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# Harmonising SNOMED CT and ICNP<sup>®</sup>: a model of effective collaboration

Jane Millar, IHTSDO  
Nick Hardiker, ICN

Delivering

**SNOMED CT**

The global  
language of  
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# Overview

- Motivation behind the collaboration agreement between IHTSDO and ICN
- Ways of working to support the alignment of SNOMED CT and ICNP
- Status update on the development of equivalency tables for nursing diagnoses and nursing interventions
- Benefits for implementation and health care professionals

# ICN

- The International Council of Nurses (ICN) is a federation of more than 130 national nurses associations with a combined membership of more than 16 million nurses worldwide
- Operated by nurses and leading nursing internationally since 1899
- Representing nursing worldwide, advancing the profession and influencing health policy

# ICNP

- ICN has supported the International Classification for Nursing Practice (ICNP) since 1989
- A standardised terminology used to represent nursing diagnoses, interventions and outcomes
- Available in 15 languages
- A formal infrastructure that facilitates cross-mapping and allows output in multiple formats
- A Related Classification in the WHO Family of International Classifications
- Collaboration agreements in place with IHTSDO and other nursing terminology standards development organisations

# IHTSDO and clinical groups

- IHTSDO has responsibility for maintaining and releasing SNOMED CT
- Values the input from international clinical groups alongside IHTSDO Special Interest Groups
  - to assure current SNOMED CT content
  - provide input to relevant SNOMED CT development projects
- This ensures that SNOMED CT is up to date with clinical practice
- Importantly, contribute to ensuring that the relevant language for all healthcare professional groups is included in SNOMED CT in a harmonized way
- Clinicians can also contribute to implementation efforts and promote the benefits of using terminologies

# ICN/IHTSDO Collaboration Agreement

- A commitment shared by IHTSDO and ICN to harmonise SNOMED CT and ICNP since at least 2006
  - A formal agreement in place since 2010, renewed in 2014, focusing on specific deliverables:
    - Nursing Diagnoses
      - Alignment of content between ICNP and SNOMED CT where appropriate
      - Delivery of an equivalence table
    - Nursing Interventions
      - Alignment of content between ICNP and SNOMED CT where appropriate
      - Delivery of an equivalence table
- Note: ICNP is the source and SNOMED CT is the target
- All assured by the international community through the IHTSDO Nursing SIG

# Motivation

- Alignment between ICNP and SNOMED CT
  - Ensuring that nursing remains connected to the wider health information landscape
  - Ensuring that SNOMED CT continues to adequately reflect nursing practice
  - Ensuring that information collected using ICNP can link to SNOMED CT encoded records and be shared with other healthcare professionals
  - Linkage in a standardised way, thus avoiding local mapping which might lead to inconsistency
  - Further quality assurance for ICNP and SNOMED CT

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ICN



# Ways of working

- A structured program of work to identify equivalencies within SNOMED CT for ICNP diagnosis, outcome and intervention statements
  - Semi-automated techniques, using UMLS to leverage previous mapping activities, to extract candidate equivalencies
  - Manual approaches involving teams from ICN and IHTSDO examining whether terms or concepts within ICNP have equivalent terms or concepts within SNOMED CT (sometimes the words themselves may differ but the underlying meaning is identical)
  - Clinical validation involving members of the IHTSDO Nursing Special Interest Group
  - Technical validation involving teams of modelers from ICN and IHTSDO

# Results

- Joint release of an equivalency table for nursing problems
  - Covers 526 ICNP diagnoses (65%)
  - Has resulted in 127 new clinical findings for SNOMED CT
  - Agreed differences between the two terminologies
    - 32 ICNP diagnoses with no equivalent within SNOMED CT for justifiable reasons
- A similar table for nursing interventions in development, for release in 2016
  - Covers 740 ICNP interventions (73%)
  - Has resulted in 416 new procedures for SNOMED CT
  - Agreed differences between the two terminologies
    - 20 ICNP interventions with no equivalent within SNOMED CT
- Extension to incorporate additional content within the 2015 release of ICNP
  - 65 ICNP diagnoses (73%) and 257 interventions (98%)

## Examples of new SNOMED CT content

- Treating injury
- Teaching about fall prevention
- Supporting dignified dying
- Screening child development
- Reporting test result
- Reinforcing adherence
- Referring to family therapy
- Providing privacy
- Promoting use of glasses
- Nephrostomy care
- Monitoring pain
- Managing anxiety
- Implementing safety regime
- Fluid therapy
- Facilitating drug abuse recovery
- Encouraging rest
- Diabetic ulcer care
- Counselling about fears
- Collaborating with social worker
- Assisting with mobility
- Assessing skin integrity
- Assessing attitude toward disease
- Assessing ability to walk
- Administering antipyretic

# Success factors

- A common goal and a shared-desire to succeed
- A commitment by senior leadership within both organisations to support the work
- Agreed-upon processes for actually doing the work.
- Allocation of dedicated resources
- Highly-collaborative working between the project team members in each organization
- Effective international clinical engagement (via the IHTSDO Nursing Special Interest Group)

## Value added

- Enabled both organisations to further refine internal processes that can be reflected onto other collaborative projects with other organisations
- Understand stakeholder needs better

# Future collaboration

- Essential
  - Ongoing maintenance and updating of nursing diagnoses and nursing interventions
- For discussion
  - Development of implementation guidance
  - Development of nursing outcomes equivalency table, e.g.
    - Effective Cardiac Function
    - Able To Participate In Care Planning
    - Improved Nutritional Status
    - Effective Response To Therapy
    - No Fall-Related Injury
    - No Medication Side Effect



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Thank you

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