

# Informatics around the Globe

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**At the end of** June, I had the privilege of attending the 10th International Congress on Nursing Informatics in Helsinki, Finland. Held every three years since 1982, the congress is sponsored by the International Medical Informatics Association – Specialist Interest Group for Nursing, with host countries bidding for the opportunity five years ahead – somewhat akin to a bid for the Olympics. Hosted by the Finnish Nurses Association, the conference theme was “Connecting Health and Humans,” with a particular focus on the engagement of consumers in health information management. As per my column in the last issue of *CJNL* (Nagle 2009), this topic is emerging as a key area of development throughout the world.

The Scientific Review Committee received more than 400 submissions, with 130 accepted for paper presentations and 120 posters, representing more than 35 countries. I should add that these submissions are full manuscripts that undergo a minimum of two peer reviews by a panel of more than 80 reviewers from around the world. Among those accepted was one paper from Canada, co-authored by myself and a colleague (Nagle and Yetman 2009), and one poster by Elizabeth Starenkyj. The program also included several pre-conference workshops and daily plenary and panel presentations.

The conference followed 10 thematic foci: (1) Clinical Workflow and Human Interface, (2) Consumer Health Informatics and Personal Health Records, (3) Health Information Technology, (4) Terminology, Standards and Nursing Minimum Data Sets (NMDS), (5) Patient Preferences and Quality of Care, (6) Patient Safety, (7) Evidence-Based Practice and Decision Support, (8)

Consumer and Professional Education, (9) Strategies and Methods for Training and (10) National eHealth Initiatives across the Globe. The papers presented and published in the proceedings include authors' perspectives, findings from numerous research initiatives and some interesting consistencies among experiences worldwide. Overall, upon reading the published proceedings of this meeting, anyone who believed that informatics was solely about technology could not help but experience a dramatic shift in thinking. The sessions that I attended, and the papers that I have subsequently read (the proceedings volume is more than 900 pages), are of a high calibre and reflect some exciting work. Indeed, there are some important initiatives from which Canadians might well benefit.

With the pending centenary of Florence Nightingale's death, a paper from the United Kingdom reflects on nursing informatics as the continued evolution of information use to improve health outcomes – one of Nightingale's ambitions (Betts and Wright 2009). The authors link some of her writings to the current and future development of assistive technologies to inform practice. Interestingly, they note that in one of her proposals, Nightingale advanced the need “to acquire a standardized record of facts” to improve medical and surgical outcomes – a goal towards which Canadian nurse informaticians continue to aspire. In sum, they suggest that “progress towards sustainable and ubiquitous health informatics” can and should be informed by such history (Betts and Wright 2009).

A significant number of papers provided insights about the engagement of citizens in the use of clinical information management tools, including text messaging (MacKenzie 2009), self-management tools (Jenkins et al. 2009), Web resources (Casper et al. 2009) and the importance of the patient narrative (Johnson and Flatley-Brennan 2009). Given the theme of the conference, the three-day post-conference (to which I was pleased to be invited) focused entirely on the topic of personal health information management (PHIM). During this meeting, the international participants took specific issues related to the future of PHIM, such as access, usability, governance, security/confidentiality and education. Each of these dimensions was more deeply explored and discussed by small working groups. The eventual outcome of these deliberations will be a comprehensive publication to be available later this fall.

Several authors described findings of improved patient safety with the use of such technologies as barcoding, radio-frequency identification and an assortment of monitoring and assessment tools. While many positive research outcomes were presented, some authors raised potential issues or dilemmas arising from the use of assistive technologies. Betts and Wright (2009) addressed the potential intrusiveness of “smart homes” with health-monitoring technologies. Hellesø and colleagues (2009) described the implications of illness severity and age on patients'

ability to understand and manage health information. From another perspective, Barnoy and colleagues (2009) examined nurses' attitudes towards the "informed" patient, concluding that nurses need to be Internet-savvy and prepared to engage with such patients.

Always of interest to those implementing clinical information systems is the choice of computing device. A selection of papers described positive findings from studies exploring the use of Personal Digital Assistants (PDAs) (Chang et al. 2009), mobile tablets (Baker and Copping 2009) and voice recognition (Wolf et al. 2009). Among a few of their kind, these studies are beginning to provide the evidence currently lacking as to the technologies that are optimal to support nursing practice. There were also a variety of papers that addressed such topics as technology fit with clinical workflow, human factors and usability, user (nurse and patient) perceptions and staff empowerment through the use of technologies. Several presentations illustrated examples of evidence-based practice being driven by the use of decision-support tools.

Internationally, numerous efforts are underway to evaluate and demonstrate the utility of standardized nursing terminologies. A number of authors described development efforts related to the use of the International Classification of Nursing Practice (ICNP). In addition, others identified several benefits to be derived from structured clinical documentation (Kaakinen and Torppa 2009; Häyrynen and Saranto 2009; Park et al. 2009; Schrader 2009). In Canada, our work in this area is in its infancy, but opportunities abound as increasingly more organizations are migrating to online clinical documentation systems.

Another topic of focus, and a particular passion of mine, is informatics and education. Of particular note was a series of presentations focused on innovative uses of Web 2.0 technologies such as virtual 3-D worlds, social bookmarking, blogs and wikis for curriculum delivery. The creative uses of some of these tools for online learning were fascinating and thought-provoking. Several papers addressed the issue of informatics competency assessment and the education needs of practitioners, educators and administrators. As I have previously noted (Nagle 2007), much remains to be done in these areas within Canadian nursing education and practice, but the good news is that significant work exists to be leveraged.

In sum, all the papers I have cited, and more, have direct relevance to the work underway in the sphere of Canadian nursing and health informatics today. There is much to be learned from reviewing the work being done by our nurse colleagues around the world. Albeit not surprising, the issues, challenges and opportunities we face in this work are paralleled in almost every developed nation.

In 2012, Canada will be hosting the 11th International Congress, which will be held in Montreal, Quebec. With the support of the American Medical Informatics Association (AMIA), this conference will be somewhat different from previous events, as the planning is being undertaken by a collaboration of nursing informatics leaders from Canada, the United States and Mexico, together with several countries from the Caribbean and Latin America. It is the hope of the organizing committee that parts of the conference program will be offered via webcast, some in Spanish, to some of these partner countries.

Given the extensive health informatics work being done in our country, it would be fantastic to see a large representation of Canadian nurses as participants and contributors to the 2012 program. I would encourage you to follow the progression of the program development on the website, now available at [www.ni2012.org](http://www.ni2012.org). As chair of the organizing committee, I welcome anyone interested to support the effort required to successfully launch a nursing informatics conference for the world stage.

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