



# Implementation Guide to Prevention of Falls with Injury

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HRET Contact  
[hen@aha.org](mailto:hen@aha.org)  
(312) 834-7056  
[www.hret-hen.org](http://www.hret-hen.org)

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# Prevention of Falls With and Without Injuries Overview

## Background:

- Among older adults (those 65 or older) falls are the leading cause of injury related death - (CDC). They are also the most common cause of nonfatal injuries and hospital admissions for trauma.
- In the acute and rehabilitation hospitals, falls resulting in some injury range from 30% to 51% and falls resulting in fracture range from 1% to 3%.
- Falls are also associated with increased length of stay, an increased amount of health care resources and poorer health outcomes when specific fractures occur.
- Soft tissue injuries or minor fractures can also cause significant functional impairment, pain and distress. Even “minor” falls can prompt the older person to fear falling, causing him/her to limit activity, resulting in loss of strength and independence.

## Suggested AIM:

- Reduce the number of preventable patient falls organization-wide by 50% by December 31, 2013.
- Decrease moderate to severe injuries from falls to 0.01 per 1000 patient days by December 31, 2013.

## Potential Measures:

*Outcome:* Moderate-Severe Injuries from fall (rate per 1,000 discharges).

Number of patient falls, with and without injury to the patient, by type of unit during the calendar month x 1,000.

*Process:* Percent fall risk assessments completed within 24 hours of admission.

Primary Drivers	Secondary Drivers
Fall and Injury Risk Assessment	<ul style="list-style-type: none"> <li>✓ Conduct a fall risk assessment upon admission using a validated risk assessment</li> <li>✓ Assess pt.'s fall risk by asking the patient and family what they do outside the hospital to prevent falls</li> <li>✓ High-injury risk patients include ABCS – Age &gt; 85, Bone, C anticoagulation, coagulopathies, Surgical pts.</li> </ul>
Fall Risk Reassessment	<ul style="list-style-type: none"> <li>✓ Conduct ongoing reassessments including new and/or changed medications that increase fall risks</li> <li>✓ Perform hourly or bi-hourly rounds to assess and address patient needs for Ps: pain, position, potty, personal belongings and safe pathway</li> </ul>
Environmental Interventions	<ul style="list-style-type: none"> <li>✓ Create a safe environment for patients by eliminating hazards and injury hazards (i.e. sharp edges)</li> <li>✓ Develop an equipment safety checklist; bathroom and shower safety devices</li> <li>✓ Consider flooring and lighting and The setup of the patient rooms: clutter free, furniture placement and the assessment of the patient's strongest side when getting out of bed, floor mats</li> </ul>
Interventions for All Patients	<ul style="list-style-type: none"> <li>✓ Use visual/audible cues, e.g. colorful, easy to view alert wristbands, bedside risk signs, non-skid footwear</li> <li>✓ Medication review – avoid unnecessary hypnotic/sedative medications</li> <li>✓ Use of beds that are lower / closer to the floor</li> <li>✓ Involve family and care givers in the care of the patient to prevent falls, e.g. sit with the patient during vulnerable times</li> <li>✓ Intermittent but regular observation through hourly “rounding” by staff</li> <li>✓ Patient education - emphasizing the positive benefits of interventions (enhancing independence and quality of life) rather than the negative (i.e., risk of falls)</li> <li>✓ Achieve interdisciplinary participation including nursing, medical staff, pharmacy, therapy staff, environmental services and engineering/maintenance</li> </ul>
Individualized Interventions for High Risk Patients	<ul style="list-style-type: none"> <li>✓ Increase the frequency of rounding</li> <li>✓ Enhance environmental changes, e.g., move closer to nursing station</li> <li>✓ Assistive devices (walking aids, transfer bars, bedside commodes, etc.) located on exit side of bed</li> </ul>

## Making Changes:

- This intervention is in the Collaborative with Reducing Pressure Ulcers and VTEs (PIVOT Collaborative). National meetings, webinars, bi-monthly coaching calls, change packages and other tools will augment state hospital association activities.

