

SNOMED CT Introduction

What is SNOMED CT?

SNOMED CT is a high-quality, comprehensive, international, logic-based reference terminology that is used to present clinically relevant information. It began with the union of NHS Clinical Terms Version 3 and SNOMED RT; this provided the initial scope which has since been updated to reflect contemporary clinical practice and changes in medical technology.

Content development is provided by expert clinicians driven by the requirements of user communities. This includes core content for use internationally and content relevant to national extensions for local implementation.

Its logic-based definitions represent terminological knowledge, or what is always true about the meaning of concepts. It consists of codes, that correspond to concepts, arranged in a polyhierarchical manner, as well as relationships between the concepts, which further define the meaning.



Description logic

Description logic (DL) is the formal foundation of meaning in SNOMED CT. The way that concepts have been modeled in SNOMED CT permits them to be represented using description logic. A DL *reasoner* is used to classify SNOMED CT. The DL reasoner also helps test expressions for subsumption and equivalence.

Why use SNOMED CT?

It supports semantic interoperability and multi-purpose use within electronic health applications (primarily electronic health records or EHRs) and has many advantages over other terminologies. They include:

- Consistent, and formal expansion of, content through centralized authoring and maintenance (International Release)
- Flexibility to meet most terminological requirements based on national, regional, language, application, or customer (Extensions)
- Clear, singular meaning of concepts
- Reliable, consistent, and reproducible clinical documentation
- Enhanced high-quality healthcare delivery to individuals and populations