UTILIZING HIGH SIGNAL SIMULATION TRAINING TO EDUCATE AND ENSURE COMPETENCY IN HIGH RISK/LOW FREQUENCY SKILLS IN A PEDIATRIC PACU

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The Boston Children's Hospital (BCH) PACU has a long history of using scenarios and simulation to teach principles of Crisis Resource Management. Feedback from these sessions coupled with recognition of a lack of proficiency with low frequency/high risk procedures prompted PACU nursing leaders to develop a nursing Needs Assessment (NA) tool. Based on responses, end- tidal carbon dioxide (ETCO2) monitoring was identified as a priority learning need.

A decision was made to utilize high signal simulation principles to focus on theory acquisition and skill development. Working closely with faculty of the BCH Simulator Program, a course proposal was submitted including the following objectives: improve knowledge; develop skills; apply knowledge and skills to practice; create an environment fostering safe and enriching learning.

Educators attended comprehensive instructor training through BCH Simulator Program. Utilizing principles of high signal teaching, a simulation program was developed providing theory and skills training using scenarios to solidify knowledge and validate competency of newly acquired skills. PACU RNs were trained in groups of 3-4 in 2 hour sessions.

Staff verbalized greater understanding of capnography theory and demonstrated proficiency with ETCO2 monitoring. Course evaluations revealed a renewed sense of confidence with ETCO2 monitoring and overwhelmingly favored the high signal style of training. It provided a comfortable, real-life, non-threatening learning experience.

High-signal learning removes background noise of complicated scenarios allowing the nurse to focus on critical theory and skill acquisition. This teaching method will provide more meaningful educational opportunities for future skills while simultaneously providing concrete validation of competency.