

World Organization of Family Doctors International Classification Committee



An international approach to the implementation of SNOMED CT and ICPC-2 in Family/General Practice

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THE UNIVERSITY OF
SYDNEY

INTERNATIONAL HEALTH TERMINOLOGY
STANDARDS DEVELOPMENT ORGANISATION





Aim: Integration of terminology

- ✚ Complimentary and integrated use of appropriate terminology with primary care classifications
- ✚ Recognizes the importance of public health data for population health promotion
- ✚ Adaptation to local language and clinical terminology
- ✚ Implementation models in EHRs which work in grass roots primary care

Terminology work with the IHTSDO

What is the IHTSDO?

Intergovernmental collaboration for the continuing development of SNOMED CT

 Current members:

 Australia

 Canada

 Cyprus

 Denmark

 Estonia

 Lithuania

 New Zealand

 Singapore

 Slovak Republic

 Slovenia

 Spain

 Sweden

 The Netherlands

 United Kingdom

 United States

Wonca/IHTSDO Agreement

- ✚ Wonca to provide input into development of SNOMED CT for GP/FM including a RefSet
- ✚ Agreement to map SNOMED to ICPC-2
- ✚ IHTSDO established an International Family Physician/General Practitioner Special Interest Group and Project Group (Chair appointed by Wonca – Dr Nick Booth)

Wonca/IHTSDO Agreement

- ✚ GP/FP PG Developed work program for mapping, sub-set development and implementation; standards and education (approved Oct 2009)
- ✚ The GP/FP SIG is also responsible for the GP/FP content of SNOMED CT at an international level

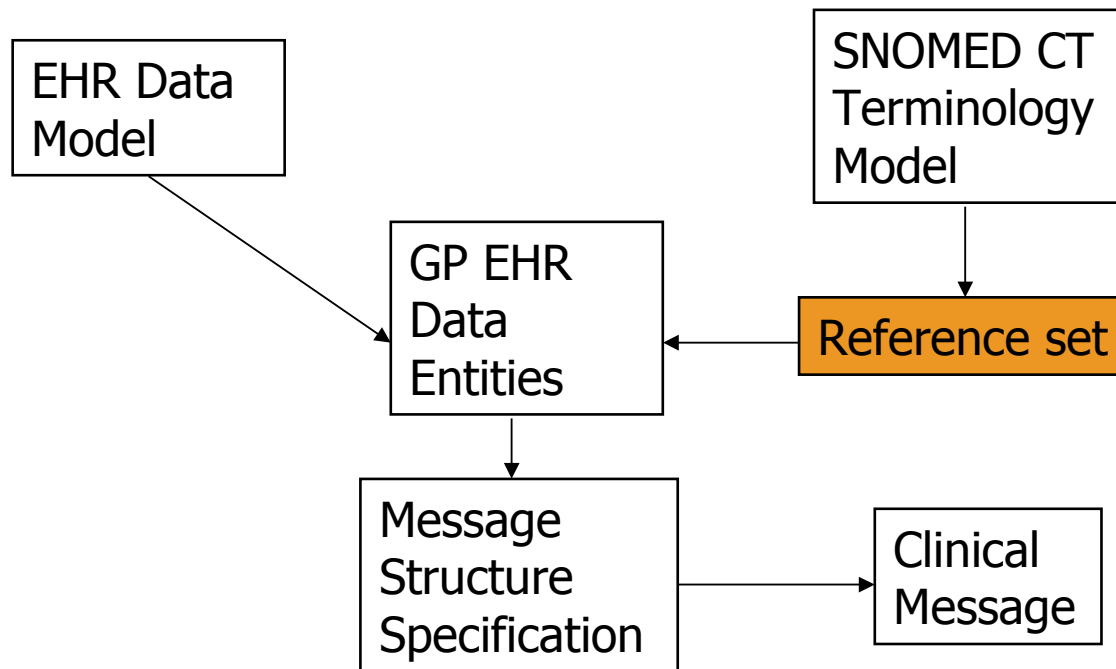
Project overview



Aim:

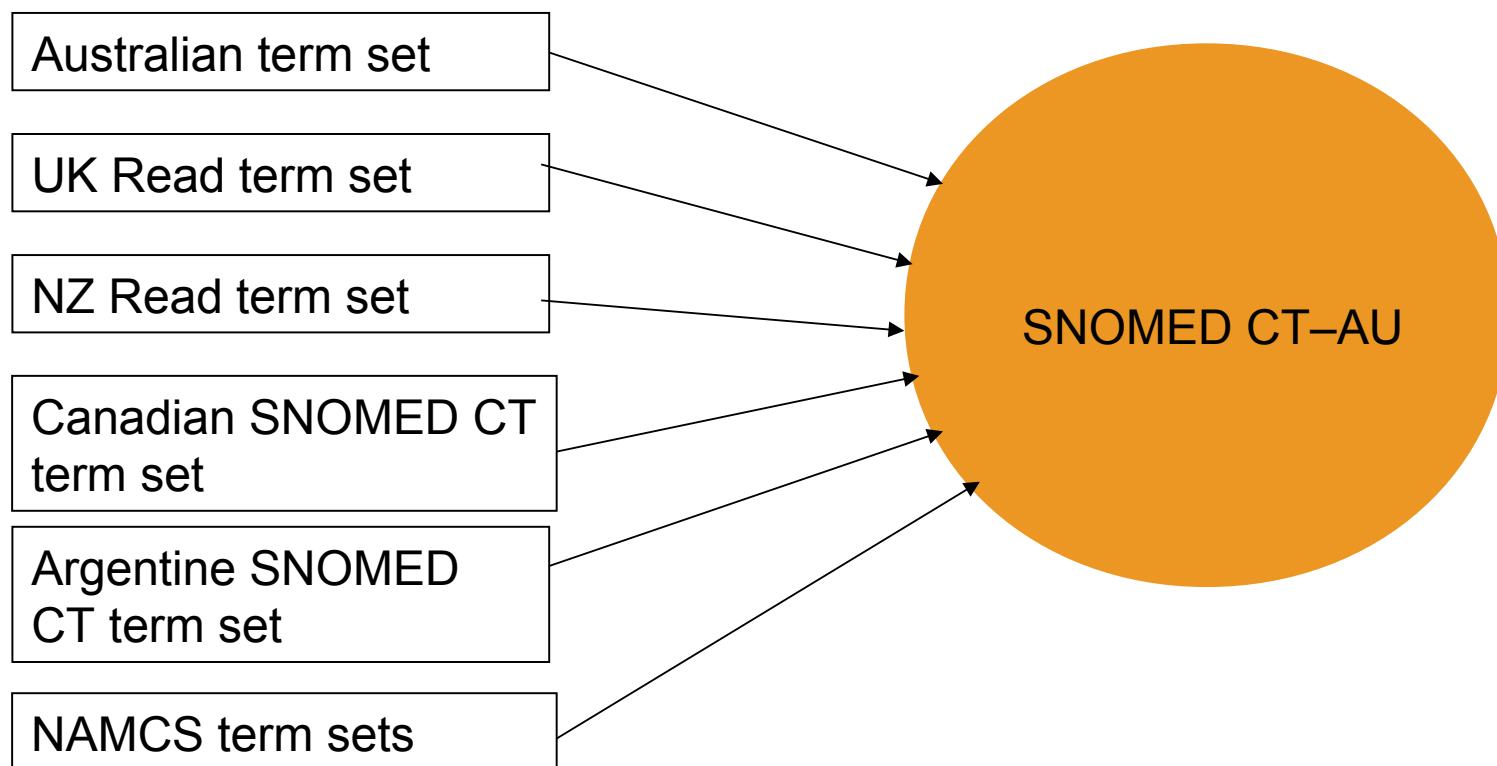
- To develop a group of reference sets (collectively the General Practice Reference Set – GPRS) from SNOMED CT
- Create links from the GPRS to appropriate international classifications used in the general/family practice environment

