5.6: Preventing Falls

“Prevent residents from falling” is one of the National Patient Safety Goals for nursing care centers. Patient falls, whether in the nursing care center, home, or hospital, are very common and can cause serious injury and death. Older adults have the highest risk of falling. Each year, 3 million older people are treated in emergency departments for fall injuries, and over 800,000 patients a year are hospitalized because of a head injury or hip fracture resulting from a fall. Many older adults who fall, even if they’re not injured, become afraid of falling. This fear may cause them to limit their everyday activities. However, when a person is less active, they become weaker, which further increases their chances of falling.[1]

Many conditions contribute to patient falls, including the following:[2]

- Lower body weakness
- Vitamin D deficiency
- Difficulties with walking and balance
- Medications, such as tranquilizers, sedatives, antihypertensives, or antidepressants
- Vision problems
- Foot pain or poor footwear
- Environmental hazards, such as throw rugs or clutter that can cause tripping

Most falls are caused by a combination of risk factors. The more risk factors a person has, the greater their chances of falling. Many risk factors can be changed or modified to help prevent falls.

The Centers for Disease Control has developed a program called “STEADI – Stopping Elderly Accidents, Deaths & Injuries” to help reduce the risk of older adults from falling at home. Three screening questions to determine risk for falls
are as follows:

- Do you feel unsteady when standing or walking?
- Do you have worries about falling?
- Have you fallen in the past year? If yes, how many times? Were you injured?

If the individual answers “Yes” to any of these questions, further assessment of risk factors is performed.\(^3\)

**Note**

Read more about the CDC’s STEADI initiative at [STEADI – Stopping Elderly Accidents, Deaths & Injuries](https://www.cdc.gov/steadi/). Read more information about preventing falls in older adults at CDC’s [Older Adult Fall Prevention](https://www.cdc.gov/healthdisasters/olderadultfallprevention.html).

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**Fall Assessment Tools**

By virtue of being ill, all hospitalized patients are at risk for falls, but some patients are at higher risk than others. Assessment is an ongoing process with the goal of identifying a patient’s specific risk factors and implementing interventions in their care plan to decrease their risk of falling. Commonly used fall assessment tools used to identify patients at high risk for falls are the Morse Fall Scale and the Hendrich II Fall Risk Model. Read more about these fall risk assessment tools using the hyperlinks provided below. Key risk factors for falls in hospitalized patients are as follows: \(^4\)

- **History of falls**: All patients with a recent history of falls, such as a fall in the past three months, should be considered at higher risk for future falls.
- **Mobility problems and use of assistive devices**: Patients who have problems with their gait or require an assistive device (such as a cane or a walker) for mobility are more likely to fall.
- **Medications**: Patients on a large number of prescription medications or patients taking medicines that could cause sedation, confusion, impaired balance, or orthostatic blood pressure changes are at higher risk for falls.
- **Mental status**: Patients with delirium, dementia, or psychosis may be agitated and confused, putting them at risk for falls.
- **Incontinence**: Patients who have urinary frequency or who have frequent toileting needs are at higher fall risk.
- **Equipment**: Patients who are tethered to equipment such as an IV pole or a Foley catheter are at higher risk of tripping.
- **Impaired vision**: Patients with impaired vision or those who require glasses but who are not wearing them are at a higher fall risk because of their decreased recognition of an environmental hazard.
- **Orthostatic hypotension**: Patients whose blood pressure drops upon standing often experience light-headedness or dizziness that can cause falls.\(^5\)

**Note**

View common fall risk assessment tools using the following hyperlinks:
Interventions to Prevent Falls

Universal fall precautions are established for all patients to reduce their risk for falling. In addition to universal fall precautions, a care plan is created based on the patient’s fall risk assessment findings to address their specific risks and needs.

Universal Fall Precautions

Falls are the most commonly reported patient safety incidents in the acute care setting. Hospitals pose an inherent fall risk due to the unfamiliarity of the environment and various hazards in the hospital room that pose a risk. During inpatient care, nurses assess their patients’ risk for falling during every shift and implement interventions to reduce the risk of falling. Universal fall precautions have been developed that apply to all patients all the time. Universal fall precautions are called “universal” because they apply to all patients, regardless of fall risk, and revolve around keeping the patient’s environment safe and comfortable.

Universal fall precautions include the following:

- Familiarize the patient with the environment.
- Have the patient demonstrate call light use.
- Maintain the call light within reach. See Figure 5.5 for an image of a call light.
- Keep the patient’s personal possessions within safe reach.
- Have sturdy handrails in patient bathrooms, rooms, and hallways.
- Place the hospital bed in the low position when a patient is resting. Raise the bed to a comfortable height when the patient is transferring out of bed.
- Keep the hospital bed brakes locked.
- Keep wheelchair wheels in a “locked” position when stationary.
- Keep no-slip, comfortable, and well-fitting footwear on the patient.
- Use night lights or supplemental lighting.
- Keep floor surfaces clean and dry. Clean up all spills promptly.
- Keep patient care areas uncluttered.
- Follow safe patient handling practices.
Interventions Based on Risk Factors

