

4.3. Pre-defined and Customized Reference Sets

SNOMED CT specifies a set of reference set types that follow specific patterns. However, different purposes and uses may impose different requirements. Therefore, flexibility is a core feature of the reference set mechanism. This flexibility is manifested by the fact that reference sets can be applied in ways that meet specific requirements; options include:

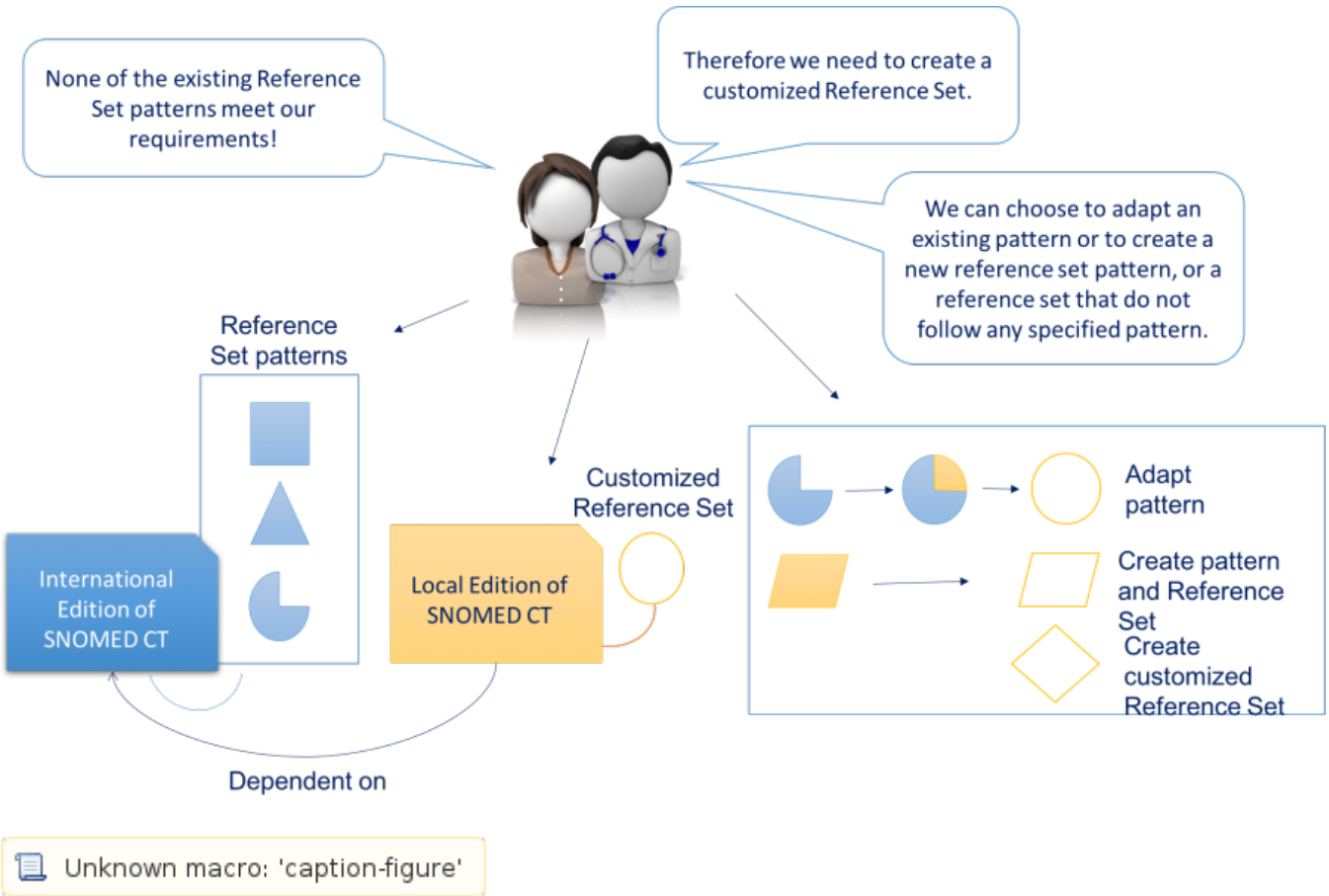
Option	Description
Create reference set based on existing pattern	Creating a simple reference set, an ordered reference set (or any other reference set) using the predefined pattern for this reference set type. Without modifying or constraining the structure of this pattern.
Create reference set based on existing pattern, however constraining the datatypes of specific attributes	Create a reference set using a predefined pattern, however specializing the descriptor template, by creating a copy and replacing the Attribute description or Attribute type values with a subtype.
Customize reference set by defining a new reference set pattern	Define a new reference set pattern based on new or existing reference set types, attributes, and attribute values. (Since you could use an existing type as a starting point.)

This means that if the pattern of existing reference set types is not sufficient for local requirements, then new reference set patterns can be specified and included in a national or local SNOMED CT Extension.

Customized Reference Sets

There might be situations where none of the defined reference set patterns are sufficient to fulfill the requirements for a specific use case for an implementing organization/project. In this case, it is possible to develop customized reference sets, which include the exact attributes necessary to meet the requirements.

If an existing pattern almost meets the requirements a developing organization may want to simply add additional attributes to an existing reference set pattern. If none of the existing patterns can be adapted it is also possible to develop a new reference set pattern or a reference set that does not follow any specified pattern. The different approaches to customizing a reference set are illustrated in the figure below.



When creating customized reference sets, it is important to ensure that the structure and content of the reference set can be automatically processed and validated. Therefore, customized reference sets should be clearly specified, which can be done specifying the reference set pattern in the [reference set descriptor](#). Specifying customized reference sets in the [reference set descriptor](#) enables users of the reference set to validate any reference set of this particular pattern against the specified definition.