Using Technology in Clinical Practice: The Future is Now!

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In the past, leaving for nursing school meant purchasing a stethoscope, wristwatch with a second hand, uniforms and books. Today, many nursing schools in an effort to better prepare their students for their practice roles in hospitals and community health settings, recognize the need for students to make additional purchases of laptop computers and personal digital assistants (PDAs).

Health care agencies now expect new nurses to know how to use computers and PDAs. An effort to increase patient safety, hospitals believe technology can help to reduce medication errors. One example of preventing errors is the use of computerized prescriptions. The Institute for Safe Medication Practices has called for an end to handwritten prescriptions because electronic timing has had such a positive effect on the reduction of medical errors.

Given the present nursing shortage and the need to do more with less, timesaving strategies using technology are being employed by health care systems. Some home health care agencies now include the use of PDAs to track patients and to document care so that nurses don’t spend hours after their shifts doing paperwork.

PDAs are a powerful clinical resource at the point of care assisting nurses in performing complex drug dosing calculations and checking for adverse effects and drug compatibility. Nurses who use PDAs can quickly check lab values, review specific treatments and interventions, and have immediate access to up-to-date medical and nursing references. Hospitals are moving toward wireless connectivity for all staff and PDAs can be downloaded with the facility-specific clinical pathways, policies and procedures. Along with the clinical aspects of care, the use of technology has advanced the transfer of patient information and documentation and the tracking of patients’ insurance information.

Implications for schools of nursing are of utmost concern. First, nursing faculty has to acquire skills in the use of PDAs and decide on the appropriate operating systems for their needs. Next, faculty must learn to evaluate the plethora of medical/nursing software available for PDAs and incorporate this knowledge into their clinical courses. Some graduate nursing programs have added PDA usage to their curriculums and now use a PDA instead of pharmacology textbooks.

At the University of St. Francis College of Nursing and Allied Health, the use of the PDA is already required for all new masters’ physician assistant students at the Albuquerque Campus. It is a strongly recommended practice for all students in their graduate nursing programs in Joliet and Albuquerque. More than half the nursing faculty own PDAs and are becoming experts at evaluating various nursing software and they use freeware, shareware, purchased and subscription downloadable programs. By fall of 2005, the college will pilot the use of PDAs with one clinical group of BSN students and the results will assist in making the decision to require all students to have their own PDAs.

If indeed the use of this technology will reduce medical and nursing errors and increase patient satisfaction then surely the future is now.

ASK2 NCSBN

Do nursing students practice under their clinical instructor’s nursing license?

We invite your questions. Please send your questions to Nancy Spector (npspector@ncsbn.org), NCSBN Director of Education, and we will call on our experts to answer them for you.

A Vickie Sheets, RN, JD, NCSBN Director of Practice and Regulation, replies:

Nursing faculty frequently talk about students practicing under a nursing instructor’s license. This is an inaccurate statement because the only person who works on a nurse’s license is the person named on the license. Nursing Practice Acts include statutory language that specifies what are called exemptions or exceptions to the requirement for a nursing license. Typically, practicing nursing as a student who is enrolled in an approved nursing program is one of the exempted (or excepted) practices. The nursing student is accountable for nursing actions and behaviors to patients, the instructor, the clinical facility and the nursing program.

The accountability for nursing instructors is for their decisions and actions as an instructor. For example, the instructor is accountable for the selection of patients for nursing students’ assignments. The instructor is expected to support students in preparing for the clinical experience and to monitor students’ clinical performance. Most critically, the instructor must intervene if necessary for the protection of patients when situations are beyond the abilities of students. Instructors must identify “teaching moments” as well as assess and evaluate the students’ clinical performance.

This broader accountability reflects the education, experience and role of the instructor, who is accountable to the patient, the student, the facility, the nursing program and the professional licensing board.
Price Reductions for NCBSN Learning Extension Courses for Faculty

NCBSN Learning Extension has adjusted the prices of online courses for nursing faculty and nurses. Now all faculty and nurse continuing education (CE) courses are priced based on the number of contact hours available. Faculty online CE courses are now $10 per contact hour and nurses online CE courses are $6 per contact hour.