## Key Resources:

- AHRQ - An Evidence Based Handbook for Nurses <http://www.ahrq.gov/qual/nursesfdbk/>
- Department of Veteran Affairs Falls Prevention Toolkit <http://www.patientsafety.gov/safetytopics/fallstoolkit/index.html>
- Hospital Elder Life Program (HELP) <http://www.hospitalelderlifeprogram.org/>
- IHI How to Guide Reducing Injuries from Falls <http://www.ihl.org/knowledge/Pages/Tools/TCABHowToGuideReducingPatientInjuriesfromFalls.aspx>

# Prevention of Falls with Injury Driver Diagram

2012-2013



**AIM: Reduce the number of preventable patient falls, organization-wide by 50% by 12/31/13**

**AIM: Decrease moderate to severe injuries from falls to 0.01 per 1000 patient days by 12/31/13**

Primary Drivers	Secondary Drivers	Change Ideas
Fall Risk Assessment	<ul style="list-style-type: none"> <li>Conduct a fall risk assessment upon admission using a validated risk assessment tool</li> <li>Include as part of fall assessment patient and family inquiry on level of mobility and fall prevention measures utilized at home</li> <li>Develop mobilization protocols that triggers a referral to PT and or OT</li> </ul>	<ul style="list-style-type: none"> <li>✓ The most commonly used assessment is the Morse Falls Score with others including but not limited to, Conley, Hendrich II and, of course, the use of nursing judgment</li> <li>✓ Use the ABCS Falls Assessment: Age, Bones, Coagulation and Surgery</li> <li>✓ Orient patients to their surroundings</li> <li>✓ Place fall risk on all hand-off communication forms and/or ticklers when giving a verbal handoff</li> </ul>
Fall Risk Reassessment	<ul style="list-style-type: none"> <li>Conduct ongoing reassessments including new medication orders</li> <li>Monitor a patient's risk factors frequently</li> <li>Perform hourly or bi-hourly rounds to assess and address patient needs for the 3 "P's:" positioning, pain and potty</li> </ul>	<ul style="list-style-type: none"> <li>✓ Instruct patients with medication time/dose, side effects and interactions with food or other medications</li> <li>✓ Consider pharmacist review of medications when patient is at risk</li> <li>✓ Determine time of day that everyone conducts the 3 "P's," using clear and loud announcements.</li> <li>✓ Combine the rounds with other care related tasks, e.g. vital signs,</li> </ul>
Environmental Interventions	<ul style="list-style-type: none"> <li>Create a safe environment for patients by eliminating hazards</li> <li>Develop an equipment safety checklist</li> <li>Involve facility management and housekeeping staff by developing a check list for environment and equipment safety</li> </ul>	<ul style="list-style-type: none"> <li>✓ Individualize the room for that patient</li> <li>✓ Bed assignment that allows patients to exit toward their stronger side</li> <li>✓ Keep bedside table, call bell and light switch in reach of patient</li> <li>✓ Well lit room</li> <li>✓ Free of clutter</li> <li>✓ Bathroom and exit doors are clearly marked</li> <li>✓ Movable furniture is locked</li> <li>✓ Use beds with adjustable heights</li> <li>✓ Keep bed in a low position</li> <li>✓ Facilities/EVS – engaged EVS staff as part of team to develop checklist. Checklist to include but not limited to:                             <ul style="list-style-type: none"> <li>o All lights are working properly</li> <li>o Area clear of obstructions</li> <li>o Handrails accessible</li> <li>o Floors are dry</li> </ul> </li> </ul>

