

„New vision for primary health care and sustainable development“

# Mapping SNOMED CT to ICPC-3: sources and strategies

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## Paving the way for an end-user terminology that is language-independent

Starting with an existing natural language **thesaurus** (3BT) with connections to a reference terminology (SNOMED CT) and two classifications (ICPC-2 and ICD-10)

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moving towards an end-user **terminology resource**, consisting of a multilingual medical dictionary, SNOMED CT, and relevant classifications (including ICPC-3).

In this project we will develop the SNOMED CT to ICPC-3 map, a crucial part of this endeavor.

### Introduction

**SNOMED CT (SCT)** is a comprehensive clinical terminology used worldwide to standardize the way health conditions, procedures, and other medical concepts are recorded and shared.

The **International Classification of Primary Care (ICPC-3)** is a person-centred classification system designed to capture and organize the variety of health issues encountered in primary care.

Mapping between these systems means creating connections between the terms in each so that information recorded in one can be understood in the other.

There is currently no map from SCT to ICPC-3.

### Methods and Results:

#### Preparation

We identified as important resources:

- SCT GP Refset: a subset of SCT mapped to ICPC-2
- 3BT (Belgium): a thesaurus mapped to SCT providing mapping candidates
- A conversion table from ICPC-3 to ICPC-2

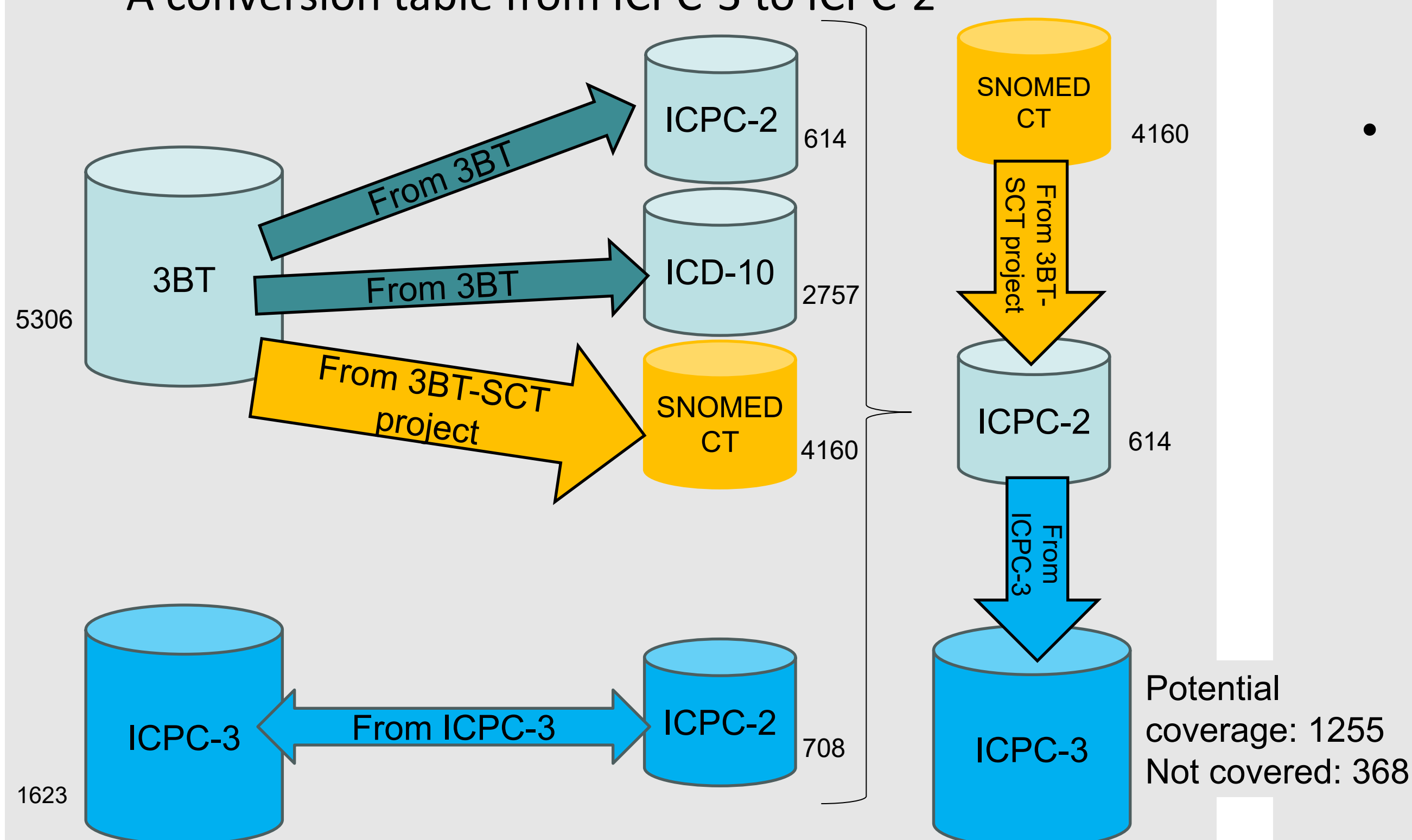


Fig 1: Mapping from 3BT to SCT, SCT to ICPC-2 and ICPC-2 to ICPC-3.

#### 3BT (Belgian Bilingual Biclassified) thesaurus:

a collection of the most frequently used lexical entries for health problems and diagnoses from a sample of GP practices in Belgium, each mapped to SNOMED CT and a combination of one ICPC-2 code and one ICD-10 code.

#### Development

–Exploring 3BT data:

5308 lexical entries linked to

- 4160 SCT concepts
- 614 (84% coverage) ICPC-2 codes

#### Coding

–The mapping between ICPC-2 and ICPC-3 plus the mapping of 3BT generated 1255 (77% coverage) candidate mappings between SCT and ICPC-3.

#### Evaluation:

- The Transmed tool will be used by 2 experienced coders to choose the correct code and validate the mapping.
- A use case on “low-back pain” will be developed to validate the mapping and test the effectiveness of an updated 3BT thesaurus.

#### Future ambition:

- Complete the exact matches from SCT to ICPC-3 by building alternative maps.
- Modernise the Belgian Thesaurus 3BT to a multilingual medical dictionary, linked to SCT and to ICPC-3.