



CHARTING NURSING'S FUTURE

REPORTS ON POLICIES THAT CAN TRANSFORM PATIENT CARE

September 2014 • ISSUE NO. 23

IN THIS ISSUE

- ▶ Innovations in Clinical Education..... 2
- ▶ Integrating Classroom and Clinical Education..... 3
- ▶ Simulation and Virtual Reality 4
- ▶ Interprofessional Education 5
- ▶ Dedicated Education Units 6
- ▶ Transition-to-Practice Programs 7
- ▶ Barriers to Change: Tradition, Communication, and Regulation 8

Innovation in Clinical Nursing Education: Retooling the Old Model for a 21st-Century Workforce

Health care in the United States is in the midst of revolutionary change. Spurred in part by the Affordable Care Act (ACA), forces are reshaping the health care landscape to emphasize prevention, cost control, population health, community-based care, and care coordination. Despite these shifts, most clinical nursing education in associate (ADN) and baccalaureate (BSN) degree programs still emphasizes hospital-based care. The result is a widening gap between clinical nursing education and the 21st-century competencies that nurses need today and for the future.

Barriers to change, both real and perceived, have hampered progress in closing this gap, but many educators are striving to transform clinical education. They are embracing curricular innovation to ensure that new nursing graduates are better prepared for tomorrow's challenges: working collaboratively in teams, providing evidence-based care, managing chronic conditions, coordinating complex care, and promoting a culture of health. This brief explores a number of innovations in clinical education, showcases some of the nursing leaders who have championed them, and shares the thoughts of educators and others who hope to accelerate the pace of change.



"There exists no substantive evidence to suggest that our traditional means of clinical education in nursing and other health professions are particularly effective in developing clinical reasoning, so it is an opportune time to closely examine our educational practices and create new learning paradigms that are grounded in evidence."

–Judith Halstead, PhD, RN, FAAN
Executive Director, National League for Nursing's Commission for Nursing Education Accreditation; Professor, Indiana University School of Nursing

Figure 1.

Do the Requirements of State Boards of Nursing Stand in the Way of Innovation?

State Board of Nursing Requirements for RN Degree Programs	# of States and U.S. Territories That Have These Requirements
Minimum number of clinical experience hours	8 states and 3 territories
Maximum simulation hours that can substitute for clinical experience hours	8 states allow no simulation as a substitute; 4 states specify that 20 to 25 percent of clinical hours may be replaced by simulation.
Student/preceptor* ratio	
1:1	14 states
2:1	11 states
> 4:1	2 states
*Preceptor: an experienced practicing nurse who serves as a teacher, mentor, role model, or supervisor in a clinical setting.	

The widespread perception is that State Boards of Nursing (BONs) are highly prescriptive in a variety of policy areas that affect clinical education. In fact, most BONs place few limitations that would hamper innovation. Even so, state BON requirements vary widely, suggesting the need for research to help determine which requirements lead to better educational outcomes.

Source: National Council of State Boards of Nursing Member Board Profiles, 2012 Education Programs; Hayden JK, Smiley RA, Gross L. Simulation in Nursing Education: Current Regulations and Practices. *Journal of Nursing Regulation*. 2014;5(2):25–30.

Innovations in Clinical Education

The Carnegie Foundation's 2009 report, *Educating Nurses*, called for a “radical transformation” of nursing education to achieve closer linkages between classroom education and clinical experiences. In 2011, the seminal Institute of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health*, produced in partnership with the Robert Wood Johnson Foundation, was equally forthright—acknowledging the need for new approaches to nursing education, including a wider range of clinical sites, and research into the effectiveness of those approaches.

Clinical education in nursing has historically involved twice-weekly hospital rotations in specialties such as medicine, surgery, pediatrics, obstetrics, and psychiatry. This hospital-based approach no longer provides students with the necessary blend of clinical experiences because so much care has shifted to the community.

“Soon hospitals will all be like ICUs. Only very, very sick people will be inpatients,” says Hila Richardson, RN, DrPH, FAAN, associate dean for New York University's undergraduate nursing program from 2004 to 2011.

