What is the problem or challenge you identified? In the acute care setting, the majority of urinary tract infections are associated with indwelling urinary catheters. Expert guidelines have been developed to provide appropriate indications for use and proper maintenance techniques to minimize the chance of infection. Despite these recommendations, catheter associated urinary tract infections (CAUTIs) continue to occur in critically injured patients. There is a paucity of data on the translation between CAUTI education and behavioral change. The goal of this project was to evaluate the clinical knowledge and attitude of the nurses at our institution towards Foley catheter insertion and maintenance, and to determine the benefits of addressing gaps in knowledge and inconsistencies in attitude through education.

Describe the intervention you developed/change you implemented to address the problem: We conducted a prospective cohort study with practicing bedside registered nurses from the emergency room (ER), trauma/surgical, and medical intensive care units (ICU). Each participant’s clinical knowledge and general attitude towards Foley catheter usage and CAUTIs was evaluated using a 20-question survey tool before and after the completion of a CAUTI education program. The survey results as well as results from a number of unannounced observations to monitor proper Foley catheter maintenance before and after the educational initiative are reported.

How did you measure the effects of the change? A total of 48 nurses completed the pre-survey, educational training, and post-survey. The mean post training survey score was significantly higher (86.9%±8.3%) than the pre-survey score (76.0%±12.3%) for the clinical knowledge section of the survey. Unfortunately, there was no marked difference in the participant attitude scores after the educational training, with mean pre-survey and post-survey scores of 91.3±7.0% and 89.8±5.3% respectively. Overall, participants were more confident in their clinical knowledge after the course, but did not significantly change how they perceived CAUTI prevention. As part of the clinical quality improvement (CQI) component, a series of unannounced rounding observations before and after the intervention were conducted, which showed an improvement in proper Foley catheter maintenance.

How did you sustain the change? CAUTI prevention education was an effective countermeasure to address gaps in clinical knowledge, but modifying attitudes towards CAUTI prevention was difficult to achieve. Despite the lack of change in attitude, rounding observations confirmed that the training had a short-term impact. Continued monitoring of CAUTI rates and proper Foley catheter maintenance will be used to determine long-term effects of the educational initiatives.