

ABSTRACT TITLE

Know your tools: Improving nurses' use of the confusion assessment method (CAM) to detect delirium

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Background: Delirium is a serious illness that increases patient morbidity and mortality during and after hospitalization. Early identification of delirium is an important step to improve patient outcomes. Although the Confusion Assessment Method (CAM) has been validated as a useful instrument to assess for delirium in the acute care setting, anecdotal experience indicates bedside nurses do not always use it effectively. The aim of this project is to provide targeted education to clinical nurses to improve their ability to use CAM assessments to detect delirium in the acute care trauma setting.

Purpose: The purpose of the presentation is to describe how the change acceleration process was used to design and implement a targeted education approach to improve CAM scoring.

Methods: A change acceleration process of preparation, assessment, diagnosis, planning, treatment, and evaluation was used to achieve improvement in staff nurses' use of the CAM tool on a 21-bed acute care trauma unit. During preparation, the project leader mobilized commitment for the project from the unit manager, staff educator, clinical nurses, professional practice leaders, and data experts. Baseline data on CAM completeness was assessed via chart review over a period of one month. Baseline reliability of the CAM was determined by measuring the agreement between two expert CAM users and clinical nurse CAM assessments. All clinical nurses on the unit were surveyed to assess their current state of knowledge of the CAM and to determine barriers to CAM completion and reliability. This informed the development of the intervention, a targeted, 40-minute education session, which was given to all 34 nurses on the unit over a period of 2.5 weeks. Post-intervention completeness and reliability of CAM assessments was measured within one month after the education.

Results: Thirty-nine patient CAM assessments were assessed pre-training and 39 different patient CAM assessments were analyzed post-training. There was a significant increase in CAM completeness between pre and post-training (73% vs. 85%, $Z=2.36$, $p < 0.009$). Inter-rater reliability also increased pre and post-training. Pre-training agreement on whether a patient was CAM positive was 84%, while post-training agreement rose to 97% ($K= .059$, $p= 0.102$). The cost to implement this project was \$3,925, including staff time for educating 34 nurses and chart auditing.

Conclusion: This project improved the completeness and reliability of nurses using the CAM tool to assess for delirium in the acute care trauma setting. Early interventions and improvement in patient outcomes is the ultimate goal of improving staff nurse assessment of delirium. In order to sustain this change, follow-up target education must be continued through designated nurse in-service days, updates in newsletters, and one-on-one coaching. In order to

achieve improvement in patient outcomes, further projects must focus on intervention strategies to prevent and mitigate the effects of delirium.