







SNOMED CT - Adding Value to Electronic Health Records

Making the EHR Meaningful

Throughout the world dedicated health professionals work hard to provide high quality care to a growing population with an ever-wider range of health needs. Despite these best efforts, avoidable deaths and injuries occur, as busy practitioners miss key information about their patients or overlook evolving standards of best practice. The use of an Electronic Health Record (EHR) is a significant step forward. It improves communication and increases the availability of relevant information.

Moving from paper to electronic documents is only part of the solution. The remaining challenge is to identify and link key facts in oceans of relevant data. A clinically validated, semantically rich, controlled terminology, like SNOMED CT, helps to make an EHR meaningful. Using SNOMED CT to represent clinical information allows meaning-based retrieval of information. A SNOMED CT enabled EHR can be used to identify key facts, presenting opportunities to reduce the risks of errors of omission or commission.

As a global enterprise, maintained by an international collaborative effort, SNOMED CT offers a vendor-neutral resource. As the clinical terminology of choice for EHR systems throughout the world, SNOMED CT is increasingly being used to link clinical knowledge in ways that contribute to the quality, consistency and safety of healthcare delivery.

Comprehensive Content for Clinical Recording, Retrieval and Reporting

SNOMED CT has a broad scope of coverage. It includes concepts representing the wide range of types of information that need to be recorded in clinical records.

SNOMED CT has a logical multi-axial subtype hierarchy. This allows it to express information with different levels of detail and precision. As a result, practitioners from different disciplines and specialties can record appropriate data at different stages in the delivery of patient care.

SNOMED CT represents logical semantic relationships between concepts. This allows consistent retrieval of clinical information for a wide range of purposes, including decision support, audit, epidemiology, research, service management, billing and statutory reporting. Maps from SNOMED CT also allow coding of diagnoses and problems in ICD-9-CM, ICD-10 and ICD-10-CM.

Delivering Benefits with SNOMED CT

SNOMED CT is the global clinical terminology that adds processable meaning to an Electronic Health Record. By enabling effective, meaningful representation of clinical information, it plays a pivotal role in world-wide endeavors to deliver cost-effective, high-quality healthcare.

SNOMED CT is a valuable component of the EHR. It has been developed and validated by clinical, technical and terminological experts. Realization of its potential benefits depends on implementation, deployment and practical use.

The IHTSDO is increasing its strategic emphasis on activities to encourage, guide, advise and support key players and stakeholders in SNOMED CT implementation by:

- Enhancing implementation guides and providing easier online access to updated guidance.
- Developing an inventory of publicly accessible SNOMED CT training resources.
- Providing an Implementation Advisor training scheme to increase the availability of SNOMED CT skills.
- Cooperating with healthcare providers to create reusable elements for use in business cases and requirements for SNOMED CT implementations.
- Cooperating with other standards bodies on standards for terminology services and to integrate relevant terminology elements within other healthcare standards.



- IHTSDO delivering
- SNOMED CT*
- the global clinical terminology



www.snomed.org

Versioning and Regular Updates

Healthcare terminology evolves and grows with advances in understanding and the introduction of new treatments. Six-monthly updates to SNOMED CT help users keep pace with these changes and add to the breadth and depth of coverage. Updates may also refine logical relationships between concepts, in ways that increase the power and flexibility of meaning based retrieval.

Updates deliver important benefits for users, but changes also create challenges. SNOMED CT provides a robust versioning mechanism that allows historically consistent views of all earlier versions from a single *full* release file. This advanced approach to terminology versioning also enables updates to be applied using small *delta* release files, containing only the changes from the previous version.

About SNOMED CT

SNOMED CT is a standard clinical terminology with specific support for multi-lingual translation. It is in use in more than fifty countries. SNOMED CT is owned, maintained and distributed by the International Health Terminology Standard Development Organisation (IHTSDO).

IHTSDO and its National Members

IHTSDO is a not-for-profit association that is owned and governed by its national Members. More than twenty-five countries are Members of IHTSDO, and more join every year.



Extensible and Configurable

SNOMED CT has an extensible design which allows National, local and vendor specific requirements to be addressed. Additional content is created in namespaces allocated to licensees to ensure unique identification.

Extensions are structured in the same way as the SNOMED CT International Release. This allows them to be fully integrated avoiding the need for customized processing of local codes.

SNOMED CT can be configured and optimized to meet specific requirements, using a standard representation for derivatives that refer to sets of SNOMED CT components. This *Reference Set* mechanism facilitates creation, maintenance and distribution of terminology subsets and value sets.

Other uses of Reference Sets include representing:

- Maps to/from other code systems
- Ordered lists
- Customized hierarchical view
- Language preferences

Affiliate Licensees

The IHTSDO has a growing community of Affiliate Licensees consisting of hundreds of software developers, vendors, healthcare providers and academic bodies. SNOMED CT is available free for use by Affiliates and their sub-licensees in IHTSDO Member countries. Use in other countries is subject to openly published licensing fees that are designed to be affordable. Reduced fees, in a few cases free, apply in lower income countries.

Further Information

More information about SNOMED CT is available from www.snomed.org. This includes up-to-date copies of this information sheet and others including:

- SNOMED CT Learning Resources
- SNOMED CT Supporting Meaningful Use
- Cooperation with other Standards Organizations

For further information about IHTSDO please see www.ihtsdo.org or contact us at info@ihtsdo.org.