

**Quantitative Research Component for the Florida Center for Nursing project entitled  
"Promoting the Use of Simulation Technology in Florida Nurse Education"  
A Partners Investing in Nursing's Future Project**

**Simulation Resources for Nursing Education in Florida**

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**August, 2010**

## EXECUTIVE SUMMARY

This report is a summary of the findings for the 2010 Nursing Simulation Resources in Florida survey. The survey was developed to identify existing simulation resources and to obtain data about how simulation is used by education and industry. Data represent responses from 132 schools of nursing (licensed practical nursing [LPN], associate degree [ADN], and baccalaureate degree [BSN]) and 78 hospitals. The overall response rate from the electronic survey was 54.5%. Schools had a higher response rate (73.7%) than hospitals (37.9%). Simulation is being used in both education and hospital settings, but specific use, staffing, and equipment vary widely. The main uses of simulation are for skill training and developing critical thinking skills. Schools report more resources for simulation than hospitals. Data also indicate that partnerships are desired and collaborative efforts should be explored.

Simulation is permitted to be used for up to 25% of direct clinical practice, yet the percent of simulation substituted for clinical hours averaged 5.1% across pre-licensure programs. Using median values, more BSN programs substitute simulation for clinical practice than either ADN or LPN programs.

A disparity exists in the amount of equipment owned by schools and hospitals. Schools own twice as many medium to high fidelity simulators as hospitals. Mannequins simulating adult, pediatric, newborn, and obstetric patients are available in each region. Over half of all simulators are for training for adult scenarios. The highest numbers of simulators were reported in regions with the largest populations and more schools and hospitals: Eastern Central, West Central, and South regions.

Only one-fourth of schools and hospitals have a dedicated simulation coordinator. Schools were more likely to have a simulation coordinator than hospitals. Nearly all coordinators have received some training to support their role, primarily education provided by equipment vendors. Few schools or hospitals had technical support personnel available. Technical support was cited as a need for simulation by nearly half of respondents.

Schools are more likely than hospitals to have dedicated space for simulation. Hospitals are more likely to transport simulators to various locations throughout the facility. Some sites with dedicated simulation space use the space for many hours throughout the week. Yet, opportunities to share or rent space to others were noted at sites that do not use their space as often. Since many sites stated future plans for establishing or building new simulation space, space may be available nearby. Few schools and hospitals have established collaborative agreements for loaning or renting simulation equipment and/or space.

Funding and sustainability for simulation is a major issue. Multiple funding sources are used to support simulation. Schools fund simulation via the institutional budget more often than hospitals. Schools also report more frequent use of funding from grants and private foundations. Three-fourths of hospital respondents indicated that they had inadequate financial resources to support simulation.

In both schools and hospitals, simulation is used across the variety of clinical specialties. Medical surgical simulations occur most frequently, with maternal-newborn simulations being the second most frequently occurring simulation type. Multi-disciplinary training was more common in the hospital setting.

Personnel at two-thirds of sites write their own scenarios, but many also use prepackaged scenarios. The primary reason for writing scenarios is to tailor to the learning objectives. Many respondents indicated a willingness to partner to develop and edit scenarios.

Respondents indicated that faculty education and hands on training were needed. School respondents reported significant interest in faculty education related to scenario writing, curriculum integration, and scenario editing.

Based on findings, the following recommendations are made:

- Simulation use varies across and within schools and hospitals. Establish a working group to identify best practices for implementing simulation across various academic programs (i.e., LPN, ADN, BSN, MSN), and collaborative simulation between schools and hospitals. Expand opportunities for simulation in clinical settings where it is not commonly applied such as mental health and home health.
- Funding and sustainability plans for simulation are critical. Establish partnerships and contracts for purchase and maintenance of equipment, space, and personnel.
- Education for those who use simulation is needed, especially faculty members and clinical educators. They need hands-on training, skills in writing and editing scenarios, and knowledge in how to integrate simulation into the curriculum. Provide education in the form of regional or statewide workshops, and through web-based education modules. Basic to advanced education is needed to meet varied learning needs.
- Research is needed regarding effective implementation of simulation and outcomes of its use. Establish partnerships for conducting research, and develop a small-grants program to support such research. Seek unrestricted grant funding from manufacturers.
- Collaboration is essential. Investigate ways to share equipment, and expand use of existing space among schools and hospitals at a regional level. Develop a model for regional technical support.
- Scenario writing is commonly done, but is time and labor intensive. Develop a statewide simulation scenario library that is tailored to the learning objectives of individual programs (e.g., LPN, ADN, and BSN) or hospital staff members. This resource could decrease the amount of time to create scenarios while meeting learning objectives that may differ. This library could be part of a web-based resource center.
- Lastly, convene a think tank of simulation leaders to initiate and lead efforts to promote simulation for teaching and learning in both schools and hospitals.