Academic/practice partnerships in primary and palliative care, public health, geriatrics, health promotion and disease prevention, and corporate health and wellness—growing specialties of the future—hold great potential as laboratories for clinical learning. At Lewis and Clark Community College in Godfrey, Illinois, for example, community health is integrated into the entire curriculum. All students rotate through a family health clinic operated by the college several times each

year, and every student rotates at least once through the local Head Start program, where students and nurse practitioners (NPs) conduct physical assessments.

Population health is another important area of instruction, a point validated in 2013 when the American Association of Colleges of Nursing (AACN) published a supplement to *The Essentials of Baccalaureate Education for Professional Nursing Practice*, which is used as a guideline for nursing school accreditation. The supplement recommends that nursing programs employ an “ecological perspective,” or one that considers the social determinants of health, “in health assessment, planning, and interventions with individuals, families, and groups.” The supplement is part of a five-year, \$1 million cooperative agreement between the AACN and the Centers for Disease Control and Prevention (CDC) aimed at, among other things, incorporating more population health into BSN and graduate nursing education.

Beyond setting and context, a growing number of educators are also advocating for a resequencing and blending of didactic and clinical education. This approach might involve mixing and matching study modules to meet individual students' learning needs, an integrated curriculum that combines the basic and clinical sciences, or concept-based learning (see p. 3). For example, at the University of Kansas School of Nursing, instead of teaching pediatrics, obstetrics, and medical and surgical care, faculty teach such concepts as fatigue, oxygenation, and perfusion. These topics cross populations and specialties and are explored by students

through various case studies. Simply put, these reforms are an acknowledgment that the knowledge explosion has forced educators to consider new ways to teach.

Ways to Restructure the Clinical Experience

- ▶ Simulation—whether using simple task trainers, actors, or complex high-fidelity mannequins—and virtual reality. These allow students to practice critical thinking, communication skills, routine health assessments, and high-risk procedures, often in teams with other health professionals (see p. 4).
- ▶ Interprofessional education. This aims to break down persistent learning silos among clinicians and prepare students to work collaboratively when they enter practice (see p. 5).
- ▶ Dedicated Education Units (DEUs). These engage all staff nurses within one unit of a care facility in working with clinical faculty to instruct students over an extended period of time (see p. 6).
- ▶ Nurse residencies. These fortify clinical competencies by providing new RNs with several months of structured guidance while they become acclimated to the challenges of the profession (see p. 7).



“We need a much greater portion of clinical nursing education to take place in Head Start programs, public health departments, outpatient clinics,

and local school districts. Long-term care and post-acute rehabilitation facilities, hospice, and home health offer exceptional learning experiences as well.”

—Donna Meyer, BSN, MSN
Dean, Health Sciences, Lewis and Clark Community College, Godfrey, Illinois;
President, National Organization of Associate Degree Nursing

Guidance from the 2011 IOM *Future of Nursing* Report

Producing nurses for the 21st century will require a reordering of curricular priorities to:

- ▶ Focus more on learning outcomes rather than credit or clock hours.
- ▶ Use more immersive clinical experiences including apprenticeships and situated learning.
- ▶ Use more simulation as a complement to hands-on clinical experience.
- ▶ Provide more flexibility in setting student-to-faculty ratios, depending on the content being taught.
- ▶ Provide nursing students with strong competencies in community assessment and community engagement.

Integrating Classroom and Clinical Education

Traditional nursing programs tend to segment nursing knowledge into separate silos of information—for example, by medical specialty, stage of life, or system of the body. Today's innovative programs interweave these components to improve students' learning and their ability to deliver care.

The University of Pennsylvania Shifts from Linear to Integrated Learning

When University of Pennsylvania School of Nursing Associate Professor Cynthia Connolly, PhD, PNP, FAAN, was a nursing student at Penn in the 1970s, she remembers being told that her generation of nurses would be practicing in a “post-infectious disease” world, a wildly optimistic and U.S.-centric vision of the future that she notes predated the AIDS epidemic. “We believed we were knocking off diseases one by one, and our education was very linear as well. There was a heavy dose of medical and surgical content as well as pediatrics, obstetrics, psych, and community health. Each course stood on its own.”

