

eHealth Programme of the International Council of Nurses

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Abstract

This paper describes the ICN eHealth Programme in terms of its vision and goals. ICN advocates for nurses and nursing worldwide and recognizes that all nurses can benefit from knowledge about and use of information and communication technology in their practice setting. The three primary elements of the eHealth Programme (Connecting Nurses, Telenursing, and ICNP) will continue development and collaboration both within ICN and with the worldwide health care community.

Keywords: ICN, eHealth, nursing classification, development

Introduction

The World Health Organization defines eHealth as the use of information and communication technologies (ICT) for health [1]. This broad definition encompasses providers and care recipients worldwide. The use of ICT in health care delivery, management, education and research will certainly continue to proliferate, in ways unimaginable today. Worldwide, people and communities in need of health care, health promotion, or disease prevention have greater opportunities for health than ever before.

The International Council of Nurses (ICN) is a federation of over 130 national nurses associations, representing millions of nurses worldwide. Founded in 1889, ICN is the world's first and widest reaching international organization for health professionals. ICN works to ensure quality nursing care for all, sound health policies globally, the advancement of nursing knowledge, and the presence worldwide of a respected nursing profession and a competent and satisfied nursing workforce.

ICN eHealth Programme

ICN formally launched its eHealth Programme in 2011 [2]. This new programme of work brings existing ICN entities into a unified place within the organization and provides a platform by which new eHealth entities that support the work of ICN can be supported and integrated. The aim for the eHealth Programme is to transform nursing through the visionary application of information and communication technology. The Programme has three broad goals: [a] to be positioned centrally in the eHealth community, [b] to be recognized as an authority on eHealth, and [c] to support eHealth practice. A multi-disciplinary Strategic Advisory Group (SAG), chaired by the ICN CEO [Figure 1], was formed to support and advance the eHealth Programme vision and goals. The multidisciplinary group brings a broad view of health care, eHealth and the issues worldwide that are relevant for the eHealth Programme. The SAG meets yearly to consider the ICT and health care environments and to envision new goals and strategies for the Programme.



Figure 1. ICN CEO (far right), Strategic Advisory Group and ICN eHealth Programme Staff.

Goal One

The first goal is oriented toward the business of health and will be achieved through collaboration with internal and external eHealth stakeholders. ICN partners with academia, industry and professional organizations to further the application of eHealth worldwide. ICN collaborates in the Connecting Nurses initiative that seeks to provide an online forum for nurses across the world to share their experiences and practices [3]. ICN is a founding member of the World Health Professions Alliance and a supporting member of the International Society for Telemedicine and eHealth. ICN publishes biannually an ICN eHealth Bulletin which informs more than 2000 people in the informatics and telehealth community [4].

Goal Two

The second goal, to be recognized as an authority on eHealth, is oriented toward professional collaboration and advocacy for the identification and promotion of best practices and policies for eHealth. In 2005, ICN commissioned an international study of telenursing. The findings from the study culminated in the publication of the ICN International Competencies for Telenursing [5]. With the growth of telenursing internationally and the strong advocacy of a core group of telenurses, ICN launched a Telenursing Network [6] with a 12-member Advisory Group. As of December 2012, the Network had 249 members representing 61 countries. The Network aims to seek, educate, support, and collaborate with nurses and nurse supporters worldwide. It further aims to promote nursing involvement in the development and use of telehealth technologies and in the establishment and application of appropriate policies for education and practice in telehealth. The Network serves as a global resource and global information exchange for nurses.

Goal Three

The third goal of the ICN eHealth Programme, to support eHealth practice, is technology-oriented and accomplished through the provision of tools and techniques to help meet the eHealth needs of nurses, other health care workers and patients worldwide. This goal is centered on the International Classification for Nursing Practice (ICNP). The development of ICNP began in 1989 with a group of nurse experts strongly committed to the aim of unifying the terminologies used by nurses worldwide. With the emergence of electronic health records and health information systems in the late 1980s and early 1990s, ICN recognized that the time had come for standardized documentation of nursing practice at the point of care. ICNP provides an international standard to facilitate the description and comparison of nursing practice locally, regionally, nationally and internationally.