Primary Drivers	Secondary Drivers	Change Ideas
		<ul style="list-style-type: none"> <li>o Furniture is sturdy</li> <li>o Flooring is level and free of tripping hazards</li> <li>o Grab bars, depending on population, in toilet and shower</li> <li>o Electrical cords secured out of the way</li> </ul>
<p>Customized Interventions for Patients</p>	<ul style="list-style-type: none"> <li>• Use Visual / Audible Cues</li> <li>• Staff education - ensure staff is capable of performing a thorough fall assessment</li> <li>• Medication Review – avoid unnecessary hypnotic/sedative medications</li> <li>• Use of beds that are lower / closer to the floor except when standing or during transfer</li> <li>• Involve family and care givers in the care of the patient to prevent falls</li> <li>• Patient education - emphasizing the positive benefits of interventions (enhancing independence and quality of life) rather than the negative (i.e. risk of falls).</li> <li>• Achieve multidisciplinary buy-in, including nursing, medical staff, pharmacy and therapy staff, and support staff responsible for housekeeping and building maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Use colorful, easy to view alert wristbands, bedside risk signs, non-skid footwear and chart with fall risk sticker</li> <li>✓ Have family/care giver sit with the patient during vulnerable times</li> <li>✓ Intermittent but regular observation through hourly “rounding” by staff</li> <li>✓ Use teach back methods for patients and their families</li> <li>✓ Use staff lead group that it is multidisciplinary to address fall reduction. Should include nursing, PT, OT, and physician.</li> </ul>
<p>Individualized Interventions for Moderate/High Injury Risk Patients</p>	<ul style="list-style-type: none"> <li>• Increase the frequency of rounding</li> <li>• Enhance environmental changes</li> <li>• Develop a check list for high risk fall room set up</li> <li>• Use of technology</li> </ul>	<ul style="list-style-type: none"> <li>✓ Room located as close as possible to nursing station</li> <li>✓ Non-slip/skid padded floor mat on the exit side of the bed</li> <li>✓ Assistive devices (walking aids, transfer bars, bedside commodes, etc.) located on exit side of bed</li> <li>✓ Night lights to ensure room is illuminated at all times</li> <li>✓ Handrails are accessible and sturdy</li> <li>✓ Individualized toileting schedule</li> <li>✓ Hip protectors</li> <li>✓ Balance/Strength assessments</li> <li>✓ Audible bed and chair alarms, if available, are turned on</li> </ul>

## Prevention of Falls with Injury:

In hospitals and other health care facilities patient and family falls are among the most frequently reported incidents. Unlike some other types of adverse events, many inpatient falls cause little or no harm, but the high overall rate of falls means that they are a significant cause of hospital-acquired injury. Falls can sometimes lead to severe injuries, such as hip fractures and head trauma.

Immobility is a decrease in the amount of time spent up and moving (getting out of the bed or chair and walking, for example). Immobility causes loss of muscle strength along with changes in the cardiac response to exercise. Immobility in the hospital increases the chances of delirium, pressure ulcers, venous thromboembolism, falls and functional decline. Functional decline is the loss of the ability to perform activities that ensure a person's independence, such as walking, getting to the toilet, and dressing. Functional decline leads to increased lengths of hospitalization and readmission.

Goal: The Partnership for Patients estimates that 25% of fall injuries are preventable. The goal set for hospitals is to cut the number of preventable fall injuries in half while maintaining or increasing patients' mobility by 2013. Over three years, this would prevent a total of 43,750 fall injuries, while maintaining or increasing mobility.

While agreed-upon and evidence-based strategies for fall injury prevention in the hospital setting have been challenging to establish, the goal is to reduce fall injuries by encouraging safe mobility (getting up and walking) of patients. Efforts to reduce falls and fall injuries while increasing safe mobility focus on risk assessment followed by interdisciplinary and multi-component responses. Examples include adhering to bed rest orders; instituting a toileting schedule to assure that a patient has help walking to and from the bathroom at regular intervals; frequent walks; frequent reorientation if confused; providing a safe environment including good lighting, a bed that lowers to the floor, appropriate assistive devices and removing clutter; and reducing drugs that may cause dizziness, drowsiness, or confusion. Devices such as bed and chair alarms that alert staff to a patient's movement should be used only in combination with interdisciplinary and multi-component responses to avoid the consequences of immobility.<sup>1</sup>

## Suggested AIM Statements:

- Reduce the number of preventable patient falls, organization-wide by 50% by December 31, 2013
- Reduce the number of preventable patient falls to zero in more than 2 units for 6 consecutive months by December 31, 2013
- Reduce the number of patient falls with moderate to severe injuries, organization-wide by 25% December 31, 2013
- Decrease moderate to severe injuries from falls to 0.01 per 1000 patient days by December 31, 2013

## Suggested Outcomes Measures:

- Number of preventable falls with and without injury to the patient, by type/location of nursing unit, during a calendar month
- Rate of moderate to severe injury from falls per 1000 discharges

## Assess Risk for Falling and Risk for Serious Injury from a Fall

An accurate assessment of a patient's risk for falling and risk for injury from a fall is a crucial first step in preventing injuries. It also helps focus resources on those patients most likely to benefit from interventions. Developing a method for assessing risk is a key first step in every fall prevention program.

