Using Fall Risk Assessment Tools in Care Planning

Presented by Patricia C. Dykes, Ph.D., RN, FAAN, FACMI
Center for Patient Safety Research and Practice
Center for Nursing Excellence
Brigham and Women’s Hospital
Welcome!

Thank you for joining this webinar about how to use fall risk assessment tools in care planning.
A Little About Myself…

Senior Nurse Scientist and Research Program Director in the Center for Nursing Excellence and in the Center for Patient Safety, Research, and Practice at Brigham and Women’s Hospital in Boston
Today We Will Talk About

• Universal fall precautions
• Fall risk factor assessment
• Fall risk assessment tools
• How to use fall risk assessment tools in care planning

Please make a note of your questions. Your Quality Improvement (QI) Specialists will follow up with you after this webinar to address them.
Universal Fall Precautions

• Features of universal fall precautions
• Examples of universal fall precautions
• How to implement universal fall precautions
Features of Universal Fall Precautions

• Are the cornerstone of any hospital Fall Prevention Program
• Apply to all patients at all times
Examples of Universal Fall Precautions

• Clear pathways.
• Wipe up spills immediately.
• Provide access to call bell.
• Provide nonskid footwear.
How To Implement Universal Fall Precautions

• Train all hospital staff who interact with patients.
• Create a hospital culture that values fall prevention.
Fall Risk Factor Assessment

- Features of risk factor assessment
- Using assessment tools universally
- Basis for risk factor assessment
Features of Risk Factor Assessment

• Identifies patients at risk of falling
• Provides baseline measure of patient-specific areas of risk
• Aids in clinical decisionmaking
• Informs personalized preventive measures, care plans, and communication strategies
• Links strategies to counteract identified risk factors

Standardized fall risk assessment is a prerequisite to implementing an evidence-based fall prevention protocol.
Using Assessment Tools Universally

• Fall risk assessment needs to be standardized and ongoing.
• Ask each patient the same key questions. That way, staff will not miss any fall risk factors.
Basis for Risk Factor Assessment

• Validated fall risk assessment tool
• Unit policy
• Clinical judgment
Risk Factor Assessment Tools

• Criteria for selecting fall risk assessment tool
• Fall risk assessment tools
• Limitations of fall risk assessment tools
• Strategies for using fall risk assessment tools
• Limitations of fall risk scores
Criteria for Selecting Fall Risk Assessment Tool

• Prospective validation in >1 population
• Sensitivity/specificity analyses
• Good face validity
• Interrater reliability
• Transparent, simple calculation of score
Fall Risk Assessment Tools

Tools include—

• STRATIFY
• Schmid Fall Risk Assessment
• Morse Fall Scale

Today, we will focus on the Morse Scale.

### Morse Fall Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Score</th>
<th>Patient Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. History of falling (immediate or previous)</td>
<td>No 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes 25</td>
<td></td>
</tr>
<tr>
<td>2. Secondary diagnosis (≥ 2 medical diagnoses in chart)</td>
<td>No 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes 15</td>
<td></td>
</tr>
<tr>
<td>3. Ambulatory aid</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>None/bedrest/nurse assist</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Crutches/cane/walker</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Intravenous therapy/heparin lock</td>
<td>No 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes 20</td>
<td></td>
</tr>
<tr>
<td>5. Gait</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Normal/bedrest/wheelchair</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Weak†</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Impaired‡</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Mental status</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Oriented to own ability</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Overestimates/forgets limitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score; Tally the patient score and record.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25: Low risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-45: Moderate risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;45: High risk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*弱步态: 短步态（或拖步），弯腰，但可能无法抬起腿而行走，可能需要在行走时获取家具的支持。
†弱步态：短步态，需辅助行走。
‡弱步态：短步态，向床边移动时可能有困难。

Suggested scoring based on Morse JM, Black C, Obelia K, et al. A prospective study to identify the fall-prone patient. Can J Med 1989; 28(1):81-6. However, note that Morse herself said that the appropriate cut-points to distinguish risk should be determined by each institution based on the risk profile of its patients. For details, see Morse JM., Morse RM, Tylko SJ. Development of a scale to identify the fall-prone patient. Can J Aging 1989;8:566-7.
Limitations of Fall Risk Assessment Tools

• No tool has perfect predictability.
• Even patients at low risk require some intervention.
Strategies for Using Risk Assessment Tools

- Use valid and reliable tools.
- Train staff in how to properly use risk assessment tools.
- Assess all patients.
- Tailor interventions based on patient-specific areas of risk.

