



Professor Ellen Buckner (center)
leads students in treating a
“simulated patient.”

Improving Quality of Care *by Doug Gillett*

“Quality of care” is a seemingly simple concept that actually relates to a vast array of problems, techniques, and strategies. Fortunately, the School of Nursing is joining with a number of partners on campus to provide an equally wide array of solutions, from undergraduate training to complex research projects by faculty members.

At the Learning Resources Center, a project jointly funded by the SON and the School of Health Professions (SHP), the SON is instilling the importance of quality of care in its students by giving them the opportunity to practice procedures on “simulated patients” in the clinical-simulation labs. These patients are far more sophisticated than, say, the mannequins used for CPR training—in fact, they’re closer to robots that can be programmed to respond authentically to whatever technique or therapy the student performs.

“These simulators actually have breath sounds and heart sounds, their pupils can dilate, they have pulses, you can put IVs into them, and they’re hooked to a computer that’s run by one of the instructors,” says associate professor Jacqueline Moss, PhD, RN, assistant dean for clinical simulations and technology. “So students are put through simulated scenarios that require both psychomotor skills and critical thinking.”

Previously, students would have had to practice such skills on actual patients—or, more likely, not at all, to avoid the possibility of mistakes. The simulated patients, though, give students a head start by letting them practice in an environment where mistakes are allowable. “There are some things that we would just never let them do in the hospital as students, just because they don’t have the experience—we would never let them run a code, for

example,” Moss says. “But in the clinical-simulation environment we can allow students the actual experience of practicing complex skills with simulated patients.”

At the other end of the academic spectrum, SON researchers are taking the lead in creating processes and management systems that will enable nurses to ensure a higher standard of care for their patients. Patrick McNees, PhD, FAAN, is using his background in business and technology to make those systems a reality.

As an example, McNees recalls an NIH-funded project he worked on in the early ‘90s concerning chronic wound care. “The problem was that we knew the methods that help wounds heal faster, but in 1993 only approximately 20 percent of practitioners actually utilized those methods,” he explains. “So we developed a computer-based system to guide people through the assessment process, then offer them a set of protocols. . . . When people followed those protocols, wounds healed a lot faster. We developed a database of more than 35,000 wound assessments worldwide, and that was converted to an Internet-based system.”

McNees, who also has an appointment at the School of Health Professions and the Center for Aging, says he looks forward to expanding these ideas at UAB and engaging other researchers and institutions in the process. “The bulk of my research is applied research, and at UAB my emphasis will be on developing multidisciplinary project teams to address a variety of problems,” he says. “So it’s really going to push team science and collaborative research and will involve a lot of different schools.

“Many of the things that other universities will have to develop over time, UAB already has in place,” McNees says. “UAB is primed to take a lead role in elevating collaborative research and team science to another level.”