## **Secondary Driver: Perform a standardized fall risk assessment for all patients on admission and with every change in status**

All patients who enter the organization must be assessed for risk of falling and risk of injury from falls. A validated, standardized assessment tool that can be used in a variety of patient settings, is simple to use and does not take a lot of time to complete is essential to this process. An assessment tool should identify and stratify the risk of falling for each assessed patient.

### **Change Ideas: Morse Fall Scale**

- ✓ Trial a validated risk assessment tool that is already in existence, such as the Morse Fall Scale (See Appendix A), on a small number of patients.<sup>2,3,4</sup>
- ✓ Define as an organization when the Initial Fall Risk Assessment should be done.
- ✓ Define as an organization that is responsible for the Initial Fall Risk Assessment, preferably in an interdisciplinary process.

### **Suggested Process Measure**

- Percentage of patients with a completed interdisciplinary fall risk assessment at admission

## **Secondary Driver: Identify those patients at high risk for injury from falls**

Prevention of falls with injuries requires special consideration and assessment of patients at risk. Patients at the highest risk for injury if they sustain a fall are those over age 85 or frail due to a medical condition, have a history of orthopedic conditions or bleeding disorders and/or post-surgical patients. These are the ABCs of risk for injury (Age, Bones, Coagulation, Surgery) from a fall and represent an important subset of all falls. Focusing on all falls and ignoring the special risks for the ABCs population is a common mistake in falls with injury management.

### **Change Ideas: The ABCs of highest-risk patients**

- ✓ Assess and re-assess fall risk status for the patients at the highest risk for injury from a fall at every shift
- ✓ Use a reminder such as “ABCs” at the beginning of each shift to identify those patients at highest risk for injury from a fall:
  - (A) Age or frailty
  - (B) Bones
  - (C) Coagulation
  - (D) (s) Surgery (recent)

### **Suggested Process Measures:**

- Percentage of patients identified at highest risk for injury from a fall reassessed as per policy
- Percentage of high-risk patients correctly identified during initial fall risk assessment

## **“Hardwiring” Assess Risk for Falling and Risk for Serious Injury from a Fall as part of improvement plan:**

Hardwiring methods include incorporating fall risk assessment in the admission assessment process and as part of the routine assessment process.<sup>5</sup> The fall risk assessment tool should be part of that documentation. Another hardwiring method is to create and implement an admissions checklist to be used with each admission to help ensure that all elements fall risk assessment and prevention methods are completed.

## **Communicate and Educate About Patient’s Fall and Injury Risk**

Communication among all caregivers, as well as with the patient and family, is key to avoiding falls and reducing injuries related to falls. Use verbal and visual communication tools to educate and remind others of a patient’s fall risk.

## **Secondary Driver: Communicate to all staff a patient’s fall risk**



Staff members who are aware of a patient's risk for falling will implement fall precautions appropriate for the patient's level of care.

**Change Ideas: Communicate fall risk**

- ✓ Use standardized visual cues to communicate fall risk to all care members.
  1. Place red colored non-skid socks on all patients at risk for falling.
  2. Colored wrist bands or colored blanket on the bed or on the patient's lap can also be used.
  3. Use signage in or outside the patient room to represent fall risk, being careful to maintain respect and dignity for the patient's privacy. (See Appendix D)
    - Some hospitals use a picture of a leaf on the door to represent a risk for falling, with a red leaf for risk of injury from falls.
    - Other hospitals simply use colored signs or other symbols to represent fall risk.
- ✓ Use standardized handoff communication between hospital staff members at change of shift or change in department.
  1. Add fall risk, risk for injury, history of falls, changes in fall risk and falls prevention measures for each patient in a handoff checklist that is standardized across the organization.

