A Shared Ontological Bridge Between ICD-11 and SNOMED CT

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Audience
People involved in developing and using formal maps between SNOMED CT and coding and classification systems such as ICD-10.

Objectives
- Describe some of the key differences between ontologies and classification systems
- Describe how a subset of SNOMED CT (a “common ontology”) can be used to formally define the building blocks of a classification system such as ICD-10 or ICD-11
- Describe how these building blocks can be assembled to form different overlapping classification system.

Abstract
The WHO is currently preparing 11th release of the International Classification of Diseases. This process is different from past revisions in several aspects, regarding web-based authoring workflows, but also the overall architecture, which includes a central hub that aggregates the terminological content that will be used to create multiple, purpose-specific classifications called Linearizations. While linearizations will differ in terms of scope and granularity, the central hub or Foundation Component will allow the relationships between different linearizations to be defined in a formal and computable basis. In order for this to work, the definition of the foundation components must also be based on a formal computable model called the Common Ontology.

The Common Ontology serves two purposes:
1) It provides a formal and verifiable definitions for the foundation components, allowing them to be validated for consistency and completeness.
2) It provides a computable map from the observations recorded in the clinical record to the corresponding classes in target linearizations

All of the information in the common ontology will be shared (or “common”) between foundation component and a subset of SNOMED CT. It is this relationship that makes both of the above goals possible. This presentation will describe the principles and goals of the common ontology and will demonstrate how SNOMED CT is being used to define foundation components and corresponding linearizations.