

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|](#) for m 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 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](#)