The use of standard statements for the documentation of nursing diagnoses, nursing interventions and patient or client outcomes was envisioned as making nursing observable and measurable. It was also anticipated that electronic data capture would allow and support data aggregation and data-driven evidence-based decisions in care planning and care delivery and in development of appropriate health care policies. The standard statements would be in compliance with the International Organization of Standards International Standard 18104[7].

ICN-Accredited ICNP Centres for Research and Development were first established in 2003 to advance the development and clinical application of ICNP. The Centres are institutions, faculties, departments, national associations, or other groups that meet the criteria for application and accreditation. Each Centre chooses its own work focus, for example, translation or catalogue development. The accreditation is for a 3-year period after which the Cen-

tre's work is evaluated and a new 3-year work plan is submitted for re-accreditation. Currently there are 10 Accredited Centres, located in Adelaide Australia, Canberra Australia, Paraiba Brazil, Concepcion Chile, Tehran Iran, Seoul Korea, Lodz Poland, Porto Portugal, Minnesota USA, and the German-Speaking Group (Germany, Austria, and Switzerland).

International Classification for Nursing Practice

The ICNP began as a multi-axial classification system, where hundreds of concepts related to nursing were listed along with rules for using the concepts to develop nursing diagnoses or outcomes and nursing interventions. The alpha, beta and beta2 versions were reviewed by experts in many different countries and the beta2 version was implemented in several clinical settings. ICNP Version 1.0, released in 2005, was based on a 7-axis model and it was the first version to use web ontology language in a Protégé software environment. The first ICNP Catalogue or terminology subset was drawn from ICNP Version 1.0. Catalogues or subsets were intended to provide clinical nurses with pre-coordinated statements for documentation. The releases of ICNP Version 1.1 in 2007 and Version 2 in 2009 demonstrated continued growth of the terminology and continued catalogue development.

Beginning in 2011, a two-year release cycle was established for ICNP, concurrent with ICN Congresses and Conferences. Whereas ICNP Version 1.0 contained about 2000 concepts, the 2011 release contained about 3300 concepts with the increase primarily being due to continued development of Catalogues with pre-coordinated statements for diagnoses and outcomes, and for interventions. All ICNP products are available via the ICN website. ICNP has been translated from English into fourteen languages. The translators work closely with the ICNP team to ensure consistency and accuracy of concept meanings across languages.

ICNP will next be released in May 2013, concurrent with the ICN Congress in Australia. The increase in size of this version, approaching 4000 concepts, reflects the continued evolution of how nurses can use ICNP: from combining individual concepts for electronic documentation in the test versions of ICNP, to the current versions where users have pre-coordinated statement subsets from which to choose the most appropriate diagnoses, interventions and outcomes for each patient or client.

Multidisciplinary Collaboration

In addition to working with nurses to implement ICNP in clinical settings, the eHealth Programme team also collaborates with other organizations to advance the use of harmonized terminologies in health care systems. ICNP is a related member of the WHO Family of International Classifications, which supports the aim of harmonizing ICNP with other WHO-FIC terminologies such as the International Classification of Functioning, Disability and Health (ICF) and the International Classification for Healthcare Interventions (ICHI). A recent study mapped the ICF and ICNP in order to facilitate unambiguous communication across health settings and professionals [8]. Another mapping exercise between ICNP nursing interventions and the ICHI was completed in 2011. The findings of these studies warrant further research and collaboration. Clinically relevant subsets for documentation of care could use multiple terminologies to provide the necessary array of options for diagnoses, outcomes and interventions.

ICN has harmonization agreements with the International Health Terminology Standards Development Organization (IHTSDO) and with SabaCare, Inc which holds the Clinical Care Classification [Figure 2]. The work with IHTSDO includes mapping of ICNP and SNOMED-CT. Given that the use of SNOMED-CT in electronic health records is increasing, this mapping is important for extracting and re-using data to compare nursing decision-making and nurse

sensitive patient or client outcomes. ICN's work with SabaCare, Inc includes mapping ICNP with the Clinical Care Classification. This will provide additional resources for nurses by advancing electronic documentation of nursing around the world [9].



Figure 2. ICN eHealth Programme Team with Virginia Saba (3rd from left).

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