



Meaningful Use Stage 2 Update: Deploying SNOMED CT to provide decision support in the EHR

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Audience

EHR developers, Terminology vendors and managers, National release center staff and leadership

Objectives

- Understand the impact and requirements of Meaningful Use stage 2 on US healthcare including requirements relating to clinical decision support
- Appreciate the role that SNOMED CT and other healthcare terminologies play in the ONC Standards and Interoperability Framework
- Identify the features of SNOMED CT ontology that contribute to decision support in electronic health records

Abstract

Meaningful Use is changing the panorama of EHR deployment in US healthcare¹. Incentive dollars paid to eligible providers (EP) and hospitals (EH) under the Affordable Care Act require the installation of certified EHR software and the use of that software to meet increasingly stringent requirements supporting patient care, communication with the patient, public health infrastructure, and enhanced clinical decision making. Those EPs who attested in the first year of the MU program are now laboring to address the requirements of stage 2 which includes hurdles such as: secure messaging via portal with 5% of patients, documentation of structured family history in 20% of patients, recording electronic progress notes in 30% of patients, providing electronic record summaries for 10% of patients on transfer of care and implementing five instances of decision support technology in their EHR. Healthcare systems are increasingly compliant with reference terminology standards within their electronic health records to comply with these objectives.

Informatics research has amply demonstrated that decision support is only effective when the technology is integrated into the workflow of the clinician, supports directed immediate action and employs information about the patient which customizes the advice and makes proposed actions relevant and context specific². This implies that the EHR is the best venue for deployment of decision support and that electronic record data should be structured and coded with ontologies that support decision logic requirements.

This presentation will briefly inform the IHTSDO community regarding stage 2 of Meaningful Use with attention to role of required terminology reference standards, especially SNOMED CT and LOINC. Features of the SNOMED CT concept model that complement and support decision support technology deployed in the electronic health record at the University of Nebraska will be demonstrated and discussed. Limitations “at the edge” of the SNOMED CT concept model and difficulties that Nebraska has encountered with integrated decision support across the spectrum of healthcare terminology will be presented by example and discussed.

References

1. <http://www.healthit.gov/providers-professionals/ehr-implementation-steps/step-5-achieve-meaningful-use>



2. Kawamoto K, Houlihan CA, Balas EA, Lobach DF. Improving clinical practice using decision support systems: a systematic review. *BMJ*. 2005 Apr 2;330(7494):765.