The International Classification for Nursing Practice (ICNP): From theory to application

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\textbf{Abstract.} ICNP is considered a reference terminology system, as well as an interface terminology. INCP include nursing concepts used at different levels in nursing practice and across specialties, languages, and cultures. More preparations are required, i.e. building ICNP templates and catalogues for representing nursing diagnoses, interventions, and outcomes, based on the best available knowledge from research and from nursing experts. ICNP is also a reference terminology, an supports interoperability in electronic health records. This makes it possible to exchange information across various software systems and across regions and countries. This workshop includes presentations based on theory and experiences of integration and development of ICNP in order to achieve a solid foundation for the documentation of the provision of nursing care during the clinical encounter.

\textbf{Keywords.} ICNP, terminology systems, electronic health care systems, implementation/integration, nursing documentation, user experiences.

1. Background

Nursing terminologies are an important part of the nurses’ working and documentation process in electronic patient records. A common understanding of nursing concepts and their embedded knowledge used is needed in order to improve communication and exchange information between nurses, as well as between nurses and other health care providers (1). In addition, information can be re-used to improve documentation, increase quality of nursing care, patient outcomes, management, clinical research, and the development of evidence-based nursing (2).

ICNP is considered a reference terminology system, as well as an interface terminology (3). In ICNP Version 2, terms are derived from seven axes for expression of nursing diagnoses, interventions, and outcomes. The axes are Focus, Action, Client, Judgment, Location, Means, and Time; they include nursing concepts used at different levels in nursing practice and across specialties, languages, and cultures. In order to be used as an interface terminology, more preparations are required. This includes, e.g., building ICNP templates and catalogues based on the best available knowledge from research and from nursing experts. In addition ICNP supports the use of synonym expressions allowing nurses to maintain their language and culture.

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Because ICNP is also a reference terminology, compliant with ISO 18104:2003 (4), interoperability is supported in the electronic environment. Hence, ICNP facilitate the aggregation and comparison of nursing concepts, making it possible to link nursing concepts to other relevant health information. Re-use of data from a reference terminology supports the generation of new knowledge about how nursing practice may be improved to benefit patient comfort, nursing performance and outcomes of care (5).

ICNP is developed under the auspices of the International Council of Nurses (ICN), which is supporting this workshop. It is in constant development. Version 2011 (released May, 2011) will include about 2,140 primitive concepts and about 1160 pre-coordinated concepts. Implementation varies by country and user community. ICNP must be broadly implemented if we are to attain the exchange of information about nursing between health care providers, across health care systems and countries. ICNP is a member of the WHO Family of International Classifications (WHO-FIC), and is recommended as a national terminology system for documentation of nursing care in the EHR in Norway.

2. Goal of the workshop

This workshop has an educational purpose with learning objectives:

- Describe possibilities and experiences of using ICNP as a terminology system in clinical care systems.
- Describe the support that is needed to build systems that implement ICNP and have the ability to store the documentation for re-use.

2.1. Format and speakers

This workshop will have presentations about initiating and implementing the integration of ICNP. Advantages and challenges of terminology applications will be discussed and experiences exchanged.

The invited speakers represent broad knowledge and experiences of ICNP:

_Claudia C Bartz, PhD, RN, FAAN_
- International Council of Nurses Staff: Coordinator for the International Classification for Nursing Practice and Coordinator of the ICN Telenursing Network
- Clinical Associate Professor at the University of Wisconsin-Milwaukee
- Six years experience with ICNP development. Her doctoral thesis was about nurse-patient communication with a minor in sociolinguistics anthropology.

_Alison Wallis, RGN, DN Cert, BSc, MSc._
- eHealth Advisor, Royal College of Nursing.
- 20 years experience as a district nurse in a semi rural area of Scotland.
- Master's degree in Health Informatics
- Nurse advisor, the NHS Scotland National Clinical Dataset Development Programme.
Hyeoun Ae Park, PhD, RN.
- Professor, Associate Dean at College of Nursing Seoul National University
- VP for WG/SIG at IMIA International Medical Informatics Association
- Implemented ICNP in Korean systems, and has conducted a lot of research on nursing terminologies and informatics, among others on ICNP

Kathy Mølstad, RN.
- Advisor at The Norwegian Nurses Organization. In charge of translation work of nursing classification systems and terminologies, including ICNP.
- Engaged in a cross-country project “Integrating evidence based nursing with ICNP: A practical approach”.

Ann Kristin Rotegård, RN, PhD(c)
Moderator of the workshop. She is a member of the Norwegian translation work of nursing terminologies, included ICNP, and the Norwegian representative in IMIA-NI.

3. Expected achievements and outcomes

After this workshop you will have increased knowledge about:
- Integration, development, challenges, and use of ICNP, including nursing care plans and catalogues for templates in nursing documentation.
- How ICNP can be used to develop and track quality indicators for nursing sensitive outcomes.

Statement of participation: Participants are expected to engage in discussions and are encouraged to bring experiences and questions they would like to discuss.

References