



Title: **MULTIDISCIPLINARY FALL PREVENTION**

Responsibility: Multidisciplinary staff need to take an active role in fall prevention.

Equipment: Fall identification wrist bands, fall identification materials, and fall prevention equipment.

Purpose: Since research has identified that numerous intrinsic and extrinsic variables can contribute to a patient's risk of falling during a hospitalization, it is essential to determine the risk factors that place the patient at the greatest (highest) risk. By utilizing strategies that take into consideration the fall risk assessment score, clinical judgement, medication management, the patients mental status, and the patients ability to ambulate, it is intended that this approach will help prevent patient falls.

The purpose of this guideline is to provide multidisciplinary staff with fall risk assessment tools that can be used to assist them in properly identifying those patients at risk for falling and determining interventions.

General Information:

A fall is defined as any unplanned descent to the floor, with or without injury (National Database of Nursing Quality Indicators [NDNQI], 2015). A fall may be either unassisted or assisted (where someone helps to 'break' the fall by helping the patient to the floor) and the NDNQI definition also includes falls where a patient lands on a surface where you would not expect to find the patient.

University of Toledo Medical Center's (UTMCs) fall injury level categories:

- None
- Minor (dressing, ice, cleaning, or elevation)
- Moderate (suturing, splinting, or steri-strips/skin glue)
- Major* (surgery, casting, traction, or neuro consult)
- Death* (died as a result of injuries sustained from the fall)

*if a patient's fall has a major injury level or results in a death, the department manager or house supervisor and Quality Management need to be notified immediately.

Tools used:

1. **The Morse Fall Scale:** This tool is used to identify risk factors for falls in hospitalized patients. The total score may be used to predict future falls, but it is more important to identify risk factors using the scale and then plan care to address those risk factors.
2. **Medication Fall Risk Score:** This tool is used to identify medication-related risk factors for falls in hospitalized patients.
3. **Short Portable Mental Status Questionnaire:** Patients found to have impaired mental activity as a risk factor for falls require further evaluation. The Short Portable Mental Status Questionnaire is designed to help determine if the patient has delirium.
4. **Mobility:** The Early Mobility Protocol Algorithm is designed to assess and document a patient's current mobility status. It is used to identify a patient's mobility zone, which can then be correlated to fall risk.

Applying Fall Risk Interventions:

Begin your patient assessment with the Morse Fall Scale (see attachment). The patient will automatically be deemed a high fall risk (see intervention chart) if any of these three red flags are noted:

- They score 70 or greater
- They have had a physiological fall in the past 90 days
- They score 15 on question #6 (they forget limitations and over estimate abilities)

If none of the above flags exist for your patient, proceed with assessing fall risk, using the other three tools, medication fall risk, short portable mental status questionnaire and mobility zone. If the patient scores in the red zone on two or more of the four assessment tools the patient will be deemed a high fall risk and high fall risk interventions will be implemented. All other patients will have universal fall interventions implemented.

Tool #1: Morse Fall Scale (see attachment):

The Morse Fall Scale uses six different patient risk factors that gives an indication of the patient's probability of falling by assigning a numerical score. The total possible scoring on the scale is 125.

1. **History of falling:** Scored as 25 if the patient has fallen during the present hospital admission or if there was an immediate history of physiologic falls, such as from seizures or an impaired gait prior to admission. If the patient has not fallen, this is scored 0. If the patient falls for the first time in-house, it is scored as 25.
2. **Secondary diagnosis:** Scored as 15 if more than one medical diagnosis is listed on the patient's chart; if not, scored as 0.
3. **Ambulatory aid:** Scored as 0 if patient walks without a walking aid even if assisted by a nurse, uses a wheelchair, or is on bedrest and does not get out of bed. If the patient uses crutches, a cane, or a walker, this item scores 15; if patient ambulates clutching onto the furniture for support, score this item 30.
4. **IV therapy:** Scored as 20 if the patient has an intravenous apparatus or a heparin/saline lock inserted; if not, score 0.
5. **Type of gait:** If the patient is in a wheelchair, the patient is scored according to the gait he or she used when transferring from the wheelchair to the bed.
 - Normal: Characterized by the patient walking with head erect, arms swinging freely at the side, and striding unhesitantly. This gait scores 0.
 - Weak: Characterized by the patient having a stooped gait but is able to lift the head while walking without losing balance. If support from furniture is required, steps are short, and patient may shuffle, this gait is scored as 10.
 - Impaired: Characterized by the patient having difficulty rising from the chair, attempting to get up by pushing on the arms of the chair, and/or bouncing several attempts to rise. Also, the patient's head is down, they watch the ground while grasping onto furniture for support, utilize a walking aid for support, or they cannot walk without assistance. This gait is scored as 20.
6. **Mental status:** Measured by checking the patient's own self-assessment of his or her own ability to ambulate. Ask the patient, "are you able to go to the bathroom alone or do you need assistance?" If the patient correctly judges his or her own ability to ambulate and this is consistent with the ambulatory orders in the EHR, the patient is rated as "normal" and scored 0. If the patient's response is not consistent with the mobility order or if the patient's assessment is unrealistic, then the patient is considered to overestimate his or her own ability and to be forgetful of limitations and scored as 15 (ahrq.gov; 2016).

