notes

- *ICD-10* is the abbreviation for the International Classification of Diseases, 10th Revision.
- A version of ICD-11 was released in June, 2018, but will not be in use for reporting until 1 January 2022.

Related Links

- International Classification of Diseases
- World Health Organization, Classifications

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ICD-10-CM

A modification of the tenth revision, ICD-10, of a system of coding of diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Notes

- *ICD-10-CM* is an abbreviation for the International Classification of Diseases, 10th Revision, Clinical Modification.
- *ICD-10-CM* is maintained jointly by the U.S. National Center for Health Statistics (NCHS) and Centers for Medicare & Medicaid Services (CMS).

ICD-11

The eleventh revision of the system of coding of diseases, signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Notes

- *ICD-11* is the abbreviation for the International Classification of Diseases, 11th Revision.
- A version of *ICD-11* was released in June, 2018 to allow Member States to prepare for its use, including translation into appropriate languages.
- The planned date for Member States to start using *ICD-11* for reporting on 1 January 2022.

Related Links

- International Classification of Diseases
- World Health Organization, Classifications

identifier

An unique reference to a SNOMED CT component or reference set member.

Component Identifiers

Each SNOMED CT component is identified by a SNOMED CT identifier (SCTID) which is defined as follows:

- A unique *integer* identifier applied to each SNOMED CT component (Concept, Description, or Relationship).

Reference Set Member Identifiers

Each reference set member is identified by a Universally Unique Identifier (UUID) which is defined as follows:

- A 128-bit integer used to uniquely identify information in computer systems.

IFCC-IUPAC

The combination of these abbreviations sometimes refers to C-NPU.

A coded terminology used in clinical laboratory sciences.

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IHTSDO

This is an abbreviation for International Health Terminology Standards Development Organisation.

The organization that owns, administers, and develops SNOMED CT.

IHTSDO Affiliate

This is a synonym for Affiliate Licensee.

An organization or individual that has been issued a license to use SNOMED CT by SNOMED International.

IHTSDO Member

This is a synonym for Member.

A Member of the International Health Terminology Standards Development Organisation (IHTSDO) in accordance with the IHTSDO Articles of Association.

immutable

A negative assertion of mutability.

An indication of whether a release file field value can change between two released versions of the same component or reference set member.

in group cardinality

This is a synonym for attribute in group cardinality.

The number of times that a specific attribute is included in the same attribute group.

inactive

This is an abbreviation for inactive component.

A SNOMED CT component that is no longer intended for current use.

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inactive component

A SNOMED CT component that is no longer intended for current use.

Notes

- Release files contain active and *inactive components* to provide a historical record of the content of the terminology at different points in time.
- A component is *inactive* when the most recent row with the relevant *component.id* in the full release file has the value *component.active* = 0 (zero). The most recent row for a component is determined based on the *component.effectiveTime* value.

Alternatives

- **Inactive**

Related Links

- Meaning of the Active Field
- Release Types

inactive concept

A concept that is no longer intended for current use.

Notes

- Release files contain active and inactive components to provide a historical record of the content of the terminology at different points in time.
- A concept is *inactive* when the most recent row with the *concept.id* in the fullrelease file has the value *concept.active* = 0 (zero). The most recent row for a concept is based on the *concept.effectiveTime* value.
- *Inactive concepts* may still be present in past records and queries but should no longer be added to newly created records.

Related Links

- Active concept
- Meaning of the Active Field

inactive description

A description that is no longer intended for current use.

Notes

- Release files contain *active* and inactive descriptions to provide a historical record of the content of the terminology at different points in time.
- A description is *inactive* when the most recent row with the *description.id* in the full release file has the value *description.active* = 0 (zero). The most recent row for a description is determined based on the *description.effectiveTime* value.
- Terms derived from *inactive descriptions* may still be present in past records but should no longer be returned by searches or user interface tools used to enter information into current records.

Related Links

- Active description

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- Meaning of the Active Field

inactive reference set member

A reference set member that is no longer intended for current use.

Notes

- Release files contain *active* and inactive reference set members to provide a historical record of the content of the terminology at different points in time.
- A *reference set member* is *inactive* when the most recent row with the *id* in the full release file has the value *reference set member.active* = 0 (zero). The most recent row for a *reference set member* is determined based on the *effectiveTime* value.
- Terms derived from *inactive reference set members* may still be present in past records but should no longer be returned by searches or user interface tools used to enter information into current records.

Related Links

- Active reference set member
- Meaning of the Active Field

inactive relationship

A relationship that is no longer intended for current use.

Notes

- Release files contain *active* and inactive relationships to provide a historical record of the content of the terminology at different points in time.
- A relationship is *inactive* when the most recent row with the *relationship.id* in the full release file has the value *relationship.active* = 0 (zero). The most recent row for a relationship is determined based on the *relationship.effectiveTime* value.
- Terms derived from *inactive relationships* may still be present in past records but should no longer be returned by searches or user interface tools used to enter information into current records.

Related Links

- Active relationship
- Meaning of the Active Field

inferred view

A representation of concept definitions that is logically derived by applying a description logic classifier to the stated view.

Notes

- Different *inferred views* can be derived from the same stated view by applying different rules that selectively exclude some types of assertions.
- Different *inferred views* may be semantically equivalent to one another provided that assertions are only excluded if they are redundant (i.e. can be *inferred* from assertions that are included). However, in some cases, an *inferred view* may not completely represent the concept definition but may serve a specific purpose.

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Change Notices

- Before July 2018, the relationship file contained an *inferred view* from which redundant subtype relationships were removed. This view, known as the distribution normal form, was semantically equivalent to the stated view.
- Changes introduced in the July 2018 release of the International Edition, enhanced the expressivity of the stated view by enabling use of the OWL Functional Syntax. The relationship file does not support these enhanced features but is still used to distribute an *inferred view*. The revised *inferred view* is known as the necessary normal form it is similar to the distribution normal form but does not fully represent the stated view of the concept definition.

Related Links

- Necessary normal form
- Stated view

INN

This is an abbreviation for International Nonproprietary Names.

An internationally recognized nomenclature of unique names for pharmaceutical substances and active pharmaceutical ingredients maintained by the World Health Organization.

intellectual property

This is an abbreviation for intellectual property rights.

Patents, trade marks, service marks, copyright (including rights in computer software), moral rights, database rights, rights in designs, trade secrets, know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect in any jurisdiction.

intellectual property rights

Patents, trade marks, service marks, copyright (including rights in computer software), moral rights, database rights, rights in designs, trade secrets, know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect in any jurisdiction.

Notes

- The definition is included in Affiliate License Agreement.
- SNOMED International owns the *intellectual property rights* of SNOMED CT.
- SNOMED International is responsible for ongoing maintenance, development, quality assurance, and distribution of SNOMED CT.

Alternatives

- **Intellectual Property**
- **IP**
- **IPR**

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Related Links

- SNOMED International Affiliate Licence Agreement

intensional subset definition

A subset definition in which the membership is represented by a set of rules specifying the conditions for inclusion.

Notes

- The SNOMED CT expression constraint language is the standard way to represent an *intensional subset definition* of a subset of SNOMED CT concepts.
- A row in a Query Specification Reference Set is the standard way to distribute an *intensional subset definition* of a subset of SNOMED CT concepts.

Example

- An example of an intensional subset definition is *concepts that are types of respiratory disease characterized by edema*. This is represented as follows in expression constraint language:
  < 19829001 |disorder of lung| : 116676008 |associated morphology| = 79654002 |edema|

Related Links

- Intensionally defined subset
- Extensional subset definition
- Extensionally defined subset
- Practical Guide to Reference Sets
- Wikipedia comparison of extensional and intensional definitions

intensionally defined subset

A subset whose membership is defined by an intensional subset definition.

An intensional subset definition is defined as

- A subset definition in which the membership is represented by a set of rules specifying the conditions for inclusion.

International Classification of Diseases

A system of coding diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases, as classified by the World Health Organization (WHO).

Related Links

International Edition

This is an abbreviation for SNOMED CT International Edition.

The set of SNOMED CT components and reference set members that either belong to a specific module identified by SNOMED International as the focus module for that *edition* or belong to one of the *modules* on which that module depends.

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International Health Terminology Standards Development Organisation

The organization that owns, administers, and develops SNOMED CT.

Notes

- The purpose of *International Health Terminology Standards Development Organisation (IHTSDO)* is to support safe, accurate, and effective health information exchange.
- SNOMED International is the trading name for the *IHTSDO*.
- *IHTSDO* is a not-for-profit organization.

Alternatives

- **IHTSDO**
- **SNOMED International (trading name)**

Related Links

- IHTSDO Adopts Trading Name of SNOMED International
- SNOMED International website

International Nonproprietary Names

An internationally recognized nomenclature of unique names for pharmaceutical substances and active pharmaceutical ingredients maintained by the World Health Organization.

Notes

- The World Health Organization collaborates closely with INN experts and national nomenclature committees to select a single name of worldwide acceptability for each active substance that is to be marketed as a pharmaceutical.
- International Nonproprietary Names (INN) are also known as generic names.

Alternative

- **INN**

Related Links

- International Nonproprietary Names

International Organization for Standardization

This is the full name for ISO.

A developer and publisher of international standards for products, services, and systems to ensure quality, safety, and efficiency.

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International Release

This is an abbreviation for SNOMED CT International Release.

The complete set of SNOMED CT components and reference set members distributed by SNOMED International and made available to its Members and Affiliates.

intersection

The set of elements that are members of **both** of two specified sets.

Notes

- In set theory, the *intersection* of sets ***A*** and ***B*** refers to all elements that are in both set ***A*** and set ***B***.
- In SNOMED CT, the *intersection* of two subsets of concepts consists of all concepts that are members of both subsets.

Examples

- The following expression constraint language defines the set of concepts that in the intersection subtypes of 85562004 |Hand| and members or the 723264001 |Lateralizable body structure reference set|. The "AND" instruction indicates a union between the sets defined by constraints on either side of that instruction.

```
< 85562004 |Hand|
AND ^ 723264001 |Lateralizable body structure reference set|
```

Related Links

- Complement
- Union
- Wikipedia
    - Intersection (set theory)

IP

This is an abbreviation for intellectual property rights.

Patents, trade marks, service marks, copyright (including rights in computer software), moral rights, database rights, rights in designs, trade secrets, know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect in any jurisdiction.

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IPR

This is an abbreviation for intellectual property rights.

Patents, trade marks, service marks, copyright (including rights in computer software), moral rights, database rights, rights in designs, trade secrets, know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect in any jurisdiction.

is a

This the name of the concept used to represent a subtype relationship.

A relationship that asserts that a concept is a subtype of another concept.

ISO

A developer and publisher of international standards for products, services, and systems to ensure quality, safety, and efficiency.

Notes

- *ISO*
  - Is the abbreviation for the International Organization for Standardization.
  - Is a network of the national standards institutes from over 160 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.

Related Links

- International Organization for Standardization
- ISO TC215

ISO TC215

A committee of the International Organization for Standardization (ISO) with a focus on Health Information and Communications Technology (ICT).

Notes

- The objectives of the *TC215* committee are: to enable compatibility and interoperability between independent systems; to ensure compatibility of data for comparative statistical purposes (e.g. classifications); and to reduce duplication of effort and redundancies.

Related Links

- ISO TC 215 Health informatics

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K

KB

This is an abbreviation for knowledge base.

the underlying set of facts, assumptions, and rules which a computer system has available to answer a question or solve a problem.

kind of value

The nature of a value that may be associated with a concept.

Example

The concept 271649006 |systolic blood pressure| can label a numeric value. The *kind of value* that it labels is a pressure.

knowledge base

the underlying set of facts, assumptions, and rules which a computer system has available to answer a question or solve a problem.

Alternatives

- **KB**

Related Links

- Knowledge Base

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L

language

A vocabulary and grammatical form that has been allocated an ISO639-1 *language* code.

Notes

- The reference to ISO639-1 in this definition is included as this language code is required to support the SNOMED CT representation of translations and language configuration.

Related Links

- Dialect
- Language context
- Language reference set

language context

The net effect of various factors on which descriptions are preferred or acceptable to represent SNOMED CT concepts in a particular environment.

Notes

- While national or regional languages are the primary factor in *language context,* local dialects and preferences for use of particular terms in a clinical specialty, organization or locality may also be significant contributing factors.
- *Language reference sets* can be used to represent preferences for use of particular *terms* in a range of different *language contexts*.

Related Links

- Description
- Synonym
- Preferred Term
- Fully specified name
- Language
- Dialect
- Language reference set

language reference set

A reference set used to specify the descriptions that are preferred or acceptable for use in a particular language context.

Notes

- In this reference set, the referencedComponentId column refers to a the identifier of a description and the acceptabilityId column indicates whether that description is 900000000000548007 |Acceptable| or 900000000000549004 |Preferred|.

Related Links

- Fully specified name
- Synonym

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- Preferred term
- Language context
- Release File Specification
    - 5.2.4 Language Reference Set
- Reference Sets Practical Guide
    - 5.8. Language Reference Set
- Extensions Practical Guide
    - 4.3.2.4.1 Language Reference Set

Logical Observation Identifiers Names and Codes

A set of identifiers, names, and codes for identifying health measurements, observations, and documents to facilitate the exchange and aggregation of clinical results.

Notes

- *LOINC codes* and related materials are copyright © 1995-2018, Regenstrief Institute, Inc..

Alternatives

- **LOINC**

Related Links

- LOINC
- Using LOINC with SNOMED CT

LOINC

This is an abbreviation for Logical Observation Identifiers Names and Codes.

A set of identifiers, names, and codes for identifying health measurements, observations, and documents to facilitate the exchange and aggregation of clinical results.

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M

machine readable concept model

A representation of the SNOMED CT concept model rules in a form that is processed by software.

Notes

- The *machine readable concept model* supports consistent authoring and validation of SNOMED CT content. It also facilitates effective creation and validation of postcoordinated expressions when using SNOMED CT.
- The *machine readable concept model* uses expression constraint language to represent domains and ranges.

Alternatives

- **MRCM**
- **Concept model**

Related Links

- SNOMED CT concept model
- Human readable concept model
- SNOMED CT Machine Readable Concept Model

managed content addition

An implementation strategy in which additional concepts, descriptions, and relationships are created in an extension.

Notes

- A *managed content addition* allows the use of precoordinated expressions to record electronic health information at the required level of detail.
- To support data retrieval, the description logic classifier creates an updated inferred view of the terminology.

Alternatives

- **MCA**

mapping

The process of converting data from one code system, classification, or terminology to another code system, classification, or terminology.

Notes

- The *mapping* process includes the preparation and maintenance of resources used for converting data.
- In SNOMED CT, *mapping* resources are distributed as Simple Map Reference Sets or Complex and Extended Map Reference Sets.

