

The Importance of Being Informatics Savvy

After more than three decades working in healthcare and academia, explaining and illustrating the conceptual and practical essence of *informatics* in nursing and healthcare continues to be my *raison d'être* – at least in the professional realm. In my seven year tenure as Editor-in-Chief, I have resisted the urge to gripe about the snail's pace at which others have come to realize the relevance and significance of informatics for health providers in every role and sector. My family and close friends are often astounded that I am STILL talking and writing about that which captured my attention and passion 30 years ago. Since much of the discourse has moved beyond informatics fundamentals, this special issue addresses many of the current and emerging considerations for nurse leaders. So if you are lacking knowledge of the fundamentals, look elsewhere, you're on your own to catch up.

My own path aside, the careers of nurses working in informatics have taken many different turns and twists, to a large extent dependent upon informal preparation and employer role definitions and interpretations of the work to be done and its value. Carrière, MacDonald, and Chan's (2016) contribution to this issue provides past, current and future perspectives on the work of nurse informaticists. While roles of the past were typified by the "IT" or "Nursing Workload System" nurse seconded from nursing to "do" or "support" systems stuff, we have evolved to see nurses in key leadership roles such as Chief Information Officer (CIO) (yours truly in days gone by). Unlike our US counterparts, few Canadian healthcare organizations have embraced the merits of the "Chief Nursing Informatics Officer" (CNIO), but not surprisingly many have created positions for a "Chief Medical Informatics Officer" (CMIO). Regardless, with or without the titles, nurses have been leading the implementation of clinical information systems across this country for many years. At this point, we should also be contemplating the new roles that will emerge with a shift from the mechanics of systems implementation to a focus on "data science;" in this realm, the role of all nurses can be significant.

"Data science methods may open the way to supporting inquiry at the level of complexity needed by nurses whose practice relies on understanding health in everyday living and delivering contextual interventions" (Brennan and Bakken 2015, p. 479).

In this issue, Remus (2016) discusses the “big data” opportunity for nurse leaders and highlights how the informatics-competent nurse executive can harness big data and derive new opportunities for nursing knowledge development and transformational leadership (p. 18). Another critical underpinning to the use of “data science” relates to the adoption of standardized nursing data. White’s (2016) case study is situated in the context of nurses gathering and recording standardized outcome measures across care sectors. She illustrates the merits of adopting national data standards to inform clinical and administrative decision-making; converging standardized data elements (e.g., readiness for discharge, functional status, symptom management) with other data (e.g, discharge abstract database) can effectively inform appropriate and necessary care where and when it’s needed.

Being an advocate of data standards leads me to question why is it that every care provider organization in every jurisdiction has to develop its own version of what nurses record and report about their care of Canadians? Is the core of nursing practice that different between and within sectors? Do we not have standards of practice and prepare our students for a consistent level of mastery for entry-to-practice? Moreover, the mind-, if not bum-, numbing resource-intensive work of organizational “Forms Committees” needs to be relegated to the past. Over the decades, healthcare organizations have methodically produced *and* reproduced thousands of forms, a majority of which are *variations on a theme* according to sector and clinical group. To make matters worse, we have been systematically replicating this nonsense in the realm of electronic health records. Surely a unified and coherent approach to the reflection of nursing care not only makes sense but is appropriate and useful to the system, the profession, and might I add, to patients.

Strudwick’s (2016) interview with international informatics colleague, Dr. Nick Hardiker, Director of the eHealth Programme at the International Council of Nurses, addresses the importance of data standards and big data for nursing. In his words: “Nurses who understand the benefits and have embraced informatics wonder how they ever did their jobs without it. And this includes nursing leaders” (p. 37). To this end, the Canadian Association of Schools of Nursing developed and published the first set of entry-to-practice informatics competencies for registered nurses (Canadian Association of Schools of Nursing 2012). In addition to the competency development effort, activities to advance the informatics knowledge of nursing faculty and integration of informatics competencies into nursing curricula have been funded by Canada Health Infoway. Notwithstanding these efforts, much work remains in realizing informatics competency among Canadian nurses.

As nurses in practice settings are expected to use a variety of electronic health record (EHR) solutions to capture nursing assessments, interventions and

outcomes, the unexpected consequences from the use of these tools are now being identified. Furlong's (2016) research about nurses learning and integrating the use of an EHR in practice, highlights the need for nurse leaders to be vigilant regarding the potential negative impacts and fallibility of these tools. Similarly, the world of social media has presented numerous ethical and professional issues for educators and healthcare leaders to address. The prevalence of image sharing and online communication using tools like Facebook™ and Twitter™ has opened the door to potential breaches of privacy and inappropriate presentations of self. Risling's (2016) contribution to this issue addresses many of the positive and negative implications of the use of social media tools, as well as useful tips about the personal and professional use of social media.

Canada's first nurse informatician, Dr. Kathryn J. Hannah is currently the Health Informatics Advisor to the Canadian Nurses Association (CNA). On behalf of CNA, she brings a nursing informatics perspective to a wide range of issues and initiatives. In this issue, she provides an update on the CNA efforts related to nursing informatics (Hannah 2016). As an aside, in conjunction with the Canadian Nurses Foundation, the Dr. K.J. Hannah Scholarship for graduate studies in nursing informatics has been established in recognition of her contributions and will be awarded for the first time in 2016. And for the Nightingale enthusiasts among you, a new informatics pin stylized after the rose diagram is available for purchase with all proceeds supporting the scholarship.

Wrapping up this issue, Booth (2016) provides a provocative view of informatics and nursing in a *post*-nursing informatics world. Focused on nursing in an automated, artificially intelligent, socially networked environment, he challenges the status quo and encourages us to not be constrained by virtue of where we have been on this journey. Rather he suggests the need to "reconceptualize the roles of both nurses and informaticians in order to ensure the nursing profession is ready to operate within future digitalized healthcare ecosystems" (p. 61).

The time has come to stridently move past the misconception of nursing informatics as: "nurses using computers" to an age of "clinical intelligence" (Harrington, 2011); one in which the tools are merely facilitative and practice informs the evidence. Getting there will require some work by our leadership: 1) the development of informatics savvy nurse leaders and educators; 2) the integration of informatics entry-to-practice competencies into undergraduate nursing education; 3) the adoption of a core set of national nursing data standards; 4) an informatics research agenda that informs practice and policy; and 5) the development of a unified vision for nursing informatics directions into the future. Although not the sum total of the work to be done, achieving progress in these key areas will pave the way for new opportunities for nursing in this country.

To all of our contributors to this special issue, who collectively include colleagues, previous and current students, I extend my thanks for your leadership in this work.

Together we are better. And as I always say: “*Our future depends upon unity in our beliefs about things that really matter*” and this is one of them!

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