

Implementing SNOMED CT Clinical Extensions to Provide Decision Support and Comply with Meaningful Use: an Epic Case Study

James R. Campbell MD University of Nebraska Medical center Omaha, NE

Audience

Clinician developers of EHR technology, Terminology vendors and managers, National release center staff and leadership.

Objectives

1)Review the requirements of Meaningful Use stages 1&2 for Eligible Provider reimbursement as pertinent to terminology; 2)Discuss the procedures for implementation of SNOMED clinical extensions in Epic; 3)Demonstrate how SNOMED CT is employed in clinical decision support, reporting and EHR functionality

Abstract

The University of Nebraska Medical Center (UNMC) successfully converted their EHR from GE Centricity Enterprise to Epic (v2010) in April, 2012. This included problem list, allergies, procedure history and past medical history data that was coded in SNOMED CT supplemented with the Nebraska Lexicon(C) extension namespace first deployed in 2004. Epic employs SNOMED CT concept and relationship data in their EHR and has expanded their software functionality to meet Meaningful Use requirements for reporting and decision support. Conversion and specification of UNMC extension concept data required that support for SNOMED CT defining attributes be expanded in Epic, accomplished in collaboration with Intelligent Medical Objects, a terminology vendor which supports many Epic implementations. 98% of our clinical practice group successfully attested to Meaningful Use stage 1 during the first quarter of 2013.

In this presentation I will summarize those elements of Meaningful Use which require SNOMED CT terminology. I will demonstrate and discuss Epic enhancements to the clinical interface which employ SNOMED CT for reporting, clinical presentation and decision support. I will discuss the issues for EHR interoperation that implementation of a SNOMED CT extension namespace must address. I will show how extension concept data UNMC has employed over the past decade is now supported in Epic. I will discuss challenges I faced as the clinical terminology manager for our EHR and contrast our SNOMED CT deployment strategies with those employed by other Epic clients.