**Suggested Process Measures:**

- Percentage of patients identified as a fall risk with visual cues in place, as per hospital policy
- Percentage of handoffs that include a discussion about patient's fall risk, as observed or documented

**Secondary Driver: Educate the patient and family members**

Patients and family members who are aware of and understand the patient's risk for falling, and the strategies for preventing falls, can help to prevent injuries from falls. It is important to assess understanding of the education by patients and families of the precautionary measures to prevent falls.

**Change Ideas: Strategies to strengthen education**

- ✓ Use the "Teach Back" method<sup>6</sup> when providing education about falls precautions including the reasons the patient is at risk for falling, precautions to be taken, reminder to use the call bell and ways to keep the patient safe
  1. After providing education, ask the patients and/or family members to restate in their own words the information that they heard during the education.
  2. If the patient and/or family member does not understand, provide additional teaching, followed by another opportunity to teach back.
- ✓ Determine who the learner(s) is/are. Address family members who are involved in care or regularly with the patient, with the patient's permission.

**Suggested Process Measures:**

- Percentage of falls education sessions which include the "Teach Back" method, as observed

**"Hardwiring" Communicate and Educate about Patient's Fall Risk as part of the improvement plan:**

Making the process as routine as possible will help to assure that all aspects of fall prevention are addressed reliably in every patient, every day. Make fall prevention a part of the everyday process of patient care.

- ✓ Use standardized handoff communication between hospital staff members at change of shift or change in department.
- ✓ Include fall risk prevention as a routine part of multidisciplinary rounds.

## Identify Modifiable Fall Risk Factors and Customize Interventions

Interventions for patients identified as at risk for falling and at high risk for injury from falling are essential to keep patients safe. Design interventions based on a comprehensive assessment for each patient and targeted to modifiable risk factors.

### Secondary Driver: Implement environmental interventions to prevent falls

Create a safe environment by eliminating hazards.

#### **Change Ideas: Reduce environmental hazards**

- ✓ Develop an environmental safety checklist.
  1. Designate a time of day for routine rounds using the checklist by a multi-disciplinary team that includes nursing staff, administrative team members, housekeeping staff and engineering staff to identify potential hazards. Collaborative rounds provide an opportunity for different perspectives to notice hazards such as uneven flooring and clutter, and lighting, grab bars or layout of the patient rooms. (See Appendix B)

#### **Suggested Process Measures:**

- Percentage of environmental rounds completed as determined by organization
- Percentage of time all required members of environmental rounds team present for scheduled rounds

### Secondary Driver: Implement patient-specific interventions to prevent falls

Customize interventions based on assessment of risk and patient's medical and physical condition.

#### **Change Ideas: Customized interventions**

- ✓ Arrange the patient's room to eliminate safety risks. (See Appendix C)
  1. Make bed assignments that allow the patient to exit toward their strongest side.
  2. Keep bedside table, call bell and light switch in reach at all times.
  3. Ask the patient if the lighting in the room is adequate. If lighting is not adequate, provide extra lighting.
  4. Offer to move personal items such as pictures and other items out of the way of the patient, but still in sight, like on a counter.
  5. Keep the bed in the lowest possible position while the patient is resting and raise it to the appropriate level to stand or transfer.
  6. Ensure that any movable furniture is in a locked position during standing, transfer and other times as appropriate for the individual patient.
  7. Secure electrical cords for equipment out of the way and off the floor based on the specific needs of the patient.

#### **Suggested Process Measure:**

- Percentage of rooms for patients identified as high risk for falling found to have bed not in lowest position while patient resting.
- ✓ Include a review of the patient's medications in the assessment of fall risk and risk for injury from falls.
  1. Flag those patients identified as increased risks for falling and injury from falls for a review of medications by a pharmacist.
  2. Consider use of the Beers criteria<sup>7</sup> for inappropriate medications in the elderly.

3. Ask the pharmacist to recommend alternatives to medications that may increase fall risk and place an alert in the medication system for care providers.
4. Develop a visual cue for the lowest possible bed position for high-risk falls patient.
5. Create a mechanism for regular (every 4 hours) monitoring for bed position appropriateness based on visual cues. Define when and who is responsible for monitoring bed position.