Fast forward 30 years, and today Penn has one of the country's more innovative nursing curricula. Students have observational clinical experiences as early as the first year, engage in interprofessional collaborative care, make use of a high-tech simulation lab, and, under guidance from their faculty mentors, partner with top research institutes to learn about and apply evidence-based practices.

Technology is used to students' great advantage, says Connolly, chair of the school's curriculum committee. For example,

a student might attend a lecture on cystic fibrosis from 9:00–11:00 a.m., and then go directly to the simulation lab to discover what a 4-year-old who has pneumonia from cystic fibrosis sounds and looks like.

The Penn experience is part of a broader trend to consciously integrate basic science and clinical experiences so that students can connect the two instead of just memorizing facts. It's far easier for students to understand what they're hearing in the lungs through a stethoscope, for example, if this clinical experience occurs while students are studying the pulmonary system in the classroom, explains Connolly.

The Penn curriculum has also doubled the time spent in community settings. The increase, says Connolly, is “in recognition of how the Affordable Care Act will change American health care and of nurses' critical roles in managing that change.” Students, she adds, will also spend “much more time learning about health policy and the social determinants of health.”

A Concept-Based Curriculum: One Solution to Coping with the Knowledge Explosion

When many current nursing faculty were educated, schools tried to give graduates a rough idea of nearly everything they might need to know before becoming an RN. Not anymore. An explosion of new knowledge makes it impossible to cover every possible subject in nursing school, says Helen Reid, EdD, RN, CNE. One solution is to convey content by focusing on concepts—categories

of nursing knowledge, such as metabolism, clotting, communication, and safety. “We look at examples of these concepts throughout the life span so students can apply what they've learned to different scenarios,” she explains.

Later, at a clinical site, students reinforce and extend their learning as they observe and collect data from 10 patients whose conditions illustrate the concept. “When we meet at the end of the day to discuss the concept, each student has seen 10 patients and looked at that concept in depth in addition to spending time providing direct patient care,” says Reid. “It takes some faculty development, but it helps the instructor focus as well, since fewer students are providing direct patient care at any one time.”

Reid, the health science provost at Trinity Valley Community College, which has campuses in four small Texas towns, is in the midst of trying out a concept-based curriculum developed by faculty at 28 of the state's nursing schools. Six schools started the innovative program in the fall of 2013, and one more followed suit in 2014. A \$696,000 Texas Higher Education Coordinating Board Grant provided funding to create and implement the first year of the 60-credit hour ADN curriculum, which combines didactic and clinical education.

The ‘Coach Model’ Supports Online Learning

Faculty at Texas Tech University Health Sciences Center School of Nursing have developed a “coach model” for clinical teaching to complement Texas Tech's online BSN program for students who already have a bachelor's degree in a non-nursing field.

Unlike a traditional model in which students rotate through a variety of clinical settings under the supervision of a clinical faculty member, this model pairs the student with a BSN-prepared nurse “coach.” They work together for several 8- or 12-hour shifts each week for a full year. The program requires students to meet with Texas Tech faculty at least once a week. These meetings occur in the hospital, creating an intensive and very effective coach-student-faculty triad.

The Value of Integrated Learning



Photo courtesy of Trinity Valley Community College

Students at Trinity Valley Community College in Texas study a “concept map” of a patient with a metabolic problem. The visual display helps students integrate information about the specific case with their broader knowledge of the concept.

Simulation and Virtual Reality

Simulation Can Address the Vagaries of Real Care Settings

The unpredictable nature of hospitals is a long-standing frustration in clinical education. One solution: simulation, or “sim” labs, which expose students to the clinical scenarios they need when they need them.

Simulation is especially useful for such low-frequency but high-risk clinical management situations as postpartum hemorrhaging or sepsis, a potentially fatal immune-system response to an infection. In both situations, explains Mary Lou Brunell, MSN, RN, the executive director of the Florida Center for Nursing, nurses would most likely be present when symptoms emerged. Simulation allows students to work through their responses—and make mistakes—before encountering high-risk scenarios with actual patients.