This change in strategy directly benefits nursing faculty interested in the test development and item writing courses. The Advanced Assessment Strategies course has dropped from $199 to $156. The online campus reflects the reduced prices starting as of February 1, 2004. In addition, NCBSN Learning Extension is still honoring the 10% off multi-user discount provided to organizations signing up 10 or more faculty for either course. Institutions purchasing courses on behalf of faculty can coordinate their participants’ enrollments through www.learninext.com. The convenient online system accepts payments made by either a credit card or purchase order. Go to the site for more details or contact campusesales@ncbsn.org. To save an additional 5%, use coupon code LLS5 at checkout.

About the Assessment Strategies Courses

The Assessment Strategies courses are asynchronous and start at a time the participant chooses. The courses should be taken consecutively, beginning with the basic course before moving on to the advanced course. However, faculty with experience in test construction and item writing are free to enter the advanced course at their discretion. Both courses are taught by NCBSN staff who guide the development of the NCLEX® examination. Participants receive expert advice and critique of their items written for course assignments.

Basic Assessment Strategies: Test Development & Item Writing

Online CE Course | 6 weeks of access | 19.5 contact hours | $195

Topics: Writing NCLEX-style items, measurement statistics used to evaluate test questions, basic techniques for writing test items that access higher-order cognitive processes

Advanced Assessment Strategies: Assessing Higher-Level Thinking

Online CE Course | 6 weeks of access | 15.6 contact hours | $156

Topics: Integrating the assessment of critical thinking into course design, applying criteria for the writing and conversion of higher-level items

Find a complete list of topics, learning objectives, course features and other details at www.learninext.com.

NCLEX-PN® Examination Passing Standard Revisited for Public Safety

In December 2004, the NCBSN Board of Directors voted to revise the passing standard for the NCLEX-PN® examination. The rationale for increasing the passing standard included changes in U.S. health care delivery and nursing practice, which have resulted in increased acuity of clients seen by entry-level LPNs and VNs. After considering all available information, the Board of Directors determined that safe and effective entry-level LPN/VN practice requires a greater level of knowledge, skills and abilities than was required in 1999, when the current standard was established.

Although the present passing standard (0.67 logits on the NCLEX-PN logistic scale) was first implemented in April 1999 and was revalidated and retained in April 2002, the passing standard will be increased from 0.67 to 0.42 logits in April 2005. This increase is expected to have only a small impact on the national pass rate. From August 1, 2003 to July 31, 2004, first-time, U.S.-educated NCLEX-PN examinees had a pass rate of 88.9%. This is expected to drop to 86.9%, a decrease of 2.0%. In this time period, the entire population of NCLEX-PN examinees had a pass rate of 79.5%. This is expected to drop to 76.9%, a decrease of 2.6%.

The new standard will take effect in conjunction with the implementation of the new NCLEX-PN® Test Plan. The new test plan is available for free of charge on the NCBSN Web site if electronically downloaded. Hard copy format is available for a fee and order information is located in the Resources section of the Web site.

The Board of Directors used multiple sources of information to guide its discussion and evaluation of the passing standard. NCBSN convened an expert panel of nurses to perform a criterion-referenced standard-setting procedure. The nine-member panel represents the four NCBSN geographic areas (Member Boards are divided into four geographical areas of the nation, referred to as Area I, the western states; Area II, the southeast; Area III, the northeast; and Area IV, the midwest), minorities, new licensed LPNs, practical nurse aides, newly licensed nurses and faculty who supervise basic/undergraduate students in the clinical area. The panel’s findings supported the creation of a higher passing standard. NCBSN also considered the results of a national survey of nursing professionals including nursing educators, directors of nursing in acute care settings and administrators of long-term care facilities.

The NCBSN Board of Directors evaluates the passing standard for the NCLEX-PN® examination every three years to protect the public by ensuring minimal competence for entry-level LPNs and VNs. NCBSN coordinates the passing standard analysis with the three-year cycle of test plan content evaluation, conducted using a practice analysis of entry-level LPNs. This three-year cycle was developed to keep the test content and passing standard current with entry-level practice.

If you have questions about the NCLEX-PN passing standard contact Thomas O’Neill, PhD, Associate Director of Testing Services – Psychometrics, at 312.525.3620 or tooesi@ncbsn.org.

Logits are units used to report relative differences between candidate ability estimates and item difficulties.

