

Executive Summary: Improving Early Detection of Delirium in Emergency Department Boards

Through Implementation of the Brief Confusion Assessment Method

DeeAnna Wilson, MSN, RN

College of Nursing, East Carolina University

Doctor of Nursing Practice

July 17, 2026

**Executive Summary: Improving Early Detection of Delirium in Emergency Department Boarders
Through Implementation of the Brief Confusion Assessment Method**

MAIN POINTS

- Delirium is a common but frequently underrecognized condition among older adults boarding in the emergency department (ED), contributing to increased morbidity, mortality, falls, and prolonged hospitalization.
- Older adults experiencing extended ED stays are at increased risk for delirium due to environmental stressors, acute illness, medication exposure, sleep disruption, and prolonged waits for inpatient placement.
- This Doctor of Nursing Practice (DNP) quality improvement project evaluated the implementation of the Brief Confusion Assessment Method (bCAM) screening tool to improve early delirium detection among older adult ED boarders.
- A 12-week evidence-based practice implementation using Plan-Do-Study-Act (PDSA) methodology was conducted in an acute care emergency department.
- During the implementation period, 756 patients met eligibility criteria for delirium screening; however, only 152 bCAM assessments were completed, demonstrating inconsistent adoption of the screening process.
- Although sustained screening compliance was not achieved, the project increased staff awareness, improved conversations surrounding delirium recognition, and identified barriers affecting workflow integration.
- Findings highlight the need for continued leadership support, workflow redesign, and dedicated strategies to improve delirium screening reliability in the emergency care environment.

BACKGROUND AND PURPOSE

Delirium is an acute change in cognition characterized by altered attention, awareness, and fluctuating mental status. It is particularly prevalent among older adults and is associated with significant negative outcomes, including increased risk for falls, longer hospital length of stay, functional decline, and increased mortality (Inouye et al., 2014). Despite these consequences, delirium often remains unrecognized in emergency department patients due to inconsistent screening practices, competing clinical priorities, and the fast-paced nature of emergency care.

Emergency departments have increasingly become environments where patients experience prolonged stays while awaiting inpatient admission. These “boarded” patients are vulnerable to complications associated with delayed treatment, unfamiliar surroundings, sleep disruption, and decreased mobility. Older adults are especially susceptible to delirium during this period, creating a need for reliable screening processes that allow early identification and intervention.

The purpose of this DNP project was to improve early detection of delirium among adult patients aged 65 years and older boarding in the emergency department through implementation of the Brief Confusion Assessment Method (bCAM). The project sought to evaluate the feasibility of integrating a standardized delirium screening tool into emergency nursing workflow and examine barriers affecting consistent completion.

METHODOLOGY

A quality improvement design using the Plan-Do-Study-Act (PDSA) framework was utilized to guide implementation. The project was conducted in a high-volume emergency department within a large healthcare system. The target population included adult patients aged 65 years and older who remained in the emergency department awaiting inpatient admission.

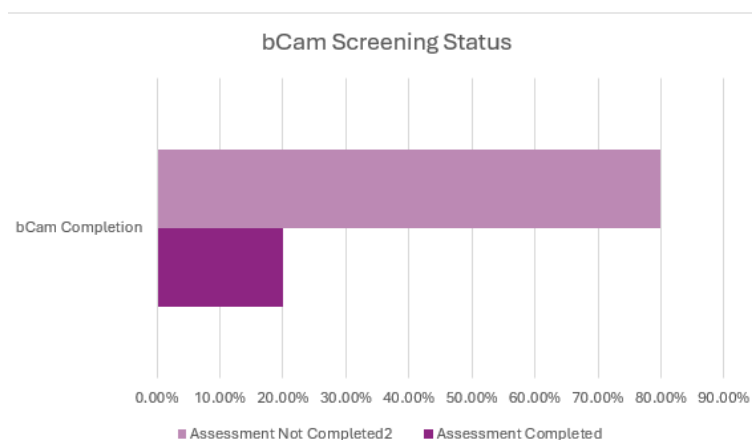
The bCAM screening tool was selected because it is a validated delirium assessment instrument adapted for use in emergency settings. The tool evaluates key delirium characteristics, including acute onset or fluctuating course, inattention, altered level of consciousness, and disorganized thinking (Han et al., 2013).

