



Dr. Lynn Nagle and the Case for Nursing Informatics

“Nursing Informatics is a specialty that integrates nursing science, computer science, and information science to manage and communicate data, information, and knowledge in nursing practice. Nursing informatics facilitates the integration of data, information and knowledge to support patients, nurses and other providers in their decision-making in all roles and settings. This support is accomplished through the use of information structures, information processes, and information technology.”

(ANA Scope and Standards of Nursing Informatics Practice 2001: vii)

Lynn Nagle, RN, PhD, is Senior Vice President, Technology & Knowledge Management at Mount Sinai Hospital in Toronto, where she is responsible for information and communication technology, and information management. She is also Assistant Professor in the University of Toronto’s Faculty of Nursing. Dr. Nagle’s research is directed towards evaluating the impact of technologies in clinical practice settings. She is the Canadian nursing representative to the International

Medical Informatics Association Nursing Work Group, and is the current and founding President of the Canadian Nursing Informatics Association.

What drew you to nursing informatics? What interests you personally about the field?

I first became interested in informatics in the mid-1980s. I was in the midst of completing my master’s degree and was introduced to some of the early movers

in this area through a conference I was asked to organize – Computers in Health Care. Meeting some of the nursing leaders and pioneers in this field, I saw this as an emerging specialization that would only grow as the health industry moved increasingly into the world of computerization.

Most importantly, I saw and experienced the outcome of nurses' not being engaged in the processes of system design, selection, implementation and evaluation; having to use systems that were, or are, more of a burden than a help to their practice; systems with no perceived value back to the clinician and patient. Nurses at that time were usually engaged only as was deemed necessary to support nursing workload systems, but were otherwise not involved in the development process. So I saw this as an opportunity to change that imbalance and develop a career path that diverged from anything else I had ever considered. It was exciting – to embark upon a path as yet taken by few Canadian nurses.

How does nursing informatics fit into the overall health IT landscape? Do nurses have specific informatics needs related to patient care?

The fit is such that nurses as key players in the delivery of health services have specific data, information and knowledge needs relative to their practice. "Nursing" informatics focuses on those unique elements. Nursing knowledge is unique to the practice of nursing and encompasses a breadth that surpasses that of the allied disciplines and transcends the boundaries of acute care, LTC, community care, mental health

and other areas. Nonetheless, we also acknowledge that much of the data, information and knowledge applied in the delivery of healthcare is shared and utilized by other disciplines. Nurses need to integrate evidence from applied "nursing" research into their practice.

Where do you see the field going over the next five to ten years? Why?

I envision that the realm of informatics will expand to be an integral part of every nurse's day-to-day work, no matter where they practise. I suspect we will continue to see an evolution of nursing roles related to informatics; hopefully, more nurses will become actively involved in the eHealth agenda for this country. Within 10 years, I hope that informatics is an integrated component of every basic nursing program, for example, reflected in every aspect of a core curriculum.

In the short term – thinking wishfully – I hope that there will be more opportunities for nurses to pursue graduate studies to become Informatics Specialists. Without the advanced education, we will continue to have too few nurses who are able to advance and understand the very significant agenda of eHealth for all. Every healthcare organization needs nurses engaged in the development of the electronic patient record, contributing to system design decisions to ensure that solutions support and enhance practice rather than impede it. As our systems become more sophisticated, we will have the capability to understand clearly the impact of nursing practice on clinical outcomes. The transformation of

nursing care information will result in the generation of new nursing knowledge. All nurses in all settings will be contributing to real-time research.

What barriers do you foresee on the horizon?

We have a frightening shortage of nursing faculty who understand this imperative and who are willing to become actively involved. We need the attention of the nursing leaders in this country to advance the cause, or nurses will be left behind. As the largest group of care providers, nurses should be playing a central role in the eHealth strategy, as they will be the primary users of the tools being deployed today. Nurses need to be sure that these tools support the unique work of nurses. More organizations need to think about how to dedicate (already scarce) nursing resources to this very important work. Nurses of the future will expect to have electronic tools at their fingertips, as will their patients. Today, there are few schools of nursing across this country with informatics content in their undergraduate or graduate programs. This has to change.

Any specific messages for the Canadian nursing community?

It is time for action! We need more nursing leaders to step up and contribute to the eHealth agenda; to lobby for investments in education; to lobby for active engagement of nurses in healthcare organizations; to make informatics integral to the very fabric of our skills and knowledge as nurses.



Nursing Informatics eRounds ... enable IT excellence in Healthcare

Experts insight: Information Technology and its impact on the daily delivery of healthcare.

Short, 20 minute sessions: A certificate program from Longwoods with the support of Bell Canada.

Developed specifically for the Canadian Nursing Informatics Association by Dr. Lynn Nagle, executive editor.

Visit Longwoods.com/elearning

Longwoods Publishing
Corporation ... enabling excellence
CNIA ... the voice for Health
Informatics in Canada
Bell Canada ... making it simple



Longwoods Publishing
Enabling Excellence