The Future of Nursing and the Informatics Agenda  DIANE J. SKIBA

The Long-Awaited Institute of Medicine (IOM) Report on the Future of Nursing: Leading Change, Advancing Health was introduced on October 5. If you were busy and did not attend the IOM briefing, you can view the broadcast at www.iom.edu/Activities/Workforce/Nursing/2010-OCT-05.aspx. The report, well over 500 pages, emphasizes the essential role of nurses in the transformation of health care and the facilitation of objectives established in the Affordable Care Act (www.healthcare.gov/law/introduction/index.html). Four key messages that structure its recommendations are as follows (IOM, 2010):

- Nurses should practice to the full extent of their education and training.
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.
- Effective workforce planning and policy making require better data collection and an improved information infrastructure.

Of course, as an informatics professor, I immediately observed that informatics knowledge, skills, and attitudes are integral to these key messages. Note the strong emphasis on removing barriers for advanced practice nurses. With the growing emphasis on patient-centered care, the medical/health home concept, and consumer engagement, it is imperative that APNs understand personal health records, e-health, and m-health (mobile health) tools. Nurses at all levels will need to become informatics literate to function within the health care delivery system.

I particularly liked this quote in the chapter on practice transformation: “There is perhaps no greater opportunity to transform practice than through technology.” In the chapter on the transformation of nursing practice, the report speaks to the American Recovery and Reinvestment Act (ARRA) (Public Law 111-5), which includes the HITECH Act (Health Information Technology for Economic and Clinical Health). This act authorizes the Centers for Medicare & Medicaid Services (CMS) to provide a reimbursement incentive for eligible hospitals and providers who are successful in becoming meaningful users of an electronic health record (EHR). Incentive payments begin in 2011 and phase down gradually. Starting in 2015, providers are expected to have adopted and be actively utilizing an EHR in compliance with the meaningful use definition, or they will be subject to financial penalties under Medicare. (More about the concept of meaningful use is online at http://healthit.hhs.gov/portal/server.pt/community/healthit_hhs_gov_meaningful_use_announcement/2996)

So, the stage has been set for assuring that health care institutions not only adopt EHRs, but that they must also demonstrate that providers are meaningful users of the technology. As Blumenthal and Tavenner (2010) state, “HITECH’s goal is not adoption alone but ‘meaningful use’ of EHRs— that is, their use by providers to achieve significant improvements in care” (p. 1).

The Future of Nursing report clearly states that “HIT (Health Information Technology) will fundamentally change the ways in which RNs plan, deliver, document, and review clinical care.” It aptly states that “care and its documentation will less frequently be ‘free-hand,’” indicating a need for nursing education to address the value and use of nursing terminologies and classification systems to codify nursing data (Murphy, 2010). To learn more about nurses’ role in meaningful use, I recommend that you access the testimony of Joyce Sensmeier, co-chair of the Alliance of Nursing Informatics (www.himss.org/ASP/ContentRedirector.asp?ContentID=72211&type=HIMSSNewItem&src=twt).

A second message from the report is critical for nurse educators in all educational programs. Nurses are “expected to use a variety of technological tools and complex information management systems that require skills in analysis and synthesis to improve the quality and effectiveness of care.” For this expectation to happen, informatics knowledge, skills, and attitudes must be integrated throughout the nursing curriculum. This is not optional. And having just a single course will not help our nurses practice in the future. I was extremely proud to see that the TIGER initiative (Technology Informatics Guiding Education Reform) was highlighted in the report.

Clearly we are at the tipping point, and nurse educators can no longer ignore the informatics agenda. Rather than merely knowing what buttons to push for documentation, our students must begin to understand the concept of being a meaningful user. My biggest fear is that schools of nursing will run out to buy EHR simulations or contract with clinical agencies, spending all their time teaching students how to use software rather than how data, information, and knowledge can improve patient care and inform their practice. Over the course of the next year, I will continue to address this topic, providing examples of how your colleagues are tackling the issue of informatics in the curriculum.

An essential message in the IOM report is that full partnership in the redesign of health care offers the promise for nurses to be creative, adapting and designing new tools to support the new roles that nurses will perform as a part of health care reform. To redesign consumer engagement and health care delivery, nurses must understand innovative technology tools and experiment with them. Think about the work of Dr. Janet Grady, a pioneer in the use of innovative tools to disrupt the current education system of teaching and learning. Dr. Grady developed the Virtual Clinical Practicum (VCP) to provide undergraduate students with remote care learning opportunities. In collaboration with Dr. Loretta Schlachta-Fairchild, she pioneered the use of telehealth in nursing education (Vaughan, 2006). Dr. Grady told of her work on the VCP in the Faculty Matters column in the May-June 2006 issue of Nursing Education Perspectives.

If we are truly at the crossroads of transforming health care, nurses must have the knowledge and skills to use disruptive innovations to facilitate and encourage new methods to deliver health care. We need to build on already existing usage of iPads, smartphones, and other devices to promote health and allow consumers to manage chronic conditions (Christensen, Bohmer, & Kenagy, 2000). To learn more about consumer use of disruptive technologies in health care, visit the Pew Internet and American Life Project website (www.pewinternet.org) or...
the California Healthcare Foundation (www.chcf.org).

We must all think outside the box, form new partnerships, and ask our students for their ideas about how to transform nursing practice. For inspiration, I suggest that you check out Project Health Design (www.projecthealthdesign.org/403826), a national initiative funded by the Robert Wood Johnson Foundation and directed by Dr. Patricia Brennan, Lillian L. Moehlman Bascom Professor at the School of Nursing and College of Engineering, University of Wisconsin-Madison. This project has been developing new visions of personal health records and their uses with a variety of health care populations.

And watch videos from the recent TEDMED conference, which “celebrates conversations that demonstrate the intersection and connections between all things medical and healthcare related: from personal health to public health, devices to design and Hollywood to the hospital” (www.tedmed.com/what). Also, read the latest issues of Technology Review (www.technologyreview.com) to see what futuristic technologies are available now and how you might use them in education or in practice. Now that we have reached a tipping point, you may even want to revisit some of my columns on Nursing Practice 2.0. They may make more sense now than they did in early 2009, when they were first published in Nursing Education Perspectives (Skiba, 2009a, 2009b).

How will you and your colleagues begin to create and shape the future of nursing education and practice? As always, you are welcome to share your thoughts, innovations, and creative ideas with me via email (Diane.Skiba@ucdenver) or on Facebook or LinkedIn.

References
Skiba, D. (2009a). Nursing Practice 2.0: Should we as educators be crafting the next generation of nursing practice? [Emerging Technologies Center]. Nursing Education Perspectives, 30(1), 48-49.

MockMeds™
by Medication

- Offer safe and realistic clinical simulations
- Prepare your students with the hands-on training they need
- Discover the most realistic and affordable simulated drug training products
- We offer the largest selection of simulated drug training products, including:
  - Vials
  - Ampules
  - Capsules
  - Tablets
  - Liquids
  - and more

877-688-4257 www.mockmeds.com

The NLN Has Tamed the CAT

NLN Testing Services is pleased to announce the arrival of the Computerized Adaptive Test (CAT) in January 2011.

- Adaptively selecting items based on ability estimation
- Balancing content to fit the NCLEX® target blueprint
- Using alternate item formats
- Using the same parameters for exam completion—“stopping rules”

To find out more, contact the Test Development Team at customerhelp@nln.org or call 800-732-8NLN (8656)