Finger Lakes Community College (FLCC) Foundation
Integrating Human Patient Simulation Learning Experiences into the FLCC RN Nursing Program

Project/activity name: Integrating Human Patient Simulation Learning Experiences into the FLCC RN Program


SimMan® is a portable and advanced patient simulator for team training. SimMan® has realistic anatomy and clinical functionality. SimMan® provides simulation-based education to challenge and test students’ clinical and decision-making skills during realistic patient care scenarios. SimMan® includes well-proven software and an interactive technologically advanced manikin allowing learners to practice the emergency treatment of patients

SimMan features:

- Full scale patient simulator which allows you to perform relevant ALS skills and scenarios.
- Interactive manikin which gives you immediate feedback to interventions.
- Simulated patient monitor with touch-screen technology including the possibility to configure your layout and content to match your simulation environment.
- SimMan software comes with pre-programmed scenarios; instructors can also design and save their own patient cases.
- Trend curves on instructor’s panel control how the physiological parameters will change over time, and multiple trends can be run simultaneously with their effects added together.
- Simulator utilizes software generating automatic debriefing, based on the event log synchronized with video pictures, which provide immediate, detailed feedback on performance to learners.
- Patented airway system allows accurate simulation of all relevant difficult airway management scenarios.
- Realistic practice of chest tube insertion
- Needle and surgical cricothyrotomy
- Bronchial tree is anatomically accurate in size, color and texture and features the accurate anatomical landmarks necessary to facilitate realistic fiber optic bronchoscope.

SimMan® Software:

- Simulated patient monitor with touch-screen technology.
- Simulated patient monitor can provide snap shot of x-ray, 12-lead ECG and trends.
- SimMan software comes with pre-programmed scenarios; instructors can also design and save their own patient cases.
• Event handlers allow user to create automatic responses to actions performed by students.
• Integrated video debriefing system combining event log with synchronized recordings of patient monitor and in-room video.
• User entered comments can be automatically added to the log to aid in evaluation of performance during debriefing.
• Scenarios can also generate automatic comments in the log.

Statement of Need: The need for this project is twofold:

1. There is a regional, state and national need for well trained Registered Nurses. According to the NYS DOL (Employment Prospects To 2016), the employment prospect for RN's is rated as very favorable. The US DOL’s 2010-11 Occupational Outlook Handbook states that the job outlook for RN’s will grow much faster than the average (20% or more). The demand for RN’s is the result of new technology to treat a wider range of illnesses, the aging “baby boomer” population and the increasing emphasis on preventive care.

2. There is a need to integrate hands-on human patient simulated clinical training into RN educational programs because 1) clinical sites are at a premium; 2) live on-site clinical experiences may not correspond to theory taught that week; 3) simulated clinical experiences allow for variety, repetition, error and immediate feedback; 4) simulated clinical experiences embrace both active and collaborative learning; and 5) simulated clinical experiences address visual, auditory and kinesthetic learning preferences in the classroom setting.

Project Goal: The goal of the project is to provide a well-trained RN workforce to meet the healthcare demands of the Finger Lakes Regional employers and community members.

Project Objective: To increase the occurrence, variety and application of nursing theory in human patient simulated clinical learning experiences by 25% in the FLCC RN Program.

Activities:
1) Purchase and install a SimMan model,
2) Train faculty to use the SimMan,
2) Integrate human patient simulated learning experiences into the RN curriculum, and
3) Engage students in human patient simulation experiences in the Nursing Lab.

Timeframe of Project: Fall 2010 – Fall 2011

Project Outcomes:
1) Increase the amount of time spent on clinical simulated learning experiences,
2) Increase in the variety of clinical scenarios for each student,
3) Increase in the opportunity to present students with a clinical senario that allows them to apply a recently taught theory, and
4) Increase the depth of training resulting in an RN workforce that can meet the challenges of 21st century health care in the Finger Lakes Region and beyond.

**Total Funding of the Project:** $125,000

**Conclusion:** RN educational programs are moving toward a model in which students must demonstrate competence prior to exiting the undergraduate program (capstone clinical experiences and objective standardized clinical examinations). Integrating human patient simulation at FLCC will promote critical thinking skills, familiarity with 21st century technology and additional methods of teaching and learning.

**Sources**

An Ohlone Story – Human Patient Simulation in the Registered Nursing Program
[http://www.ohlone.edu/org/academicaffairs/docs/ohlonestory-humanpatientsimulation.pdf](http://www.ohlone.edu/org/academicaffairs/docs/ohlonestory-humanpatientsimulation.pdf)

New York State Department of Labor
[https://www.labor.state.ny.us/stats/lsproj.shtm](https://www.labor.state.ny.us/stats/lsproj.shtm)

US DOL 2010-11 Occupational Outlook Handbook
[http://www.bls.gov/oco/ocos083.htm#outlook](http://www.bls.gov/oco/ocos083.htm#outlook)

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