“In the real clinical world, when the student is a novice and something potentially life-threatening occurs, somebody will take over,” says Pamela Jeffries, PhD, RN, ANEF, vice provost for digital initiatives at Johns Hopkins University School of Nursing and president of the Society for Simulation in Healthcare. “In the sim lab, it’s the student who has to make a decision.”

Some observers have questioned whether simulation should count as clinical time, but a recent study by the National Council of State Boards of Nursing (NCSBN) found no

differences in NCLEX pass rates or other measures of overall readiness for practice between new graduates who had traditional clinical experiences and those who spent up to 50 percent of their clinical hours in simulation.

The cost of simulation is perhaps its biggest drawback. An initial investment can run into the tens of thousands of dollars for lifelike mannequins that can turn blue, vomit, bleed, and mimic a range of other physiological effects. In addition, the need for specialized technicians to maintain and operate the units adds ongoing costs to a school’s budget.

So far, considerable evidence indicates that simulation is an effective training tool in other industries, particularly aviation, and a few studies have emerged that show similar benefits to simulation in health care.

Virtual Reality: Less Expensive and Widely Accessible

Virtual reality—a catch-all term for computer-based learning that seeks to replicate the types of experiences provided by actual patient encounters—costs less than setting up a sim lab. What’s more, virtual learning can occur day and night, anywhere on the planet, so long as students have access to a computer and an Internet connection. Virtual lessons can also be shared widely by educators at little or no cost.

“Chatbots,” computer programs designed to simulate an intelligent conversation, are

used around the world as customer service tools. Nursing students use them to interview virtual patients through a Web interface.

The chatbots, which can wink and change facial expressions, are programmed to respond to a student’s questions just as a live human being would. At the University of Colorado College of Nursing, Diane Skiba, PhD, FAAN, FACMI, is designing chatbots to prepare students to work with patients with depression, post-traumatic stress disorder, and traumatic brain injury.

Other programs allow students to create avatars or on-screen representations of themselves that can interact with others in a virtual health care environment and render virtual care. “You must do certain things or the patient can die,” says Skiba, adding, “It really gives you the feeling that you’re immersed in that environment.”

Up to a point. As Skiba acknowledges, in a profession that requires nurses to physically interact with patients to provide most care, the only thing that can be touched when using virtual reality is a computer screen or keyboard.

For More Information:

Hayden JK, Smiley RA, Alexander M, Kardong-Edgren S, Jeffries P. The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. *JNR*. 2014;5(2):S3-S64.

The Value of Simulation

University of Texas at El Paso (UTEP) students take part in “Simulated Hospital Day,” a four-hour simulation exercise in which students take turns acting as patients. Actual physicians and APRNs make rounds and write orders, while student nurses provide patient care, dispensing medications and using electronic health records.

When Ronnie Stout arrived at UTEP in 2009 to run the school’s 54-bed simulation laboratory—one of the biggest in the country—he heard a common complaint: Despite the sophistication of the school’s four high-tech mannequins, the sim lab still lacked the realism of a hospital unit. Additionally, each mannequin required a computer to run it, a camera to record the students’ interactions, and in some cases, a dedicated technician. So UTEP turned its sim lab into a simulated hospital. “The student patients complain of chest pains, pull out their IVs, fall out of



Photo courtesy of the University of Texas at El Paso

bed,” says Stout. “We have religious issues going on, economic issues, family members who try to sneak candy in for a diabetic.”

UTEP hosts 45 Simulated Hospital Days each year, giving students from UTEP’s other health professions schools ample opportunity to join in the simulation exercise.

Interprofessional Education

Preparing Students to Work in Teams to Improve Health Outcomes

A 1999 IOM study, *To Err is Human, Building a Safer Health System*, estimated that nearly 100,000 preventable medical errors occur each year in U.S. hospitals. More recent studies suggest the current number may be significantly higher. Nearly three-quarters of the errors in the IOM study were blamed on communications failures. One proposed remedy: interprofessional education (IPE) to improve communication among health professionals by teaching them to work collaboratively in teams.

