

12.2.3 Apelon

Apelon is an international informatics company focusing on data standardization and interoperability. Leading healthcare organizations use Apelon's products and services to better manage terminology assets. Apelon solutions help healthcare application vendors, biomedical researchers, providers, biotech companies and government agencies improve the quality, comparability, and accessibility of clinical information. ¹

For more information please visit <http://www.apelon.com/>.

SNOMED CT plays a central role in many Apelon products and projects. Apelon tools feature navigation and visualization tools to support SNOMED CT in a variety of ways. Apelon also undertakes bespoke content development and consultancy work in healthcare and biomedicine using SNOMED CT.

The Apelon Terminology Development Environment (TDE) software was used by the College of American Pathologists to build and maintain the SNOMED CT International Edition prior to the formation of IHTSDO. Apelon software continues to be used by major healthcare organizations and some National Release Centers to maintain SNOMED CT extensions, maps and subsets.

Apelon Distributed Terminology System

The Apelon Distributed Terminology System (DTS) offers a variety of human and computer interfaces to navigate, visualize and query SNOMED CT. DTS allows users to create custom extensions to SNOMED CT and perform incremental description logic classification to ensure that the extensions are consistent with the base version of SNOMED CT. DTS permits navigation, and side-by-side comparison of concepts across multiple SNOMED CT versions. Features of Apelon DTS supporting analytics and data retrieval include:

- **Subsetting:** DTS allows users to create customized SNOMED CT subsets using advanced logic techniques. The user is able to create extensional and intentional value sets of concepts for queries based on both hierarchical and non-hierarchical relationships.
- **Data normalization:** DTS supports the matching of text input to standardized terms and concepts via word order analysis, word stemming, spelling correction and term completion
- **Code translation:** DTS supports the mapping of clinical data to standard coding systems such as SNOMED CT, ICD-9, 10 and CPT

Projects Using SNOMED CT

Apelon frequently choose to rely upon SNOMED CT in their consulting work as the overarching reference terminology. Recent projects using SNOMED CT include:

- Work with a major performance measure developer to create a large number of SNOMED CT value sets representing the inclusion and exclusion criteria for quality measures. SNOMED CT supplies the expressivity for the detailed distinctions amongst disorders and patient characteristics that is essential for this work.
- Use of SNOMED CT as the "backbone" terminology in a number of mapping projects for Health Information Exchanges. A small value set of SNOMED CT concepts serves as the "source of truth" for determining appropriate maps, and then codes from other terminologies are assigned based on whether they are a good fit with the SNOMED CT concept. This strategy provides a way to capture the precise intent behind the often-fuzzy language found in clinical documents.
- Use of SNOMED CT to index patient education materials for a major content provider. Documents are retrieved via an 'Infobutton' request in the EMR based on codes found in the patient record.

¹ www.apelon.com/