NCBSN to Present NCLEX® Research

The Joint Research Committee (JRC), which is comprised of NCBSN testing staff, Pearson VUE testing staff and external consultants, recently submitted six research papers on the operational considerations in computerized adaptive testing (CAT) to the American Educational Research Association (AERA). The research was accepted and will be presented as a symposium at AERA’s national meeting on April 11-15, 2005, in Montreal, Canada. AERA is an internationally recognized professional organization with the primary goal of advancing educational research and its practical application. AERA’s Measurement and Research Methodology Division is sponsoring the event. Acceptance of the symposium provides an opportunity to showcase best practices in methodology used by NCBSN for the NCLEX®. Not only does each of the research papers relate to NCLEX, but also is applicable to CAT in general. By sharing these best testing practices, NCBSN acts in accordance with its vision of "building regulatory excellence worldwide.”

Thomas O’Neill, Associate Director of NCBSN Testing Services – Psychometrics, will chair the symposium and present a paper with Michelle Reynolds, NCBSN Testing Data Integrity Associate. There will also be two distinguished speakers, Casey Marks, Director of NCBSN Testing Services, and Steve Wise, Professor at James Madison University. The symposium will cover several topics including:

- Analyzing requirements for the NCLEX examination to determine the optimal characteristics for an item pool
- Demonstrating that the notion of a single construct, nursing ability, is justifiable empirically, rather than the use of several smaller more specific constructs
International Administration of the NCLEX Examinations Launched

On January 3, 2005, the NCESBN NCLEX program started processing registrations and scheduling appointments, through contracted test service provider Pearson VUE, for the three international test centers approved to administer the NCLEX for the purposes of domestic licensure. The initial sites are: Hong Kong, London, England; and Seoul, South Korea. The first NCLEX examinations to be scheduled internationally were delivered on January 17 in all three testing centers. Within the first 30 days, almost 900 applicants have registered to take the examination.

It is important to note there is no difference in the NCLEX test plans, examination items or passing standards for NCLEX examinations administered globally versus domestically. The cost associated with scheduling at an international test center is an additional $150 and a Value Added Tax (VAT) may apply. These fees must be paid by credit card when scheduling an appointment to test.

Please visit the Testing Services portion of the NCESBN Web site for more information at: www.ncsbn.org/testing/index.asp
WHAT’S INSIDE

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NCSBN's Institute of Regulatory Excellence

NCSBN developed the Institute of Regulatory Excellence (IRE) in 2004 to assist regulators in their professional development by providing educational and networking opportunities. The IRE offers annual seminars to provide nurse regulators access to the depth and breadth of regulatory knowledge they need. The topics covered are: (1) public protection/role development of nursing regulators, (2) discipline, (3) competency evaluation/remediation strategies, and (4) organizational structure/behavior. The second annual IRE “Practice Violations and Discipline” was held in San Francisco, California, on January 10-12, 2005, and was attended by 65 individuals from boards of nursing.

The specific objectives of the IRE are to:

- Expand the body of knowledge related to regulation through research and scholarly work.
- Develop the capacity of regulators to become expert leaders based on establishment of core competencies.
- Develop a network of regulators to collaborate on research questions and improve regulatory practices and outcomes.

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NCSBN Clinical Experience Position Paper

Nancy Spector, DNSc, RN, NCSBN Director of Education

At the NCSBN annual meeting in August 2004, the National Council of State Boards of Nursing (NCSBN) Member Boards supported a resolution for the NCSBN Practice, Regulation and Education (PRAE) Committee to develop a position statement on prelicensure nurse clinical experiences. The statement will, "provide guidance to boards in evaluating whether entry-level nursing applicants have received sufficient hands-on, effective, and supervised clinical nursing education to ensure safe nursing practice, in both traditional and alternative educational nursing programs utilizing distance learning, simulation laboratories, and other technological innovations."

The boards of nursing requested this because their mission is to protect the public, and they have the responsibility of ensuring that new graduates are safe practitioners.

In preparation for writing this position paper, members of the PRAE Committee have surveyed the boards of nursing and nursing education organizations about their opinions on clinical experiences for prelicensure students, including their thoughts on the definitions of clinical experiences and supervised clinical education.

They have also done a literature review on clinical experiences in nursing education and have reviewed the clinical education in other practice-based disciplines. At its February meeting, members of the PRAE Committee visited a simulation laboratory and heard from a renowned researcher in medical and nursing simulation. When the PRAE Committee members have all the necessary background, they will write the position paper. It will need approval by the NCSBN Board of Directors and then will be presented at the 2005 NCSBN annual meeting in August. Once approved, this position paper will be posted on the Education page of the NCSBN Web site.

This position paper will serve to guide boards of nursing, though NCSBN does not have the authority to mandate nursing boards to implement new practices.

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