Using SNOMED CT enabled EMRs to assess the quality of care for patients with head and neck tumors

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Audience
This presentation will be of interest to those interested in the feasibility of using SNOMED CT enabled electronic medical records (EMRs) to assess the quality of care.

Objectives
To study the use of SNOMED CT enabled EMRs to assess the quality of care for patients with head and neck tumors. The clinical care processes will be unraveled in clinical building blocks (CBBs) using parts of the Detailed Clinical Model (DCM) format to release pieces of care information for multiple use.

Abstract
The use of SNOMED CT enabled EMRs goes beyond direct patient care. The terminology can, for instance, facilitate functions such as decision support, health research, and assessment of quality of care.

In our study we evaluate if the information needed for assessment of the quality indicators for patients with head and neck tumors, could directly be extracted from SNOMED CT enabled EMR’s. All centers for patients with head and neck tumors in the Netherlands (n=13) have defined a set of quality indicators with which the quality of care can be assessed. The indicators are based on the patients care pathway and have been formulated from different perspectives (patients, care givers, hospitals, purchasers). Usually special registries are being built to collect the data needed to assess the quality of care on the quality indicators creating an extra registration burden for care givers. To explore if these data could directly be extracted from EMR’s we plan a pilot study in four centers in the Netherlands.

An important step to extract the data from different hospital information systems is standardization of the information needed. CBBs containing SNOMED CT have already been defined in the UMCs, together with the national institute for IT in healthcare (Nictiz). So far this is the set of generic CBBs, developed with patients' transfer in mind. In our pilot study refinements and extensions to this set will be developed by the health professionals in collaboration with information standards experts. The work flow can be used as basis for the description of the blocks, but so can be the quality indicators. Both methods will be studied to learn about outcome differences. It will be studied how the balance between generic CBBs and disease specific CBBs has to be found.

This study is the first in The Netherlands in which the use of clinical building blocks and EMRs linked to SNOMED CT as source for quality indicators will be evaluated. We use this experience with quality indicators for patients with head and neck tumors for other patient groups in the future. Preliminary results of our pilot study will be presented.