SNOMED CT Expo 2019
Kuala Lumpur | Oct 31-Nov 1
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201915 Implementing the new SNOMED CT Medicinal Product Concept Model through mapping to an existing in use Medicinal Product Terminology

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Summary

The presentation will discuss how smaller member nations with limited resources can make use of the new Medicinal Product Concept Model to develop mappings from an existing medicinal product terminology for patient care to core SNOMED CT concepts; both technical and content challenges are addressed.

Audience

Clinical, Policy/administration, Technical

Learning Objectives

1. How smaller member nations with limited resources (both technical and timing) can undertake a mapping project
2. Challenges to be aware of in the mapping
3. Use cases in support of and value of the mapping

Abstract

The IPU have been involved with a project to examine how best to make its medicinal product file useable within the SNOMED environment. The IPU distributes under licence its medicinal product file to about 99% of pharmacies in Ireland, various government departments and other health facilities. The primary goal for the IPU is to present this medicinal product file with records mapped to appropriate SNOMED Concept Ids. This then allows the various pharmacy system vendors, hospital system developers and other relevant developers to continue to use the IPU Product File while at the same time enabling a means to integrate where necessary to SNOMED.

Every actual product record in the IPU's Product File is linked to a Virtual Medicinal Product (VMP) record. Each VMP record has a number of associated attributes, and those important for mapping are identified.

This VMP record broadly speaking equates to a SNOMED Clinical Drug concept with its own unique Concept ID. Using the SNOMED 'Drug Concept Model - Description of Model & Editorial Guidelines for Modelling and Terming' document, the mapping process involves a search for a single SNOMED Concept Id that has ALL of the requisite attribute matches.

The process of mapping the IPU drugs records is a batch process using in-house database tooling rather than more complex tooling using ontological relationships, working with a set of extracted text files from the SNOMED Jan-2019 release (SnomedCT_InternationalRF2_PRODUCTION_20190131T12) whose data is loaded into an Oracle database. A set of scripts is run against this data in the effort to map records. The results of the mapping process are shared with the IPU Product File pharmacists through worksheets. The pharmacists can then analyse the records and establish the reasons within either the IPU Product File or within Snomed that are contributing to instances of non-matching.

The IPU are currently experiencing a 'Snomed Clinical Drug' to'VMP' mapping success rate of 40%. Issues for this fairly low match rate will be discussed, as will strategies and methodologies for overcoming them, both locally and centrally. The presentation will also discuss areas where matching has been relatively successful, in particular with regard to the description of dose form and active ingredient substance.