EHR data building blocks



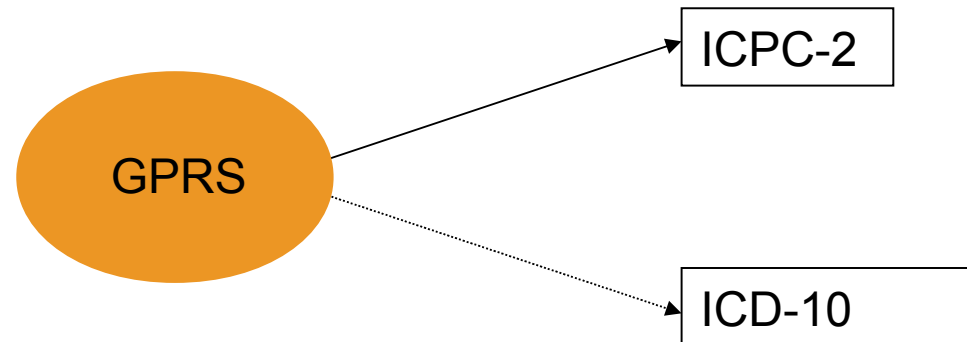


Creating links from source terminologies to SNOMED CT

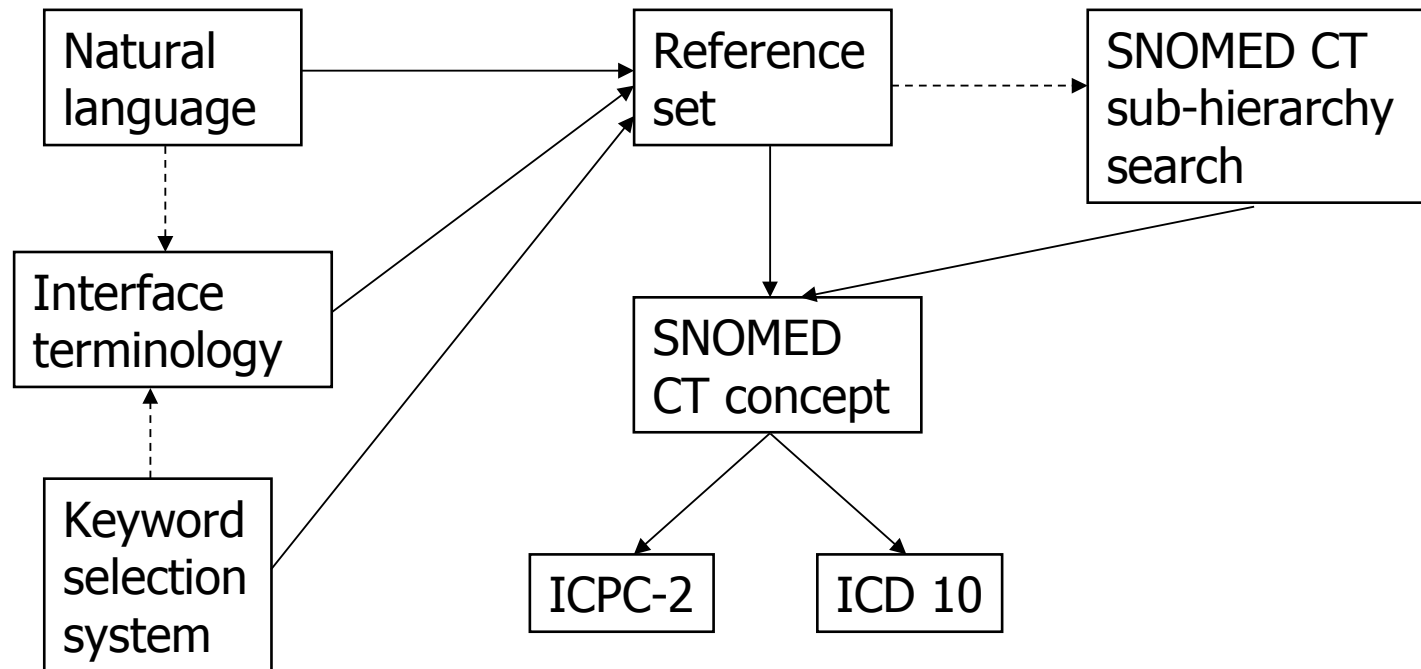




Creating links from the GPRS to classifications



Implementation of RefSets



Project schedule

- ✚ The GP/FP RefSet and ICPC mapping project was divided into three distinct phases:
 1. Requirements gathering and method (9 months)
 2. Build phase (6 months)
 3. Testing and validation phase (6 months)

What has happened to date

- ✚ Phase 1 – Development of project framework
 - ▣ Scoping document
 - ▣ Requirements document (written in line with the IHTSDO quality assurance framework)
 - ▣ Methods document
 - ▣ Project plan for Phases 2 and 3 (???)

Scoping document

- ✚ Outlines the scope of the GP/FP RefSet and ICPC mapping project
- ✚ A preliminary scope statement was prepared by the Project Group
- ✚ International and national standards for applicable information models were researched
- ✚ National Colleges/Academies of General/Family Practice in IHTSDO member countries and SNOMED CT National Release Centres were consulted for feedback on the proposed project scope.