At Emory University, about 20 nursing students in the school's community health class work each semester with physical therapy, pharmacy, and dental hygiene students in a family health program at a migrant labor camp in Moultrie, Georgia. "They are literally working side by side with different professions," says Elizabeth Downes, DNP, MPH, FAANP, an assistant clinical nursing professor who helps run the program. "It's a very rich two-week immersion."

As rewarding as these experiences can be, the coordination challenges they pose have discouraged many schools from adopting IPE. Health professions students typically have rigid course schedules, their schools

may not be located on the same campus, and by tradition, professional education has been siloed rather than interdisciplinary. What's more, some educators have simply not been convinced that IPE will make much difference in clinical outcomes.

"Not too long ago, the evidence for team training in healthcare relied heavily on the experiences of other industries: aviation, nuclear power generation and the military," wrote Eduardo Salas and Michael Rosen in a 2013 issue of *BMJ Quality and Safety*, an international journal of health care improvement. Now, however, "we know that teamwork impacts clinical performance, and teamwork training can improve the teamwork of clinicians, and even clinical outcomes." One example they cite is a Veterans Health Administration team-training program implemented in 74 facilities. The program produced an 18-percent reduction in annual mortality compared with a 7-percent decrease at facilities that did not undergo any training.

Pioneering IPE Program Incorporates Patients

In tandem with placing increased value on collaborative care, the new health care landscape is becoming more patient-centered, with implications for nursing education and IPE. Health Mentors, a

program pioneered by Thomas Jefferson University in Philadelphia, embraces both trends. It takes the concept of IPE one step further by including patients as collaborators on the health care team. Incoming nursing and other health professions students form small interprofessional teams that are then paired with a volunteer health mentor—a patient living in the community who has been diagnosed with one or more chronic conditions such as high blood pressure, diabetes, arthritis, heart disease, or cancer.

Each team meets twice each year for two years, conducting lengthy visits at the patient's home to take a health history and observe, assess, and document physical, social, and environmental contributors to the mentor's health and well-being. Students also create an individual plan of care. According to Barbara Brandt, PhD, the director of the University of Minnesota's National Center for Interprofessional Practice and Education, incorporating patients into the curriculum is "the next wave" in health professions education.

For More Information:

Salas E, Rosen MA. *Building High Reliability Teams: Progress and Some Reflection on Teamwork Training. Quality and Safety in Health Care.* 2013;22:369–373.

The Value of Community-Based Education

Emory University School of Nursing student Miriam Boulay shows two girls at a migrant farmworker community clinic in Georgia how to brush their teeth. Boulay and other Emory nursing students in the school's community health class work with physical therapy, pharmacy, and dental hygiene students at the clinic as part of their interprofessional training.



Photo: Steve Ellwood, courtesy of Emory University



"Interprofessional education started in the 1960s, and up to now, it just seemed like a nice thing to do. But now health systems are looking at costs

and quality, and what will make IPE 'stick' this time is that the research is starting to demonstrate the value of teams in improving health outcomes."

—Barbara Brandt, PhD
Director, National Center for Interprofessional Practice and Education

Dedicated Education Units

Partnerships are essential to the new health care paradigm, and the Dedicated Education Unit (DEU) is a creative example of this trend. The DEU represents a partnership between a school of nursing and a health care facility whose staff nurses serve as instructors, closely supervising students while fulfilling their own clinical roles. The arrangement expands the capacity of the nursing school's clinical faculty members. Rather than teaching students directly, they oversee the clinical education process, providing guidance to the staff nurses and helping students with more theoretical concepts.

In a traditional clinical education model, students rotate through many clinical placements. Under the supervision of a clinical faculty member, they are typically assigned to work with one or more patients over the course of a single shift. The DEU model places students in one clinical setting, a given hospital unit, for example, often for an entire semester, with the staff nurses on the unit providing direct supervision of the students' work.

For students, this sustained, consistent interaction with staff often makes the DEU a far richer clinical environment. For the facility hosting the DEU, the benefits are less tangible but no less significant. Staff nurses, who frequently receive adjunct faculty appointments, are often invigorated by the chance to be part of nursing's long tradition of mentoring.