Prior to implementation, education was provided to emergency nurses regarding delirium risk factors, the importance of early recognition, and completion of the bCAM assessment. The screening process was incorporated into existing electronic medical record workflows. Data collection occurred throughout the 12-week implementation period and included the number of eligible patients and the number of completed bCAM assessments.

Data was reviewed through electronic medical record reporting and descriptive analysis. The primary measure evaluated was completion of the delirium screening assessment among eligible patients.

RESULTS

During the 12-week implementation period, 756 patients met eligibility criteria for delirium screening based on age and emergency department boarding status. Of those eligible patients, 152 bCAM assessments were completed, resulting in a 20.1% completion rate. The remaining 604 eligible patients (79.9%) did not have a documented bCAM assessment completed.



Despite education and workflow reinforcement, sustained completion of the delirium screening tool was not achieved. Contributing factors identified during implementation included competing emergency department priorities, high patient volumes, frequent patient turnover, staffing variability, and reliance on resource nurses who may have had limited familiarity with the screening process.

Although the project did not achieve the intended level of sustained screening compliance, the implementation increased staff awareness regarding delirium risk among older adults. The project also provided valuable insight into organizational barriers that must be addressed before reliable delirium screening can become embedded into emergency nursing practice.

STRENGTHS AND LIMITATIONS

A primary strength of this project was the application of an evidence-based delirium screening tool within a real-world emergency department environment. The project addressed an important patient safety concern among a vulnerable population and utilized a structured implementation framework to evaluate practice change.

Additional strengths included collaboration with emergency nursing leadership, incorporation of the screening tool into existing workflows, and the collection of objective electronic medical record data to evaluate implementation outcomes.

Several limitations affected project outcomes. The most significant limitation was inconsistent completion of the bCAM assessment despite education and reinforcement. The emergency department environment presents unique challenges, including high patient acuity, competing priorities, staffing variability, and frequent interruptions that may affect adherence to new processes.

Additionally, this project evaluated implementation feasibility rather than clinical outcomes related to delirium identification or reduction in falls. The limited completion rate reduced the ability to evaluate the relationship between delirium screening and patient outcomes. Future projects may benefit from additional implementation strategies, dedicated staff support, and workflow modifications prior to measuring clinical impact.

IMPLICATIONS FOR PRACTICE

The findings from this project demonstrate that implementing evidence-based screening tools requires more than education alone. Successful practice change depends on leadership engagement, workflow alignment, staff accountability, and ongoing evaluation.

For emergency departments caring for increasing numbers of older adults, early delirium recognition remains an important patient safety priority. Future improvement efforts should consider

strategies such as assigning dedicated staff responsibilities for boarded patients, integrating screening prompts into mandatory workflow steps, and providing ongoing competency validation.

This project also emphasizes the role of the DNP-prepared nurse as a practice leader who identifies healthcare gaps, evaluates evidence, implements change initiatives, and develops sustainable solutions to improve patient outcomes.

CONCLUSION

Delirium among older adult emergency department boarders represents a significant patient safety concern requiring early recognition and intervention. This DNP project evaluated the implementation of the bCAM screening tool to improve delirium detection within the emergency department setting.

Although the project did not achieve sustained screening compliance, it identified important organizational barriers and increased awareness of delirium recognition among emergency nursing staff. The results demonstrate that successful integration of evidence-based screening practices requires continued leadership support, workflow optimization, and strategies that account for the complexity of emergency care environments.

Future efforts should focus on developing sustainable approaches to improve delirium screening reliability and ultimately reduce preventable complications among older adults receiving emergency care.

References

- Han, J. H., Wilson, A., Vasilevskis, E. E., Shintani, A., Schnelle, J., Dittus, R. S., & Ely, E. W. (2023). Diagnosing delirium in older emergency department patients: Validity and reliability of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). *Journal of the American Geriatrics Society*, 61(5), 779–786.
- Inouye, S. K., Westendorp, R. G. J., & Saczynski, J. S. (2014). Delirium in elderly people. *The Lancet*, 383(9920), 911–922.
- Pozgar, G. D. (2024). *Legal and ethical issues for health professionals* (6th ed.). Jones & Bartlett Learning.