Emergency Department Procedure

The Triage Nurse will assess fall risk for patients on admission. Any one of the following three findings will result in the patient being deemed a high fall risk; a Morse Score of 70 or greater, a history of a fall within the

last 90 days, and the patient demonstrating overestimation of abilities or forgetting limitations. All patients assessed as high fall risk will have a yellow fall wrist band applied, and bed alarm in place while being treated in the Emergency Department.

Tool #2: Medication Fall Risk Score

Procedure:

1. The RN will evaluate medication-related fall risk on admission and at regular intervals thereafter. The institutional electronic Medication Fall risk Score website will add up the point value (risk level) for every medication the patient is administered. If the patient is taking more than one medication in a particular risk category, the score should be calculated by (risk level score) X (number of medication in that risk level category).
2. Nursing personnel will use this tool in conjunction with clinical assessment and the other fall risk tools to determine if a patient is at risk for falls and plan care accordingly.
3. The Medication Fall Risk Score is available electronically for pharmacy use in reviewing patient profiles. If questions arise from nursing personnel, pharmacists may be contacted with questions.
4. The RN will check this institutional electronic Medication Fall Risk Score website under the References drop down menu of the nursing charting system each shift to help identify those patients at risk for falling and to determine interventions.

Point Value/ (Risk Level)	American Hospital Formulary Service Class	Comments
3 (High)	Analgesics,* antipsychotics, anticonvulsants, benzodiazepines [†]	Sedation, dizziness, postural disturbances, altered gait and balance, impaired cognition
2 (Medium)	Antihypertensives, cardiac drugs, antiarrhythmics, antidepressants	Induced orthostasis, impaired cerebral perfusion, poor health status
1 (Low)	Diuretics	Increased ambulation, induced orthostasis
Score \geq 6		Higher risk for fall; evaluate patient

* Includes opiates. [†] Although not included in the original scoring system, the falls toolkit team recommends that you include non-benzodiazepine sedative-hypnotic drugs (e.g., zolpidem) in this category.

Tool #3: Short Portable Mental Status Questionnaire (see attachment):

Procedure:

1. A proper evaluation for delirium requires both standardized testing and direct observation of the patient's behavior. Mental status will be assessed upon admission and daily with nursing assessments by performing the Short Portable Mental Status Questionnaire. This information will then be used in conjunction with other tools to judge fall risk.
2. This tool should be used with any patient whose mental status is unclear on admission, or transfers to another unit, or whose mental status has acutely declined.
3. The tool will allow multidisciplinary staff to determine if a patient is delirious and therefore requires further medical evaluation for delirium. This tool is important to distinguish delirium from behavioral symptoms of dementia.

4. The Senior Behavioral Health (SBH) nursing unit will utilize a more indepth mental status assessment in determining patient fall risk and fall risk interventions.

Tool #4: Mobility (see attached Early Mobility Algorithm)

Procedure: A proper evaluation for mobility requires a systematic trial of mobility skills, from the easiest to most difficult. This assessment is outlined in the Early Mobility Protocol Algorithm.

1. Patient mobility will be assessed upon admission and daily with nursing assessments.
2. Using the Early Mobility Algorithm, begin at the top (left) with “start”.
3. Assess the patient’s ability to complete the task in question in each of the diamond shapes.
4. If the patient is able to complete the task with you at the defined level, answer “yes” to the question and move down to the next activity as directed by the arrows.
5. Continue assessing each activity identified in the diamond shapes until you reach an activity that the patient is unable to complete.
6. If the patient is unable to complete the task with you at the defined level, answer “no” to the question and follow the arrow over to the zone number indicated.
7. Document the zone number for the level that the patient is unable to complete. Documentation of the mobility zone is completed in the “Mobility” tab of the EHR.
8. Refer to the Table below to assign a fall risk level based on the mobility assessment.
9. The mobility tool will not apply when assessing fall risk level in the Senior Behavioral Health unit.

