## A New Multidisciplinary Learning Technique

Robert Shaw, MD, ECU Brody School of Medicine, Greenville, NC Angelic Sorrell, MSN, RN, ECU Brody School of Medicine, Greenville, NC, Wendy Ayscue, MAEd, RRT, RCP, Pitt Community College, Greenville, NC Walter C. Robey, III, MD, ECU Brody School of Medicine, Greenville, NC Patricia Ouellette, MSN, RN-BC, Vidant Medical Center, Greenville, NC

**Background:** Traditionally, education of healthcare professionals has occurred in "silos" where each discipline learns competencies pertinent to their field. Medical knowledge has become so vast that no individual can learn it all, and teamwork is essential in providing patient care. We created a collaborative learning experience involving Vidant Medical Center nurses, Pitt Community College respiratory therapy (RT) students, and ECU/Vidant Internal Medicine residents.

**Objectives:** The participants will be able to recognize and collaboratively manage a simulated pulmonary embolism patient in respiratory distress. Evaluate participants' perception of the learning experience as it relates to knowledge and practice.

**Methods:** Team-Based Learning (TBL) was followed by simulation in an afternoon session. The TBL paradigm of students reading pre-course material, taking a 10-question individual quiz, and then taking a team quiz was utilized. Each team had 3-4 residents, 1 RT student, and 1 nurse. Following the TBL, the team managed a simulated patient with pulmonary embolism and respiratory distress. The participants debriefed by viewing a video of their team performance. A Likert survey was completed to determine participants' perception of the value of this learning modality.

**Results:** The Likert survey indicated that most participants prefer TBL/simulation format to didactic teaching. Participants reported a better understanding of other discipline's thought processes in patient management. There was a perceived improvement in working relationships between disciplines. Responses were neutral as to whether this format was more effective than a board review to retain information. Subjective comments regarding the experience were positive. There was no significant difference in responses by the three disciplines.

**Conclusions:** This method of learning improved collaboration between different healthcare disciplines and was an effective learning tool. TBL, followed by simulation, facilitated learning about patient management and the value of collaboration. Most participants felt the interactive learning of TBL and simulation was preferable to didactic PowerPoint<sup>®</sup> lectures. We have had three of these sessions and will continue this format. The challenge is to determine if there is empiric evidence for improvement in patient outcomes and test scores on standardized exams.