"Hospitals tell us it makes them better nurses," says Joane Mocerri, RN, PhD, the

associate dean for the undergraduate nursing program at the University of Portland. "When they are teaching students what they know, it keeps them on their toes, it keeps them up with the latest evidence-based nursing." Facilities also gain access to a tested group of student nurses that they can later hire.

DEUs began in Australia in the 1990s and were pioneered in the United States at the University of Portland beginning in 2003. The school partnered with area hospitals to establish its first DEUs but now has DEUs in community settings as well (see "The Value of Partnerships," below).

The DEU model has advantages for all stakeholders.

- ▶ Schools increase their teaching capacity at a time of clinical site and nurse faculty shortages.
- ▶ Host facilities see an increase in job satisfaction among nursing staff, offsetting up-front training costs.
- ▶ Students gain richer clinical learning environments and a greater sense of belonging to the health care team.

For More Information:

Moscato S, Nishioka V, Coe M. **Dedicated Education Unit: Implementing an Innovation in Replication Sites.** *Journal of Nursing Education.* 2013;52(5):259-267.

Jeffries PR, Rose L, Belcher AE, et al. **A Clinical Academic Practice Partnership: A Clinical Education Redesign.** *Journal of Professional Nursing.* 2013;29(3):128-136.

FAQ

What exactly is a DEU?

A DEU is a clinical setting in which an entire health care unit is dedicated to educating students from one academic program. Staff nurses on the DEU are given the chance to become clinical instructors. Students take part in the workflow and culture of the unit, and actually live the nursing experience.

What's in it for the host facility's nursing staff?

By taking part in a DEU, staff nurses fulfill the profession's long tradition of mentoring. Frequently they also receive free or reduced-rate continuing education, access to the latest nursing research, and an adjunct faculty title through their relationship with the nursing school.

What's in it for the host facility?

Hospitals and other health care facilities get to train students in accordance with their own specific policies and gain an advantage in recruiting the students after graduation and licensure.

What's in it for the nursing school?

Since the host facility provides the clinical instructors, the school can increase enrollment without increasing costs, or maintain the same enrollment but operate with slightly fewer clinical faculty.

The Value of Partnerships

A student (at far right) assists a resident with the help of a certified nursing assistant (CNA) at this long-term care facility run by the Marquis Companies. Students in the adult and elder health care course at the University of Portland School of Nursing spend six weeks paired with CNAs on this Dedicated Education Unit. While CNAs perform various tasks, the university's clinical faculty coordinator helps the students learn about geriatric care. As a CNA is turning a resident over in bed, for example, a student nurse might conduct a skin assessment; or while a CNA takes a resident for a walk, a student nurse can observe the person's gait and mobility to assess his or her neurological health.

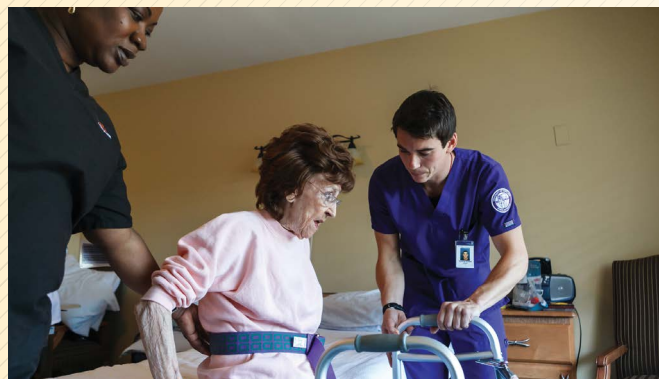


Photo: Andrea Lonas Photography

Transition-to-Practice Programs

Residencies for Nurses Mirror Success of Those for Physicians

Residency requirements are routine for physicians, but for nurses, transition-to-practice programs are still considered optional. That may soon change. Implementing nurse residencies was one of eight recommendations in the 2011 IOM *Future of Nursing* report, and a 2011 survey of 219 hospitals found that more than one-third of those hospitals had residency programs in place.