Zone	Goal	Risk level
Zone 1	Roll side to side with one assist	High
Zone 2	Dangle at edge of bed with standby assistance for 2 minutes	High
Zone 3	Stand at edge of bed with one assist	Moderate
Zone 4	Pivot to chair at side of bed with one assist	Moderate
Zone 5	Walk from their bed to point in room with standby assistance. Patient has a steady gait.	Low
Zone 6	Walk from their bed to point in the hallway unassisted.	Low

REMINDER: If the patient scores in the red zone on two or more of the four assessment tools the patient will be deemed a high fall risk and high fall risk interventions will be implemented. All other patients will have universal fall interventions implemented.

RISK for fall. Remember the 4 M's...	<u>M</u>orse fall scale	<u>M</u>edication fall risk	<u>M</u>ental Status questionnaire	<u>M</u>obility
High	Score greater than 45	Greater than a score of 6	8 to 10 errors (Severe cognitive impairment)	Zone 1 and 2
Moderate	Score 25-45		5 to 7 errors (Moderate cognitive impairment)	Zone 3 and 4
Low	Score less than 25		0-4 errors (mild cognitive impairment to normal mental functioning)	Zone 5 and 6

INTERVENTIONS:

<p style="text-align: center;"><u>HIGH</u></p> <p>Morse score is 70 or > or history of fall 90 days prior to admission or scores “15” on “over estimates abilities and forgets limitations” or scores in the red zone on two or more of the four assessment tools</p>	<p style="text-align: center;"><u>Universal-all patients</u></p>
<ul style="list-style-type: none"> • Bed in low and locked position • Bed/Chair locked • Use of night light • Nonskid slippers on when up • Call cord in reach • Hourly rounding • Use of gait belt whenever patient is up with assistance, walker available at each bedside • Patient in room near nurses station when able • Bed/chair alarm in place • Yellow wrist band • Yellow card outside the room • Continuous assist when toileting or bathing, toileting regimen every 2-4 hours • 3 of 4 siderails up when in bed 	<ul style="list-style-type: none"> • Bed in low and locked position • Bed/Chair locked • Use of night light • Nonskid slippers on when up • Call cord in reach • Hourly rounding • Use of gait belt whenever patient is up with assistance, walker available at each bedside
<ul style="list-style-type: none"> • Consider use of floor mats when patient in bed • Consider use of Posey vest • Consider use of net bed • Consider use of a roll belt • Consider use of activity apron • Consider distraction, such as folding wash cloths • Consider providing patient with something to hold, such as stuffed animal 	

References:

1. Agency for Healthcare Research and Quality (2016). Morse Fall Scale for Identifying Fall Risk Factors. Retrieved on February 16, 2016, from <http://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/fallpxtk-tool3h.html>.
2. Vassallo, M., Poynter, L., Sharma, J. C., Kwan, J., & Allen, S. C. (2008). Fall risk-assessment tools compared with clinical judgment: An evaluation in a rehabilitation ward. *Age and Ageing, 37*, 277-281.
3. Bok, A., Pierce, L. L., Gies, C., & Steiner, V. (2016). Meanings of falls and prevention of fall saccording to rehabilitation nurses: A qualitative descriptive study. *Association of Rehabilitation Nurses, 41*, 45-53.

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Morse Fall Scale Attachment #1

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

* Weak gait: Short steps (may shuffle), stooped but able to lift head while walking, may seek support from furniture while walking, but with light touch (for reassurance).

[†] Impaired gait: Short steps with shuffle. May have difficulty arising from chair, head down, significantly impaired balance, requiring furniture, support person, or walking aid to ambulate.

Attachment #2 Short Portable Mental Status Questionnaire

Question	Response	Error?
Who is the current president?		
Who was the president before him?		
What was your mother's maiden name?		
Can you count backward from 20 by 3s?		

*A mistake on ANY part of this question should be scored as an error.

Total Errors: _____

SCORING*:

0-2 errors = normal mental functioning

3-4 errors = mild mental impairment

5-7 errors = moderate mental impairment

8-10 errors = severe mental impairment

Early Mobility Protocol Algorithm

- Note patient's previous level of mobility and exercise capacity
- PT/OT evaluation and treatment if patient is not at baseline activity

**For patients with acute fractures OR postorthopedic surgery, please follow weight-bearing restrictions when starting mobility protocol.