Patients at elevated risk for falling require multiple, individualized interventions, in addition to universal fall precautions. There are many interventions available to prevent falls and fall-related injuries based on the patient’s specific risk factors. See Table 5.6a for interventions categorized by risk factor.\(^\text{[11]}\)

Table 5.6a Interventions Based on Fall Risk Factors

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altered Mental</td>
<td>Patients with new altered mental status should be assessed for delirium and treated by a trained nurse or physician. See a tool for assessing delirium in the hyperlink below. For cognitively impaired patients who are agitated or trying to wander, more intense supervision (e.g., sitter or checks every 15 minutes) may be needed. Some hospitals implement designated safety zones that include low beds, mats for each side of the bed, nightlight, gait belt, and a “STOP” sign to remind patients not to get up.</td>
</tr>
<tr>
<td>Status</td>
<td></td>
</tr>
</tbody>
</table>
Patients with impaired gait or mobility will need assistance with mobility during their hospital stay. All patients should have any needed assistive devices, such as canes or walkers, in good repair at the bedside and within safe reach. If patients bring their assistive devices from home, staff should make sure these devices are safe for use in the hospital environment. Even with assistive devices, patients often need staff assistance when transferring out of bed or walking.

Patients with frequent toileting needs should be taken to the toilet on a regular basis via a scheduled rounding protocol. See Table 5.6b for a rounding protocol.

Patients with visual impairment should have clean corrective lenses easily within reach and applied when walking.

Patients on high-risk medications should have their medications reviewed by a pharmacist with fall risk in mind and recommendations made to the prescribing provider for discontinuation, substitution, or dose adjustment when possible. If a pharmacist is not immediately available, the prescribing provider should carry out a medication review. See Table 5.6c for a tool to review medications for fall risk. Patients on medications that cause orthostatic hypotension should have their orthostatic blood pressure routinely checked and reported. The patient and their caregivers should be educated about fall risk and steps to prevent falls when the patient is taking these medications.

Patients with a history of frequent falls should have their risk for injury assessed, including checking for a history of osteoporosis and use of aspirin and anticoagulants.

Scheduled Hourly Rounding

Scheduled hourly rounds are scheduled hourly visits to each patient’s room to integrate fall prevention activities with the rest of a patient’s care. Scheduled hourly rounds have been found to greatly decrease the incidence of falls. See below for a list of activities to complete during hourly rounds. These activities can be completed by unlicensed assistive personnel, nurses, or nurse managers.\(^ {12}\)

Hourly Rounding Protocol:\(^ {13}\)

- Assess patient pain levels using a pain-assessment scale. (If staff other than a nurse is doing the rounding and the patient is in pain, contact the nurse immediately so the patient does not have to use the call light for pain medication.)
- Put pain medication that is ordered “as needed” on an RN’s task list and offer the dose when it is due.
- Offer toileting assistance.
- Ensure the patient is using correct footwear (e.g., specific shoes/
slippers, no-skid socks).

- Place the hospital bed in a low position when the patient is resting; ask if the patient needs to be repositioned and is comfortable.
- Make sure the call light/call bell button is within the patient’s reach and the patient can demonstrate accurate use.
- Put the telephone within the patient’s reach.
- Put the TV remote control and bed light switch within the patient’s reach.
- Put the bedside table next to the bed or across the bed.
- Put the tissue box and water within the patient’s reach.
- Put the garbage can next to the bed.
- Prior to leaving the room, ask, “Is there anything I can do for you before I leave?”
- Tell the patient that a member of the nursing staff (use names on white board) will be back in the room in an hour to round again.

### Medications Causing Elevated Risk for Falls

Evaluate medication-related fall risk for patients on admission and at regular intervals thereafter. Add up the point value (risk level) in Table 5.6b for every medication the patient is taking. 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 medications in that risk level category). For a patient at risk, a pharmacist should review the patient’s list of medications and determine if medications may be tapered, discontinued, or changed to a safer alternative.  

<table>
<thead>
<tr>
<th>Point Value (Risk Level)</th>
<th>Medication Class</th>
<th>Fall Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (High)</td>
<td>Antipsychotics, anticonvulsants, and benzodiazepines</td>
<td>Sedation, dizziness, postural disturbances, altered gait and balance, and impaired cognition</td>
</tr>
<tr>
<td>2 (Medium)</td>
<td>Antihypertensives, cardiac drugs, antiarrhythmics, and antidepressants</td>
<td>Induced orthostasis, impaired cerebral perfusion, and poor health status</td>
</tr>
<tr>
<td>1 (Low)</td>
<td>Diuretics</td>
<td>Increased ambulation and induced orthostasis</td>
</tr>
<tr>
<td>Score ≥ 6</td>
<td></td>
<td>Elevated risk for falls; ask pharmacist or prescribing provider to evaluate medications for possible modification to reduce risk</td>
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</tbody>
</table>

**Note**

View tools used to assess delirium and confusion in the [Delirium Evaluation Bundle](https://med.libretexts.org/Bookshelves/Nursing/Nursing_Fundamentals_(OpenRN)/05%3A_Safety/5.06%3A_Preventing_Falls) shared by the Agency for Healthcare Research and Quality.
9. “Hill-Rom_hospital_bed_TV_remote_control.JPG” by BrokenSphere is licensed under CC BY-SA 3.0.