

# World Organization of Family Doctors International Classification Committee



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

Graeme Miller<sup>1,2</sup>, Julie O'Halloran<sup>1,2</sup>, Nick Booth<sup>1</sup>

<sup>1</sup>IHTSDO IFP/GP RefSet and ICPC Mapping Project Group

<sup>1</sup>Wonca International Classification Committee

<sup>2</sup>Family Medicine Research Centre, The University of Sydney



INTERNATIONAL HEALTH TERMINOLOGY  
STANDARDS DEVELOPMENT ORGANISATION







## *The Wonca – IHTSDO agreement*

- Agreement signed in December 2009 to promote co-operation and collaboration between Wonca and the IHTSDO.
- The agreement led to the formation of the International Family Physician/General Practitioner Special Interest Group (chaired by Dr Nick Booth)
- Contains a commitment to developing a mapping program, classifying relevant content in SNOMED CT to ICPC-2.
- As part of this mapping program, a reference set (RefSet) of SNOMED CT containing general/family practice content will be created, and the content of the RefSet will be mapped to ICPC-2



# *Overview of the GP/FP RefSet and ICPC-2 mapping project*

## Aims

-  To create a set of SNOMED CT concepts commonly used in general/family practice (the SNOMED CT general/family practice reference set (RefSet))
-  To map the SNOMED CT general/family practice RefSet to ICPC-2



## *Project schedule*

- The GP/FP RefSet and ICPC mapping project is divided into three distinct phases:
  1. Development of project framework (9 months)
  2. Construction of the GP/FP RefSet and map from the GP/FP RefSet to ICPC-2 (6 months)
  3. Testing and validation of the GP/FP RefSet and map from the GP/FP RefSet to ICPC-2 (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.



# *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: Health informatics – system of concepts to support continuity of care  
“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 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 EMR if they are not able to find a suitable concept in the RefSet
- The GP/FP RefSet must be generated using existing GP/FP termsets 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 the basis for the GP/FP RefSet
  1. Termsets will be mapped to SNOMED CT using a specialised mapping tool
  2. Each source termset will be rationalised, all multiple source terms will be mapped to a single SNOMED CT concept
  3. 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)
  4. 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 have completed project governance processes
- IHTSDO meeting in Sydney next week (10-14 October)
- Phase 2 to commence shortly





## *What happens next*

- It is anticipated that Phase 2 (the production phase) will commence shortly
  - First drafts of the GP/FP RefSet and map to ICPC-2 will be available around July/August 2012
- Testing will then begin
  - Recruitment of testing sites
  - Testing of GP/FP RefSet +/- map to ICPC-2
  - Incorporation of comments resulting from testing



## *Conclusion*

- Improving information management in GP/FM EHRs is essential both for patient management and research.
- Wonca/WICC is working with other international organisations and local Colleges and health authorities to bring about these improvements