

Title:

Prevalence and Trends of Falls on a Surgical Unit

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Session Title:

Preventing Falls Using Evidence-Based Practice

Slot:

O 06: Sunday, 30 July 2017: 1:15 PM-2:00 PM

Scheduled Time:

1:35 PM

Keywords:

Patient Falls, Patient Falls on Medical Surgical Unit and Prevalence and Trends of Falls

References:

Aydin, C., Donaldson, N., Fridman, M., Brown, SD. (2015). Improving Hospital Patient Falls Leveraging staffing characteristics and processes of care. *The Journal of Nursing Administration*. 45 (5): 254-262.

Bouldin, D.E., Andresen, M. E., Dunton. E. N., Simon, M., Waters, M. T., Liu, M., Daniels, J. M., Mion, C. L., Shorr, R., (2013). Falls among adult patients hospitalized in the United States: Prevalence and Trends

Williams T., Szekendi, M., Thomas, S. (2014). An analysis of patient falls and fall prevention programs across academic medical centers. *J Nurs Care Qual*.29(1):19-29.

Urquhart Wilbert, W. (2013). The effectiveness of a fall prevention/management program in reducing patient falls: A retrospective study. *The Journal of Chi Eta Phi Sorority*. 57 (1), 24-27

Abstract Summary:

The rate of falls in United States (U.S.) hospitals is approximately 3.1 to 11.5 per 1,000 patient days, varying by unit type. Risk factors for falls include intrinsic, extrinsic, and environmental factors. Henceforth, fall-prevention strategies should include a multimodal action plan to promote patient safety.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Identify common risk factors for patient falls on a post-surgical unit	List of a common risk factors are: age dependent and mental status, and bathroom assistance
Develop strategies to decrease falls	implement purposeful rounding, bed alarm criteria, and geriatric nurse resource,

Abstract Text:**Background**

Falls are the most common adverse events in hospitalized patients contributing to pain, suffering, morbidity, and mortality (Aydin, Donaldson, Aronow, Fridman, Brown, 2015). Falls increases healthcare

costs, with each fall ranging from \$14,000 to \$ 35,000. The rate of falls in United States (US) hospitals is approximately 3.1 to 11. 5 per 1,000 patient days, varying by unit type. Neurosurgery, neurology, and medical units have the highest fall rates (Bouldin et al., 2014). Many falls risk factors identified include intrinsic, extrinsic, and environmental factors (Urquhart Wilber, 2013). Henceforth, fall prevention strategies should include a multimodal action plan to promote patient safety (Williams, Szekendi, Thomas, 2014). 5 Tower's fall performance ranges from 1.28 to 3.54 per 1,000 patient days from 2014 to 2016. In 2016, the patient fall rate has consistently underperformed compared to the national benchmark.

Purpose

The purpose of this quality improvement project was to examine the trend of patient falls on a post-surgical unit at an 11,000-bed hospital in the US to develop interventions based on the findings to prevent falls. The purpose of this project is follows:

- Assess and analyze the staffing pattern when patients fell
- Determine the times and days patient falls are more likely to occur
- Examine common risk factors related to patient falls

Description of method

Seventy post-fall records were reviewed from 2014-2016 utilizing the electronic medical record (EMR). The post-fall records indicated time, date, unit census, medications, injury, and number of registered nurses (RNs) and certified nursing assistants (CNAs)/ health care tech (HCTs).

Results:

The data showed that females were at a slightly higher risk than males for falling (51% compared to 49%). Most falls occurred during dayshift. The times patient falls occurred were 1 AM, 5 AM, 6 AM, 10 AM, 1 PM, 3 PM, 4 PM, and 7 PM. It appeared that the unit would have a fall about every 2-3 hours. The peak times were at 1AM and 1 PM with the highest number of patient falls. Interestingly, most falls occurred when the unit was staffed adequately (1:5 nurse to patient ratio and 1:12 HCT/CNA to patient ratio). The common risk factors for patient falls were age, confusion, impulsiveness, and toileting assistance. The highest risk age group were geriatric patients age 65 years and older with 44%. The remaining risks per age group were 27% for age group range from 50-64 years old, 29% for age group range from 30-49 years old, 4% for age group range from 18-29 years old. The most common reason for patient falls was bathroom help. The data showed 39% of the time patients fell in the bathroom or went to the bathroom alone without assistance. Patients who were confused and impulsive were also most likely to fall. Only nine percent of patients who fell were 24-hours post-anesthesia during this period.

Conclusion / Implications:

This project addressed the clinical questions and helped the unit develop strategies for fall preventions. Developing a bed alarm criteria that would fit the unit population could potentially improve the fall rate. Additionally, we have identified and correlated the time of patient falls with nursing tasks. Patient falls occurred early in the morning when staff were passing medication or morning labs were being drawn and patients got up to use the bathroom without calling for assistance. Bathroom usage after meals and during staff lunches have been identified as the reasons why patients fell. Therefore, it is important to communicate with staff about these findings and provide education to help improve patient safety. Hardwiring the purposeful rounding or toileting program to decrease fall rates could improve patient safety. With the addition of cardiac monitors to the unit in 2015, there was an increase in the geriatric population and medical population with multiple comorbidities admitted to the unit. This could have

contributed to the increased number of falls. Currently, there are nurses who underwent geriatric advanced training to become geriatric resource nurses (GRNs) to help improve patient outcomes in geriatric population.