



Lessons learned from starting to implement SNOMED CT

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Audience

Organizations and vendors that are in the planning or start-up phase of implementing SNOMED CT.

Objectives

The presentation contains lessons learned mainly in the areas of electronic healthcare records (EHR), information sharing, mapping of terminologies in information models to SNOMED CT, and training of mappers. The lessons learned are relevant when introducing SNOMED CT in a healthcare organization.

Abstract

National eHealth – the strategy for accessible and secure information in health and social care – is a Swedish initiative aiming at improving information management within the healthcare and social services sector. SNOMED CT is one tool in this strategy. To gain experience from SNOMED CT implementation, the National Board of Health and Welfare (host of the National Release Center of SNOMED CT) funded a number of pilot projects during 2013. Our project was one of these, focusing on facilitation of information sharing by using SNOMED CT in two application areas as described below. Furthermore, the project initiated a dialog with the EHR vendor concerning future SNOMED CT implementation.

One area was transfer of discharge summaries from hospital care at Östergötland County Council to municipal home care. A discharge summary consists of a template with encoded headings, associated free text fields, and instructions about intended content. These headings were mapped to SNOMED CT.

The other area was transfer of information from the EHR system at hospitals in three counties to the Swedish Stroke Register, a national quality register. The specification of information requested by the register was analyzed. Then, an EHR template was outlined, taking into account the clinical stroke process requirements, quality register requirements, and the information model of the EHR system. The draft template was based on mappings to SNOMED CT to facilitate a mutually agreed template. That means a template common for the three county councils, as well as information transfer to the register, and at the same time reduce the need for double documentation, information searching and other manual routines.

Lessons learned include that mapping EHR template components and other EHR objects to SNOMED CT concepts holds potential benefits, regardless of whether one's EHR system can handle mappings. Mapping activities may aid review and management of existing and development of new templates. Furthermore, mappings may be used as a common point of reference when information is shared. Mapping ambiguous template headings to SNOMED CT concepts was found to be time consuming and uncertain and mapping seems to be most useful when EHR contents are structured. These mapping source prerequisites imply that existing documentation practice needs to be revised and that organizations must support end users in that process. The project also concluded that mappings would be even more advantageous if EHR systems can handle mappings of different objects types. Organizations also need to allocate adequate resources for managing its own mappings as well as contributing to the development of SNOMED CT as such.

Finally, the project found that training of mapping personnel benefits from integrating theoretical instruction and practical use of SNOMED CT, and that finding the correct concept in SNOMED CT calls for clinical expertise in order to be successful.