Alternatives

- **Cross mapping**

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Related Links

- Release File Specification
  - 5.2.9 Simple Map Reference Set
  - 5.2.10 Complex and Extended Map Reference Sets
- ICD-10 Mapping Technical Guide

MCA

This is an abbreviation for managed content addition.

An implementation strategy in which additional concepts, descriptions, and relationships are created in an extension.

Member

A Member of the International Health Terminology Standards Development Organisation (IHTSDO) in accordance with the IHTSDO Articles of Association.

Notes

- IHTSDO trades as SNOMED International.

Alternatives

- **IHTSDO Member**
- **SNOMED International Member**

Related Links

- Members
- Governance and Advisory - Articles of Association

Member Forum

An advisory body to SNOMED International that optimizes collaboration and coordination amongst Members.

Notes

- The *Member Forum* supports the objectives of SNOMED International by promoting consultation and communication, at an operational level, between SNOMED International and its Members.
- The *Member Forum*:
  - Facilitates collaboration and cooperation between Members
  - Promotes learning from shared experiences

Related Links

- Member Forum

Member territory

A territory that is represented by a Member in accordance with the IHTSDO Articles of Association.

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Notes

- The list of Member territories is published by the SNOMED International from time to time (see link below).

Related Links

- non-Member territory
- Current Members
- Governance and Advisory - Articles of Association

metadata

This is a synonym for SNOMED CT metadata.

SNOMED CT content (including concepts, descriptions, and relationships) that provides additional information about SNOMED content and derivatives (including reference sets).

migration

The process of transition from to a SNOMED CT enabled application.

Related Links

- Operational migration
- Data migration
- Predicate migration

model of meaning

An information model that provides a common representation of particular types of information.

Notes

- The objective of a *model of a meaning* is to enable similar types of information collected, stored or communicated in different ways to be integrated for analysis and reuse to support a range of uses.
- A *model of a meaning* requires structural and terminological components that contribute to meaning to be resolved into a common form that minimizes the risk of ambiguity and misinterpretation. Thus a *model of meaning* can also be thought of as a set of rules for transforming different representations of the same information into one or more forms suitable for analysis and reuse.
- In contrast, a model of use refers to a representation of information that meets the requirements of a limited set of use cases.

Examples

- Family history information be recorded in different ways depending on when and how the data was collected. Three of the many possible methods of collection are shown below.

Method of Collection	Possible Model of Use Record
Checkbox in a questionnaire	"Yes" recorded against the label "Family history of heart disease"
Coded entry in a family history record section	Family history record entry containing: 56265001 |Heart disease|
Coded entry from a picklist or search	Clinical record entry containing: 275120007 |Family history: Cardiac disorder|

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- A decision support rule may need to show an alert in patients with a family history of heart disease. An effective *model of meaning* needs to ensure the required information is accessible to the rules engine irrespective of the way it was originally recorded. The table below shows one way to resolve each of three *model of use* records into a common form to support effective retrieval.

Model of Use Record	Possible Model of Meaning Resolutions
"Yes" recorded against the label "Family history of heart disease"	Map "Yes" response to questionnaire entry to 275120007 |Family history: Cardiac disorder|
Family history record entry containing: 56265001 |Heart disease|	Map use of disorder concepts in family history section to the appropriate family history concept 275120007 |Family history: Cardiac disorder|
Clinical record entry containing: 275120007 | Family history: Cardiac disorder|	No change

Related Links

- Model of use

model of use

An information model designed to align with or meet specific intended purpose.

Notes

- A *model or use* may represent information in a way that directly relates to the way data was captured or specific requirements for reporting arising from a particular use case.
- In contrast, a model of meaning provides a common representation of particular types of information that supports a range of different uses.

Related Links

- Model of meaning

modeler

This is a synonym for SNOMED CT author.

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

modeling

This is a synonym for SNOMED CT authoring.

The process of creating or editing SNOMED CT concepts, concept definitions and descriptions.

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module

This is an abbreviation for SNOMED CT module.

A group of SNOMED CT components and/or reference set members managed, maintained, and distributed as a unit.

monohierarchical classification

A hierarchy in which each node is linked to only one parent node.

Notes

- Each node in a the hierarchy is linked to the top of the hierarchy by a single path.

Example

- The figure below shows a monohierarchy. Each node has one parent so there is only one route from each node to the top of the hierarchy.
  For example from node P the path is P → G → C → A.

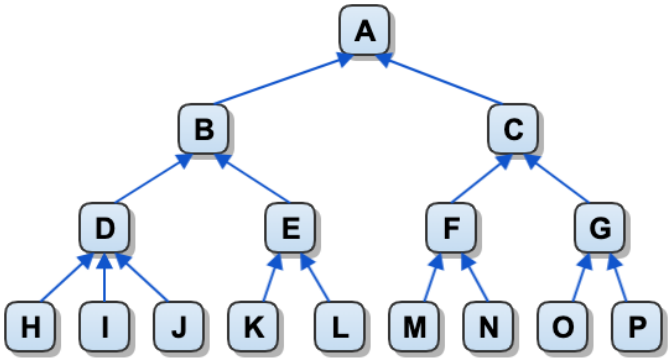

Figure 1: Hierarchy Illustration - Monohierarchical Classification

Alternatives

- **Monohierarchy**

Related Links

- Statistical classification
- Polyhierarchical classification
- Subtype classification
- Directed acyclic graph

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monohierarchy

This is an abbreviation for monohierarchical classification.

A hierarchy in which each node is linked to only one parent node.

MRCM

This is an abbreviation for machine readable concept model.

A representation of the SNOMED CT concept model rules in a form that is processed by software.

mutability

An indication of whether a release file field value can change between two released versions of the same component or reference set member.

Notes

- All released versions of the same component or reference set member have the same id (field), but each version has a different effective time (field).
    - If a field is mutable (Mutable=YES), its value can differ from one version to the next without changing the identifier.
    - If a field is immutable (Mutable=NO), its value must be the same in every version of a component. To change the value associated with an immutable field, the existing component must be inactivated and a new component must be created to replace it. The new component must have a previously unused identifier. The field values are set to replace the inactivated concept with the updated information.
- The mutability for each field, in each type of release file, is indicated in the release file specification table for that component type or reference set.

Alternatives

- **Mutable**

Related Links

- Immutable (opposite of mutable)
- Release File Specifications

mutable

A positive assertion of mutability.

An indication of whether a release file field value can change between two released versions of the same component or reference set member.

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metadata concept

A SNOMED CT concept that is a subtype descendant of the root metadata concept.

Notes

- All SNOMED CT metadata concepts are subtypes of 900000000000441003 |SNOMED CT Model Component (metadata)|.
- The top level of the metadata hierarchy represents broad groups of metadata as follows:

Top level of the SNOMED CT metadata hierarchy
900000000000441003 |SNOMED CT Model Component (metadata)| • 106237007 |Linkage concept (linkage concept)| • 370136006 |Namespace concept (namespace concept)| • 900000000000442005 |Core metadata concept (core metadata concept)| • 900000000000454005 |Foundation metadata concept (foundation metadata concept)|

Examples

- Concept enumerations use *metadata concepts* to represent values that are applied to particular fields in release files.
- Reference set types and reference set names are represented by *metadata concepts* that are subtypes of 900000000000455006 |Reference set (foundation metadata concept)|.

Alternatives

- **SNOMED CT metadata**

Related Links

- Concept enumeration
- Metadata Hierarchy

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N

namespace concept

A concept that represents an extension namespace identifier.

Notes

- All *namespace concepts* are subtypes of the concept 370136006 |Namespace concept| .
- The *namespace identifier* is represented in an associated description. The concept identifier of the *namespace concept* does not represent the *namespace identifier*.

Examples

- The *namespace concept* hierarchy showing first few namespace concepts:

```
900000000000441003 |SNOMED CT Model Component|
   370136006 |Namespace concept|
      373872000 |Core Namespace|
      370137002 |Extension Namespace 1000000|
      370138007 |Extension Namespace 1000001|
      384597007 |Extension Namespace 1000002|
      413335000 |Extension Namespace 1000003|
      413336004 |Extension Namespace 1000004|
       ... more values ...
```

namespaceId

This is an abbreviation for extension namespace identifier.

A seven digit number allocated by SNOMED International to an organization that is permitted to maintain a SNOMED CT Extension.

namespace identifier

This is an abbreviation for extension namespace identifier.

A seven digit number allocated by SNOMED International to an organization that is permitted to maintain a SNOMED CT Extension.

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National Edition

This is an abbreviation for SNOMED CT National Edition.

A set of SNOMED CT components and reference set members that belong to a focus module identified by a National Release Center (NRC), as well as all modules on which that *module* depends.

National Health Service

This is an abbreviation for UK National Health Service.

A government funded service delivering health care services to all United Kingdom (UK) citizens.

National Library of Medicine

The largest medical library in the world, located in Bethesda, Maryland, US.

Notes

- *National Library of Medicine (NLM)* is part of the National Institutes of Health, US Department of Health and Human Services (HHS).
- The *NLM* represent the United States of America as a Member of SNOMED International. It also hosts the SNOMED CT National Release Center for the US.

Alternatives

- **NLM**

References

- NLM SNOMED CT Home Page

National Release

This is an abbreviation for SNOMED CT National Release.

The complete set of SNOMED CT components and reference set members distributed to licensees by a Member.

National Release Center

The organization within a Member territory that is responsible for maintaining and releasing SNOMED CT content, including any National extensions of SNOMED CT.

Related Links

- SNOMED CT National Release Center Guide

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natural language processing

A service in which a computer system converts human-readable text and/or spoken language to formal representations of information.

Notes

- The formal representations that result from natural language processing may be generated, analyzed, and processed by other software applications.
- Structured records including SNOMED CT expressions may be generated by *natural language processing*.

Alternatives

- **NLP**

Related Links

- Wikipedia
  - Natural language processing

navigation

The process of locating a concept by traversing links represented by relationships or reference set members.

Notes

- *Navigation* can supplement term based searching by providing logical or intuitive routes through SNOMED CT.

Examples

- Viewing and/or selecting concepts that:
  - are more specific (or more general) by following subtype relationships.
  - share a common defining characteristic by traversing attribute relationships.
  - are practically related to a common use case by following links specified by an *association reference set*
  - are presented in a rational order represented by an *ordered association reference set.*

Related Links

- Navigation hierarchy
- Release File Specifications
  - 4.2.3 Relationship File Specification
  - 5.2.5 Association Reference Set
  - 5.2.6 Ordered Association Reference Set
- Terminology Services Guide
  - 6.2 Hierarchical Navigation
- Reference Sets Practical Guide
  - 5.4. Association Reference Set
  - 5.5. Ordered Association Reference Set

navigation concept

A concept that exists only to support navigation.

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Notes

- A n*avigation concept* is not suitable for recording or aggregating information.
- All *navigation concepts*:
  - are direct subtypes of the concept navigational concept
  - have no other supertype or subtype relationships
- Navigation concepts are only linked to other concepts by navigational links. These navigational links are represented using reference sets.

References

- Navigation
- Navigation hierarchy
- Release File Specifications
  - 5.2.5 Association Reference Set
  - 5.2.6 Ordered Association Reference Set
- Terminology Services Guide
  - 6.2 Hierarchical Navigation
- Reference Sets Practical Guide
  - 5.4. Association Reference Set
  - 5.5. Ordered Association Reference Set

navigation hierarchy

A hierarchical view of SNOMED CT concepts that differs from the subtype hierarchy and enables an alternative way to locate and view part or all of the concept of SNOMED CT.

Notes

- SNOMED CT enables *navigation hierarchies* to be specified using either:
  - an *ordered association reference set* in which the display order of nodes can be specified; or
  - an *association reference set* which the display order is not specified.
- The links in a *navigation hierarchy* do not contribute in any way to the semantic definitions of the linkedconcepts.
- A *navigation hierarchy* may include navigation concepts which are created to represent nodes in the hierarchy exist only to organize the hierarchy and cannot be selected for data entry.
- A *navigation hierarchy* may be limited to a subset of concepts relevant to a particular use case.
- Many different *navigation hierarchies* can be created, each specifying a structure that meets the needs of a particular use case.

Related Links

- Navigation
- Navigation concept
- Release File Specifications
  - 5.2.5 Association Reference Set
  - 5.2.6 Ordered Association Reference Set
- Terminology Services Guide
  - 6.2 Hierarchical Navigation
- Reference Sets Practical Guide
  - 5.4. Association Reference Set
  - 5.5. Ordered Association Reference Set

necessary condition

A characteristic that is always true of a concept.

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Notes

- Some *necessary conditions* can be represented as defining relationships but other *necessary conditions* that can be represented as OWL axioms cannot be represented as *relationships*.
- The relationship file represents the inferred view of *necessary conditions* in that can be represented as *relationships*.

Example

- If you have a 71620000 |fracture of femur|, the morphological abnormality 72704001 |fracture| must be present. Therefore, 116676008 |morphology| = 72704001 |fracture| is a *necessary condition* of 71620000 |fracture of femur|.

Change Notices

- Prior to July 2018, SNOMED CT represented all *necessary conditions* in the stated view as defining relationships in the stated relationship file.
- Changes introduced in the July 2018 release of the International Edition mean that in future *necessary conditions* in the stated view will be represented as axioms in the OWL axiom reference set file.

Related Links

- Necessary Conditions

necessary normal form

An inferred view of a concept definition that includes only defining relationships that are necessarily true.

Notes

- The necessary normal form is designed to represent an inferred view derived from the enhanced concept definitions in a form that can be distributed in the relationship file. Although the enhanced features cannot be fully represented within the structure of the relationship file, the necessary normal form provides a view of the results of classifying data that is accessible to those without access to description logic tools.

Change Notices

- Changes introduced in the July 2018 release of the International Edition, enhanced the ability of SNOMED CT to support more advanced description logic. These changes allow the stated view of concept definitions to use axioms represent using the OWL Functional Syntax.

Alternatives

- **NNF**

Related Links

- Generating Necessary Normal Form relationships from the OWL refsets

NHS

This is an abbreviation for UK National Health Service.

A government funded service delivering health care services to all United Kingdom (UK) citizens.

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NHS Clinical Terms Version 3

A source terminology used to develop SNOMED CT.

Notes

- SNOMED RT was also used with *NHS Clinical Terms Version 3* to develop SNOMED CT.
- *NHS Clinical Terms Version 3* is UK Crown Copyright, distributed by the United Kingdom National Health Service (NHS), and is integrated into SNOMED CT.

Alternatives

- **CTV3**
- **Read Codes Version 3**

NLM

This is an abbreviation for National Library of Medicine.

The largest medical library in the world, located in Bethesda, Maryland, US.

NLP

This is an abbreviation for natural language processing.

A service in which a computer system converts human-readable text and/or spoken language to formal representations of information.

NNF

This is an abbreviation for necessary normal form.