Transition-to-practice programs are far more comprehensive than the orientations that new nurses usually receive. They allow new nurses to hone their clinical abilities and develop confidence, and they are typically tailored to the sponsoring employer's priorities. It can cost employers a few thousand dollars per nurse to operate their own residency programs, but the results—and cost savings—can be dramatic. The cost of replacing one staff RN can easily run upwards of \$50,000. A 2013 article in the *Journal of Nursing Administration* noted that a structured transition-to-practice program dramatically lowers the rate of turnover to between 7 and 14 percent—significantly below the current turnover rate of 35 to 65 percent.



"There's increasing recognition that the complexity of patient care systems today is so extreme that even very high-quality education programs aren't able to fully prepare nurses for the complexity of the work environment. Residencies are designed to ease the transition of new graduates into clinical settings where the disease burden is high and patients suffer many psychosocial complications."

—Patricia Farmer, DNP, FNP-c, RN
Consultant, Center to Champion Nursing in America, AARP Public Policy Institute

California's Statewide Model Puts a New Twist on Nurse Residencies

Educators and concerned funders in California developed the New Graduate RN Transition Program to help newly licensed RNs find employment in the midst of the recession. The program is offered by 24 nursing schools throughout the state and runs an average of 24 hours a week for 12 to 18 weeks, with weekly meetings on the host school's campus. The nursing schools cover workers' compensation and liability insurance for the RNs and work out the residency curriculum with the host employers.

The California model makes a point of placing new nurses in non-acute care settings where more nurses will be needed. An initial evaluation of data from 2010 to 2012 shows an increase in both competence and confidence among those taking part. According to Nikki West, MPH, who coordinates the program in her capacity as program director at the California Institute for Nursing and Health Care, about 80

percent of participants found employment within three months of completion, many at the same location as their residencies.

Dwight Wilson, who runs Mission Hospice and Home Care in San Mateo, California, reports that the residency program has kept the hospice's turnover rate at less than 10 percent. "There is a common core belief in our profession of mentoring new nurses," he says, "but a residency also enhances our capacity to vet individuals, and matching persons to what we do is critical to our success."

The program started as a pilot in 2010, and so far, about 1,500 nurses have participated. "Postgraduate residencies are not yet a requirement, but that's where I'd like to see things head," says West. One of the biggest barriers to making that happen is finding a reliable funding model. The program is currently paid for through time-limited grants and partial tuition payments.

The Iowa Online Residency Program: Affordable and Accessible

Faced with an aging nursing workforce and more and more nursing retirements, Iowa employers wanted to figure out a way to ensure that the state maintained a steady flow of new nurse graduates who would remain on the job after the first and second year of work. Residency programs for newly graduated nurses were seen as the answer, because they produce big increases in nurse retention rates. But the state's many smaller facilities did not have the resources to set up their own programs and needed a solution that was inexpensive and efficient.

In response, the Iowa Action Coalition, one of 50 state-level groups working to implement the recommendations of the IOM *Future of Nursing* report, created an affordable, 12-month, online residency program based on a set of universal

competencies rather than specific clinical experiences. These competencies range from delegation to critical thinking to how to communicate with other members of the health care team. The program and its competencies are not just intended for the acute care setting; the modules include long-term care and home health care as well.

Health care facilities can purchase the residency for just \$200 per nurse if they opt for a "blended" model, in which staff at the facility lead discussions among the residents. The full program costs \$1,000 per nurse and provides individual coaching, project support, and access to synchronous Web-based discussions with an online cohort of other residents. All residencies culminate in an evidence-based practice or quality-improvement project.

Barriers to Change: Tradition, Communication, and Regulation

Despite enormous change in U.S. health care in the past decade—and far more change to come—clinical education for many of the nation's 170,000 ADN and BSN students continues essentially as it has in decades past. There are innovative clinical nursing programs across the country, as this brief makes clear, but these programs remain the exception, not the rule.

In 2009, NCSBN convened a committee of its members, and with input from prominent national groups representing nursing education and accrediting bodies, developed language for their Model Act and Rules that state boards of nursing (BONs) could adopt to encourage innovative education pilots. Three years later, almost one-third of state BONs had adopted some of the model language. More than half of state boards said their rules and regulations were already flexible enough to promote innovation in nursing education.

