

ASSESSMENT OF FALLS ON A MEDICAL-TELEMETRY UNIT

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ABSTRACT

Purpose: The purpose of this quality improvement project is to implement a falls intervention to improve falls on the Medical-Telemetry unit.
Background: Between 700,000 and 1,000,000 falls occur in hospitals every year. Furthermore, approximately 30-35% of these falls result in injury and 11,000 falls result in death (Health Research & Educational Trust, 2016). Falls harm patients, families, and providers. They are also a high cost, as many insurance companies will not reimburse care when a patient falls. As a hospital organization it is important to ensure funds are going to the appropriate places. Currently the metropolitan hospital had an increase of 6 falls from 2016 fiscal year to 2017 fiscal year. Through data itemization it appears the current protocol and procedures is not meeting the need to decrease and diminish falls.

STATEMENT OF THE PROBLEM

- The Master of Science in Nursing (MSN) Clinical Nurse Leadership (CNL) students addressed falls because of the history of falls in the hospital over the last two years.
- According to the large metropolitan hospital, the falls from 2016 fiscal year to 2017 fiscal year increased from 31 falls in 2016 to 36 falls in 2017.
- Chaos theory and complexity theory make up the theoretical framework of this quality improvement project.
- The Morse Fall Assessment Risk Tool is utilized to assess the mobility and risk of falls for each patient admitted on the Medical-Telemetry unit.
- The assessment occurs during admission, once a shift, during transfers, and after any type of injury or fall occurs the fall is assessed and documented in the electronic health record system.
- The documentation is utilized to determine the risk of falling on the unit and if labeled "fall risk" the patient is to follow hospital policy.
- The policy for "fall risk" patients includes a sign outside the door indicating to medical personnel the patient is at high risk for falling, yellow socks as another indicator that patient is at high risk for falling, an armband as yet another reminder of the high fall risk status, and depending on the degree of confusion or unsteadiness the bed alarm can be placed to ensure if and when the patient is out of the bed other personnel are alerted.

METHODOLOGY AND ROOT CAUSE ANALYSIS RESULTS

- The MSN/CNL student team will conduct a cumulative total of 12 on-site assessments at a large, metropolitan Magnet hospital in smaller teams of two (total of four teams).
- Six shift assessments will be conducted during the day, and six will be conducted during the night.
- MSN/CNL student nurse will be assigned to shadow one floor nurse during shift change as well as during initial patient encounters
- The purpose of these evaluations is to collect data on:
 - How nurses communicate with each other during shift report
 - Overall compliance and competency of nurses on following fall protocol in the Medical-Telemetry units
 - Observations for mention of patient's present fall risk status, ambulation requirements, and elimination needs and whether the oncoming nurse had questions for the nurse from the previous shift regarding these issues
 - Observations on how the nurse conducts the Morse Fall Scale assessment on assigned patients and how they chart on the data
- The MSN/CNL student will also gain access to the list of patients identified for fall risk in the unit and use it as a guide for collecting compliance/competency data, including: three side rails up, posted fall risk sign outside door, activated bed alarms if necessary, and call light placement for ease of access
- Due to complexities with the IRB process, the CNL students were unable to collect data from the clinical microsystem. In the absence of real measurements, data from an alternative microsystem was provided by the USF facility and used by the CNL students to move forward with the planning, implementation, and evaluation of this quality improvement project. Despite the integration of the MFS into the EHR, patients were still not being properly identified as fall risks. It was concluded that due to many different reasons, nurses were not conducting their own full fall risk assessment and were frequently relying on the previous nurse's assessment and their own nursing judgement to determine the patient's MFS score.

Data	AM Shift	PM Shift	Total
Number of Shifts Observed	3	2	5
Number of Patients Identified as a Fall Risk	44	34	78
Average Fall Risk Patients per Shift	14.6	17	15.6

Table 1 Number of fall risk patients on a Medical-Telemetry Unit

Fall Risk Factor	Percent Communication of Fall Risk Factor During Nursing Assessment
Patients level of orientation and cognition	78%
Continence status	72%
Number and types of prescribed medications	60%
Number of diagnoses	45%
Gait and balance	42%

Table 2 Fall Risk Factor Assessment Composition

Fall Risk Prevention Intervention	Percent Compliance with Fall Risk Protocol
Three side rails up	36%
Fall risk sign posted	63%
Bed alarm activated	7%
Call light placed appropriately within reach	36%