An inferred view of a concept definition that includes only defining relationships that are necessarily true.

Nomenclature, Properties and Units

This is the full name for C-NPU.

A coded terminology used in clinical laboratory sciences.

non-Member territory

A territory that is not represented by an Member in accordance with the IHTSDO Articles of Association.

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Notes

- The list of territories is published by the SNOMED International from time to time (see link below).
- In accordance with SNOMED International Affiliate License agreements, fees are payable to SNOMED International for use of SNOMED CT in non-Member territories.

Related Links

- Member territory
- Articles of Association
- Current Members

normal form

A SNOMED CT expression in which none of the referenced concepts are fully defined and where there is no redundancy or duplication of meaning.

Notes

- Two *normal form* expressions can be readily compared to determined whether they are logically equivalent equivalence or whether one expression is subsumed by the other.
- In theory, an expression can be transformed to its *normal form* by replacing each reference to a fully defined concept with a nested expression that represents the definition of that concept. However, this process often results in redundancy or duplication of meaning requiring removal of less specific attribute values and mergers of attribute groups. Therefore, use of description logic classifier is more effective way to normalize and compare expressions.

Change Notice

- The January 2019 release of the International Edition included enhancements to the description logic used by SNOMED CT. As a result of these enhancements, expression transformation is no longer a reliable option for subsumption testing. Instead, postcoordinated expressions should be classified using a description logic classifier.

Related Links

- Canonical form
- Terminology Services Guide
    - 12.4 Transforming Expressions to Normal Forms

normal form transformation

Refers to the process of generating a normal form normal form.

A SNOMED CT expression in which none of the referenced concepts are fully defined and where there is no redundancy or duplication of meaning.

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NPU

This may sometimes be used to refer to C-NPU.

A coded terminology used in clinical laboratory sciences.

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O

ontology

In the context of SNOMED CT usually refers to Web Ontology Language.

A W3C Semantic Web language designed to represent rich and complex knowledge about things, groups of things, and relations between things.

openEHR

An open, domain-driven platform for developing flexible e-health systems.

Notes

- *openEHR* is an international, not-for-profit foundation.
- *openEHR* develops specifications that are based on, and extend, key aspects of the CEN Standard for Electronic Health Record Communication (EN 13606).

Related Links

- openEHR

operational migration

A process to enable an organization to use SNOMED CT.

Notes

- *Operational migration* may be utilized in an organization with or without a previous clinical coding scheme.

Related Links

- Migration
- Data migration
- Predicate migration

other-code

A code or identifier in a code system, classification, or terminology other than SNOMED CT.

Disambiguation

Not to be confused with:

- The hyphenated form other-code (or other-codes) is used to avoid confusion with the more general reference to *another code*.

Related Links

- Target code

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OWL

This is the acronym for web ontology language.

A W3C Semantic Web language designed to represent rich and complex knowledge about things, groups of things, and relations between things.

OWL axiom

This is the full name for axiom.

A true statement that serves as a premise or starting point for further reasoning.

OWL axiom reference set

A reference set that contains OWL axioms that formally define SNOMED CT concepts.

Notes

- The *OWL axiom reference set* follows the OWL Expression Reference Set pattern and is distributed in the OWL expression reference set file.

Related Links

- Axiom
- OWL
- OWL ontology reference set
- SNOMED CT OWL Guide
    - 2.4. Content for the OWL Axiom Refset
- Release File Specification
    - 5.2.21 OWL Expression Reference Set

OWL Functional Syntax

A formal representation of the web ontology language (*OWL*) as a simple text base syntax that is used as a bridge between the structural specification and various concrete syntaxes.

Notes

- The OWL Functional Syntax is used to represent axioms in OWL Expression Reference Sets.

Related Links

- OWL Functional-Style Syntax Specification

OWL ontology reference set

A reference set that contains general ontology information related to a SNOMED CT edition.

Notes

- The OWL ontology reference set follows the OWL Expression Reference Set pattern and is distributed in the OWL expression reference set file.

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Related Links

- OWL
- OWL axiom reference set
- SNOMED CT OWL Guide
    - 2.3. Content for the OWL Ontology Refset
- Release File Specification
    - 5.2.21 OWL Expression Reference Set

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P

partitionid

This is an abbreviation for partition identifier.

A value that indicates the type of component that the SCTID identifies.

partition identifier

A value that indicates the type of component that the SCTID identifies.

Notes

- The types of component include concepts, descriptions, and relationships.
- The *partition identifier* also indicates if the SCTID contains a namespace identifier.
- The *partition identifier* is made up of the second and third digits from the right of the string rendering of the SCTID.

Alternatives

- **PartitionId**

References

- Release File Specification
    - 6.5 Partition Identifier

phrase equivalent

A phrase that has the same meaning as another phrase.

Notes

- Recognition of *phrase equivalents* may be useful to support more inclusive text searches for SNOMED CT concepts.

Example

- The phrases "renal calculus" and "kidney stone" can be considered equivalent. However, in some cases only one of these phrases may be included in the synonyms associated with a particular concept. Therefore, searching for terms including either "renal calculus" or "kidney stone" may assist location of an appropriate concept.

Related Links

- Word equivalent
- Terminology Services Guide
    - 6.1.5.3 Word equivalents table

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POC

This is and abbreviation for point of care.

The time and location at which healthcare professionals deliver healthcare products and services to patients.

point of care

The time and location at which healthcare professionals deliver healthcare products and services to patients.

Notes

- The term *point of care* is most often used to indicate a particular activity is carried out at the location where the patient is being seen or treated.

Example

- *Point of care testing* and *point of care documentation*.

Alternatives

- **POC**

Related Links

- Wikipedia
  - Point-of-care, testing

polyhierarchical classification

A hierarchy in which each node has one or more parents.

Notes

- The subtype relationships of SNOMED CT create a *polyhierarchical classification*.
- A *polyhierarchical classification* can be represented as a graph in which each node has a one or more directed links to or from other nodes.
- A node in a *polyhierarchical classification* cannot be a descendant of itself, which means the hierarchy must not contain cyclic relationships. This type of hierarchy is therefore known as a directed acyclic graph.

Examples

- The diagram below shows a polyhierarchy. Each node has one or more parent node so there can be multiple paths from a node to the top (or root) of the hierarchy.
  For example from node V the paths include the following:
  - V → N → F → B → A
  - V → N → F → C → A
  - V → G → C → A

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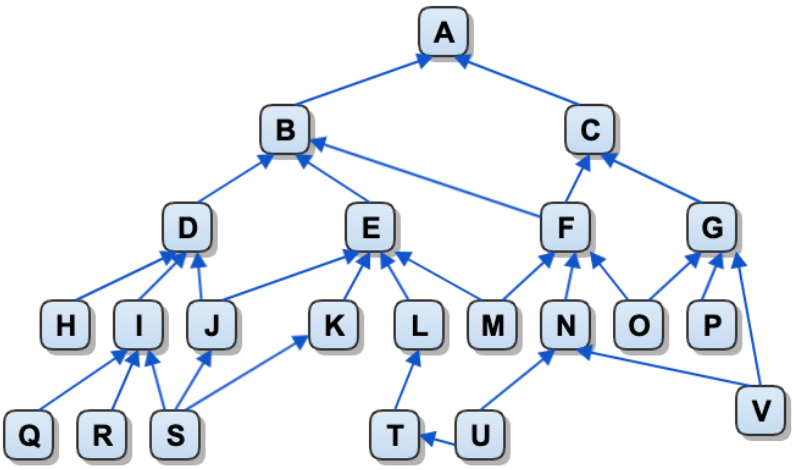

Figure 1: Hierarchy Illustration - Polyhierarchical Classification

Alternatives

- **Polyhierarchy**

Related Links

- Statistical classification
- Monohierarchical classification
- Subtype classification
- Directed acyclic graph

polyhierarchy

This is an abbreviation for polyhierarchical classification.

A hierarchy in which each node has one or more parents.

postcoordinated

This is an abbreviation for postcoordinated expression.

An expression that contains two or more concept identifiers to represent an idea.

postcoordinated expression

An expression that contains two or more concept identifiers to represent an idea.

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Notes

- The concept identifiers in a *postcoordinated expression* relate to one another in ways that build more specific clinical ideas. The required meaning is expressed by postcoordinating several clinical ideas, each of which is represented by an identified concept .

Example

- The concept 125605004 |fracture of bone| can be refined using the attribute 363698007 |finding site|, and the body structure concept 71341001 |bone structure of femur| to create the following *postcoordinated expression*:

```
125605004 |fracture of bone| : 363698007 |finding site| = 71341001 |bone structure of femur|
```

Alternatives

- **Postcoordinated**
- **Postcoordination**

Related Links

- Precoordinated and Postcoordinated Representations
- Precoordinated expression

postcoordination

This is a synonym for postcoordinated expression.

An expression that contains two or more concept identifiers to represent an idea.

precoordinated

This is an abbreviation for precoordinated expression.

An expression that contains a single concept identifier to represent an idea.

precoordinated expression

An expression that contains a single concept identifier to represent an idea.

Notes

- *Precoordinated expressions* combine all aspects of a potentially multifaceted concept into a single discreet form.
- SNOMED CT technical specifications include guidance for transforming logical expressions into a common canonical form.

Example

- The procedure, laparoscopic emergency appendectomy can be represented with the *precoordinated expression* 174041007 |laparoscopic emergency appendectomy| to record an instance of this procedure.

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This procedure has at least three distinct facets: *removal of appendix*, *using a laparoscope*, and *as an emergency procedure*. SNOMED CT *precoordinates* these facets in one concept.

Alternatives

- **Precoordinated**
- **Precoordination**

Related Links

- Postcoordinated expression
- Precoordinated and Postcoordinated Representations

precoordination

This is a synonym for precoordinated expression.

An expression that contains a single concept identifier to represent an idea.

predicate migration

The steps to enable pre-existing data retrieval predicates to be converted or utilized in a system using SNOMED CT.

Notes

- The pre-existing data retrieval predicates include queries, standard reports, and decision support protocols.

Related Links

- Migration
- Data migration
- Operational migration
- Migration Requirements

preferred term

The term deemed to be the most clinically appropriate way of expressing a concept in specified language context.

Notes

- The *preferred term* is a synonym which is indicated as being *preferred* in the language reference set for the current language context.

Alternatives

- **Preferred synonym**

Related Links

- Term
- Description
- Synonym
- Fully specified name
- Language context
- Language reference set

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preferred synonym

This is a synonym for preferred term.

> The term deemed to be the most clinically appropriate way of expressing a concept in specified language context.

primitive concept

A concept without a sufficient definition in the necessary normal form distributed in the relationship.

Notes

- The meaning of a SNOMED CT concept is expressed in a human-readable form by its fully specified name. Each concept also has a formal concept definition that provides a computer-processable representation of the meaning of the concept.
- A *primitive concept* has a concept definition that is not sufficient to computably distinguish it from other concepts.

Example

- The concept 5596004 |atypical appendicitis (disorder)|is *primitive* because the following definition is not sufficient to distinguish *atypical appendicitis* from any other type of *appendicitis:*

```
5596004 |atypical appendicitis (disorder)|
      <<< 116680003 |is a| = 74400008 |appendicitis|
        116676008 |associated morphology| = 23583003 |inflammation|
        363698007 |finding site| = 66754008 |appendix structure|
```

Change Notices

- Changes introduced in the July 2018 release of the International Edition allow assertions to be represented as axioms in the OWL axiom reference set file. This will allow concepts to be defined by multiple sufficient definitions, some of which may contain assertions that are not necessarily true.
- Following these changes a concept will be marked as primitive unless it is sufficiently defined by relationships. Although, in some cases, the OWL axioms may provide a sufficient definition that cannot be fully represented as *relationships*.

Related Links

- Sufficient definition
- Sufficiently defined concept

production package

This is a synonym for production release package.

> A final, formally endorsed SNOMED CT release package intended for live use in appropriately licensed operational systems.

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production release

This is an abbreviation for production release package.

A final, formally endorsed SNOMED CT release package intended for live use in appropriately licensed operational systems.

production release package

A final, formally endorsed SNOMED CT release package intended for live use in appropriately licensed operational systems.

Notes

- A *production release package* represent the authoritative release of the product. Implementers can use it in operational clinical systems.
- The *production release* status indicates that the releasing party (SNOMED International or the owner of the extension) commits to maintain the release history. Thus the historical audit trail is maintained through the product's lifetime.

Alternatives

- **Production package**
- **Production release**

Related Links

- Alpha release package
- Beta release package

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Q

qualifier

This is a synonym for qualifying characteristic.

An attribute value pair that may be applied to a concept to refine its meaning.

qualifier value

A SNOMED CT concept from the qualifier value domain.

Notes

- The *qualifier value* domain is defined as including all the subtypes of the concept 362981000 |Qualifier value |. It contains a wide range of concepts that provide attribute values used in the definitions of other concepts. These value can also be used in expressions to refine the meaning of a *concept* or in a appropriate fields of a health record to add additional information.

Examples

- The list below includes a small illustrative selection of the types of *qualifier values*.

```
129264002 |Action|                    ← provides values for the method attribute
103379005 |Procedural approach|      ← provides values for surgical approach attribute
182353008 |Side|                      ← provides values for laterality attribute
260299005 |Number|
272423005 |Degrees of severity|
261612004 |Stages|
284009009 |Route of administration value|
272394005 |Technique|
7389001 |Time frame|
767524001 |Unit of measure|
97289008 |World languages|
```

Related Links

- Qualifier Value

qualifying characteristic

An attribute value pair that may be applied to a concept to refine its meaning.

Notes

- The machine readable concept model (MRCM) provides a comprehensive and flexible method to identify the set of attributes and ranges that can be applied to refine concepts in particular domains.

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Alternatives

- **Qualifier**

quality characteristic

A type of attribute used to measure a quality of a component.

Notes

- *Quality characteristics* are one part of the *SNOMED International Quality Assurance Framework.* The *Framework* is used to identify and monitor appropriate and meaningful quality components for the activities and products of SNOMED International

Related Links

- Quality Assurance
- Quality metric
- Quality target

quality metric

A method to measure the level of achievement, performance, or conformance of a component or its quality characteristic(s).

Notes

- *Quality metrics* are one part of the *SNOMED International Quality Assurance Framework.* The *Framework* is used to identify and monitor appropriate and meaningful quality components for the activities and products of SNOMED International.

Related Links

- Quality Assurance
- Quality characteristic
- Quality target

quality target

A desired level of achievement, performance, or conformance of a component for a given quality characteristic.

Notes

- *Quality targets* are one part of the *SNOMED International Quality Assurance Framework.* The *Framework* is used to identify and monitor appropriate and meaningful quality components for the activities and products of SNOMED International.

Related Links

- Quality Assurance

query predicate

A query condition that determines inclusion or exclusion of candidate instance data in or from a selection.