All patients who fall once are likely to fall again and under similar circumstances. Plan appropriately.
Limitations of Fall Risk Scores

• Some assessment tools include a scoring system to predict fall risk.
  – If you base a patient’s individualized care plan on their fall risk score alone, their care plan will not be tailored to their risk factors.
  – Instead, use assessment tools to identify fall risk factors. Do not rely on scores alone.
Using Fall Risk Assessment Tools in Care Planning

• Types of falls and how to prevent them
• Risk factors for falls identified by the Morse Fall Scale
Types of Falls and How To Prevent Them

Accidental falls

• Occur in those who have no risks for falling
• Are usually caused by an environmental hazard or error in judgment
• Account for 14% of falls
• Are prevented through universal fall precautions
Types of Falls and How To Prevent Them

Unanticipated physiological falls

• Occur in those who have no risks for falling.
• Are caused by physiologic changes, such as seizure.
• Account for 8% of falls.
• Are the most difficult to prevent. Some may not be preventable.
Types of Falls and How To Prevent Them

Anticipated physiological falls

• Occur in those who have a risk for falling:
  – Morse Fall Scale includes 6 items that can predict this type of fall.

• Account for 78% of falls

• Can be prevented through fall risk assessment using a validated tool and tailored care planning and interventions
Risk Factors for Falls Identified by Morse Fall Scale

- History of falling
- Secondary diagnosis
  - Associated with incontinence, vision problems, multiple medicines, orthostatic hypotension
- Ambulatory aid
- IV therapy/heparin (saline) lock
- Gait
- Mental status
Using Morse Fall Scale in Care Planning

• Morse Fall Scale
• Steps to take
• Recommended interventions
• Case study
• Using assessment tools
**Morse Fall Scale**

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Numeric Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. History of falling</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>25</td>
</tr>
<tr>
<td><strong>2. Secondary diagnosis</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>15</td>
</tr>
<tr>
<td><strong>3. Ambulatory aid</strong></td>
<td></td>
</tr>
<tr>
<td>None/bed rest/nurse assist</td>
<td>0</td>
</tr>
<tr>
<td>Crutches/cane/walker</td>
<td>15</td>
</tr>
<tr>
<td>Furniture</td>
<td>30</td>
</tr>
<tr>
<td><strong>4. IV or IV access</strong></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
</tr>
<tr>
<td><strong>5. Gait</strong></td>
<td></td>
</tr>
<tr>
<td>Normal/bed rest/wheelchair</td>
<td>0</td>
</tr>
<tr>
<td>Weak</td>
<td>10</td>
</tr>
<tr>
<td>Impaired</td>
<td>20</td>
</tr>
<tr>
<td><strong>6. Mental status</strong></td>
<td></td>
</tr>
<tr>
<td>Oriented to own ability</td>
<td>0</td>
</tr>
<tr>
<td>Overestimates or forgets limits</td>
<td>15</td>
</tr>
</tbody>
</table>
Steps To Take

• Review areas of risk identified by the Morse Fall Scale for a specific patient.
• Select interventions to address each area of risk.
• Communicate the tailored fall prevention plan to all staff who interact with the patient.
• Share the plan with the patient and his or her family members.
Recommended Interventions

History of falling (in past 3 months)

• Use safety precautions.
• Communicate risk status via plan of care, change of shift report, and signage.
• Document circumstances of previous falls.
Recommended Interventions

Secondary diagnosis

• Think about factors that may increase risk for falls related to multiple medical problems:
  – Illness/multiple medicines
  – Side effects such as dizziness, frequent urination, and unsteadiness
  – Vision problems
Recommended Interventions

Ambulatory aid

• Use an ambulatory aid at the patient’s bedside if needed.
• Review dangers of using furniture or hospital equipment as ambulatory aids.
• Think about a PT consult.
Recommended Interventions

IV therapy/heparin (saline) lock

• Implement a toileting/rounding schedule.
• Tell the patient to call for help with toileting.
• Review side effects of IV medicines.
Recommended Interventions

Gait

• Help the patient get out of bed.
• Consider a PT consult.