***Suggested Process Measures:***

- Percentage of patients identified as high risk for injury from falls receiving a medication review by pharmacist
- Percentage of medications that meet Beers criteria
- Percentage of medications changed after pharmacist review

**Secondary Driver: Implement intentional rounding on patients**

Perform hourly or bi-hourly comfort rounds on patients to address needs for pain control, positioning and elimination. Falls frequently occur when patients at risk for falling attempt to get out of bed to get to the restroom without assistance. Addressing this need frequently will allow the hospital to assist the patient safely to the restroom and back to bed.<sup>8</sup>

***Change Ideas: Methods to standardize rounding***

- ✓ Combine hourly or bi-hourly rounding with other patient care tasks, such as turning, pain assessment, or vital signs to be more effective.
- ✓ Assign specific staff members to the rounding to ensure responsibility is clear.
- ✓ Educate the patient that a staff member will be in the room every two hours to assist with the “P’s” – pain, position, potty, personal belongings, pathway

***Suggested Process Measure:***

- Percentage of patient rooms with documented rounding per hospital policy

**“Hardwiring” Standardize Interventions for Patients at Risk for Falling as part of the improvement plan:**

Standardizing where you do something each and every time is a method of hardwiring. Several of the interventions above promote hardwiring, such as:

- ✓ Combine hourly or bi-hourly rounding with other patient care tasks, such as turning, pain assessment, or vital signs to be more effective.
- ✓ Assign specific staff members to the rounding to ensure responsibility is clear.
- ✓ Educate the patient that a staff member will be in the room every two hours to assist with the “3 P’s” – pain, position and potty.

**Customize Interventions for Moderate/High Injury Related Risk Patients**

Patients identified as moderate to highest risk for a serious injury from a fall require more intensive precautions to maintain safety. In addition to a standardized process for all patients, addressing special or unique issues with these patients is crucial to hitting your AIM.

**Secondary Driver: Increase intensity and frequency of observation**

Patients at high risk for injury require more frequent observation than those patients assigned to standard fall precautions.

***Change Ideas: Enhancing direct patient observation***

- ✓ Encourage family members to stay with the patient whenever possible.

- ✓ Place high risk patients in rooms that are closer and more visible to hospital staff, ideally in a direct line of sight.
- ✓ Round in the patient's room more frequently than the hourly or bi-hourly rounds.
- ✓ Develop an individualized toileting schedule for the patient.

***Suggested Process Measures:***

- Percentage of high risk patients in rooms designated for falls risk
- Percentage of documented rounding at frequency determined by facility

**Secondary Driver: Make environmental adaptations and provide personal devices to reduce risk of fall-related injury**

Environmental adaptations can provide protection from falls and reduce the risk of injury from falls. In some cases, more intense or individualized adaptations are required based on a patient's risk, specific needs or progress with treatment.

***Change Ideas: Customized environmental changes***

- ✓ Place a non-slip padded floor mat next to the bed.
- ✓ Place assistive devices (walking aids, transfer bars, bedside commodes) on the exit side of the bed.
- ✓ Use night lights to ensure the room is illuminated at all times.
- ✓ Use bed or chair alarms to alert staff quickly to patient movement.
- ✓ Keep the bed at its lowest possible height.
- ✓ Use gait belts when ambulating the patient.

***Suggested Process Measures:***

- Percentage rooms identified on environmental rounds as not meeting requirements for high risk patients

**Secondary Driver: Target interventions to reduce the side effects of medications**

Many medications increase the risk for falling and the risk for injury as the result of a fall. Especially in the elderly, polypharmacy is common and contributes to many adverse events including falls and falls with injury.

***Change Ideas: Safer medication management***

- ✓ Review patient's medication lists with prescribing providers and pharmacy to eliminate or replace any medications that would increase the risk for falling, if possible.
- ✓ Consider use of the Beers criteria<sup>9</sup> for inappropriate medications in the elderly.
- ✓ Ask the pharmacist to recommend alternatives to medications that may increase fall risk and to place an alert in the medication system for care providers.

