

201925 SNOMED CT for regional and national chronic disease analysis and reporting

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Summary

This presentation identifies barriers and challenges relating to the use of SNOMED CT, and describes an approach for leveraging SNOMED CT coded data for regional and national analysis and reporting of chronic diseases.

Audience

Clinical, Research/academic

Learning Objectives

1. learn about using SNOMED CT for chronic disease reporting
2. understand the difficulties in using SNOMED CT for reporting
3. understand some techniques for using SNOMED CT, ECL and FHIR value sets for reporting

Abstract

Treatment of chronic disease in primary care has been identified as an area where SNOMED CT is not only beneficial for data capture and exchange, but also for data retrieval and analytics. Techniques for the extraction and analysis of chronic disease data are not currently standardised, and Australian government agencies, software vendors, primary care networks, other organisations and individuals have developed discrete practices in this area. The lack of standard definitions and inclusions for chronic disease reporting in Australia makes it difficult to aggregate and analyse this data nationally, leading to a diminished ability to measure the effectiveness of the health system in treating these conditions.

Ten chronic disease categories were selected based upon national priority areas and common areas of interest in vendor software. For each of the chronic disease categories, Expression Constraint Language (ECL) queries were constructed to identify relevant SNOMED CT concepts, documenting both inclusion and exclusion criteria. Use case specific requirements such as mutual exclusivity and coverage of historical data were considered and an approach was developed to meet these requirements.

The results of the ECL queries were used to create a collection of FHIR value sets, which are being validated by various vendors ahead of publication via the National Release Centre.