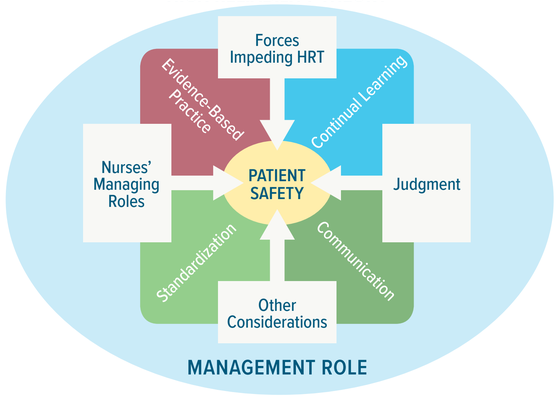
An Explanatory Case Study That Includes Evidence-Based Practice In A Hospital Setting

Cathy DeChance PhD, RN

HIGH RELIABILITY THEORY



PROBLEM BACKGROUND

- On average 25 patients fall per 1000 patient days
- Patient outcomes drive satisfaction and reimbursement
- Every patient fall increases risk for injury or death
- The first step is to identify the patient's level of fall risk
- Many EBP assessment instruments are available
- Less is known about the nurse's process when implementing these tools

PURPOSE

To use the components of high reliability theory to examine how medical surgical nurses implement an evidence-based fall risk assessment instrument into routine practice.

RESEARCH QUESTIONS

- How do medical-surgical nurses implement the Morse Fall Scale for assessing a medical surgical patient's risk for falls?
- To what extent does the organization support medical surgical nurses' implementation of the Morse Fall Scale?

Sub Research questions and propositions were used to answer the questions.

METHODOLOGY

(Staff Nurse/Organizational Leader)

Characteristic Survey (n=24/4)
Evidence-Based Practice Belief Scale (n=24/4)
Educational Transcript Review (n=24/4)
Observations (n=10)
Interviews (n=7/4)
Electronic Health Record Review (n=10)
Comparison of Policy to Health Record (n=10)

DATA ANALYSIS-EMPIRICAL PATTERN MATCHING

- Each method individually analyzed either statistically, inductively, deductively, or chronologically
- Each data source was analyzed and empirical patterns identified
- The identified empirical patterns were matched to predicted patterns/propositions
- The patterns that matched the proposition supported the proposition; no match alternative explanations required

STUDY SAMPLE CHARACTERISTICS

	Staff Nurse	Leader
Education	Diploma/Assoc.....79% Bachelor's/Master's..20.76%	Associate to Master's
Experience as an RN	Less than 1 year.....20.8% 1 to 5 years.....25% 5 to 10 years.....29% > 10 years.....25%	11 to 32.1 years
EBP Belief Scale	44 to 74	59 to 75
Educational Transcript Confirming Education on Morse Fall Scale	100% less than 6 months	0%

ELECTRONIC HEALTH RECORD

- Nine documented assessments—10 observed
- Morse Fall Risk Scale Range—20 to 75
- 44% scored at 35 (low risk)
- Use of an ambulatory aid not documented
- Past medical history not documented

DOCUMENTATION COMPARED TO POLICY

	No Risk	Low to Moderate Risk	High Risk
Compliance to Policy	14.28%	0%	26.6%

CHRONOLOGY OF MORSE FALL RISK SCALES

CONCEPTS AND THEMES FROM DATA ANALYSIS OF OBSERVATION

- **EBP**—Asepsis, Introduction, Identify the Patient, Rounding
- **Standardization**—Report Sheets, Nursing Care Practices
- **Communication**—Electronic Report Sheet, Alarm, Identify Self, Non-Verbal Communication
- **Continual Learning**—Patient Education
- **Barriers**—Environmental and Distraction

THEMES-LEADER INTERVIEWS

EBP	Continual Learning	Communication	Standardization	Management Role	Patient Safety	Other Considerations
None	Educate Staff Need More Education	Communicate Fall Risk Modes of Communication	Morse Fall Risk Scale Complete Number Identifies Risk Nurses Support	Outcome Change Management	High Risk Means Interventions Type of Interventions Goal of Morse Fall Risk Scale Post Happenings Post Responsibilities	Red Flags Barriers

SUPPORTED AND PARTIALLY SUPPORTED PROPOSITIONS

Proposition 1: Fully supported
Consistency in the implementation of the Morse Fall Risk Scale occurs when medical surgical nurses have a high EBP Belief.

