SE2EOa

Example a: Incidence of Geriatric Falls in the Cary ED and the Implementation of Delirium Screening

Problem

Patients 65 years and older represent one-third of the total volume of patients treated in the Cary Emergency Department (ED). Alyse Arnold, BSN, RN, CEN, Cary ED Manager, and Amy Short, MSN, RN, NEA-BC, Director Emergency Services, Cary, identified that the Cary ED had a higher than acceptable rate of geriatric falls.

Pre-Intervention

Bethany Fox, MBA, HCA, BSN, RN, CEN, CCM, Clinical Nurse IV, Cary ED, has a special interest in the geriatric population. As a member of the Emergency Nurses Association (ENA), Fox was aware of its geriatric-focused education and completed the Geriatric Emergency Nursing Education (GENE) I, II, and III modules. GENE consists of three courses focused on foundational knowledge and skills and high-risk presentations. By completing these modules, Fox learned about the correlation between delirium in older adults and falls. The evidence-based literature recommends implementing delirium screening, citing that delirium is "an important and potentially modifiable risk factors for falls."

As a result of the knowledge she gained through the GENE courses, Fox proposed to Arnold and the Geriatric ED Falls Task Force the idea of implementing the Delirium Triage Screening (DTS) and Brief Confusion Assessment Method (b-CAM) screening for patients ages 65 or over. A positive DTS screen would trigger the Cary ED clinical nurses to perform a b-CAM for the identified patients. Scores for both screenings would then automatically send the provider an electronic alert to order additional testing and/or consultations for the at-risk patient.

In 1st Quarter FY 2023 (October-December 2022), the geriatric patient falls rate was 1.13. The rate is calculated by dividing the number of geriatric (age 65 and over) patient falls in the Cary ED by the number of geriatric (age 65 and older) patient visits and multiplying by 1000.

Goal Statement

Decrease the geriatric (age 65 and older) patient falls rate in the Cary ED.

Participants

Geriatric ED Falls Task Force			
Name/Credentials	**Discipline**	**Title/Role**	**Department**
Bethany Fox, MBA-HCA, BSN, RN, CEN, CCM	Nursing	Clinical Nurse IV	Cary ED

Alyse Arnold, BSN, RN, CEN	Nursing	Nurse Manager	Cary ED
Amy Short, MSN, RN, NEA-BC	Nursing	Director	Emergency Services, Cary
Eric Lefebvre, MD	Physician	Geriatric Physician Champion	Wake Emergency Physicians
Madjimbaye Namde, MD, MBA	Physician	Medical Director, Cary ED	Wake Emergency Physicians

Description of the Intervention

January-March 2023

- Fox used the knowledge acquired through the GENE modules to serve as Cary ED's Geriatric Champion, through which she was instrumental in educating the team on geriatric-specific considerations and screenings. Fox provided staff education about geriatric ED application, DTS, and b-CAM at monthly Cary ED staff meetings. Fox eagerly volunteered for the position of Nurse Champion of the Geriatric Emergency Department Certification journey when asked by Short.
- The Geriatric ED Falls Task Force was formed as a group of stakeholders who initiated efforts toward Geriatric ED Accreditation for the Cary ED.
- The implementation of DTS and b-CAM screening required additional work from clinical nurses during the triage and bedside assessment processes. Education consisted of background data on delirium in the geriatric population; its effect on morbidity, mortality, and falls; and visual representations of the screenings in Epic ASAP. The task force set a documentation goal of 70% compliance for screenings.
- Fox began a chart audit process to compare data pulled by a business intelligence analyst that would funnel directly into Tableau (organization's quality dashboard product) with data she collected directly from chart reviews, thereby ensuring the data is valid before going into production in Tableau. Fox created a working template in Tableau for ongoing data validation. When the Tableau report was created, nurses were asked to validate that the report was pulling the correct information. Fox spent hours conducting a deep dive into the reports, reviewing the raw data and chart reviews, to ensure the correct information was being pulled into the report.
- DTS and b-CAM screenings went live in Epic before staff members were educated on the tools for tracking and validating data.

