



Reducing Fall Related Injuries Using Floor Matting

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Background

- Despite decades of research and efforts to reduce fall events, falls remain the most commonly reported adverse events in hospitals¹.
- Since October 2008, hospitals are no longer reimbursed for injuries that result from falls which average over \$24,000 for injuries sustained by a patient falling from the bed².
- In 2009 our hospital ranked at the 98th percentile in injury falls per thousand patient days when compared to other hospitals in the National Database for Nursing Quality Indicators benchmark.

Purpose

This study evaluated the effectiveness of implementing floor matting for fall injury protection in the acute care setting.



Methods

- Floor matting was selected by nursing staff over other potential material resources including hip protectors and helmets.
- Matting was provided by Posey Company™ for clinical trials on the neurosciences and stem cell transplant units.
- After early success in these units mats were purchased for each nursing unit based on the unit manager's estimation of need.

Implementation Barriers

Initial efforts to implement the use of floor matting across units met with various barriers:

- Some nursing and therapy staff were reluctant to use the mats
- Cleaning and infection control standards had not been established for ongoing use
- Application of the mats was variable across units

Solutions

- Representatives from Posey Company™ partnered with study staff to provide house wide education for frontline staff using the floor mats.
- Infection Control evaluated and determined standard operating procedures for cleaning and storing the floor matting.
- Clinical decision support for implementing the floor matting was embedded into the HD Fall Management Program® which was currently in use at UAMS Medical Center.

Results

- After the first year of implementing the HD Fall Management Program® including incorporation of fall matting, UAMS Medical Center saved \$1.27 million in costs related to injuries resulting from falls.
- 60% of patients who fall in our hospital land on a floor mat.
- We consistently outperform the mean nationally and are now a Top Performer in preventing injury falls.

Conclusions

- Implementation of floor matting is a cost effective and sustainable mechanism for preventing falls in the acute care setting.
- Portability of the matting allows for injury protection whether the patient is in the bed or out of bed to a chair.
- Dispelling nursing concerns and providing clinical decision support using an evidence based fall program were key to reducing variability in how and when floor matting is implemented.



References available upon request