

Partnerships and innovation: The future of nursing education

Collaboration, design thinking, and competencies are critical to prepare nurses to work at the top of their practice.

By Catherine Spader, RN

Nursing education is evolving rapidly to prepare nurses for mounting health-care challenges, including the COVID-19 pandemic, healthcare inequality, integration of electronic health records, and care across various settings. The World Health Organization (WHO), in its State of the World's Nursing Report—2020, is calling for an ur-

gent investment to accelerate nursing education. (Visit [who.int/publications-detail/nursing-report-2020](https://www.who.int/publications-detail/nursing-report-2020) to read the report.) WHO also advocates for strengthening leadership so nurses have an influential role in developing health policy and decision-making and can contribute to effective health and social care systems.



Here's a look at some of the innovative strategies associations and schools are using to ensure future nurses are well prepared to meet evolving healthcare needs and work at the top of their licenses.

Covering the essentials

"Unprecedented changes in healthcare delivery needs are accelerating innovative efforts in nursing education," says **Deborah Trautman**, PhD, RN, FAAN, president and chief executive officer of the American Association of Colleges of Nursing (AACN).

In addition, the 2019 *Activating Nursing to Address Unmet Needs in the 21st Century* report by the Robert Wood Johnson Foundation states that one of the core functions of nursing practice is to build partnerships within and outside the health sector to find solutions to today's healthcare challenges. (Visit bit.ly/36wRQa6 to read the report.)

AACN is taking a big step into the future by re-envisioning its *Essential Series*, the elements and framework on which to develop nursing curricula. "We are moving from baccalaureate, master's, and doctor of nursing practice curricula essentials toward competency-based education and assessment," Trautman says. The goal of this approach is to ensure equitable learning experiences and achieve a consistent level of competency in domains such as primary care, coordination of care, public health, and population health management.

Many of the changes schools of nursing have implemented because of the current public health crisis will likely continue and evolve, including online education and virtual simulation. "Our experience during COVID-19 has shown us high standards can be met with online education," Trautman says. "Before this crisis, there was some concern about how well students would accept virtual simulation programs, but we have found it is not a problem, and some students even prefer them."



Deborah Trautman

Creative collaborations solve problems

Schools of nursing are responding to rapidly changing healthcare demands by developing creative new clinical collaborations and strengthening existing ones.

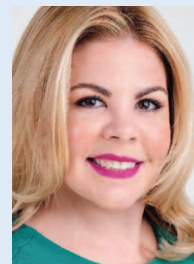
"There is an ingenuity happening that is providing benefits to patients and a great learning experience for nursing students," Trautman says. "These academic-based teams are helping students learn and addressing care needs throughout the country. I believe these partnerships will continue to grow and strengthen in the future as a result of the pandemic."

Since 2013, the University of Connecticut (UConn) School of Nursing in Storrs has strategically focused on educating nursing students in the science of innovation. Initial efforts encouraged undergraduate nursing students to work with teams of engineering, business, and allied health students to take their ideas and solutions from concept to successful prototype. Projects include new products, services, and processes that students develop and then conduct initial tests in clinical environments or in the simulation lab.

"The more we can get students to work together and think about how to creatively problem solve, the stronger we will be in uncertain times," says **Tiffany Kelley**, PhD, MBA, RN, DeLuca Foundation Visiting Professor for Innovation and New Knowledge at the UConn School of Nursing.

UConn integrates innovation education throughout its curriculum across all degree programs (bachelor of science through doctorate). For undergraduates, innovation is introduced in their first semester. "We prepare undergraduates to be thinking early about care delivery in different ways," Kelley says.

The school also offers the newly launched Healthcare Innovation Online Graduate Certificate. The 12-credit program integrates innovation theories from



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business and social sciences and teaches medical and nonmedical professionals how to apply critical thinking skills to shift healthcare culture. The program, which stresses healthcare innovation theory and application and workplace cultures that foster innovation, encourages students to be divergent thinkers and teaches them how to assess potential benefits and risks associated with launching their ideas to determine viability. The program’s capstone project is designed to advance students’ ideas as far as possible with guided mentorship over 14 weeks.

“One of the most dangerous statements we hear in healthcare is, ‘That’s the way we’ve always done it.’” Kelley says. “We evolve when we become personally invested in addressing what is not working for the betterment of all.”

Solving real-world problems in real time

Students at Duke University School of Nursing in Durham, NC, are learning to solve real-world problems in real time in the Duke Health Innovation Lab. The lab is a physical space where practicing nurses, nursing students, faculty, physicians, physical therapists, engineers, and other professionals collaborate to develop, build, and test prototypes of new healthcare products and delivery processes. Projects include much-needed 3D-printed face shields, now in clinical use at the Duke University Health System, and telepresence robots in the intensive care unit to increase patient communication and reduce personal protective equipment use. (Visit [youtube.com/watch?v=KOLcTKhPEhE](https://www.youtube.com/watch?v=KOLcTKhPEhE) to see a telepresence robot in action.)



