

## 3.6 Apply Mapping Reference Sets

This section considers the terminology services required to apply a [mapping reference set](#) to map data between SNOMED CT and another code system.

A [mapping reference set](#) is a [reference set](#) designed to support the process of [mapping](#) data from one code system, classification, or terminology to another code system, classification, or terminology.

### Notes

- There are several types of *mapping reference set* each of these supports different types of mapping.
  - [Simple Map from SNOMED CT Reference Sets](#) and [Simple Map to SNOMED CT Reference Sets](#) support one-to-one maps from or to SNOMED CT.
  - [Complex and Extended Map from SNOMED CT Reference Sets](#) support maps where additional information is required to determine the correct mapping from SNOMED CT to a statistical classification such as [ICD-10](#).
  - Maps which have a requirement to indicate the degree of correlation between a SNOMED CT concept and other codes. (See [Map Reference Sets](#) which use "correlation" within their type / name.)
  - [Code to Expression Reference Sets](#) support maps from other code systems in cases where some or all the source codes may need to be represented by a [postcoordinated expression](#).

[Table 3.6-1](#) shows a summary of the services required to support effective use of a mapping reference set.

In practice, these terminology services only get the relevant mapping data for the source concept (or source code in the other code system). The relevant mapping data may be one or more rows from the mapping reference set. If there are no rows, this implies that there are no maps from the source code. Otherwise, the rows of returned mapping data must be parsed using the rules applicable to the particular map to determine the result. These rules are found in the mapping guide associated with the particular map or mapping reference set type. For example, the mapping rules for the SNOMED International ICD-10 map are documented in the [ICD-10 Mapping Technical Guide](#).



SNOMED International provides an online [Mapping Tool](#) that can be used to access maps that it distributes. This tool enables guests to view the maps (see <https://mapping.ihtsdo.org/>).

**Table 3.6-1: Services Required to Access Mapping Data**

Practical Requirement	Status <sup>1</sup>	Required Terminology Services <sup>2</sup>	Additional Terminology Service Dependencies <sup>3</sup>
Enable the selection of SNOMED CT edition and version to be used.	REQUIRED	<a href="#">4.1 Select Edition and Version</a>	N/A
Get maps for a specified concept in an identified map reference set <sup>4</sup>	REQUIRED	<a href="#">4.12 Get Mapping Data</a> <ul style="list-style-type: none"><li>Get maps based on combinations of refsetId and referencedComponentId</li></ul>	<a href="#">3.1.10 Get Data from a Reference Set</a>
Get maps for a specified code in another code system in an identified map reference set <sup>4</sup>	REQUIRED	<a href="#">4.12 Get Mapping Data</a> <ul style="list-style-type: none"><li>Get maps based on combinations of refsetId and mapTarget</li></ul>	N/A



When applying a mapping reference set it is important to note that most mapping reference sets are designed to be unidirectional and will not produce reliable results when used to map codes in the opposite direction.

### Footnotes

<sup>1</sup> Applications designed to address this use case must support the practical requirements marked as *Required*. Support for the practical requirements marked as *Optional* is recommended as these provide enhanced functionality that may be required by some users.

<sup>2</sup> In most cases, a reference to a subsection of [4 Terminology Service Types](#), implies a requirement for all services marked as *Required* in that subsection. However, where a reference is followed by a bulleted list, that list specifies the specific terminology services required. Some of the specific services listed as required for an *Optional* practical requirement may be marked as *Recommended* in the referenced subsection.

<sup>3</sup> The *Additional Terminology Service Dependencies* column contains references to services on which a *Required Terminology Service* depends. This column does not restate dependencies on services listed as required service or additional dependencies for essential requirements listed in earlier rows. A full list of the dependencies of each terminology service is provided in the relevant subsection of [4 Terminology Service Types](#).

<sup>4</sup>

Most mapping reference sets are designed to be unidirectional and will not produce reliable results when used to map codes in the opposite direction. Check the documentation before using a mapping reference set and only use it for mapping in the direction specified. For example, the ICD-10 extended map distributed by SNOMED International is designed to be used to map from SNOMED CT to ICD-10.