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Notes

- *Query predicates* applied to a set of SNOMED CT expressions may test for subsumption of the overall meaning and/or may test the values applied to particular attributes in the expression.

Related Links

- Migration Requirements
- Predicate migration

query template

A SNOMED CT query containing SNOMED CT template slots that can be populated with appropriate values to create an executable query.

Related Links

- SNOMED CT query language
- SNOMED CT template
- SNOMED CT template slot
- SNOMED CT Language

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R

range

This is an abbreviation for concept model range.

A set of values that the concept model permits to be applied to a specific attribute.

range constraint

This is an abbreviation for concept model range.

A set of values that the concept model permits to be applied to a specific attribute.

Read Code

A five-character code allocated to a concept or term in NHS Clinical Terms Version 3 or Read Codes Version 2.

Notes

- Codes originating in the Read Codes 4 byte set may be prefixed with a full stop to represent them in five-character coded form.

Read Code 4-byte set

This is a synonym for Read Code.

A five-character code allocated to a concept or term in NHS Clinical Terms Version 3 or Read Codes Version 2.

Read Code Version 2

This is a synonym for Read Code.

A five-character code allocated to a concept or term in NHS Clinical Terms Version 3 or Read Codes Version 2.

Read Code Version 3

This is a synonym for NHS Clinical Terms Version 3.

A source terminology used to develop SNOMED CT.

realm

The authority, expertise, or preference that influences the required range or frequency of use of components.

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Notes

- A *realm* may be a county, organization, professional discipline, specialty, or individual user.

record service

A software function that captures, stores, retrieves, displays, communicates or processes electronic health records.

Notes

- *Record service* are typically specific to the design of a specific clinical information system as this affect the nature of the services required to capture, store, retrieve, display and process records.
- *Record services* interact with terminology services to support capture, retrieval and processing of SNOMED CT encoded data.

Related Links

- Terminology service
- Implementation Services: Service architecture
- Record Services Guide

reference information model

A high-level, generalized model that allows information to be represented and related consistently within a particular field of human endeavor.

Notes

- The Health Level 7 Version 3 Reference Information Model is an example of a *reference information model* used in health care.

reference set

This is an abbreviation for SNOMED CT reference set.

A standard format for maintaining and distributing a set of references to SNOMED CT components.

reference set member

A row in a reference set release file with a unique identifier.

Notes

- Although each *reference set member* has a unique identifier, a full view of a reference set may contain several versions of each *reference set member* with the same identifier. The *effectiveTime* and *active* fields represent the version and status of the *reference set member.*
- Each *reference set member* reference set, identified by the refsetId field.
- All *reference set members* also contain a referencedComponentId field referring to a SNOMED CT component that is part of the set.
- *Reference set members* may have other fields, depending on the type of reference set.

Related Links

- Reference set

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- Reference set member version
- Reference Sets Practical Guide
- Release FIle Specification
    - 5.2 Reference Set Types

reference set member version

A reference set member as created or modified at a particular point in time.

Notes

- A *reference set member version* is represented in release files as a single row with an identifier, unique to that reference set member.
- The identifier is shared by other versions of that *reference set member* as indicated by the *effectiveTime* and *active* fields.
    - The *effectiveTime* field indicates the point in time at which this version of the *reference set member* was created or superseded the previous version of the same *reference set member.*
    - The *active* field indicates if the *reference set member* is active or inactive.

Related Links

- Reference set
- Reference set member
- Reference Sets Practical Guide
- Release FIle Specification
    - 5.2 Reference Set Types

reference terminology

A terminology in which each term has a formal computer-processable definition of its meaning.

Notes

- *Reference terminologies* support meaning-based retrieval and aggregation.
- SNOMED CT is a *reference terminology,* which also has features such as synonyms and reference sets that support use at the user interface.

refinement

This is an abbreviation for expression refinement.

The part of a SNOMED CT expression that applies qualifying details to a focus concept.

refset

This is an abbreviation for SNOMED CT reference set.

A standard format for maintaining and distributing a set of references to SNOMED CT components.

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relationship

This is an abbreviation for SNOMED CT relationship.

An association between a source concept and a destination concept.

relationship group

This is used to refer to a group of relationships representing an attribute group.

An association between a set of attribute value pairs that causes them to be considered together within a concept definition or postcoordinated expression.

relationship type

This is a synonym for attribute name.

The concept that represents the attribute type in a defining relationship or postcoordinated expression.

release

This is an abbreviation for SNOMED CT Release Package.

A single-unit set of release files with SNOMED CT components, reference set members, and/or other related items.

release file

This is an abbreviation for SNOMED CT release file.

A computer file used to distribute SNOMED CT content in a form that can be readily imported by a software application.

release file column

This is a synonym for release file field.

A property of a SNOMED CT component or reference set member represented by a column in a release file.

release file field

A property of a SNOMED CT component or reference set member represented by a column in a release file.

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Alternatives

- **Field**
- **Release file column**

Related Links

- SNOMED CT Release File Specifications

release format

This is an abbreviation for SNOMED CT release format.

A file structure used to distribute SNOMED CT content.

release package

This is an abbreviation for SNOMED CT release package.

A single-unit set of release files with SNOMED CT components, reference set members, and/or other related items.

release type

The temporal scope and completeness of a Release Format 2 file or set of files.

Notes

- The release types are as follows:
  - Full release
    - A release type in which the release files contain every version of every component and reference set member ever released.
  - Snapshot release
    - A release type in which the release files contain only the most recent version of every component and reference set member released, as at the release date.
  - Delta release
    - A release type in which the release files contain only rows that represent component versions and reference set member versions created since the previous release date.

References

- Release File Specification
  - 3.2 Release Types

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Release Format 1

This is an abbreviation for SNOMED CT Release Format 1.

The file structure previously used to distribute SNOMED CT content.

Release Format 2

This is an abbreviation for SNOMED CT Release Format 2.

The file structure used to distribute SNOMED CT content and derivatives.

RF1

This is an abbreviation for SNOMED CT Release Format 1.

The file structure previously used to distribute SNOMED CT content.

RF2

This is an abbreviation for SNOMED CT Release Format 2.

The file structure used to distribute SNOMED CT content and derivatives.

role

This is a synonym for concept model attribute.

A characteristic of the meaning of a concept or the nature of a refinement.

role group

This is a synonym for relationship group.

root concept

The concept that is at the top of the SNOMED CT concept hierarchy.

Notes

- The root concept is 138875005 |SNOMED CT Concept|.
- All other active concepts are subtype descendants of the root concept.

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Related Links

- Top level concept
- Root and top-level concepts

root metadata concept

This is a synonym for SNOMED CT model component concept.

The concept that represents the top of the hierarchy of metadata concepts.

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S

SCT

This is an abbreviation for SNOMED Clinical Terms.

SCTID

This is an abbreviation for SNOMED CT identifier.

A unique *integer* identifier applied to each SNOMED CT component (Concept, Description, or Relationship).

semantic equivalence

The relationship between two classes that have the same logical meaning.

Notes

- The equivalent classes may be represented in different ways for example as SNOMED CT concept definitions, SNOMED CT expressions, or axioms expressed using a syntax such as OWL Functional Syntax.
- Semantic equivalence is represented by the ≡ symbol or by a sequence of three equals signs === .

Example

- The expression below asserts that the concept 80146002 |Appendectomy| has *semantic equivalence* with 71388002 |Procedure| with method 129304002 |Excision - action| applied to the direct site 66754008 |Appendix structure|.

```
80146002 |Appendectomy|
  === 71388002 |Procedure| :
      { 405813007 |Procedure site - Direct| = 66754008 |Appendix structure| ,
        260686004 |Method| = 129304002 |Excision - action| }
```

Alternatives

- **Concept equivalence**
- **Equivalence**

semantic interoperability

The capability of computer systems to communicate and exchange information.

Notes

- With *semantic interoperability*, each system should be able to interpret and effectively use received information. To achieve this, the meaning of the information must be agreed upon, consistent, and clear.
- *Semantic interoperability* of electronic health applications is achieved through the combination of the information architecture of the application and its terminology.

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- SNOMED CT is a clinical terminological designed to support for *semantic interoperability* between well-designed electronic health records, clinical decision support and data analytics systems.

Related Links

- Semantic Interoperability

semantic tag

This is a synonym for hierarchy tag.

A parenthetical notation at the end of a fully specified name indicating the relevant domain.

SEP

This is an abbreviation for structure-entire-part.

A modeling approach used in SNOMED CT to represent anatomical entities such as body organs, systems, or regions.

situation with explicit context

A concept that specifically defines the context of a clinical finding or procedure.

Notes

- A *situation with explicit context* is defined as a subtype of the situation to which it applies with an attribute associating it with the relevant clinical finding or procedure.

Example

- *Family history of diabetes mellitus* is a *situation with explicit context* concept. It defines the context as *family history* by indicating that the 408732007 |Subject relationship context| is a 303071001 |Family member|.
- In contrast, *diabetes mellitus* itself is not a *situation with explicit context*. It can be used in many different situations including *family history*, *past medical history* or *current diagnosis*.

Alternatives

- **Clinical situation**
- **Context**
- **Explicit context**

Related Links

- Context wrapper
- Safely representing the context of recorded codes

snapshot release

A release type in which the release files contain only the most recent version of every component and reference set member released, as at the release date.

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Related Links

- Snapshot view
- Other Release Types
    - Delta release
    - Full release
- Release File Specification
    - 3.2 Release Types

snapshot view

A view of SNOMED CT that includes the most recent version of all components and reference set members at a specified point in time.

Notes

- The *snapshot view* at the current date matches the content of the most recent snapshot release.
- A full release can be filtered to provide the snapshot views for the current date or any date in the past.

References

- Other Views
    - Delta view
    - Dynamic snapshot view
    - Full view
- Release Types
    - Delta release
    - Full release
    - Snapshot release

SNOMED

The general name for a series of clinical terminologies owned, managed and licensed by SNOMED International.

Notes

- The current version, SNOMED Clinical Terms was first released in 2002 and is actively maintained, licensed and distributed by SNOMED International.
- None of the earlier versions of SNOMED are maintained and since 2017 all antecedent versions are formally deprecated and are no longer licensed for use.
- The SNOMED terminologies were originally developed by the College of American Pathologists (CAP), they were acquired by the International Health Terminology Standards Development Organisation (IHTSDO) in 2007. Since 2017 IHTSDO has traded as SNOMED International.

References

- A Brief History of SNOMED Code Systems
- Timetable for Withdrawal of Legacy SNOMED Codes.

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SNOMED Clinical Terms

This is the full name for SNOMED CT.

A clinical terminology owned, maintained and distributed by SNOMED International.

SNOMED CT

A clinical terminology owned, maintained and distributed by SNOMED International.

Notes

- *SNOMED CT* is the most comprehensive clinical terminology in use around the world.
- *SNOMED CT* was created in 2002 as a result of the merger of SNOMED RT and NHS Clinical Terms Version 3.

Alternatives

- **SCT**
- **SNOMED CT**

SNOMED CT Affiliate License Agreement

This is the full name for Affiliate License Agreement.

The agreement between a Affiliate Licensee and SNOMED International.

SNOMED CT application

This is an abbreviation for SNOMED CT enabled application.

A software application designed to support the use of SNOMED CT.

SNOMED CT author

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

Alternatives

- **Author**
- **Editor**
- **Modeler**
- **SNOMED CT editor**
- **SNOMED CT modeler**

Related Links

- SNOMED CT authoring

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SNOMED CT authoring

The process of creating or editing SNOMED CT concepts, concept definitions and descriptions.

Alternatives

- **Authoring**
- **Modeling**
- **SNOMED CT modeling**

Related Links

- SNOMED CT author

SNOMED CT browser

A software application that provides a user interface through which to explore SNOMED CT content.

Note

- A typical *SNOMED CT browser* can locate concepts and descriptions by identifiers and by searching the text of description *terms*.
- Various views of located concepts may be displayed including the set of related descriptions, the hierarchical relationships and other defining relationships.

Alternatives

- **Browser**
- **Terminology browser**

Related Links

- SNOMED CT Browser
- Other SNOMED CT browsers

SNOMED CT component

A concept, description, or relationship that conforms with the SNOMED CT logical model.

Notes

- *Components* are released and distributed in file formats that conform to the Release File Specification.
- *Components* may be part of the SNOMED CT International Edition or in an authorized extension.

Alternatives

- **Component**

Related Links

- concept
- description
- relationship
- SNOMED CT Logical Model

SNOMED CT compositional grammar

The set of rules that govern the way in which SNOMED CT expressions are represented as a plain text string.

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Alternatives

- **Compositional grammar**
- **SCG**

Related Links

- Compositional Grammar Specification and Guide

SNOMED CT concept

A clinical idea to which a unique concept identifier has been assigned.

Notes

- *SNOMED CT concepts* are distributed in the concept file.
- *Concepts* are associated with descriptions that contain human-readable terms describing the concept.
- *Concepts* are related to one another by relationships and OWL axioms that provide a formal logical definition of the *concept*.

Alternatives

- **Concept**

Related Links

- Concept file
- Release File Specification
    - 2.1 Logical Model of SNOMED CT Components
    - 4.2.1 Concept File Specification

SNOMED CT concept definition

A set of one or more axioms that partially or sufficiently specify the meaning of a SNOMED CT concept.

Notes

- The axioms that specify a *concept definition* are represented in release files as SNOMED CT relationships or as OWL axioms that conform to the OWL Functional Syntax.

Change Notices

- Before July 2018, all axioms were represented as relationships.
- During a transitional period commencing with the July 2018 release of the International Edition, some axioms in stated view will be represented using the OWL functional syntax and at the end of the transitional period all stated view axioms will be represented in this way.
- Inferred view axioms will continue to be represented as relationships.

Alternatives

- **Concept definition**

Related Links

- Defining relationship
- OWL Expression Reference Set
- OWL Functional Syntax
- Relationship File Specification
- SNOMED CT Logic Profile Specification

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- SNOMED CT OWL Guide

SNOMED CT concept identifier

A SNOMED CT identifier that uniquely identifies a concept.

Notes

- Each concept represents a defined meaning. Therefore, a *concept identifier* can be used to refer to that meaning in electronic health records and queries used to analyse those records.

Examples

- The c*oncept identifier* for the concept 233604007 |Pneumonia (disorder)| is 233604007.

Alternatives

- **Concept identifier**
- SNOMED code *(deprecated)*

Related Links

- SNOMED CT expression
- Component features - Identifiers
- Concepts

SNOMED CT concept model

The set of rules that determines the permitted sets of relationships between particular types of concepts.

Notes

- The c*oncept model* specifies the attributes that can be applied to concepts in particular domains and the ranges of permitted values for each attribute. There are additional rules on the cardinality and grouping of particular types of relationships.

