A grant from the US Department of Labor coupled with the generous support of the Smart family allowed Pensacola State College to realize its mission to fully integrate high-fidelity simulation into its two-year nursing curriculum. Today, the 12,000 square foot Mary Ekdahl Smart Center for Patient Simulation Training & Research uses numerous high-fidelity simulators, including Harvey® the Cardiopulmonary Patient Simulator, and the Harvard debriefing model to educate students in a 12-suite ‘virtual hospital’. During the 2009-2010 school year, there were over 6,719 duplicated simulation encounters involving Pensacola ADN, PN, EMT and Paramedic students.
The Mary Smart Simulation Center has three full-time staff (Education Director; simulation specialist, technician); ten adjunct instructors; and several nursing faculty members. Since fall 2006, the Center’s curricular offerings have expanded each semester; and a Summer Simulation Camp even gives local high school students an opportunity to explore and experience health careers using patient simulation in a variety of scenarios and interactive classes.

Integrating patient simulation into clinical teaching strategy offers multiple opportunities for student practice

Center staff devoted a year to building the conceptual and curricular frameworks for their simulation programs. One distinctive aspect is how they integrate student clinical hours with theory classes. 10% of clinical hours are simulation distributed in 2-hour segments through the entirety of each course over two years. The Center students acquire 22-24 simulation experiences, including debriefing with good judgment. This allows multiple opportunities for students to understand and reframe assumptions. The Mary Smart Simulation Center staff believe that students who make mistakes aren’t doing so intentionally – but, if you change their assumptions, you change their behaviors.

Two ADN students commented on their clinical experiences with simulation: “The heart and lung sounds the ‘sims’ can create give us a chance to learn the ‘normal’ and then move on to the abnormal, without the pressure of dealing with a live patient,” says one. Another adds: “Simulation time allows me to put what I learn in class into practice: it ‘bridges the gap,’ so I can more fully understand an illness or situation. It also gives you and your team members a chance to share ideas and collaborate to help the ‘patient’ while role-playing. With the instructor’s guidance, we learn the best practice to handle a particular situation.”

Marta Suarez-O’Connor, Education Director advises a slow, gradual integration of simulation into curriculum. “You don’t have to be perfect to get started – you’ll get better by the third or fourth semester – and you don’t need to start with 40 scenarios. Learn and build your program together, and it will change with experience.”

Research studies focus on curricular and needs assessment

The Florida Center for Nursing took the lead in 2010 in completing a statewide simulation resource inventory to identify nursing education models. The Florida Center has recently received a BCBS Foundation grant to launch the Florida Health Care Simulation Alliance, a state and regional model for simulation.

In 2008, the Center initiated a series of professional development programs and participated in research. A recently completed multi-center study by nursing faculty at Florida International University, Johns Hopkins University, Texas Tech, University of Miami, University of Pittsburgh and Pensacola State evaluated the effectiveness of the newly developed Harvey curriculum for cardiovascular assessment for the pre-licensure nursing population.

“Pensacola was the only two-year school invited to be in the study,” says Annette Orangio, simulation specialist. “We had 12 students who were very excited to participate in using an organized system of cardiopulmonary assessments using Harvey.” The study was submitted to the Journal of Nursing Education and is currently undergoing review.