Abstract:

Purpose: Many healthcare facilities require staff nurses to complete annual competency assessments on central line care. However, the question arises, could simulation provide a better assessment of competency and possibly help nurses retain competence longer?

Review of Relevant Literature: A thorough review of the literature revealed that limited investigation has been done regarding the perception or effectiveness of simulation as a tool for competency evaluation. Multiple authors have identified simulation as an advantageous method for training health care providers in central line care. Several studies have linked simulation based training with decreased central line associated bacteremia rates. There is also evidence in the literature that simulation has great potential as a competency validation technique.

Discussion: A sample of staff nurses participated in one of four central line care scenarios in a simulation environment. The participants were asked to complete a demographics survey as well as a self-assessment on central line competency prior to the simulation experience. Debriefing followed the simulation, offering the participant feedback on performance and verification of correct and incorrect actions. The self-assessment was then repeated to
measure participant perception post-simulation.

Implications for Clinical Practice: No significant difference of performance in the simulation was inferred from baccalaureate-prepared nurses versus diploma or associate-prepared nurses. Almost all participants rated their competence in caring for a central line as either “competent” or “highly competent.” However upon demonstration of central line skills in the simulation, all but two participants omitted a critical step. Omitting these steps places the patient at risk for infection or other complications.