Alternatives

- **Concept model**

Related Links

- Concept model domain
- Concept model attribute
- Concept model range
- Concept Model Overview
- Editorial Guide
- Machine Readable Concept Model

SNOMED CT core

This is an abbreviation for SNOMED CT core file.

A distribution file used to represent the main SNOMED CT components (concepts, descriptions and relationships).

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SNOMED CT core file

A distribution file used to represent the main SNOMED CT components (concepts, descriptions and relationships).

Notes

- Previously, the term *core* was also used to refer to the content of the SNOMED CT International Release, but this usage is deprecated.
- The SNOMED CT Affiliate License agreement contains a specific legal definition of the term "SNOMED CT Core", which includes all content controlled, maintained and distributed by SNOMED International.

Alternatives

- **Core file**
- **Core table**
- **SNOMED CT core**
- **SNOMED CT core table**

References

- SNOMED CT Affiliate License

SNOMED CT core table

This is a synonym for SNOMED CT core file.

A distribution file used to represent the main SNOMED CT components (concepts, descriptions and relationships).

SNOMED CT derivative

A document, subset, set of maps, or other resource that includes references to, or is derived from, one or more SNOMED CT components.

Notes

- The standard computer processable representation for most types of *SNOMED CT derivatives* is a reference set.
- The SNOMED CT Affiliate License agreement contains a more specific legal definition of the term "Derivative".

Alternatives

- **Derivative**

References

- SNOMED CT Affiliate License

SNOMED CT description

An association between a human-readable phrase (term) and a particular SNOMED CT concept.

Notes

- Each *description* is represented by a separate row in the Description File.

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- Each *description* has a unique identifier and connects a concept with a *term* of a specified description type. All concepts have descriptions with description types fully specified name and synonym. Other description type can be defined and may be applied to some concepts.

Alternatives

- **Description**

Related Links

- Descriptions and Terms
- Release File Specification
    - 4.2.2 Description File Specification

SNOMED CT distribution file

This is a synonym for SNOMED CT release file.

A computer file used to distribute SNOMED CT content in a form that can be readily imported by a software application.

SNOMED CT distribution format

This is a synonym for SNOMED CT release format.

A file structure used to distribute SNOMED CT content.

SNOMED CT edition

A complete set of SNOMED CT components and reference set members that belong to an identified SNOMED CT module and all of the modules on which that *module* depends.

Notes

- The module used to define the scope of an *edition* is referred as the focus module of that *edition*.
- All *SNOMED CT editions* (except the International Edition) are a combination of one or more extension modules, together with the modules from the SNOMED CT International Edition.
- A complete *SNOMED CT edition* may be prepared and released by SNOMED International or by the provider of a SNOMED CT Extension. Alternatively, a *SNOMED CT edition* may be derived from one or more release packages, by combining the contents of an identified *focus module* with the contents of the relevant version of all modules on which the *focus module* depends.
- The dependencies between modules are represented using the |Module dependency reference set (foundation metadata concept)|.
- A SNOMED CT edition can be identified using a Uniform Resource Identifier (URI) as specified by the URI Standard (2.1 URIs for Editions and Versions).

Examples

- The SNOMED CT International Edition consists of the *focus module*, |SNOMED CT core module|, and the module on which it depends, |SNOMED CT model component module|.
- The US National Edition (including the US SNOMED to ICD-10-CM maps) consists of the *focus module*, |SNOMED CT to ICD-10-CM rule-based mapping module|, and the three modules on which this depends, |US National Library of Medicine maintained module|, |SNOMED CT core module| and |SNOMED CT model component module|.

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Alternatives

- **Edition**

Related Links

- Focus module
- SNOMED CT Editions with their module identifiers and URIs
- URI Standard
    - 2.1 URIs for Editions and Versions

SNOMED CT editor

This is a synonym for SNOMED CT author.

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

SNOMED CT enabled application

A software application designed to support the use of SNOMED CT.

Alternatives

- **Enabled application**
- **SNOMED CT application**

SNOMED CT enabled implementation

An implementation of an information system that is able to make effective use of SNOMED CT in an organization or region.

Notes

- *SNOMED CT enabled implementation* has a broader meaning than SNOMED CT enabled application. An implementation involves practical deployment of one or more applications to address personnel and organizational issues that allow the potential benefits to be realized.

Alternatives

- **Enabled implementation**
- **SNOMED CT implementation**

SNOMED CT expression

A structured combination of one or more concept identifiers used to express a clinical idea.

Notes

- An *expression* containing a single concept identifier is referred to as a precoordinated expression. An *expression* that contains two or more concept identifiers is a postcoordinated expression.
- The concept identifiers in a postcoordinated expression are related to one another in accordance with rules expressed in the SNOMED CT Concept Model.
- These rules allow an *expression* to refine the meaning of a concept by applying more specific values to particular attributes of a more general concept.

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Example

- 284196006 |burn of skin| : 363698007 |finding site| = 33712006 |skin of hand|

Alternatives

- **Expression**

Related Links

- Precoordinated expression
- Postcoordinated expression
- Focus concept
- Refinement
- Context wrapper
- Compositional Grammar Specification and Guide
- Logical Model of SNOMED CT expressions

SNOMED CT extension

A set of terminology components and reference set members that add to and are dependent on the SNOMED CT International Edition.

Notes

- An *extension* is created, structured, maintained, and distributed in accordance with SNOMED CT specifications and guidelines.
- An *extension* consists of one or more modules. All components and reference set members maintained in an extension include a module identifier that assigns them to a module in that extension.
- *SNOMED CT extensions* may be created and maintained by SNOMED International itself or by SNOMED International Members or Affiliate licensees to which *SNOMED International* has assigned a namespace identifier.
- Components that are created by *Members* or *Affiliates* are identified using SCTIDs that include the namespace identifier assigned to that organization. This ensures that they do not collide with other SCTIDs, and can be traced to an authorized originator. Identifiers of extension *components* and *reference set members* created by *SNOMED International* are not required to include a namespace identifier.
- *Extensions* released by *SNOMED International* contain *components* and *reference set members* that extend, rather than being an essential part of, the SNOMED CT International Edition. However, *SNOMED CT International Extensions* are considered to be part of the overall International Release.
- Members may create, maintain, and distribute *extensions* to address specific national, regional, and language requirements. SNOMED International Affiliates may also create, maintain, and distribute *extensions* to meet the needs of particular software solutions and customers.

Alternatives

- **Extension**

Related Links

- SNOMED CT Edition
- SNOMED CT Release
- Change or Add to SNOMED CT
- Extensions Practical Guide

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SNOMED CT Identifier

A unique *integer* identifier applied to each SNOMED CT component (Concept, Description, or Relationship).

Notes

- Each *SNOMED CT Identifier (SCTID)* includes an item identifier, a check-digit, a partition identifier and, depending on the partition identifier, it may also include a namespace identifier.

Alternatives

- **Identifier**
- **SCTID**

Related Links

- Release File Specification
  - 6 SNOMED CT Identifiers

SNOMED CT implementation

This is an abbreviation for SNOMED CT enabled implementation.

An implementation of an information system that is able to make effective use of SNOMED CT in an organization or region.

SNOMED CT International Edition

The set of SNOMED CT components and reference set members that either belong to a specific module identified by SNOMED International as the focus module for that *edition* or belong to one of the *modules* on which that module depends.

Notes

- The *International Edition* includes the foundational content of SNOMED CT on which all other SNOMED CT modules must have dependencies.
- SNOMED International currently identifies the |SNOMED CT core module (core metadata concept)| as the *focus module* for the *International Edition*. Only the |SNOMED CT model component module| is currently specified as a dependency.
- The *International Edition* may be supplemented by extensions, maintained and distributed by Members and Affiliates, to meet additional national, local, and organizational requirements.

Alternatives

- **International Edition**

Related Links

- Edition
- International release
- National Edition
- National Extension
- SNOMED International Extensions

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SNOMED CT International extension

A SNOMED CT extension that is maintained and distributed by SNOMED International.

Notes

- Identifiers of components in a SNOMED CT extension are not required to include a namespace identifier.
- A *SNOMED CT International extension* contains components and reference set members which are dependent on modules in the International Edition, but are not part of the International Edition. The *International extensions* are, however, considered part of the overall International Release.

Example

- The contents of the |LOINC - SNOMED CT Cooperation Project module|.

Related Links

- Extensions Practical Guide
- SNOMED CT extension

SNOMED CT International Release

The complete set of SNOMED CT components and reference set members distributed by SNOMED International and made available to its Members and Affiliates.

Notes

- The *International Release*, provided by SNOMED International, includes the SNOMED CT International Edition and all supplementary content and derivatives containedin SNOMED CT International Extensions.
- The *International Release* may be supplemented by extension releases, maintained and distributed by Members and Affiliates, to meet additional national, local, and organizational requirements.
- The *International Release* made available on a particular date may be referred to as an *International Release* version.

Alternatives

- **International Release**

Related Links

- SNOMED International Extensions
- SNOMED CT International Edition
- SNOMED CT release
- SNOMED CT Release File Specification

SNOMED CT International release package

A SNOMED CT release package distributed by SNOMED International.

Notes

- A *SNOMED CT International release package* is used to distribute the SNOMED CT International Edition.

Related Links

- SNOMED CT International Release
- SNOMED CT release package
    - alpha release package

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- beta release package
- production release package

SNOMED CT metadata

SNOMED CT content (including concepts, descriptions, and relationships) that provides additional information about SNOMED content and derivatives (including reference sets).

Notes

- All SNOMED CT metadata concepts are subtypes of 900000000000441003 |SNOMED CT Model Component (metadata)|.
- The top level of the metadata hierarchy represents broad groups of metadata as follows:

Top level of the SNOMED CT metadata hierarchy
900000000000441003 |SNOMED CT Model Component (metadata)| • 106237007 |Linkage concept (linkage concept)| • 370136006 |Namespace concept (namespace concept)| • 900000000000442005 |Core metadata concept (core metadata concept)| • 900000000000454005 |Foundation metadata concept (foundation metadata concept)|

Examples

- Concept enumerations use *metadata concepts* to represent values that are applied to particular fields in release files.
- Reference set types and reference set names are represented by *metadata concepts* that are subtypes of 900000000000455006 |Reference set (foundation metadata concept)|.

Alternatives

- **metadata**

Related Links

- SNOMED CT model component concept
- Top level metadata concept
- Metadata concept
- Concept enumeration
- Metadata Hierarchy

SNOMED CT model component concept

The concept that represents the top of the hierarchy of metadata concepts.

Notes

- This *SNOMED CT model component concept* has the identifier 900000000000441003 |SNOMED CT Model Component (metadata)|.
- The top level of the metadata hierarchy represents broad groups of metadata as follows:

```
138875005 |SNOMED CT Concept|     ← The root concept
  900000000000441003 |SNOMED CT Model Component|   ← The root metadata concept
    106237007 |Linkage concept|                     ← Attributes and other linkage concepts
    370136006 |Namespace concept|                   ← Concepts representing namespaces
    900000000000442005 |Core metadata concept|     ← Metadata supporting components
```

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900000000000454005 |Foundation metadata concept| ← Metadata supporting refsets

Alternatives

- **Root metadata code**

Related Links

- Metadata Hierarchy

SNOMED CT modeler

This is a synonym for SNOMED CT author.

A person responsible for creating or editing SNOMED CT concepts, concept definitions, and descriptions.

SNOMED CT modeling

This is a synonym for SNOMED CT authoring.

The process of creating or editing SNOMED CT concepts, concept definitions and descriptions.

SNOMED CT module

A group of SNOMED CT components and/or reference set members managed, maintained, and distributed as a unit.

Notes

- Components and reference set members that are part of the same *module* share the same moduleId value.
- All *modules*, except the 900000000000012004 |SNOMED CT model component module|, have dependencies on other *modules* specified by the Module Dependency Reference Set.
    - components and reference set members, that are part of the same *module,* share the same moduleId value.
    - components and reference set members are part of only one *module*, at any given time.
- The organization responsible for maintaining an extension must:
    - create and maintain at least one *module* identified by a *moduleId* that it has created;
    - apply a *moduleId* that it has created to all components and reference set members in its *extension*;
    - manage and distribute information about the dependencies of its *modules* in accordance with SNOMED CT specifications.
- The organization responsible for maintaining an extension may:
    - create and maintain multiple *modules*;
    - organize its components and reference set memberswithin the modules it manages in a way that best meets its business needs;
    - move a component or reference set memberbetween its *modules* by creating a revised version of that component or reference set member with a different *moduleId* (It is then part of the new *module* from the *effectiveTime* of the revised version).
- Components and reference set members may be moved between *modules* maintained by different organizations. However, such moves must only be made:
    - with the consent of the organizations responsible for both the source and target modules; and
    - in accordance with rules specified by SNOMED International.

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Alternatives

- **Module**

Related Links

- Extensions Practical Guide
    - 4.2.2 Module Dependencies

SNOMED CT National Edition

A set of SNOMED CT components and reference set members that belong to a focus module identified by a National Release Center (NRC), as well as all modules on which that *module* depends.

Notes

- The focus module is part of the National Release for which that NRC is responsible.
- An NRC may have multiple *National Editions* with different focus modules for each edition.
- A *National Edition* may:
    - be part of a National Release distributed to licensees.
    - combine a focus module from the *National Release*, the relevant versions of modules in the International Edition, and any other extension modules on which the International Edition depends.

Examples

- United States Edition
- Canadian Edition
- United Kingdom Clinical Edition (does not include UK drug extension modules)
- United Kingdom Edition (includes UK drug extension modules)

Alternatives

- **National Edition**

Related Links

- List of SNOMED CT Editions with URIs
- SNOMED CT Edition
- SNOMED CT National Release
- SNOMED CT National Extension
- Extensions Practical Guide
    - 4.4 Editions

SNOMED CT National Extension

A SNOMED CT Extension that is maintained by a Member for use in the territory for which that Member is responsible.

Related Links

- Extensions Practical Guide
- National Edition
- SNOMED CT Extension

SNOMED CT National Release

The complete set of SNOMED CT components and reference set members distributed to licensees by a Member.

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Notes

- The *National Release* is a set of release files which contain components and derivatives from a National Extension maintained and distributed by a Member.
- A *National Release* may also include the SNOMED CT International Release on which it depends, in which case it is a release of the National Edition.
- Alternatively, a *National Release* may consist only of the National Extension release files for a specified release date. In this case, the National Edition combines these files with the International Release on which it depends.
- The *National Release* made available on a particular date, is referred to as a *National Release* version.

Alternatives

- **National Release**

Related Links

- National Edition
- SNOMED CT release

SNOMED CT query language

A formal language for representing computable queries over SNOMED CT content.

Notes

- The SNOMED CT query language is a superset of the SNOMED CT Expression Constraint Language, with the addition of *filters*, which restrict the results based on the value of specific release file fields.