Table 3 Care Planning Performance

INTERVENTION



- Utilizing Kotter's Eight Step Change Model, just in time training was implemented to decrease fall incidences on the Medical-Telemetry unit
- An assessment of the microsystem was conducted to compile data on patient falls (incidence reports, staff and patient surveys, item analysis, and RN assessment observations) and present the problem of incorrectly done Morse Fall Scale assessments, how it contributes to patient falls, and the consequences of patient falls
 - Establish a group that would be committed to the process improvement of patient falls, including unit managers, senior management, nurses, nursing assistants
 - Define the end goal: clear understanding from staff on how to correctly conduct the Morse Fall Scale assessment and a reduction in patient fall incidents and determine method of implementing change (just in time training)
 - Communicate vision and goal with staff and managers of the unit and ensure understanding of the process of just in time training
 - Removing barriers to encourage participation in just in time training
 - Establish short-term benchmarks: checking off staff on Morse Fall Scale assessment competencies and seeing a reduction in patient falls within a month of just in time training
 - Continue to accomplish short-term goals over time (reduction in patient falls) to establish motivation to continue quality improvement and change in practice
 - Continue to evaluate and motivate staff to continue with performing an efficient Morse Fall Scale assessment so that it becomes a natural part of the unit's protocol

JUST IN TIME TRAINING

- Three encounters for each nurse with the CNL to determine that RNs are correctly performing the Morse Fall Scale assessment:
- 1st Encounter: CNL demonstrates the Morse Fall Scale assessment to the nurse
 - 2nd Encounter: nurse demonstrates and teaches back Morse Fall Scale assessment to the CNL; any changes and corrections would be made at this encounter
 - 3rd Encounter: nurse performs the Morse Fall Scale assessment correctly and the CNL checks off the nurse's competency on this skill
- The Morse Fall Scale assessment is conducted by the primary nurse every shift and interventions were placed throughout the shift

EVALUATIONS

- There will be three phases of evaluation:
- Phase 1 (Check-off):** on the 3rd encounter described in the interventions, the CNL will evaluate the nurse performing the Morse Fall Scale assessment on the patient and then check the competency off if met
- The following guidelines were met:
- The nurse must demonstrate Morse Fall Scale assessment on one patient
 - Did the nurse ask about history of falls prior to or during hospitalization?
 - Did the nurse assess the admission record or ask the patient for a secondary diagnosis?
 - Did the nurse assess the patient's extremity strength while sitting?
 - If the patient is able to ambulate, did the nurse assess the patient's gait while walking a short distance?
 - Did the nurse assess if the patient needed an ambulatory aid (walker, crutches, cane, staff assistance, furniture)?
 - Did the nurse assess if there was an IV in place with continuous therapy or saline/heparin lock?
 - Did the nurse assess the patient's mental status?
 - The nurse categorizes the patient correctly based on the Morse Fall Scale assessment (no risk, low risk, moderate risk, high risk)
 - The nurse states the correct fall prevention interventions based on the result of the Morse Fall Scale assessment
 - The nurse integrates interventions into the plan of care and shares findings at change of shift
- Phase 2 (Questionnaire - did you learn it):** Nurses will be given a questionnaire to see if this process met their needs and how well they learned from the Just-In-Time training
 - Phase 3 (Questionnaire - did you like it):** Did you enjoy the learning process?
 - Ongoing Evaluation:** CNLs will further evaluate nurses on the Medical-Telemetry floor to see if they are continuing to implement the Morse Fall Scale assessment correctly and if there is a correlation to decreased amount of falls on the unit

NURSING RELEVANCE

- To further improve nursing practice regarding falls prevention, the following practices need to be highlighted:
- The need for increased safety
 - A higher level of nursing practice through proper fall risk assessments
 - Evaluation of proper assessment on fall risk by a CNL
 - Nursing advocacy in patient ambulation abilities
 - The importance of re-education about fall risk status to patients
 - The patient's understanding on falls risk

CNL RELEVANCE

- The CNL expertise is a valuable asset to the clinical microsystem for two reasons: CNLs possess the formal training and clinical expertise required to improve processes
- The CNL curriculum includes advanced pathophysiology and assessment, improvement science, financial resource management, healthcare systems leadership, and healthcare informatics.
 - The CNL's position is dedicated to working exclusively on improving work flow and the work environment.
 - A total of 530 hours (300 CNL student hours and 230 hours for implementation/evaluation) would be required to complete this project. This equates to 3.3 months of full-time work exclusively on this project. For example, nurse managers, CNSs, floor nurses, and the QI department do not have the time to take on this responsibility.

FUTURE DIRECTIONS

- Being more inclusive: Having the interdisciplinary team and family members more involved on patient's fall risk status (CNA, PT, OT, Dr., NP etc).
- Focus on performance-improvement: Actively involve master's educated students to implement strategies proposed and evaluate its effectiveness.
- Getting the IRB waived: Facilities that require CNL students to write an IRB for project approval should be waived since it is not in the MSN-CNL scope of practice.
- Analyzing hospital policies: Looking at facilities' protocols on falls prevention per specialty can help measure the risks and outcomes of falls per microsystem.
- Further implementation of falls prevention: Evidence-Based Practices that have shown to be effective through research, allows nurses to better advocate for patients and provide higher quality care.