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## INTRODUCTION

As rehabilitation healthcare providers we think we have the market cornered on collaborative interdisciplinary practice. Rehab is much about team functioning and the patient the cornerstone of it. As much as team is a fundamental principle of rehab, in 2013, so are outcomes. We are all driven to have the best quality outcomes for our patients in a cost effective manner. Yet on my floor we saw an opportunity to do team building and a means to maintain ongoing competency through utilization of the simulation lab.

This poster will examine our experience as an acute comprehensive rehab unit integrating simulation technology into interdisciplinary education.

## BACKGROUND

Simulation as a technique for learning is not new. The military, nuclear power and aeronautical industries have used simulation for years. In the last decade, nursing education has utilized simulation as a tool to “ensure quality of care and safety of patients cared for by nursing students.” (Gates, 2012). High fidelity simulation consistent with life-like manikins that breathe, blink, talk and have heart, respiratory, bowel sounds are used for training sessions. This mimics real life situations while these smart manikins provide a high level of realism and interactivity. High fidelity manikins can cost \$100,000 and it is estimated that the maintenance of a simulation lab is approximately \$350,000 a year with initial start up costs up estimated to be \$850,000 for a simulation lab. (Gates, 2012).

The benefits of simulation in nursing education are well documented and include anatomically correct models that mimic physiologic changes requiring nursing interventions, standardization of disease progression, skill acquisition. Limitations to sim technology have been lack of communication or dialogue with a manikin, fostering psychomotor skills and not critical thinking

development or interventions based on human patient responses and feedback. Manikins, no matter how high fidelity the technology, are still not human. (Bricker and Pardee, 2011).

Besides our goal of bringing the team together in the simulation lab, the intent of the physical therapist clinical specialist and I was to look critically as to how competency is maintained as staff age and are faced with the increasingly complex fragile rehab patient. As rehabilitation nurses how can we maintain competency? Is five years practicing as a rehabilitation nurse enough to stay competent anymore? 10 years? 15 years? The Competency and Credentialing Institute recognizes continuing competency as a “dynamic and evolutionary process that must evolve constantly to meet the demands of society, changes in technology, professional responsibility and expanded knowledge and skills.” (Decker, et al, 2011).

### Components of a simulation experience: scenario building and debriefing

A well designed scenario with specific objectives is key to successful collaboration. The scenarios are based on reasons for developing the scenario in the first place, levels of the learners, and identifying roles. For example, will objectives be maintaining a skill set or improving team communication? Developing these simulation scenarios is labor intensive and requires knowledge of standards of practice in various disciplines. Oftentimes the scenarios can be organized into a framework of the facility’s mission, a nursing unit’s core competencies, or patient safety initiatives. (Decker, et al, 2011).

The debriefing comes after the simulation occurs. This is considered the most important part of a simulation experience. Bricker and Pardee (2011) state that debriefing is a “process of reflection and conceptualization to adapt and reconstruct cognitive frameworks.” Debriefing involves the reactions of the participants, discussion and understanding of what occurred, and summarizes the scenario.

## OUR EXPERIENCE

Our experience working with the interdisciplinary team in the simulations has been challenging. We came to realize that physical therapists, occupational therapists, and rehabilitation nurses learn differently. As we improve with integrating the disciplines and how they learn, we anticipate the incorporation of what’s important to each discipline. We also learned, despite the best laid out plans of a scenario, things can turn out to be chaotic. We had some chaos when the manikin failed to do the evolving stroke scenario. Of course, adequate staffing for the floor while staff attending the sim lab has to be planned and budgeted. Lastly, and critical to the success of our experience, was the clinical specialist having gone to a three day course on health care simulation, theory, at a neighboring university healthcare institution .Having the training made us better as sim leaders from the start. For the investment of staff’s time and money, this was so important because these sim lab experiences are not meant to be developed haphazardly and winged or done on the fly. They are well thought out learning experiences. Our feedback from the participants continues to ask for more frequent exposure to be the sim lab as a team. In our assessment of the skills portion the rehab nurses improved in competency of earlier activation of an emergency protocol.

## CONCLUSION

**Our ongoing use of simulation for interdisciplinary rehab team education continues to evolve. We continue to improve with our innovation with patient related scenarios and debriefings with each session. Yet for all those team building and efficiencies in group education, the literature offers a dearth of evidence that simulation education translates to changes in patient outcomes. In my opinion, rehabilitation nurses can be at the forefront of developing competency oriented and specialty scenarios based on evidenced based guidelines for autonomic dysreflexia, neurogenic bowel and bladder etc. More research needs to be done by rehabilitation nurses and possibly as a members of ARN we could develop rehab specialty nursing scenarios to generate ongoing competencies as we age within our specialty and our specialty ages.**



## References

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