Change Notice

- ⚠ The SNOMED CT Query Language Specification has not yet been published. It is included in the glossary a placeholder for references from glossary entries related to SNOMED CT templates.

Related Links

- SNOMED CT template

SNOMED CT reference set

A standard format for maintaining and distributing a set of references to SNOMED CT components.

Notes

- A *reference set* can be used to represent a subset of components (concepts, descriptions or relationships).
- A *reference set* may also associate referenced components with additional information such as:
  - Ordered lists of components
  - Sets of associations between components
  - Mapping between SNOMED CT concepts and other systems codes, classifications, or knowledge resources.

Alternatives

- **Refset**

Related Links

- Reference set member

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- Subset
- Reference Sets Practical Guide
- Release FIle Specification
    - 5.2 Reference Set Types

SNOMED CT relationship

An association between a source concept and a destination concept.

Notes

- Each *relationship* is represented by a separate row in the relationship file.
- Each *relationship* has a unique identifier and contains columns identifying the relationship type and the concepts that are related (sourceId and destinationId).
- Each *relationship* provides defining information about the source concept.
- Following enhancements to SNOMED CT during 2019, the authoritative stated representation of this defining information will be OWL axioms distributed in OWL Expression Reference Sets. Relationships will continue to be distributed to represent the necessary normal form.

Example

- The source, type and destination of one of the *relationships* for the concept 74400008 |Appendicitis (disorder)| are as follows:

sourceId	typeId	destinationId
74400008 |appendicitis|	363698007 |finding site|	66754008 |appendix structure|

Alternatives

- **Relationship**

Related Links

- Relationship File Specification
- Concept Enumerations for Relationship typeId

SNOMED CT release

The complete set of SNOMED CT components and reference set members distributed by a specific organization.

Notes

A release at a given point in time can be referred to as a *SNOMED CT release* version.

Examples

- The SNOMED CT International Release distributed by SNOMED International.
- A SNOMED CT National Release distributed by a Member National Release Center.

Related Links

- SNOMED CT International Release
- SNOMED CT National Release
- SNOMED CT Edition
- SNOMED CT release package
- SNOMED CT release file
- SNOMED CT Release File Specifications

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SNOMED CT release file

A computer file used to distribute SNOMED CT content in a form that can be readily imported by a software application.

Notes

- The content is from SNOMED International or from the originator of an Extension.
- *SNOMED CT release files* follow the Release Format 2 (RF2) as defined in the SNOMED CT Release File Specifications.

Alternatives

- **Release file**
- **SNOMED CT distribution file**

Related Links

- SNOMED CT release
- SNOMED CT Release File Specifications
    - 3 Release Types, Packages and Files
    - 4 Component Release Files Specification
    - 5 Reference Set Release Files Specification

SNOMED CT release format

A file structure used to distribute SNOMED CT content.

Notes

- The *release format* is specified by SNOMED International.
- The current *release format* is Release Format 2, which superseded Release Format 1 in 2012.

Alternatives

- **Release format**
- **SNOMED CT distribution format**

Related Links

- Release file
- SNOMED CT Release File Specifications
    - 3 Release Types, Packages and Files
    - 4 Component Release Files Specification
    - 5 Reference Set Release Files Specification

SNOMED CT Release Format 1

The file structure previously used to distribute SNOMED CT content.

Notes

- *Release Format 1* was specified by SNOMED International in 2002, but was replaced by Release Format 2 in January 2012.
- Release Format 2 is now the primary format for the SNOMED CT International Release.
- During an overlap period until 2016, both formats were used for the SNOMED CT International Release.

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Alternatives

- **RF1**
- **Release Format 1**

Related Links

- Release Format 2
- SNOMED CT Release File Specifications

SNOMED CT Release Format 2

The file structure used to distribute SNOMED CT content and derivatives.

Notes

- *Release Format 2* was specified by SNOMED International.
- In 2012, Release Format 2 replaced the original SNOMED CT Release Format 1 used between 2002 and 2012.
- During an overlap period until 2016, both formats were used for the SNOMED CT International Release.

Alternatives

- **Release Format 2**
- **RF2**

Related Links

- Release Format 1
- SNOMED CT Release File Specifications

SNOMED CT release package

A single-unit set of release files with SNOMED CT components, reference set members, and/or other related items.

Notes

- A *release package*
    - Is distributed by SNOMED International, a National Release Center, or another organization authorized to maintain and distribute a SNOMED CT extension
    - May be a complete SNOMED CT Edition or a supplementary extension module, dependent on other modules
    - May be referred to as a *release package* version, meaning it is distributed at a specific point in time
        - Each *release package* version is assigned a release packages status: alpha release package, beta release package, or production release package.
    - May also refer to other SNOMED CT products or services, such as those listed in the SNOMED International Products and Services Catalogue

Alternatives

- **Release**
- **Release package**

Related Links

- SNOMED CT International Release
- SNOMED CT National Release
- SNOMED CT release
- Alpha release package

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- Beta release package
- Production release package

SNOMED CT template

A SNOMED CT expression, expression constraint, or query containing one or more SNOMED CT template slots to be populated with values prior to or during processing.

Related Links

- SNOMED CT Language Templates
- SNOMED CT template slot

SNOMED CT template slot

A marked position in a SNOMED CT template that can be removed or replaced an with appropriate values during processing.

Notes

- There are two main types of template slots:
    a. *Replacement Slots*, which are replaced by a SNOMED CT concept, expression or string during template processing
    b. *Information Slots*, which provide metadata about how the template is to be processed.

Related Links

- SNOMED CT template
- SNOMED CT Language Templates
- Expression Template Examples

SNOMED CT terminology server

Software that provides access to SNOMED CT through a defined application programming interface.

Notes

- A *SNOMED CT terminology server* should enable term-based searches, hierarchy navigation, access to selected concepts and their descriptions and definitions.
- A *SNOMED CT terminology server* may also provide access to other terminologies, code systems and classifications.

Alternatives

- **Terminology server**

Related Links

- Terminology server
- SNOMED CT Snapshot API

SNOMED CT version

A SNOMED CT edition that is published on a specific date.

Notes

- A new *version* of the International Edition of SNOMED CT is released twice a year (in January and July).

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- National extensions generally follow this cycle, however it is often with a three-month delay. Some extensions (notably those including medication-related concepts) are released more frequently.

Examples

- The International Edition, 20180131 (dated January 31, 2018).
- The US National Edition, 20180501.

Alternatives

- **SNOMED CT versioned edition**
- **Version**
- **Versioned edition**

SNOMED CT versioned edition

This is the full name for SNOMED CT version.

A SNOMED CT edition that is published on a specific date.

SNOMED CT logical model

The model that specifies the overall design of SNOMED CT.

Notes

- The logical model specifies how the SNOMED CT components and reference sets represent the essential content of the terminology.

Related Links

- Components
- Concepts
- Concept definitions
- Relationships
- Descriptions
- Reference sets
- SNOMED CT components
- Release File Specification
    - 2 SNOMED CT Logical Model

SNOMED International

This is the trading name of the International Health Terminology Standards Development Organisation.

The organization that owns, administers, and develops SNOMED CT.

Disambiguation

Not to be confused with:

- SNOMED International (version of SNOMED)

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SNOMED International (version of SNOMED)

The name of one of the antecedent versions of the SNOMED terminology.

Notes

- **Antecedent versions of SNOMED have not been maintained for many years.**
  Since 2017 all antecedent versions are formally deprecated and are no longer licensed for use.
- *SNOMED International*
- *SNOMED International* was first released in 1993.
- *SNOMED International version 3.5*, released in 1998, was the immediate predecessor of SNOMED RT.

References

- A Brief History of SNOMED Code Systems
- Timetable for Withdrawal of Legacy SNOMED Codes.

Disambiguation

Not to be confused with:

- SNOMED International, the trading name of the organization responsible for maintaining and distributing SNOMED CT.

SNOMED International Affiliate

This is a synonym for Affiliate Licensee.

An organization or individual that has been issued a license to use SNOMED CT by SNOMED International.

SNOMED RT

The antecedent version of SNOMED that immediately preceded the release of SNOMED Clinical Terms.

Notes

- **None of the earlier versions of SNOMED are maintained.**
  Since 2017 all antecedent versions are formally deprecated and are no longer licensed for use.
- In *SNOMED RT*, *RT* refers to reference terminology.
- *SNOMED RT* was a source terminology, with CTV3, from which SNOMED CT was developed.

References

- A Brief History of SNOMED Code Systems
- Timetable for Withdrawal of Legacy SNOMED Codes.

source concept

The concept that is used as a source value in a relationship.

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Notes

- The *source concept* is identified by the sourceId in the *relationship.*
- The *relationship* represents a defining characteristic of the *source concept*.

Related Links

- Destination concept
- Relationship type

source language

This is an abbreviation for translation source language.

The language in which the original text is written.

sourceId

A field in the relationship release file containing a SNOMED CT identifier that represents the source concept as defined by the associated relationship.

Related Links

- DestinationId
- SourceId

SQL

This is an abbreviation for Structured Query Language.

The standard language for manipulating and querying relational databases.

stated form

This is a synonym for stated view.

A representation of concept definitions consisting only of assertions made or revised by SNOMED CT authors.

stated view

A representation of concept definitions consisting only of assertions made or revised by SNOMED CT authors.

Notes

- In contrast to the inferred view, the *stated view* does not include inferences generated by applying a description logic classifier.

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Change Notices

- Before July 2018, the *stated view* was represented by a combination of subtype relationships and attribute relationships distributed in the Stated Relationships File.
- During a transitional period commencing with the July 2018 release of the International Edition, some elements of the *stated view* are represented as axioms, that conform to the OWL functional syntax. These axioms are distributed in the OWL axiom reference set file. At the end of the transitional period, this form of representation will completely replace the Stated Relationships File which will be deprecated.

Alternatives

- **Stated form**

Related Links

- Inferred view
- Stated Relationships File
- OWL axiom reference set file
- Concept Definitions
- SNOMED CT OWL Guide

statistical classification

A hierarchical organization of terms or ideas that allows aggregation into categories.

Notes

- A *statistical classification*
  - Allows categories to be counted and compared, without double counting.
  - Is a monohierarchical classification, which mean that each node in the hierarchy is included in only one node in the level above. Although this avoids double counting, it means that arbitrary decisions are made when a node is naturally related to more than one parent.

Example

- In a *statistical classification* such as ICD-10, *bacterial pneumonia* is related to *lung disorder* or *infectious disorder*, but not to both.

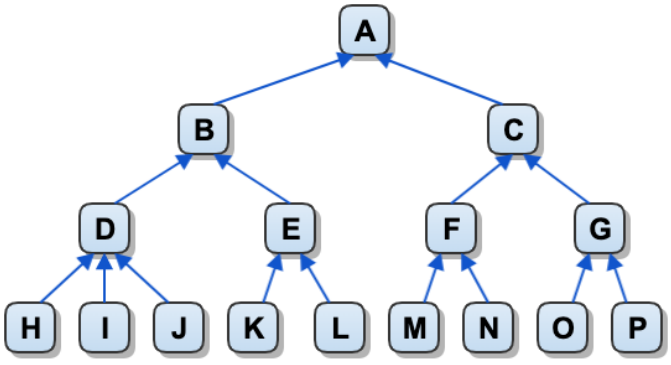

Figure 1: Hierarchy Illustration - Statistical Monohierarchical Classification

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- In contrast, a polyhierarchical classification such as SNOMED CT, enables *bacterial pneumonia* to be a subtype of both *lung disorder* and *infectious disorder*. This enables more inclusive analytics and avoids overlooking conditions that are in a different category from the one being analyzed.

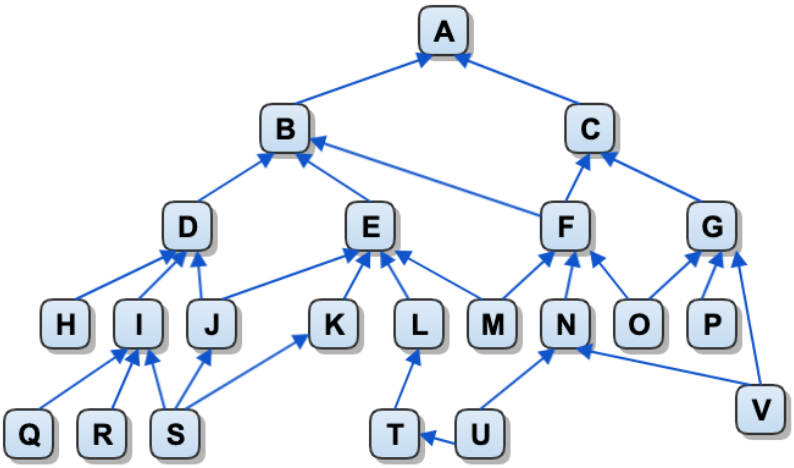

Figure 2: Hierarchy Illustration - Subtype Polyhierarchy

Related Links

- Monohierarchical classification
- Polyhierarchical classification
- Subtype classification
- Directed acyclic graph

structure-entire-part

A modeling approach used in SNOMED CT to represent anatomical entities such as body organs, systems, or regions.

Notes

- **Structure** is the most general way to refer to an organ, body system, or region.
- **Entire** refers to a complete organ, body system, or region.
- **Part** refers to a part of an organ, body system, or region. Part does **not** refer to the entire organ, body system, or region.

Example

Figure 1 below illustrates the relationships between the *structure*, *entire*, and *part* concepts applied to the heart.

- 80891009 |heart structure|
- 302509004 |entire heart|
- 119202000 |heart part|

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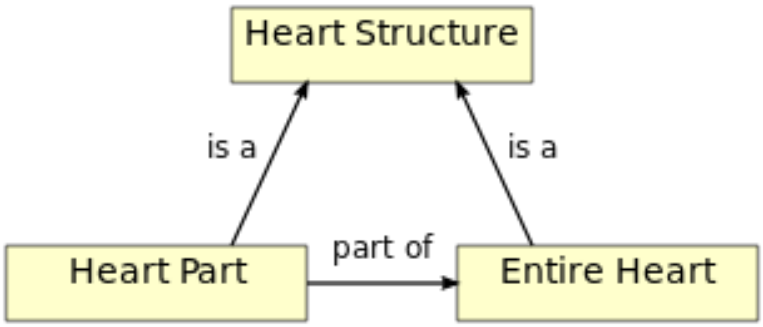

Figure 1: Structure-Entire-Part applied the heart

Alternatives

- **SEP**

Related Links

- Anatomical Concept Model

Structured Query Language

The standard language for manipulating and querying relational databases.

Notes

- *Structured Query Language* (SQL) is designed for:
  - managing data in a relational database management system (RDBMS)
  - stream-processing data in a relational data stream management system (RDSMS)
- *Structured Query Language* is an ANSI and ISO standard.

Alternatives

- **SQL**

Related Links

- Database Queries
- SQL
- Supporting Selective Data Retrieval

subset

A set of members all of which are members of another set (from *set theory* in mathematics).