Despite this progress, educational innovation is still hampered by a lack of communication between educators and state boards, sometimes inflexible rules related to faculty qualifications, and the often cumbersome process of curriculum change itself.



"It's about changing a mindset. We teach as we were taught, so we're often holding onto that old model in our heads."

—Beverly Malone, PhD, RN, FAAN
Chief Executive Officer, National League for Nursing

Charting Nursing's Future asked several nurse leaders for their thoughts on accelerating the slow pace of change in clinical nursing education. Here is a sample of their responses:

- ▶ "A common misperception is that boards of nursing, in their regulatory oversight of nursing education programs, are overly prescriptive. In fact, most boards of nursing are not. For example, most boards of nursing do not require a fixed number of clinical hours. Rather, they describe sufficient clinical experiences to meet the program's outcomes with the concept of 'sufficient' including quality as well as quantity."

—Kathy Apple, MS, RN, FAAN, chief executive officer, National Council of State Boards of Nursing

- ▶ "While the gap between practice and academia in nursing still exists today, the practice community is not aware of or engaged enough in the academic education model to create the market forces needed to help spur changes in academia. Health systems could channel their tuition and scholarship dollars to selected innovative programs with the best outcomes. Legislated tax dollars could be directed to programs that adopt concept-based and integrated curricula."

—Cole Edmonson, DNP, RN, NEA-BC, chief nursing officer, Texas Health Dallas

- ▶ "Faculty are reluctant to restructure an entire curriculum that is functioning very well by all outcome measures and implement a new model that has been tested in only limited ways. Our curricular decisions are based on student, employer, and performance measures, and it is

difficult to find the interest or resources to launch a major structural overhaul when these measures do not indicate it is warranted."

—Beverly Foster, PhD, MPH, RN, director, undergraduate program, School of Nursing, UNC-Chapel Hill

- ▶ "Because the nurse licensing exam is based on current practice, it can overlook the most novel innovations and 'bleeding edge' approaches to care. Fear of lowering pass rates is one reason some faculty resist innovation."

—Marla Weston, PhD, RN, FAAN, chief executive officer, American Nurses Association

- ▶ "For many educators, there is no 'burning platform' to spur change, no incentive, and no reward for changing things. Universities and community colleges can be highly bureaucratic as well, requiring multiple approvals to make changes to curricula."

—Linda Tieman, RN, MN, FACHE, executive director, Washington Center for Nursing

For More Information:

To see the NCSBN Model Act and Rules, visit <https://www.ncsbn.org/4275.htm?iframe=true&width=500&height=270>

For resources for boards of nursing, nursing faculty, and others on fostering innovation in nursing education, visit <https://www.ncsbn.org/1927.htm>

Spector N, Odom S. The Initiative to Advance Nursing Education: Three Years Later. *Journal of Nursing Regulation*. 2012;3(2):40–44.

Credits

EXECUTIVE EDITOR: Maryjoan D. Ladden, PhD, RN, FAAN, senior program officer, Robert Wood Johnson Foundation

The George Washington University Project Team

PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR:

Ellen T. Kurtzman, MPH, RN, FAAN, assistant research professor, School of Nursing

DEAN: Jean Johnson, RN-C, PhD, FAAN, School of Nursing

ACKNOWLEDGEMENTS: Many thanks to Kathy Apple, Jean Giddens, Pamela Jeffries, Teri Murray, Shirley Orr, and Julie Sochalski for their advice and support during the development of this brief.

CONTRIBUTING EDITOR: Susan B. Hassmiller, RN, PhD, FAAN, senior adviser for nursing, Robert Wood Johnson Foundation, and director, The Future of Nursing: Campaign for Action

SENIOR EDITOR: Nicole Fautoux, Propensity LLC

WRITER: T.R. Goldman

GRAPHIC DESIGN: Marketing & Creative Services, Division of External Relations

Subscription Information

Charting Nursing's Future is distributed electronically and free of charge. To subscribe to the series or to download PDF files from the archives, visit www.rwjf.org/goto/cnf.

SUBSCRIBE ONLINE AT
WWW.RWJF.ORG/GOTO/CNF