Simulation



t one time or another, most nursing students at Duke will come in contact with a dummy. Her name could be Victoria, and she might be about to go into labor. If all goes well, and even if it doesn't, Victoria will live to see another day, and another, and another. Victoria is just one of our simulation manikins – part of our family, says Margie Molloy, DNP, RN, CNE, CHSE, assistant professor at Duke University School of Nursing (DUSON) and director of the Center for Nursing Discovery (CND).

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"People are oftentimes very curious about what is going on and what we are doing," Molloy says about the simulation lab, which will often display the manikins, like Victoria, around the School during open houses. "We want them to see this aspect of how we are educating our students."

While most nursing schools today offer simulation as part of their education, DUSON is the only nursing school in North Carolina, and one of several in the country, to have received a five-year accreditation by the Society for Simulation in Healthcare and the Council for Accreditation of Healthcare Simulation Programs in the area of Teaching/Education. The CND received this special certification in January 2017.

"It (accreditation) gives you credibility in the field," Molloy says. "It confirmed that we were on the right track with our approach to simulation education, and the accreditation process encouraged us to examine our existing policies and procedures and identify areas where we were not strong. We then put into place changes to strengthen them." One of those areas was facilitator training. Since the changes, the school now has nine Certified Health Care Simulation Educators (CHSE) and offers training to those interested in receiving those credentials. "From what we understand, we have the most CHSEs of any institution that we are aware of," Molloy says.

Nursing students across the ABSN, MSN and Nurse Anesthesia programs use the simulation lab to augment their clinical and classroom education. A study done by the National Council of State Boards of Nursing provides substantial evidence that with well-trained facilitators, simulation experiences can be effectively substituted for up to 50 percent of traditional clinical experiences.

The benefit of simulation labs is that instructors can replicate whatever health event they wish, and all students can have the same experiences. This is especially important for helping students master competencies for high-risk, low frequency events. For instance, if clinical instructors want to teach students about patients suffering a heart attack, or a mother in labor, they are at the mercy of the real world. "If there are no babies in the hospital to be delivered, you can't deliver a baby," Molloy says. The simulation lab allows education to happen regardless of what situation presents itself in a close to real-life clinical setting.

Realism is a main goal of simulation. "We as a staff were given the opportunity



to really design this space," Molloy says of the school's 2014 expansion. "We put our heart and soul into this place and we helped design a layout that really worked with the multiple programs we have here." With a nurse's station, two operating rooms, an obstetrics area and several general simulation rooms, the CND covers a gamut of realistic learning opportunities.

Molloy says making sure students feel comfortable and safe in the simulation labs is another goal. Especially for students who have never been in a simulation lab, or worked with a high-fidelity manikin, the experience can be quite daunting. So briefings before the simulation can be just as important as the debriefing afterward, Molloy says. "We give them a tour of the space. We tell them how they can contact a healthcare provider if they need one during the simulation," Molloy says. "We try to increase their comfort level when participating in the lab and emphasize that our universal goals of teamwork and communication are really very important." Feeling secure in the lab over time translates to feeling secure in the real world. "We really promote psychological safety," Molloy says. "Hopefully the mistakes, if you make them in the sim lab, won't be the same mistakes made in the patient care area."

The use of simulation has grown exponentially over the past decade, when only a handful of courses applied this technology as an education tool. Now simulation is a component of almost every clinical course. "It's very deliberate," Molloy says. "Our simulations match the content of what our students are receiving in the classroom didactically; they bring what they are learning to the sim lab for practice."

And using simulation for interprofessional education is one of the greatest benefits of the lab, Molloy says. Bringing multiple disciplines together in the same room to practice patient care is a win-win situation. One such example of this effort is the "Blending of the Blues Program" organized through Duke AHEAD, (Academy for Health Professions Education and Academic Development), which brings together health professions faculty from the University of North Carolina (UNC) at Chapel Hill with those from Duke. Because UNC offers programs Duke doesn't in pharmacy and training of x-ray technicians and auditory speech therapists, for instance, it's a unique opportunity for multidisciplinary professional interaction.

"It gives us an opportunity to work with faculty who are outside of our traditional programs here at Duke," Molloy says. "We have ongoing sessions with other educators and we get to know them and their programs."

For DUSON students, simulation can also bring together students from the School of Medicine and other health professions programs here on campus. "Nurses hold onto a lot of myths about other disciplines," Molloy says, noting that nursing students may not be familiar with how medical students are trained. Bringing them together in a simulation is a great way to grow mutual

understanding. "I think each discipline enjoys hearing and learning from each other."

Molloy says as lifelong learners, she and her colleagues are always looking to adopt new and best practices. She is interested in understanding if, and how, simulation training positively

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affects patient outcomes. "It's almost a burning question for us sim educators now," she says. "We know the students

are learning, and they engage with our simulation manikins in a very unique way. To us they are not dummies, but highly sophisticated teaching tools. Our students truly enjoy this style of hands-on learning, but the next step will be to know we are making a difference in patient outcomes."

