Implementation of SNOMED CT in Dutch Hospitals

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Audience

Implementers, physicians, researchers, decision makers.

Objectives

We explain how the Dutch national reference set of clinical diagnoses is created, based on SNOMED CT (SCT) and cross-mapped to ICD-10 classification and the Dutch casemix system (DBC) for point-of-care registration of diagnoses for multiple use, such as financial settlement, healthcare data and scientific research.

Abstract

The registration of diagnoses is not standardized in Dutch hospitals. Registration of diagnoses may vary from registration in free text, ICD classification (version 9 or 10) or DBC-code system to using a locally developed terminology set. The variation in registration method may lead to potential misapprehension between health care professionals and hinders exchange of clinical information with potential harmful consequences for patients.

The benefits of an uniform standardized point-of-care registration of diagnoses are clear. Key goal is to increase the quality and efficiency of point-of-care registration of diagnoses by developing the Dutch reference set of clinical diagnoses, the Diagnosethesaurus (DT). The DT is based on SCT and contains Dutch clinical terms used and recognized by Dutch clinical healthcare professionals, with cross-mapping to ICD-10 and DBC-code system for data, research and financial settlement purposes.

During development of the DT we encountered several difficulties. One of the difficulties we met, was the variety in used and desired terms between hospitals, specialisms and even physicians. The point-of care users expressed the need for specific terms for clinical and administrative purposes, but didn't comply with our terminology guidelines for diagnoses or the editorial guidelines of SNOMED CT. We will explain how we dealt with these difficulties in cooperation with the users and terminology experts of Nictiz.

The development of the DT is still ongoing. To achieve an acknowledged and widely accepted terminology set, each university hospital was asked to validate a subset of the DT, comprising specific medical specialisms, on correctness and completeness of the subset. In addition several general hospitals were asked to do the same. We will explain the process and how we manage the outcome of this process. Cross-mapping to DBC-code system was authorized by the respective medical specialist organizations and DBC-Onderhoud, independent expert center on healthcare products. The National Institute for Public Health and the Environmen (RIVM), the Dutch WHO-FIC collaboration centre, will authorize the cross-mappings to ICD-10. The authorization and validation process is expected to be ready end of August 2014.

The DT is an ongoing project and maintained by DHD in cooperation with its stake holders and end users.