April-June 2023

- Arnold and Fox used staff meetings to provide the Cary ED staff with quarterly reminders on how to use the DTS and b-CAM screening tools.
- Fox was a champion of the nursing DTS and b-CAM screenings practice change and served as a mentor to the nursing staff.
- To ensure that clinical nurses had fully adopted the practice change, Kristin Clemens, BSN, RN, CEN, Cary ED Clinical Supervisor/Educator, and Paige Grubbs, BSN, RN, TCRN, Cary ED Clinical Supervisor/Educator, completed daily live (concurrent) audits of patient charts and performed just-in-time

follow-up with clinical nurses to assimilate these changes into everyday practice.
- After months of data validation by Fox, the Tableau Geriatric ED Dashboard was put into production. The dashboard began reflecting DTS and b-CAM screening documentation data from Epic in real time.
- Arnold, Fox, and Short participated in monthly meetings with business intelligence analysts and Epic analysts to review and continue validating data.

July-September 2023
- Clemens, Grubbs, and Arnold continued daily audits with real-time follow-up on DTS and b-CAM screening documentation. This intentional follow-up significantly enhanced nurses' adherence to using the tools and understanding of how they impact nursing practice and patient outcomes.

An evidence-based change in nursing practice, made due to Fox's affiliation with the ENA, was associated with a decrease in the geriatric (age 65 and over) patient falls rate in the Cary ED.
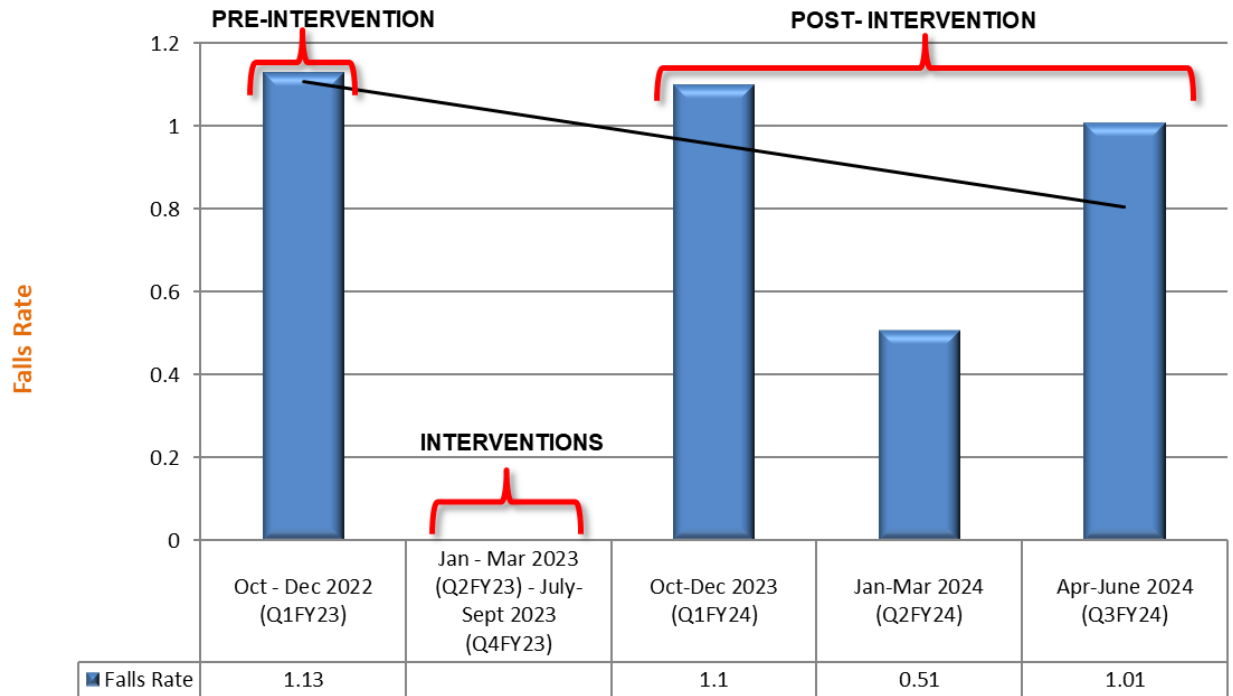
The interventions were fully implemented by the end of September 2023.

References:

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Kalivas, B., Zhang, J., Harper, K., Thomas, M. K., Dulin, J., Marsden, J., . . . Heincelman, M. (2023). The Association between Delirium and In-Hospital Falls: A Cross-Sectional Analysis of a Delirium Screening Program. *Journal of Aging Research*. https://onlinelibrary.wiley.com/doi/full/10.1155/2023/1562773

Outcome

(Evidence SE2EOa-1, Geriatric [Age 65 and Greater] Patient Falls Rate, WakeMed Health & Hospitals, Cary Emergency Department [ED])