

Problem & PURPOSE

- Falls rates are high in the veteran population yet remain understudied.
- Veterans have a higher comorbidity burden than non-veterans.
- The VA supports veteran's preference for independence and freedom which supports the veteran's need for privacy and autonomy.
- Fall rates averaging 5.8/1000 bed days of care (BDOC) at the study site.
- National Database of Nursing Quality Indicators (NDNQI) recommends a mean fall rate of 3.1 falls per 1000 BDOC per month (goal).

The purpose of this study was to use evidence-based strategies to reduce the mean fall rates in two medical/surgical units over 30 days.

Available Knowledge & Rationale

Multimodal approach is best to address:

- Complete fall risk assessments
- Keep personal items within reach
- Patient/family education
- Purposeful rounding
- Visual aids/reminders for the patient
- Applying bed/chair alarms
- Post-fall huddles
- This project was implemented using the Iowa Model for evidence-based interventions as the foundation for implementing current evidence-based practice.

Methods

- **Context:** intervention deployed in 2 med/surg units in a Midwestern VA Hospital. One unit was a cardiopulmonary specialty and the other surgery and oncology.
- **Intervention:** Staff education on Morse fall scale scoring and the application of bed/chair alarms at admission if high risk for falls.
- **Study of Intervention:** Data from JPSR system and *Falls Note Entries-Patient List*.
- **Measure:** analyze trends of pre/post intervention data from both data systems.

Data Analysis

Descriptive statistical analysis of the quantitative data using Microsoft Excel.

Results

- Mean fall rates decreased 6.4 to 3.97 falls per 1000 BDOC.
- Raw number of falls decreased.
- Time of admit to fall shifted from 0-3 days to falls occurring after day 3 of hospitalization.
- Fall risk scoring shifted to more patients being scored as high risk on admit 60% to 83%.
- Alarms in place before a fall increased from 20% to 33%.**
- Witnessed falls increased from 20% to 67%.**

Results continued

- ** Data gathered from nurse charting but conversations with nursing staff suggest that all patients who fell had alarms on before the fall.
- ** Data gathered from charting however nursing staff report all falls were witnessed and patient lowered to the ground.

Discussion

- Application of alarms may have had a positive impact on reducing patient falls in the hospital.
- During the study there were zero patient injuries and no additional testing related to a fall.
- Range of falls 2024: 2.1 - 11.1 per 1000 BDOC.
- Median fall rate in 2024: 4.9.
- Mean fall rate during intervention: 3.97 per 1000 BDOC.

Conclusions

- Use caution as the 2 data reporting systems were not reporting the same raw fall numbers.
- Findings support the systematic application of alarms for all patients admitted to the hospital who score high-risk on the Morse Fall Risk assessment.
- Alarm application may reduce the number of falls but can increase the number of witnessed falls and decrease patient injury.