Data elements to be covered by GPRS content in the first project

- ✚ Reason for encounter
- ✚ Problem/diagnosis (Health issue)
- ✚ Including sub-refssets:
 - symptoms, signs, diseases, family history, allergies, ADRs, results, procedures, administrative processes
- ✚ SNOMED CT hierarchies:
 - Finding/disorder
 - Procedure/intervention
 - Observable entities



Scope of the GP/FP RefSet and map to ICPC-2

Reason for encounter

 Uses the definition from the Wonca Dictionary of General/Family Practice.

- “An agreed statement of the reason(s) why a person enters the health care system, representing the demand for care by that person”.

Scope of the GP/FP RefSet and map to ICPC-2

Health issue

 Uses the definition from the European standard CEN 13940-1: Health informatics – system of concepts to support continuity of care – Part 1: basic concepts

- “issue related to the health of a subject of care, as identified or stated by a specific health care party”.
- This is further defined in the notes: “according to this definition, a health issue can correspond to a health problem, a disease, an illness”

Requirements document

- ✚ Gathering and reporting requirements in a formalized manner allows the Project Group to prepare the GP/FP RefSet and map to ICPC-2 against a defined set of objectives and expectations.
- ✚ The requirements were written in the style of the IHTSDO Quality Assurance Framework
 - ▣ This allows each requirement to be measured and assessed against a quality metric.

Clinical requirements

- ✚ The RefSet must be comprehensive, including terms commonly used by GPs/FPs internationally
- ✚ Concepts in the GP/FP RefSet must be able to be mapped to, and correctly mapped to ICPC-2
- ✚ Suggestions for new content in SNOMED CT identified during the development of the RefSet must be forwarded to the IHTSDO for their consideration
- ✚ The implementation of the GP/FP RefSet and map to ICPC-2 should have a positive impact on users' electronic medical records systems.
- ✚ GP/FP software vendors must be provided with education about the implementation of the GP/FP RefSet and map to ICPC-2 in the form of an implementation guide.

Technical requirements

- ✚ Values in the GP/FP RefSet must be linked to the following core clinical headings: reason for encounter and health issue.
- ✚ End users must be able to enter SNOMED CT clinical concepts that are not in the GP/FP RefSet into their electronic medical record if they are not able to find a suitable concept in the RefSet
- ✚ The GP/FP RefSet must be generated using existing termsets used in general/family practice from at least five IHTSDO member countries
- ✚ Both the GP/FP RefSet and map to ICPC-2 should be field tested prior to their inclusion in the SNOMED CT international release
- ✚ Content in the GP/FP RefSet must be kept up-to-date with updates to the SNOMED CT international core

Licensing requirements

- ✚ The GP/FP RefSet must only be released to those with a SNOMED CT affiliate licence
- ✚ The map from the GP/FP RefSet to ICPC-2 must only be provided to users with both a SNOMED CT affiliate licence and an ICPC-2 licence

Methods

1. Create the GP/FP RefSet
2. Create the map from the GP/FP RefSet to ICPC-2

Creating the GP/FP RefSet

- ✚ Terminologies/codesets used in general/family practice will be used as the basis for the GP/FP RefSet
 1. Termsets will be obtained
 2. Termsets will be mapped to SNOMED CT using a specialised mapping tool
 3. Each source termset will be rationalised, amalgamating all instances of multiple source terms mapped to a single SNOMED CT concept
 4. Any listed (and relevant) SNOMED CT concept present in three or more source termsets will be included in the RefSet (demonstrating breadth of use internationally)
 5. Frequency of use will be used to determine an appropriate cut-off for the remainder of the RefSet, based on the relative frequency with which concepts have been used and the breadth of concepts overall



Creating the map from the GP/FP RefSet to ICPC-2

- ✚ The map will be from the SNOMED CT GP/FP RefSet to ICPC-2
- ✚ The most recent versions of SNOMED CT and ICPC-2 available at the start of the mapping process will be used in the mapping

Current status of project

- ✚ Between Phases 1 and 2 at present
- ✚ Phase 1 deliverables going through project governance processes
- ✚ IHTSDO meeting in Sydney next week (10-14 October)
- ✚ Phase 2 to commence shortly
 - First drafts of the GP/FP RefSet and map to ICPC-2 will be available around July/August

What happens next

- ✚ Testing will then begin
 - ▣ Recruitment of testing sites
 - ▣ Testing of GP/FP RefSet +/- map to ICPC-2
 - ▣ Incorporation of comments resulting from testing

WICC involvement

- ✚ We will be looking for volunteers to:
 - ▣ Validate the map from SNOMED CT to ICPC-2
 - ▣ test the products (second half of 2012)