

## 5.4.2.3 Inactivate Concept in an Extension

### Purpose

Concepts may be inactivated in an extension for various reasons including:

- The concept is erroneous, obsolete or out of scope
- The concept is ambiguous, and must be replaced with one or more concepts whose meaning is clear
- The concept is redundant, because another concept has the same clinical meaning or definition

Please note that concepts that are promoted from the extension into the International Edition (or a module on which the extension module depends) are **not** inactivated in the extension. For more information on concept promotion, please refer to [5.4.1.1 Promotion and Demotion](#).

### Principles

#### Inactivating Extension Concepts

Concepts in an extension can be inactivated if necessary. This is accomplished by creating a new inactive version of the concept, and new inactive versions of any relationships in which that concept participates. This inactivation process is explained in more detail below.

#### Inactivating International Concepts

Concepts which belong to the International Edition (or to a module on which the extension depends) should not be inactivated in an extension. Extension producers should submit any requests for inactivation to SNOMED International (or the module owner). In most situations, in which an extension producer needs to exclude specific international concepts in their extension, this should be done by creating a reference set of either the 'included' or 'excluded' concepts. For more information, refer to [3.2.1.3. Exclude Content](#) in the [Practical Guide to Reference Sets](#).

Please note that if a situation arises in which an error is detected in the International Edition that causes inference errors in the extension, then this **must** be submitted to SNOMED International for correction. If a correction in the International Edition is not available prior to the release of the extension, then the error may be corrected in the Extension Edition, as long as this is reconciled in the next version of the extension that uses the corrected International Release.

### Process

When inactivating a concept in an extension, key steps include:

- Inactivating the concept
- Inactivating any relationship in which the inactive concept participates
  - This includes any relationship in which the inactive concept is the source concept, the destination concept or the relationship type
- Representing the reasons for inactivation and possible replacements in the appropriate reference sets

Please note that active descriptions should **not** be inactivated when a concept is inactivated. This provides a mechanism to see the terms associated with concepts that have previously been entered into a clinical record, and to support historical queries on data that was captured using a previous version of the terminology.

#### Note

Concepts should NOT be used for data entry once they have been inactivated. However, inactive concepts should be retained to support historical records entered prior to the inactivation.

The table below provides a summary of the process to follow when inactivating a concept in an extension.

File Type	Process
Concept	A new row representing an inactivated version of the concept is added to the Concept file.
	The attributes of the new version of the concept are set as follows: <ul style="list-style-type: none"><li>• <i>id</i> is set to the conceptId of the concept being inactivated</li><li>• <i>effectiveTime</i> is set to the date the extension will be published</li><li>• <i>active</i> is set to '0' to indicate that the concept will become inactive at the time of publication</li><li>• <i>moduleId</i> is set to identify a module in the extension</li><li>• <i>definitionStatusId</i> is set to 900000000000074008   Primitive</li></ul>
Stated Axiom	Inactivating a concept's active relationships involves adding a new row to the OWL axiom reference set file, which inactivates the member of the reference set representing the stated axiom of the concept being inactivated.  For more information please refer to <a href="#">5.4.6.3 Remove Members from a Reference Set</a> .

	<p>The attributes of the new version of the concept are set as follows:</p> <ul style="list-style-type: none"> <li>• <i>id</i> is set to the UUID of the reference set member referencing the concept being inactivated</li> <li>• <i>effectiveTime</i> is set to the date the extension will be published</li> <li>• <i>active</i> is set to '0' to indicate that the reference set member will become inactive at the time of publication</li> <li>• <i>moduleId</i> is set to identify a module in the extension</li> <li>• <i>referencedComponentId</i> is set to the concept identifier of the concept being inactivated</li> </ul>
<b>Inferred Relationships File</b>	<p>An inactive concept does not participate in any active <b>relationships</b>. This means that when inactivating a concept, all active relationships, in which the concept was used as the source, destination or type, must be inactivated. As a result, the inactive concept is removed from the subtype hierarchy, and will no longer have any defining relationships. This reinforces the point that an inactive concept should not be used in any new data entry, as it will not be subsumed by any other concept.</p>
<b>Concept inactivation indicator reference set</b> + <b>Historical association reference set</b>	<p>A new row is added to the   Concept inactivation indicator attribute value reference set  , and the relevant   Historical association reference set  to indicate the reason that the concept was inactivated, and to specify any relevant associations with active concepts (e.g. possible replacements for the inactivated concept).</p> <p>When inactivating a concept, it is best practice is to specify the reason that the concept was inactivated in the   Historical association reference set  . Please refer to <a href="#">5.2.1.3 Attribute Value Reference Set</a> for an example of the   Concept inactivation indicator attribute value reference set  , and to <a href="#">5.2.3.1 Component Inactivation Reference Sets</a> for a list of valid inactivation indicator values.</p> <p>Additionally, depending on the inactivation reason, a row should be added to the relevant   Historical association reference set  . This helps to support extension consumers with the change management process, by (for example) specifying possible replacements for the inactivated concept. Please refer to <a href="#">5.2.5.1 Historical Association Reference Sets</a> for a list of historical association reference sets, and an example of the   REPLACED BY association reference set  .</p> <p>Please refer to <a href="#">3.2.6.3. Managing Component Inactivation</a> for further information.</p>