Solution: Jack’s Crown and Jill’s Hip: Advancing Fall Prevention Beyond Kindergarten

Organization: University of Maryland Medical Center  
Type: Acute Care

Primary Contact: Diane Smith, RN, MS, Senior Clinical Nurse II  
E-mail: dsmith2@umm.edu  
Phone: 410.328.5339

Secondary Contact: Luiza Lima, RN, MS, Professional Development Coordinator  
E-mail: llima@umm.edu  
Phone: 410.328.7699

IDENTIFICATION:
UMMC nurses began assessing fall risk with the Morse Fall Risk Assessment. It was documented within the online medical record daily and at other defined times. It included designated interventions for each of the three levels.

Problems:
- Inconsistent scoring of patient attributes on Morse Fall Risk Assessment (e.g., ‘weak’ vs. ‘impaired’)
- Communicating a recent fall (which scored the patient at higher risk) was dependent upon perfect RN recall at handoffs and time of Morse assessment
- Difficulty communicating fall risk level to new units and test/procedure areas (previously just ‘fall risk’)
- Inconsistent documentation of risk-specific interventions on the Morse (nurses could skip interventions and form still appeared ‘complete’)
- Nurses did not receive fall rates by unit or in relation to the hospital or benchmarks (blocking timely knowledge and ownership in reducing the falls)

Identified by:
- A fall injury quality of care review
- An interrator reliability test
- A review of handoff tools used for new units and test/procedure areas tool
- Fall rates not decreasing
- A review of Morse form interventions

Baseline data:
- Fall rates
- Fall injuries
- Interrator reliability data
- Handoff form audits

PROCESS:
A small patient safety falls team selected the Morse tool, developed an electronic version, and initiated it house wide in 2007. The falls team had been meeting monthly but was a small group.
In light of the identified problems, it was determined that more aggressive and timely actions needed to be taken. UMMC nursing leadership formed an ad hoc group of direct and indirect nurses, IT personnel, the Director of Nursing Research, and the Director of Quality and Safety. A designated Professional Development Coordinator was appointed to facilitate the process. The Chief Nursing Officer was highly supportive and interested in the process and outcomes. Regular updates were given to Nursing Coordinating Council, Falls Team, and Clinical Practice Council.

The ad hoc group met frequently to plan strategies. One of the initiatives was an integrator reliability test with a convenience sample of 64 nurses on 11 units. Results were 0.28, demonstrating a statistically significant variation on the interpretation of assessment items on the Morse scale. A large educational initiative was developed.

Other methodologies included:
- Revisions of the online Morse form and interfaces with other online forms
- Online HealthStream program for falls
- Emailed educational PowerPoints for units to share with staff
- Competency development for nursing and nonnursing staff
- Creative solutions e.g. as an algorithm to provide guidance for the use of developing technology, e.g., as low beds

**SOLUTION:**

**Solutions and Implementation:**
The Patient Safety: Falls Team and a smaller Falls Ad Hoc group developed a series of solutions to revamp the falls injury prevention program at UMMC:

- The Falls Team was increased to include not only a few units, rehab, and risk management, but almost all inpatient units and some outpatient areas. Nurses were designated as fall prevention ‘leaders’ for their units.
- Modifications were made to the electronic Morse Fall Risk Assessment form:
  - Positive history of falls within 3 months of present admission defaults to all subsequent Morse assessments.
  - Added “history of falling” to E-Kardex for shift report.
  - Created a new field on the daily Morse scale form where the previous assessment score is displayed, to alert nurse to reevaluate the assessment if the new scoring changed the risk level.
  - Intervention measures are defaulted on the fall assessment electronic form, depending on the score and level of risk.
- Identification of patients at high and critical fall risk:
  - Instituted a yellow wristband to identify patients with high or critical fall risk.
  - Included fall risk level on all hand-off forms, including form used to communicate to procedure/test areas.
  - Patient room signage reflects standard, high or critical risk level.
- Implementation of fall prevention resources to reduce observation assistant (sitter) use:
  - Piloting low beds, enclosure beds, and chair alarms
- Developed an algorithm to assist nurses in utilizing technology and restraint alternatives for the highest risk patients; algorithm accepted as Creative Solution Poster at AACN NTI 2009 Conference

**Education:**
- Developed a mandatory fall prevention online module
- Developed a new fall prevention competency for nursing staff.
- Developed a falls competency for non-nursing staff within medical center.
- Developed fall prevention patient education tools.
- Presenting a falls poster at most Clinical Practice Summits
- Displaying data or fall prevention initiatives frequently on units’ Commitment to Excellence boards, which are easily viewable by both staff and patients/visitors.

**Monitoring:**
- Created quarterly fall rates graphs by unit, with hospital, MHA, and NDNQI (National Database of Nursing Quality Indicators) benchmarks.
- Created a unit-based, patient-focused fall assessment electronic report that is available at any time.
- Monthly falls team increased to include staff nurse fall prevention leaders from most units, as well as risk manager, rehab, nurse managers, etc.
- Units with falls rates below the Maryland Hospital Association and the NDNQI receive a “Commitment to Excellence” thank you card from the Safety/Falls Prevention Team.

**Planning:**
- Piloting low beds, enclosure beds, and chair alarms to help prevent falls, decrease staff stress, and decrease sitter and injury costs
- Modifying algorithm to support nurses and decrease costs
- Analyzing solution of combining online falls form with online restraint form
- Developing post-fall tool to drive communication with MD and family and to guide post-falls analysis and care

**Results:**
UMMC has already experienced decreased falls since the implementation of these initiatives in February 2008.

- UMMC has been below MHA and NDNQI benchmarks for the past (7) quarters
- Total inpatient falls have decreased each quarter
- Inpatient falls per 1000 patient days FY 08: 2.51 2.30 2.27 2.11
- Inpatient falls per 1000 patient days FY 09: 1.94

**Sustainability:**
- Analyze quarterly report with direct feedback to each unit’s leadership group
- Monitor compliance with online falls education program
- Repeat interrator reliability test to determine if variability of Morse assessment has decreased after falls education initiatives
• Analyze post-falls reports
• Evaluate impact of advanced program on reducing sitter costs