Normal gait: Walks with head erect, arms swinging freely at the side, striding without hesitation.

Weak gait: Stooped, but able to lift head without losing balance. If furniture is needed, uses it as a guide (feather-weight touch). Short steps; may shuffle.

Impaired gait: Difficulty rising from a chair (needs to use arms; several attempts to rise). Head down; watches ground while walking. Cannot walk without assist; grabs at furniture or whatever is available. Short, shuffling gait.
Recommended Interventions

Mental status

- Use a bed or chair alarm.
- Place the patient in a visible location.
- Encourage family presence.
- Do frequent rounding.

Mental status test: “Are you able to go to the bathroom alone, or do you need assistance?”
- Normal: Patient response is consistent with orders or kardex.
- Overestimates/forgets limits: Patient response is inconsistent with orders or unrealistic.
Case Study

• An 82-year-old man with type 2 diabetes was admitted to the telemetry unit with chest pain and shortness of breath on exertion.
• On admission, the patient was alert and oriented to place, person, and time. He had an IV of saline 0.45% and was placed on a cardiac monitor.
• During his admission interview, the patient reported that with his cane, he was independent with ambulation and transfers. However, the admitting nurse noted that the physician’s order was for ambulation with a cane and assistance.
• With further questioning, the patient reported that he had fallen at home several times over the past year, most recently last month.
• As the nurse assisted the patient to the bathroom, she noted that initially he used the bedside table and other furniture as a guide and needed to be reminded to use his cane.
• Once he was given his cane, the patient walked with short, steady steps to the bathroom.
## Case Study: Morse Fall Scale

<table>
<thead>
<tr>
<th>Areas of Risk</th>
<th>Numeric Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. History of falling</td>
<td>No: 0</td>
</tr>
<tr>
<td></td>
<td>Yes: 25</td>
</tr>
<tr>
<td>2. Secondary diagnosis</td>
<td>No: 0</td>
</tr>
<tr>
<td></td>
<td>Yes: 15</td>
</tr>
<tr>
<td>3. Ambulatory aid</td>
<td>None/bed rest/nurse assist: 0</td>
</tr>
<tr>
<td></td>
<td>Crutches/cane/walker: 15</td>
</tr>
<tr>
<td></td>
<td>Furniture: 30</td>
</tr>
<tr>
<td>4. IV or IV access</td>
<td>No: 0</td>
</tr>
<tr>
<td></td>
<td>Yes: 20</td>
</tr>
<tr>
<td>5. Gait</td>
<td>Normal/bed rest/wheelchair: 0</td>
</tr>
<tr>
<td></td>
<td>Weak: 10</td>
</tr>
<tr>
<td></td>
<td>Impaired: 20</td>
</tr>
<tr>
<td>6. Mental status</td>
<td>Oriented to own ability: 0</td>
</tr>
<tr>
<td></td>
<td>Overestimates or forgets limits: 15</td>
</tr>
<tr>
<td><strong>Total Score:</strong></td>
<td><strong>115</strong></td>
</tr>
</tbody>
</table>
Using Assessment Tools

Assessment tools should be used—

• By staff nurses

• In conjunction with clinical assessment and medicine review

• To identify a patient’s fall risk factors

• To plan care that addresses these factors

*If your hospital has an electronic health record system, integrate tools into the system.*
Today We Talked About

• Universal fall precautions
• Fall risk factor assessment
• Fall risk assessment tools
• Using fall risk assessment tools in care planning
Any Questions?

• Thank you for being such great listeners.
• Please refer any questions to your QI Specialists.
Resources

  – Tool 3B: Scheduled Rounding Protocol
  – Tool 3F: Orthostatic Vital Sign Measurement
  – Tool 3G: STRATIFY Scale for Identifying Fall Risk Factors
  – Tool 3H: Morse Fall Scale for Identifying Fall Risk Factors
  – Tool 3I: Medication Fall Risk Scale and Evaluation Tools
  – Tool 3J: Delirium Evaluation Bundle
  – Tool 3K: Algorithm for Mobilizing Patients
  – Tool 3L: Patient and Family Education
  – Tool 3M: Sample Care Plan

• Morse JM. Preventing patient falls. 2nd ed. New York: Springer; 2009.