Notes

- In SNOMED CT, the definition of *subset* applies to SNOMED CT components as follows:
  - A subset of SNOMED CT concepts is a set of concepts taken from a wider set of concepts.
  - A subset of SNOMED CT descriptions is a set of descriptions taken from a wider set of descriptions.
- The members of a subset can defined in one of two ways:
  - Extensionally, by enumeration, with a simple reference set as the standard distribution format.

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- Intensionally, using rules to determine inclusion, with a query reference set as the standard distribution format.

Examples

- A subset of SNOMED CT concepts from all of the concepts in a particular version of a SNOMED CT edition.
- A subset of SNOMED CT descriptions from all the descriptions in a particular version of a SNOMED CT edition.

Related Links

- Extensional subset definition
- Intensional subset definition
- Reference set
- Reference Sets Practical Guide, Subset
- Subset

substrate

The SNOMED CT content by which an expression constraint is evaluated or a query is executed.

Notes

- Two distinct types of substrate are directly relevant to use of SNOMED CT:
  - The *substrate* for an expression constraint that generates the membership of a subset or reference set.
  - The *substrate* for a clinical analytics query, consisting of a collection of records either coded in or mapped to SNOMED CT.

Examples

- Substrates for subset generation include:
  - A particular version of a specified SNOMED CT edition
  - Members of a preexisting reference set.
- Substrates for analytics include:
  - SNOMED CT encoded electronic health records from a particular institution or department.
  - A disease registry database containing or mapped to SNOMED CT.

Related Links

- Expression Constraint Language - Specification and Guide
- Analytics with SNOMED CT
  - 3.3 Substrates fo Analytics
- Decision Support with SNOMED CT
  - 3.3. Substrate

subsume

See subsumption test.

A test to determine if a specified candidate concept or expression is a subtype descendant of another specified concept or expression.

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subsumption test

A test to determine if a specified candidate concept or expression is a subtype descendant of another specified concept or expression.

Notes

- Literally speaking a *subsumption test* determines if one concept is *subsumed* by another.
- In the context of SNOMED CT a *concept* is *subsumed by* its supertypes and *subsumes* its subtypes. So the following terms are for all practical purposes interchangeable.

Uses of the terms subsumption and subsume	Equivalent uses of the words supertype and subtype
subsumption test	**subtype test**
A **subsumes** B	A **is a supertype of** B
A **is subsumed by** C	A **is a subtype of** C

Examples

- To answer the question "*Which patients have an infectious disease?*" involves finding all of the patients with records that include a concept or expression that is subsumed by the concept 40733004 |Infectious disease (disorder)|.

Alternatives

- **Subtype test**

Related Links

- Subsumption
- Data Analytics with SNOMED CT
    - 6.2 Subsumption

subtype

A specialization of a concept, sharing all the definitional attributes of that concept, but with at least one additional distinguishing feature[1].

Notes

- *Subtypes* are transitive, that is if A is a *subtype* of B and B is a *subtype* of C, then A is also a *subtype* of C.
- The term *subtype* is synonymous with subtype descendant. However, it may be helpful to use the term *subtype descendant* to emphasize inclusion of all *subtypes* not just subtype children.

Example

- 87628006 |Bacterial infectious disease (disorder)| is a *subtype* of 40733004 |Infectious disease (disorder)|.
- 10001005 |Bacterial sepsis (disorder)| and 197171003 |Bacterial peritonitis (disorder)| are *subtypes* of 87628006 |Bacterial infectious disease (disorder)| (and thus also *subtypes* of 40733004 |Infectious disease (disorder)|).

Disambiguation

Not to be confused with:

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- The term *subtype* is sometimes used incorrectly to refer **only** to concepts that are directly related to a parent concept via a single 116680003 |is a|relationship. The correct term for a directly related *subtype* concept is subtype child.

Related Links

- Subtype
- Supertype

Note that the distinguishing features may or may not be represented in the concept definition of the *subtype*.

subtype child

A concept that has a direct |is a| subtype relationship to a specified concept.

Notes

- See also subtype and subtype descendant.

Example

- The figure below shows an example hierarchy in which concept *C* has two *subtype children*, *F and G*.

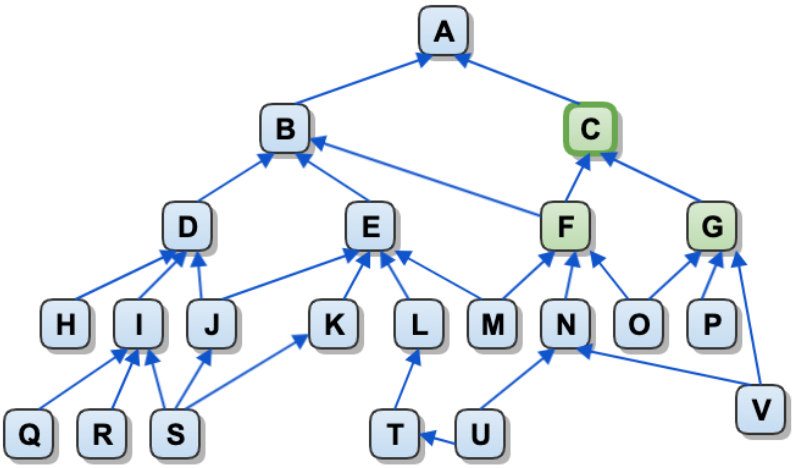

Figure 1: Hierarchy Illustration - Subtype children

Alternatives

- **Child**
- **Children**
- **Subtype children**

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subtype children

This is the plural form of subtype child.

A concept that has a direct |is a| subtype relationship to a specified concept.

subtype classification

A classification hierarchy in which each node is connected to its supertypes.

Notes

- *Subtype classification* allows aggregation of information based on a hierarchy of types.

Alternatives

- **Subtype hierarchy**

Related Links

- Statistical classification
- Monohierarchical classification
- Polyhierarchical classification
- Directed acyclic graph

subtype descendant

A concept that is a subtype of a specified concept.

Notes

- Includes the subtype children and the subtype children of each subtype child and so on recursively.
- The terms *subtype* and *subtype descendant* are synonymous. However, it is sometime helpful to use the term *subtype descendant* to emphasize inclusion of all *subtypes* not just subtype children.

Example

The figure below shows an example hierarchy in which concept *C* has eight *subtype descendants* (F, G, M, N, O, P, U and V).

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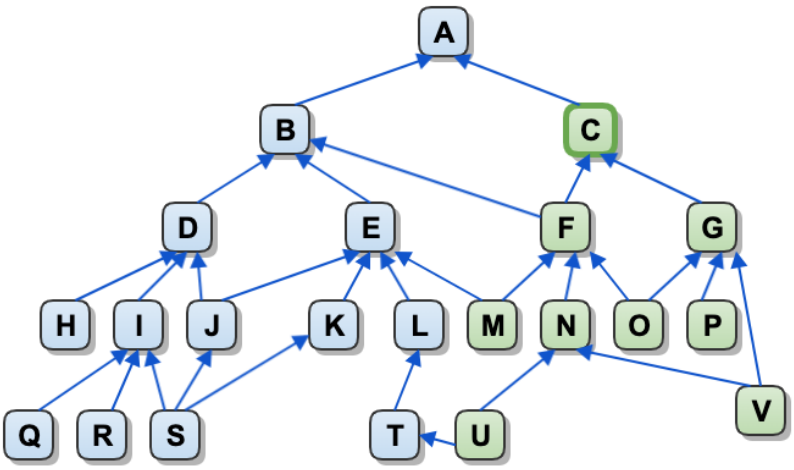

Figure 1: Hierarchy Illustration - Subtype descendants

Alternatives

- **Descendant**

subtype hierarchy

This is a synonym for subtype classification.

A classification hierarchy in which each node is connected to its supertypes.

subtype relationship

A relationship that asserts that a concept is a subtype of another concept.

Notes

- *Subtype relationships* are represented by relationship type 116680003 |is a|.
- A *subtype relationship* asserts that a concept conforms to all the defining characteristics the supertype concept but also has at least one feature or refinement[1] that distinguishes it from that *concept*.

Example

- The table below shows an example of a *subtype relationship* as it appears in the three significant columns of the relationship file

sourceId	typeId	destinationId
6025007 |Laparoscopic appendectomy|	116680003 |is a|	80146002 |Appendectomy|

Alternatives

- **Is a**

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Related Links

- Attribute relationship
- Subtype

Note that the distinguishing features may or may not be represented in the concept definition of the *subtype concept*.

subtype test

This is a synonym for subsumption test.

A test to determine if a specified candidate concept or expression is a subtype descendant of another specified concept or expression.

sufficient definition

A set of characteristics which distinguish a concept and its subtypes from all other concepts.

Notes

- Any concept that matches the *sufficient definition* is equivalent to or a subtype of the defined concept.
- A concept may have more than one *sufficient definition*. In that case any concept that matches at least one of these *sufficient definitions* is equivalent to or a subtype of the defined concept.

Examples

- The following set of assertions is a sufficient definition for 74400008 |appendicitis (disorder)| because any concept for which this set of assertions is true must either be the disorder *appendicitis* or a subtype of *appendicitis*.

```
18526009 |disorder of appendix| +
    302168000 |inflammation of large intestine| :
    116676008 |associated morphology| = 23583003 |inflammation| ,
    363698007 |finding site| = 66754008 |appendix structure|
```

- Both the following sets of assertions are sufficient definitions for the concept 8801005 |Secondary diabetes mellitus (disorder)|:

```
73211009 |Diabetes mellitus| : 246075003 |Causative agent| = 105590001 |Substance|
```

```
73211009 |Diabetes mellitus| : 42752001 |Due to| = 64572001 |Disease|
```

- While each of the assertions 246075003 |Causative agent| = 105590001 |Substance| and 42752001 |Due to| = 64572001 |Disease| form part of a sufficient definition, neither of these assertions are necessary conditions because *only one* of them needs to be true. This illustrates that an assertion that is part of a sufficient definition need not be a necessary condition.

Change Notices

- Prior to July 2018, SNOMED CT could only support one *sufficient definition* for each concept could not represent the 8801005 |Secondary diabetes mellitus (disorder)| example above. A further limitation, that

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also prevented formal representation of that example was the stated relationship file was only able to represent necessary conditions.
- Changes introduced in the July 2018 release of the International Edition allow assertions to be represented as axioms in the OWL axiom reference set file. This will allow concepts to be defined by multiple sufficient definitions, some of which may contain assertions that are not necessarily true.
- Following these changes a concept will only be marked as sufficiently defined if it is sufficiently defined by relationships. However, the OWL axioms may provide a sufficient definition that cannot be fully represented as *relationships*.

Alternatives

- **Sufficient set**

Related Links

- Necessary condition
- Sufficiently defined concept

sufficient set

This is a synonym for sufficient definition.

A set of characteristics which distinguish a concept and its subtypes from all other concepts.

sufficiently defined concept

A concept with one or more sufficient definitions.

Notes

- A SNOMED CT concept is expressed in a human-readable form by its fully specified name (FSN).
- A *sufficiently defined concept* has at least one sufficient definition that distinguishes it from any concepts or expressions that are neither equivalent to, nor subtypes of, the defined concept.

Examples

- The concept 74400008 |appendicitis (disorder)| is *sufficiently defined* by the following definition because any concept for which these defining relationships are true, is either the disorder *appendicitis* or a subtype of *appendicitis*.

```
74400008 |appendicitis (disorder)|
    === 18526009 |disorder of appendix| :
            116676008 |associated morphology| = 23583003 |inflammation| ,
            363698007 |finding site| = 66754008 |appendix structure|
```

Change Notices

- Prior to July 2018, SNOMED CT could only support one *sufficient definition* for each concept could not represent the 8801005 |Secondary diabetes mellitus (disorder)| example above. A further limitation, that also prevented formal representation of that example was the stated relationship file was only able to represent necessary conditions.

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- Changes introduced in the July 2018 release of the International Edition allow assertions to be represented as axioms in the OWL axiom reference set file. This will allow concepts to be defined by multiple sufficient definitions, some of which may contain assertions that are not necessarily true.
- Following these changes a concept will only be marked as sufficiently defined if it is sufficiently defined by relationships. However, the OWL axioms may provide a sufficient definition that cannot be fully represented as *relationships*.

Alternatives

- **Fully defined concept**

Related Links

- Primitive concept
- Sufficient definition

supertype

A concept with a definition that subsumes the definition of a specified concept.

Notes

- The term *supertype* is synonymous with supertype ancestor. However, it may be helpful to use the term *supertype ancestor* to emphasize inclusion of all *supertypes* not just supertype parents.

Related Links

- Subtype
- Supertype

supertype ancestor

A concept that is a supertype of a specified concept.

Notes

- A *supertype ancestor* Includes the supertype parents and the supertype parents of each supertype parent, until the root concept is reached.
- The term *supertype* is synonymous with supertype ancestor. However, it is sometime helpful to use the term *supertype ancestor* to emphasize inclusion of all *supertypes* not just supertype parents.

Example

- The figure below shows an example hierarchy in which concept *S* has seven *supertype ancestors* A, B, D, E, I, J and K.

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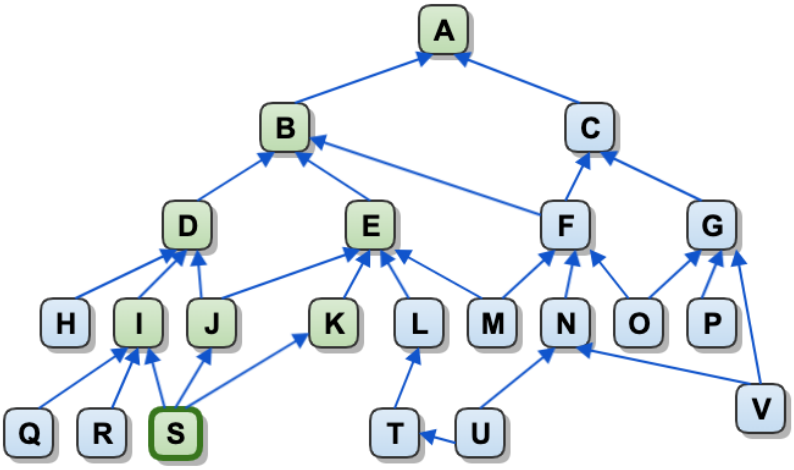

Figure 1: Hierarchy Illustration - Subtype ancestors

Alternatives

- **Ancestor**

supertype parent

A concept that is the target of a direct 116680003 |is a| subtype relationship from a specified concept.

