4 SNOMED CT Overview

SNOMED CT is a clinical terminology containing concepts, with unique meanings and formal logic-based definitions, organized into hierarchies. The clinical content of SNOMED CT includes diagnoses and other clinical findings, clinical observations, drug products, organisms, specimen types, body structures, and surgical and non-surgical procedures.

SNOMED CT enables clinical information to be consistently represented at an appropriate level of detail within electronic health records. The relationships within SNOMED CT then facilitate meaning-based retrieval of this information at the preferred level of detail for the given query. This provides significant flexibility and facilitates the integration of data from divergent models of use, such as different user interfaces or databases, into convergent models of meaning, such as for the representation of data for reporting or statistical analysis purposes. Clinical systems can thereby query and analyze electronic health record data recorded in different settings, at varying levels of granularity and across multiple axes. This enables SNOMED CT to support a variety of clinical processes, which may require either detailed or high-level information - from investigation, to diagnosis and clinical research.

SNOMED CT content is represented using three main types of component:

- Concepts - unique clinical meanings
- Descriptions - human readable terms used to refer to a concept
- Relationships - links between concepts that help to define the meaning of each concept

In addition to these three types of components, SNOMED CT also supports:

- Expressions – a structured combination of one or more concept identifiers used to represent a new clinical meaning
- Reference sets – a mechanism for representing references to SNOMED CT components for a variety of purposes, including subsets, aggregation hierarchies, maps and language preferences

In this section we introduce these SNOMED CT features and explain how they may be used to support analytics over health data. For more detailed information about SNOMED CT features, please refer to the SNOMED CT Starter Guide and the SNOMED CT Technical Implementation Guide.

We also discuss the specific benefits enabled by using SNOMED CT. For more details about the benefits of SNOMED CT please refer to Building the Business Case for SNOMED CT.