Ryan J. Shaw

“The lab and the team played a critical role in the journey of the robots and face shields from concept to use,” says Ryan J. Shaw, PhD, RN, associate professor and director of the Health Innovation Lab.

Thinking by design

Schools of nursing also are adapting the design thinking approach to foster innovation. Design thinking teaches students how to challenge their own assumptions to better understand patients and their needs to create quicker, more effective solutions.

“The end goal of design thinking is to make the user experience the best it can be. It’s about creatively thinking forward, rapid prototyping, and testing ideas and products,” says Daniel Pesut, PhD, RN, FAAN, professor of nursing at the University of Minnesota School of Nursing, and director of the Katharine J. Densford International Center for Nursing Leadership.

The five phases of design thinking are discovery, interpretation, ideation, experimentation, and evolution. The University of Minnesota School of Nursing has adapted design thinking into its Health Care Design and Innovation Post-Baccalaureate Certificate program. Courses teach the knowledge, skills, and abilities to bring design thinking to nursing leadership and innovation.

In one student project, a nurse observed and listened to patrons at the local library and discovered they frequently discussed unmet health issues. She used design thinking to activate ideas about how libraries can become portals to promote health and health literacy. Possible library services could include health counseling, a nurse practitioner clinic, and a health and human services professional to help patrons access health-related resources.

“We are seeing many dysfunctional systems in healthcare colliding and breaking down as a result of the pandemic,” Pesut says. “Teaching design thinking is an opportunity to reboot and think differently about the future, as opposed to returning to old ways of thinking and old process models.”



Daniel Pesut

Uncovering the real problems to find the best outcomes

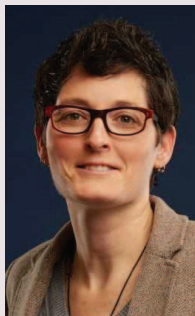
The University of Pennsylvania’s School of

Nursing in Philadelphia also has incorporated design thinking into its Innovation in Health course, which is open to all university undergraduate and graduate students.

“We need more rapid solutions to problems, especially now with the COVID-19 pandemic,” says **Marion Leary**, MSN, MPH, RN, director of innovation at the University of Pennsylvania’s School of Nursing. “Design thinking allows nurses to rapidly create and test solutions to problems in months instead of years.” Leary also is a founding member of the Society of Nurse Scientists, Innovators, Entrepreneurs & Leaders.

Students begin by learning about the foundation of empathy, which refers to seeking out the true cause of a problem, rather than relying on preconceived ideas. For example, in one project, students performed interviews and observations in Philadelphia public schools with a goal of improving food insecurity. What they discovered after working through the design thinking activities was that the problem wasn’t what they thought it was. The real issue was asthma attacks in the classroom—and a shortage of school nurses trained to respond. Nursing students tackled the problem by creating a mock inhaler and a scan code. The code links online to each child’s individualized asthma action plan, so teachers can quickly look up how to treat the child.

“We can’t tell people what we think they need. Design thinking begins with allowing patients to tell and show us what they know they need,” Leary says.



Marion Leary

Primary care competency

To address the healthcare needs of the future, WHO is recommending that nurses are educated and trained in the scientific, technological, and sociological skills needed to drive progress in primary healthcare and that they work to their full potential.

“Due to the shortage of physicians, physician assistants, and nurse practitioners, primary care is moving toward team care, and RNs are a vital part of the team,” says **Mary A.**

Dolansky, PhD, RN, FAAN, Sarah C. Hirsh Professor at the Frances Payne Bolton School of Nursing, Case Western Reserve University in Cleveland, OH.

Nurses’ role in primary care is partnering with patients to foster optimal patient self-management. This includes monitoring health, managing medications, teaching and coaching health improvement strategies, supporting success, and providing motivation for healthy activities, such as exercise and healthy eating. To achieve this, primary care RNs must be able to work to the top of their licenses—which they haven’t be able to in the past, according to Dolansky.

Times are changing, and educational partnerships and better training are supporting nurses to practice at the highest level possible. Frances Payne Bolton School of Nursing has teamed up with Louis Stokes Cleveland VA Medical Center in a federally funded program to strengthen primary care training for nurses while enhancing veteran healthcare. Program competencies include care coordination, population health management, behavioral health integration, and chronic disease management. Other skills include relationship building, teamwork and collaboration, and leadership.

“Nurses need to know how to step up and influence others and be the role model for the professional delivery of care,” Dolansky says. “This requires a transformation of curricula from a narrow focus on acute, inpatient care to a wider education and training in primary care and health management.”

The faculty is developing an observational assessment of primary care competence. The goal is to establish that baccalaureate nurses are competent in primary care nursing as new grads.

“It’s an exciting moment for nursing,” Dolansky says. “Primary care is a specialty in which we can shine and show the world the full extent of what a nurse does.”



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Catherine Spader is an author and healthcare writer based in Littleton, Colorado.