Everything I Know About Informatics, I Didn't Learn in Nursing School

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ABSTRACT

To date, efforts to initiate future graduates and nurses currently in practice into the world of information and communication technologies (ICTs) have been provided by relatively few nurse educators. In the past decade, nursing informatics leaders have developed a profile of informatics competencies for nurses, novice to expert – for example, the National Nursing Informatics Project (Hebert 2000) – and have demonstrated actual (Kaminski 2006) and possible informatics integration into curricula (Nagle 2001). Findings from recent studies (Infoway 2007; Nagle and Clarke 2004) suggest that a minority of Canadian schools of nursing have tackled the challenge of integrating informatics throughout their nursing curricula. When asked to respond to a recent survey (Infoway 2007), some schools decided not to participate because there were no faculty members with appropriate expertise in the area, while other schools did not regard informatics as relevant content for their program. Nevertheless, over the years, several schools of nursing have had the foresight to create a single informatics course – usually an elective – at the undergraduate or graduate level. I have held discussions with several deans and directors of schools of nursing over the past two years, and most of them recognize that this is a content area to be reckoned with sooner rather than later. No graduate nursing program has, as yet, created an informatics specialty option, but stay tuned.

An Academic/Learning Advisory Group was recently created as a key component of Infoway's user engagement strategy. Since many of the core informatics concepts can be addressed interprofessionally, this group includes academics, students and practitioners from health informatics, nursing, medicine and pharmacy. The mandate of this advisory group is to provide input to the development of strategies and tactics to support (a) continuous professional development for clinicians in practice in the use of electronic health record solutions (EHRs) and (b) the integration of informatics

content into the core curricula of the health disciplines. The advisory group members bring knowledge from the academic and healthcare delivery arenas and expertise in informatics, e-learning and knowledge translation. The group has been working on the development of a conceptual framework that will be used to underpin the direction of subsequent work. Infoway's future efforts will include the capture of success stories and exemplars of successful EHR training and informatics integration in work environments and basic training programs.

To date, an environmental scan has been undertaken in the hope of obtaining representative samples of schools of nursing, medicine and pharmacy. Additionally, recent graduates were asked to participate in a survey of perceived readiness for the workplace in relation to the use of ICTs. Unfortunately, the response rates to both surveys were insufficient to yield any meaningful conclusions. Unless there has been a dramatic upturn in the integration of informatics among schools of nursing, one might assume that the findings from the 2003 Canadian Nursing Informatics Association (Nagle and Clarke 2004) study of 79 schools of nursing are likely still a reflection of the status quo. That study showed that less than 40% of the schools had addressed or integrated informatics content. I suspect that there is still much work to be done.

So where to begin? Within healthcare organizations, there are now many experiences in the field with successful and failed implementations. What is well known is the importance of user engagement from the outset of any EHR initiative. What is yet unknown is the effectiveness of the various models and strategies being used within healthcare organizations to get practitioners engaged, educated and trained in the use of EHR applications. Based upon personal experience and discussion with many colleagues across Canada, educators in healthcare organizations need

• multiple and flexible methods and tools for delivery,
• knowledge of adult learning principles and
• credibility among their peers. "Expert user" does not equate to "educator."

Clinician users want

• sustained support post-implementation,
• engaged leadership and
• extended opportunities to develop a comfort level with applications.

These are simple concepts, touted by many as key success factors, but they are not always evident. Among the many challenges within healthcare organizations is not only skillful integration of ICTs with existing practices, but also sufficient time to educate and train an already overtaxed workforce. Implementation ultimately comes down to the perceived value of the EHR tools to support clinical care delivery effectively – no value, no buy-in, no commitment to learn and use.

Canadian schools of nursing are of the highest calibre in the world; faculty are renowned worldwide for their programs of research and publications. Many are even conducting leading-edge research in the informatics realm. Whether recognized or not, in today's

world, informatics is simply a part of every faculty member's tool kit. Therefore, it should not be offered or developed as a separate course. Rather, it should be integrated with approaches to the theoretical and practical teachings in every course. A student nurse recently lamented to me that his class was told they could not use electronic textbooks because of faculty discomfort with the medium. Today's students want their texts available on a handheld device; they want to use technology in their learning and practice. Educators need to encourage the integration of technology, understand the use and potential of EHRs and become champions in their own right. Otherwise, I fear we run the risk of discouraging the prospective technology-savvy student from pursuing a career in nursing. Hopefully, unlike my generation, nursing students and graduates of the future will know enough about informatics to position themselves in the emerging clinical world of ICTs.

While writing this article, I reflected upon the related contributions of the late Dr. Pat Griffin to this work. As executive director of the Canadian Association of Schools of Nursing (CASN) and a member of the Infoway Nursing Advisory Group, Pat brought thoughtful insights and her commitment to our discussions about engaging nurse educators in the informatics agenda. She was a self-proclaimed "non-techy," telephoning me in recent months to confess abashedly that she had misplaced my e-mail address – "it would have to be you, of all people!" Nonetheless, she recognized the importance of addressing the delivery of informatics knowledge and skills to nurses. In fact, the week prior to her death, she participated in her usual whole-hearted way in an all-day meeting of the advisory group and was planning for my participation in the CASN board meeting the following week. In her memory, I encourage all educators of nurses to boldly embrace this challenge!

About the Author

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