Moving from ICD-9-CM Legacy to SNOMED CT Based Clinical Content – An Implementation in Progress...

Presenter: Robyn Kuropatwa, Dennis Lee & Kathy Giannangelo (RKL)

Audience
Anyone involved in or supporting implementations including project managers, clinical leaders, mappers, subset and tooling developers and those involved in stakeholder engagement.

Objectives
To explain how the feasibility of proceeding with SNOMED CT implementation was assessed.
To share the approach used to clean and map legacy diagnoses and then build specialty specific subsets.
To describe the methods, tooling and documentation used to support review and audit.

Abstract
In the province of Nova Scotia, Canada, it is required that physicians record and report clinical diagnoses and health service description information for each patient visit. This clinical information is based on ICD-9-CM (1996) and the Canadian Classification of Procedures both of which have been modified locally and are outdated. The clinical information collected is used for planning, payment and audit. With feasibility to record and report clinical diagnoses with SNOMED CT being shown, the government is now implementing SNOMED CT based specialty specific subsets with the goals to: (a) modernize the clinical information collected and used; (b) represent this clinical information in supporting documentation and reference materials; (c) maintain current uses (e.g. to support province wide planning and physician billing); and (d) to increase the relevance and use of this clinical information by physicians in their practice. This presentation will discuss the work being completed towards these goals related to:

- **Assessment of Feasibility** – How feasibility was assessed from multiple parameters: Technical Feasibility (i.e. the ability to map to legacy data); Organizational Feasibility (i.e. compatibility with existing policy, processes and systems); Improved Content Feasibility (i.e. are existing shortcomings addressed); and Overall Feasibility.
- **Diagnoses Cleaning, Mapping and Validation** – The approach taken on the legacy term set of more than 10,000 diagnoses to clean and then map to SNOMED CT using lexical and semantic approaches. Map quality scoring and validation was completed by members within the team and by physicians. These results were captured using supporting tooling.
- **Building Specialty Specific Subsets** – The method to create over 30 specialty specific diagnoses subsets. These subsets build from the legacy terms used by each specialty. Terms that were identified as being redundant by physician stakeholders were removed. Moving to modernized clinical term sets (subsets) by using the extensional approach where physicians identify specific topics and concepts relevant to their practice which are then identified in SNOMED CT and added. Subset quality and overall success is dependent upon physician engagement.
- **Methods, Tooling and Documentation** – The tooling and documentation required to support the various methods and process steps are essential to ensure they are consistently applied, and the work can be reviewed and audited over the short and long-term. The key tools used will be described.
- **What Has Been Learned and the Way Forward** – Overview of the lessons learned, next steps and pending or yet to be resolved challenges will be discussed.