Nursing Driven Acute Delirium Prevention

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Abstract

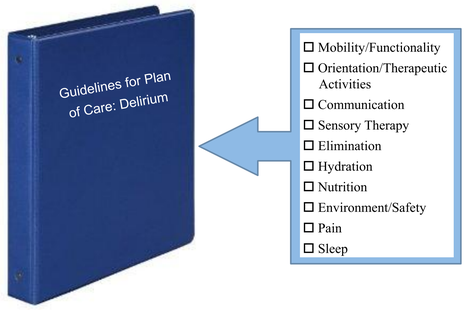
Improvement target: Decreased delirium prevalence in the acute care hospital.
Literature: The prevalence of delirium in acute care hospitals ranges from 10-24%. Delirium increases the risk of negative health outcomes and increases costs.
Goals and measurement: To determine rates of delirium for community dwelling patients on an Acute Care for Elders (ACE) Unit at the start of and 1 year after implementing a nursing-driven delirium protocol. Outcomes include high risk medications, restraints, falls, length of stay and discharge disposition.
Implementation: An interdisciplinary group of clinicians developed a delirium protocol for the older adults in a small community hospital.
Components: The protocol is implemented by staff nurses on patients who screen high risk for delirium using the Six Item Screener. High risk patients receive an "at risk for delirium" care plan and are screened for depression, alcohol abuse, and previous confusion. To monitor the development of delirium, staff nurses administer the NuDESC (Nursing Delirium Screening Scale) every shift and implement prevention interventions aimed at high risk medications, orientation, mobility, sleep, sensory input, depression, and family involvement. The NuDESC provides a quantitative measure of delirium and is tracked via the electronic medical record. High risk patients are reported to the unit's Advanced Practice Nurse (APN) and their case is reviewed at daily interdisciplinary team meetings.
Hardwiring: The APN, through the use of education, team meetings and mentoring, drives adherence to the delirium prevention protocol.
Evaluation: Delirium prevalence decreased from 52.8% to 29.8% after 1 year (p=0.001). Restraints and falls were too infrequent at either time point to test. Length of stay was significantly shorter after 1 year (4.08 vs. 5.27 days, p=0.02). Discharges to home increased significantly from 56.8% to 73.2%, p=0.02. There was no significant difference in prescription of high risk medications.

Introduction

The experience of delirium in the acute care environment ranges from 10 -24%. The incidence of delirium in older adults with dementia increases dramatically with evidence suggesting two of three older adults with dementia experience delirium during an acute care stay. It is well documented that those older adults who experience delirium have a higher rate of morbidity and mortality, experience a longer length of stay, and often require a stay in a rehabilitation environment before transitioning home. Summa Barberton Hospital opened an ACE Unit on a medical/surgical unit in September 2012. In preparation; all nursing staff and all disciplines represented on the interdisciplinary team engaged in a four-hour class to prepare for the utilization of the ACE Model of Care.
It was recognized early on that our hospital did not have a method to measure and monitor the prevalence of delirium nor a means to systematically care for those at risk or experiencing delirium.

Materials and Methods

- Developed a Nursing Driven Acute Delirium Prevention Protocol by adapting the Delirium Protocol created by Summa Akron City Hospital to meet the needs of a smaller community hospital
- Upon admission, all patients screened for risk of delirium using the Six Item Screener (SIS)
  - Involved a three word recall and three orientation questions
  - Two or more errors – patient identified as at risk
  - Also, patients with prior experience of acute confusion were identified as at risk
- The Nursing Delirium Screening Scale (NuDESC) was completed each shift and as needed to assess for signs and symptoms of delirium
  - Addressed five components of delirium:
    - Disorientation
    - Inappropriate behavior
    - Inappropriate communication
    - Illusions/hallucinations
    - Psychomotor retardation
  - Assigned a numerical value to the severity of symptoms; 0 = no symptoms, 1 = mild symptoms present, 2 = symptoms present and pronounced and provided examples for each value
- A non pharmacological plan of care developed for patients identified as at risk or experiencing delirium using *Guidelines for a Plan of Care: Delirium*



Results

- Prior to the implementation of the Nursing Driven Acute Delirium Prevention Protocol, the prevalence of delirium on the ACE Unit was 52.8%. One year later, the prevalence decreased to 29.8% (p=0.001)
- Discharges to home increased significantly from 56.8% to 73.2% (p=0.02)
- Length of stay was significantly shorter after 1 year 4.08 vs 5.27 days (p=0.02) **Figure 1**

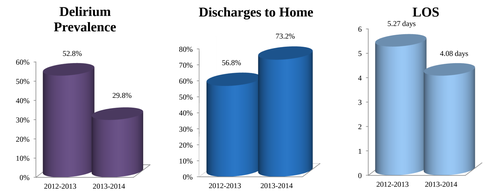


Figure 1

- Pharmacy alerted to review medications for patients identified as at risk or experiencing delirium
- Queue created in the electronic medical record for the APN to monitor all patients, as well as, within each patient record for the caring RN to view
- Family provided a booklet - *Helping You Loved One Avoid Confusion While They are Hospitalized* to assist with understanding delirium and how they can help comfort their loved one

Discussion

- The incorporation of a nursing driven acute delirium prevention intervention was instrumental in decreasing the prevalence of delirium in older adults thus positively impacting quality of life
- SIS and NuDESC provide a common language for health care providers to discuss incidence of risk and severity of delirium - promoting communication and collaboration between interdisciplinary team members
- Quantitative measures of the NuDESC allows for easy tracking of scores via the electronic medical record during current hospitalization and prior admissions
- Positive outcomes support transition of acute delirium prevention protocol throughout the hospital

Nurses Improving Care for Healthsystem Elders
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References

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