Proposition 3: Partially supported
Consistency in the implementation of the Morse Fall Scale occurs when medical surgical nurses use standardized visual fall risk indicator.

Proposition 6: Fully supported
Consistency in the implementation of the Morse Fall Scale occurs when medical surgical nurses perceive that more support versus barriers exists for the fall risk.

Proposition 8: Partially supported
Consistency in the implementation of the Morse Fall Scale occurs when medical surgical nurses have participated in an educational program concerning the Morse Fall Risk Scale within the last six months.

REFUTED AND PARTIALLY REFUTED PROPOSITIONS

Proposition 2: Partially refuted
Consistency in the implementation of the Morse Fall Risk Scale occurs when medical surgical nurses use verbal communication with the care team about the patient's level of fall risk.

Proposition 4: Partially refuted
Consistency in the implementation of the Morse Fall Risk Scale occurs when medical surgical nurses document the patient's assessment in the electronic health record at the same time the assessment is completed.

Proposition 5: Partially refuted
Consistency in the implementation of the Morse Fall Risk Scale occurs when medical surgical nurses follow the organizational policy on fall prevention.

Proposition 7: Fully refuted
Consistency in the implementation of the Morse Fall Risk Scale occurs when medical surgical nurses have higher levels of educational preparation.

PROPOSITIONAL OUTCOME CONSISTENCIES

OBSERVATIONS		
Observed Assessments were documented	Fall risk as assessed is identified in the policy	Call bell was observed within reach of every patient
INTERVIEWS		
Morse Fall Risk Scale should be accurately completed	Following the policy is important	Numbers represent fall risk
Documentation is important	Morse Fall Risk Scale is completed every shift	Standard interventions are used
ELECTRONIC HEALTH RECORD		
Documented time of assessment matched the observed time of assessment	The documented average fall risk score in previous 24 hours matched the observed assessed fall risk score	The documentation in the patient record reflected the expected number of interventions as stated in the organizational policy

THEMES-STAFF NURSE INTERVIEWS

EBP	Communication	Continual Learning	Standardization	Forces Impeding High Reliability	Nurses Managing Role	Judgment
Numbers Represent Fall Risk Support for MFRA	Report Provides Initial Data Communicating Fall Risk Documentation	Patient Education Staff Education	Identifying Fall Risk Completing MFRA Accurately Following Policy Standard Interventions	Staff Frustration Unforeseen Circumstances	Keeping Patient Safe Fall Prevention Time Management Work Around	Mentation is a Consideration in Fall Prevention Automatic Red Flags Fall Scores do not Match Patient Needs Critical Thinking Trusting

SUB-RESEARCH QUESTIONS

1. To what extent does standardization of the fall risk assessment process assist medical surgical nurses in implementing the Morse Fall Risk Scale? More consistency than inconsistency existed with the use of visual indicators of fall risk, consistency existed even though nurses did not document concurrently, consistency existed even though every element in the policy was not followed.
2. How do medical-surgical staff nurses communicate the fall risk assessment to other nurses and caregivers? Consistency occurred even though nurses did not use verbal communication to identify a patient's fall risk level, and nurses did not follow every element regarding communication outlined in the organizational policy.
3. To what extent does nurse's personal beliefs regarding evidence-based practice assist medical-surgical nurses' implementation of the Morse Fall Risk Scale? Consistency existed because the nurses had a high level of belief in EBP.
4. To what extent does education support medical-surgical nurses' implementation process of the Morse Fall Scale? All staff nurses had recent education about the Morse Fall Risk Scale, and there was more evidence for consistency than inconsistency. Nurses with all levels of education were consistent with implementing the Morse Fall Risk Scale.
5. To what extent do organizational leaders support medical-surgical nurses' implementation process of the Morse Fall Risk Scale? Leaders provide guidance, support, monitoring, policy, and tools. Leaders had a high level of belief in EBP and they create the environment for EBP.
6. What barriers and supports for assessing a patient's fall risk do medical-surgical nurses identify when implementing the Morse Fall Risk Scale? Consistency existed when implementing the Morse Fall Risk Scale because more support than barriers existed.

LIMITATIONS

- Rural community hospital
- Survey return rate 58.5%
- Propositions partially tested
- Potential behavior alteration