Example

- The figure below shows an example hierarchy in which concept *S* has three *supertype parents, I, J* and *K*:

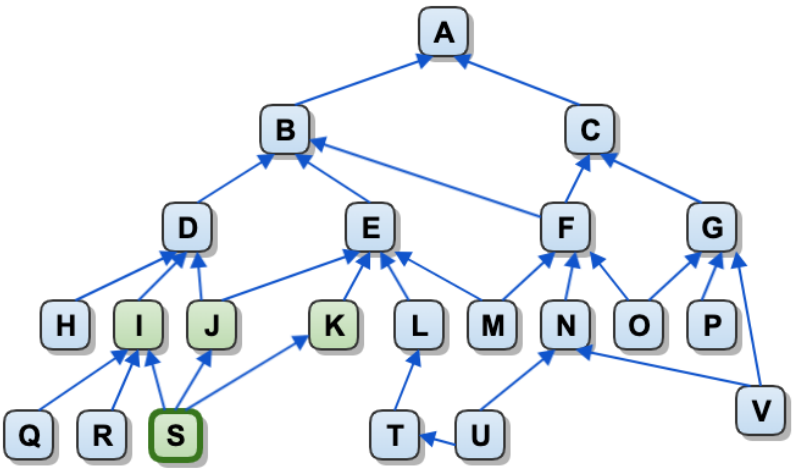

Figure 1: Hierarchy Illustration - Supertype parents

Related Links

- Supertype ancestor

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synonym

A word or phrase that expresses the meaning of a SNOMED CT concept in a specified language.

Notes

- Each *synonym* is represented by the *term* in a SNOMED CT description with the *typeId* value 900000000000013009 |Synonym|.
- *Synonyms* allow the same concept to be expressed in different ways.
- Unlike fully specified names, *synonyms* are not necessarily unique as the same *term* may be used to describe more than one concept.
- In any given language context, a concept may have any number of *synonyms* that are acceptable for use and must have one *synonym* that is preferred for use (the preferred term). The *synonyms* that are preferred or acceptable are specified by a *language reference set* for the relevant language context.

Related Links

- Term
- Description
- Preferred term
- Fully specified name
- Language context
- Language reference set
- Release File Specification
    - 4.2.2 Description File Specification

SCG

This is an abbreviation for SNOMED CT compositional grammar.

The set of rules that govern the way in which SNOMED CT expressions are represented as a plain text string.

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T

target code

This is a synonym for other-code.

A code or identifier in a code system, classification, or terminology other than SNOMED CT.

target language

This is an abbreviation for translation target language.

A language into which the original text is translated or rendered.

target scheme

A terminology, coding scheme, or classification to which some or all SNOMED CT concepts are mapped.

Example

- ICD-10 is the target scheme for the SNOMED CT to ICD-10 map.

Related Links

- Mapping
- ICD-10 Mapping Technical Guide

technology preview

Superseded by - Alpha release package.

A SNOMED CT release package made available only for initial review and testing by implementers and other stakeholders.

template

This is an abbreviation for SNOMED CT template.

A SNOMED CT expression, expression constraint, or query containing one or more SNOMED CT template slots to be populated with values prior to or during processing.

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template slot

This is an abbreviation for SNOMED CT template slot.

A marked position in a SNOMED CT template that can be removed or replaced an with appropriate values during processing.

term

A human-readable phrase that names or describes a concept.

Notes

- A *term* is one of the properties of a description.
- Other properties of a description link the *term* to an identified concept and indicate the type of description.

Related Links

- Description type
- Fully specified name
- Synonym

TermInfo

This is an abbreviation for HL7 TermInfo.

An HL7 project that developed the "HL7 Version 3 Implementation Guide: Using SNOMED CT in HL7 Version 3" as a Draft Standard for Trial Use (DSTU).

terminology binding

A link between a terminology component and an information model artifact.

Notes

- Terminology components include SNOMED CT expressions, reference sets, and constraints.
- Information model artifacts include classes and attributes in reference models for electronic health records and communication specifications.
- *Terminology bindings* enables formal specification of rules for:
  - consistent use of SNOMED CT in an information model; and
  - transforming data to a shared model of meaning.
- *Terminology binding* can also refer to the process of creating and maintaining links between terminology components and information model artifacts.

Examples

- A set of coded values that may be applied to a particular attribute in an information model. The set may be expressed extensionally (by enumeration of the codes) or intensionally (by rules such as expression constraints).

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- The association between a named attribute value in the information model and a specific coded value or expression.
- A rule that determines the way that a coded expression is constructed, based on multiple attribute values in the information model.

Related Links

- Extensional subset definition
- Intensional subset definition
- Model of meaning

terminology browser

This is a synonym for SNOMED CT browser.

A software application that provides a user interface through which to explore SNOMED CT content.

terminology server

This is an abbreviation for SNOMED CT terminology server.

Software that provides access to SNOMED CT through a defined application programming interface.

terminology service

A software function that interfaces with and provides access to information from one or more representations of a terminology.

Notes

- A *terminology service* can be designed ways that enable a wide range of different electronic health record applications to access key features of SNOMED CT.
- Different applications can interact with a *terminology service* to support a range of application specific record services including data entry, storage, retrieval, display and analysis.

Related Links

- Record service
- Terminology server
- Implementation Services: Service architecture
- Terminology Services Guide

textual definition

A narrative text explanation of the meaning of a concept that may exceed the maximum permitted length for a fully specificied name.

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Notes

- *Textual definitions* are optional and are only provided for a limited number of concepts, where there is a requirement additional detail.
- *Textual definitions* are distributed as descriptions with a description type 900000000000550004 |Definition (core metadata concept)|.
- A file that conforms to the standard description file format is used to distribute *textual definitions*. However, *descriptions* in this file have a maximum permitted length of 4096 characters.
- ⚠ *Textual definitions* should not be confused with the formal logic definitions of concepts expressed using OWL axioms or defining relationships.

Example

- One use of *textual definitions* is to indicate alignment of a SNOMED CT concept with a specific clinical definition of a condition.
  For example 11530004 |Brittle diabetes mellitus (disorder)| has the following textual definition:
  - 11530004 |Diabetes mellitus in which there are frequent, clinically significant fluctuations in blood glucose levels both above and below levels expected to be achieved by available therapies.|

Related Links

- Term
- Fully specified name
- Release File Specification
  - 4.2.2 Description File Specification

top level concept

A concept that is directly related to the root concept by a subtype relationship.

Notes

- All other concepts are subtype descendants of at least one *top level concept*.

Examples

- The list below shows the top level concept in the 2019-01-31 SNOMED CT International Release.

```
138875005 |SNOMED CT Concept|     ← The root concept
  123037004 |Body structure|
  404684003 |Clinical finding|
  308916002 |Environment or geographical location|
  272379006 |Event|
  363787002 |Observable entity|
  410607006 |Organism|
  373873005 |Pharmaceutical / biologic product|
  78621006 |Physical force|
  260787004 |Physical object|
  71388002 |Procedure|
  362981000 |Qualifier value|
  419891008 |Record artifact|
  243796009 |Situation with explicit context|
  48176007 |Social context|
  370115009 |Special concept|
```

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```
123038009 |Specimen|
254291000 |Staging and scales|
105590001 |Substance|
900000000000441003 |SNOMED CT Model Component|
```

Related Links

- Root concept

top level metadata concept

A concept that is directly related to the SNOMED CT model component concept by a subtype relationship .

Notes

- The SNOMED CT model component concept concept is 900000000000441003 |SNOMED CT Model Component (metadata)|.
- All metadata concepts are subtype descendents of at least one *top level metadata concept.*
- The top level of the metadata hierarchy represents broad groups of metadata as follows:

```
138875005 |SNOMED CT Concept|     ← The root concept
  900000000000441003 |SNOMED CT Model Component|   ← The root metadata concept
    106237007 |Linkage concept|                     ← Attributes and other linkage concepts
    370136006 |Namespace concept|                   ← Concepts representing namespaces
    900000000000442005 |Core metadata concept|     ← Metadata supporting components
    900000000000454005 |Foundation metadata concept|   ← Metadata supporting refsets
```

Related Links

- SNOMED CT model component concept
- metadata concept
- Metadata Hierarchy

transform

This is a synonym for normal form transformation.

transformation

This is an abbreviation for normal form transformation.

transitive closure

A comprehensive view of all the supertype ancestors of a concept.

Notes

- The view is derived by traversing all of the 116680003 |is a| relationships between that concept and the root concept.
- A *transitive closure table* represents the *transitive closure* of the 116680003 |is a| relationships of all active concepts and facilitates efficient subsumption testing.

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Related Links

- Inferred view
- Release File Specifications
    - Transitive closure file

translation

The process of rendering text from a source language into a target language.

Notes

- English is the source language for the International Edition of SNOMED CT.

Related Links

- Guidelines for Translation of SNOMED CT

translation service provider

Person or organization supplying translation services.

Alternatives

- **TSP**

Related Links

- Guidelines for Translation of SNOMED CT

translation source language

The language in which the original text is written.

Example

- English is the source language for the International Edition of SNOMED CT.

Alternatives

- **Source language**

Related Links

- Guidelines for Translation of SNOMED CT

translation target language

A language into which the original text is translated or rendered.

Example

- Spanish is the target language for the SNOMED CT Spanish Edition.

Alternatives

- **Target language**

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Related Links

- Guidelines for Translation of SNOMED CT

TSP

This is an abbreviation for translation service provider.

Person or organization supplying translation services.

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U

UI

This is an abbreviation for user interface.

The way in which a software application presents itself to a user.

UK National Health Service

A government funded service delivering health care services to all United Kingdom (UK) citizens.

Notes

- The *National Health Service (NHS)* Digital provides standards for collecting and publishing data and information for the health and social care system in England.
- The *NHS* and the College of American Pathologists collaborated on the development of SNOMED CT.
- The *NHS* is a founding Member of SNOMED International.

Alternatives

- **National Health Service**
- **NHS**
- **UK NHS**

Related Links

- National Health Service
- NHS Digital, Terminology and Classifications

UK NHS

This is an abbreviation for UK National Health Service.

A government funded service delivering health care services to all United Kingdom (UK) citizens.

understandability, reproducibility and usefulness

Criteria applied to test the validity of new SNOMED CT concepts and design features.

Notes

- **Understandable.** The meaning of a concept can be understood by most healthcare providers, without reference to private or inaccessible information.
- **Reproducible.** Multiple users apply the concept to the same situations.
- **Useful.** The concept has a practical value to users that is self-evident or can be readily explained.

Alternatives

- **URU**

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Related Links

- Examining SNOMED from the Perspective of Formal Ontological Principles

union

The set of elements that are members of at least one of two or more sets.

Notes

- In set theory, the union of a collection of sets is the set of all elements in the collection.
- In SNOMED CT, the *union* of two or more subsets of concepts consists of all concepts that are members of at least one of those subsets.

Examples

- The following expression constraint language defines the set of concepts in the union of subtypes of 7569003 |Finger| and subtypes of 76505004 |Thumb structure|. The "OR" instruction indicates a union between the sets defined by constraints on either side of that instruction.

```
<< 7569003 |Finger|
OR << 76505004 |Thumb structure|
```

Related Links

- Complement
- Intersection
  Wikipedia
  - Union (set theory)

universally unique identifier

A 128-bit integer used to uniquely identify information in computer systems.

Notes

- *Universally unique identifier* are generated by widely available algorithms. They are used to identify information in computer systems world-wide.
- In SNOMED CT *universally unique identifiers* is used to uniquely identify reference set members. Since *universally unique identifiers* are unique and it is unnecessary to track the issuing of identifiers for the thousands of reference set members that are needed in some implementations.
- In SNOMED CT release files, *universally unique identifiers* are represented as a string following a standard canonical form - a 36 character string containing 32 hexadecimal digits and four hyphens. The hexadecimal digits are arranged in five groups separated by the hyphens. The first group contains 8 hexadecimal digits, the last group contains 12 and each of the three other groups contains 4. So the overall pattern is 8-4-4-4-12.

Example

- ac527bed-9c70-4aad-8fc9-015828b148d9

Alternatives

- **UUID**

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Related Links

- International Telecommunications Union
  - Universally Unique Identifiers
- Wikipedia
  - Universally Unique Identifier

URU

This is an abbreviation for understandability, reproducibility and usefulness.

Criteria applied to test the validity of new SNOMED CT concepts and design features.

user interface

The way in which a software application presents itself to a user.

Notes

- The *user interface* includes the:
  - On-screen appearance
  - Commands readily available to the user
  - Manner in which the user can access and update information with the application

Alternatives

- **UI**

Related Links

- Interface Terminology

UUID

This is a synonym for universally unique identifier.

A 128-bit integer used to uniquely identify information in computer systems.

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V

value set

A uniquely identifiable set of valid concept representations, where any concept representation can be tested to determine whether or not it is a member of the *value set*.

Notes

- This definition is used in HL7 Vocabulary Committee documents and FHIR specifications.
- The role of a *value set* is to constrain the permissible content for a particular use (e.g. data entry into a particular field).
- In SNOMED CT a concept representation may be a concept identifier or a SNOMED CT expression.
- A reference set can be used to represent a *value set* of SNOMED CT concepts each of which is represented by a concept identifier in the *referencedComponentId* field.

Related Links

- Full HL7 definition of Value Set
- Subset
- Reference set

version

This is an abbreviation for SNOMED CT version.

A SNOMED CT edition that is published on a specific date.

versioned edition

This is a synonym for SNOMED CT version.

A SNOMED CT edition that is published on a specific date.

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W

Web Ontology Language

A W3C Semantic Web language designed to represent rich and complex knowledge about things, groups of things, and relations between things.

Alternatives

- **OWL**

Related Links

- OWL axiom
- OWL Functional Syntax
- SNOMED CT OWL Guide
- SNOMED CT Logic Profile Specification
- Release File Specification
    - OWL Expression Reference Set
- W3C
    - Semantic Web - Web Ontology Language (OWL)
- Wikipedia
    - Web Ontology Language (OWL)
    - Ontology

WHO

This is an abbreviation for World Health Organization.

The directing and coordinating authority on international health within the United Nations system.

word equivalent

A word or abbreviation that has the same meaning as another word or abbreviation.

Notes

- Recognition of *word equivalents* may be useful to support more inclusive text searches for SNOMED CT concepts.

Example

- The words "heart" and "cardiac" can be considered equivalent. However, these two words tend to be used in different contexts. As a result many concepts with synonyms including the word "heart" do not have synonyms including the word "cardiac" and vice versa. Therefore, in some cases, expanding a search for terms including either "heart" or "cardiac" may assist location of an appropriate concept.

Related Links

- Phrase equivalent
- Terminology Services Guide
    - 6.1.5.3 Word equivalents table

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World Health Organization

The directing and coordinating authority on international health within the United Nations system.

Notes

- The *World Health Organization* (*WHO)* maintains the International Classification of Diseases (ICD) and collaborates with International Nonproprietary Names (INN) experts in naming active pharmaceutical ingredients.

Alternatives

- **WHO**

Related Links

- World Health Organization

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