***Suggested Process Measures:***

- Percentage of high risk patients receiving a review of medications by a pharmacist
- Percentage of medications that meet Beers criteria
- Percentage of medications changed after pharmacist review

**“Hardwiring” Customized Interventions for Patients at Highest Risk of a Serious or Major Injury from a Fall as part of the improvement plan:**

In order to customize prevention methodologies for the highest risk patients, assessment of risk has to be routine. If risk goes unassessed then the chance of appropriate precautions taken is low. As stated earlier, assessments should be done on admission, every day if not every shift, and on change of status. Once the assessment is complete, the findings of the assessment should generate an automatic intervention and needed referrals.

## Potential Barriers:

Implementation of falls prevention efforts may spur resistance for staff due to a perceived increase in work load. To help mitigate, demonstrate return on the work invested, and educate staff about how patient safety and falls prevention protocols have been shown to decrease falls.

Staff may experience the feelings of powerlessness and resentment to a “do this, do that” approach.

- Including key stakeholders such as bedside nurses, physicians, and nurses’ aides, and environmental services in the improvement team to develop protocols, work flows and conduct peer to peer education has been shown to be effective in successfully implementing best practices.<sup>10,11</sup>

Leadership may underappreciate the impact of falls on workload and risk management. The acuity of high-risk patients doesn’t always match the work requirements to implement safe practices. Staffing patterns may need to be evaluated with a fully implemented program to address the ABCs population, in particular. Units may be closed for budget purposes, putting high-risk falls patients further from line of sight. Falls with moderate to severe injury may have an impact on risk management costs and including those responsible in the discussion may help place the appropriate attention on the problem.

### Using administrative leadership sponsorship to help remove or mitigate barriers

- A management executive sponsor, recognizing the value to the patients and the value to the organization of preventing falls, can help brainstorm solutions to what may appear to be added work, or provide resources to mitigate that additional work. An executive sponsor can also help to see the “big picture” on how this may impact the organization as a whole, and champions through requests for workflow change or supplies. Executive sponsors can help educate, lead, and provide solutions to staffing barriers.
- Start with one unit and refine the process until it is a reliable process and has demonstrated some success in fall reduction. You may need to start with just one nurse champion to use protocols and refine.

### This is not just a change in practice but may also be a change in culture

- This is an example of an innovation that will require small tests of change and planned spread driven by success. The ideal end result is the development of team-based care where each member of the team (physician, nurse, respiratory therapist) contributes to better and safer patient care.

## Tips on Using the Model for Improvement:

### ***Assess risk for falling and risk for serious injury from falls:***

- Ask one nurse to pilot test a fall risk assessment on one patient, and then work with that nurse to improve the assessment for the next patient.
- Remember that a small pilot test can be just that – small. Start with one patient, one physician, and one nurse. Don’t wait for approval from all departments. The results of multiple small tests of change will ultimately guide successful implementation.
- Add the ABCs information to an existing handoff communication tool. Ask one nurse to help you improve the process of communicating risk for serious injury from falls in a manner that makes the most sense to those who will be doing the communication – format a handoff tool, prompts in an electronic assessment screen, visual cues.

### ***Communicate and educate about patient’s fall risk:***

- Designate one person (a charge nurse, nurse aide, administrative person) to do unscheduled environmental rounds to test if visual cues are present for those patients identified as fall risks. Measure compliance with the visual cues – falling star sign on the door to the room, red socks on the patient’s feet, red blanket across the patient’s lap, etc.

- If compliance with the visual cues is not as expected, ask a few of the team members responsible for implementing the process to help drill down the reasons for non-compliance. Oftentimes, non-compliance is not due to forgetfulness, but to deficiencies in supplies or communication.

***Standardize interventions for patients at risk for falling:***

- Successful implementation of standardized rounding will require buy-in from nursing staff. Find an initiative “champion” among nurses who is respected by his/her peers to help educate the staff about the expected benefits of standardized rounding.
- Work with nurses and nurse aides to develop a schedule for rounding that makes the best use of time for all team members. Schedule rounds around tasks that will require staff to be in the patient room already, such as medication administration, vital signs, etc.
- Designate who on the treatment team is responsible for the rounds.
- Trial the rounding on a few patients with just one nurse to start and improve the process immediately based on feedback.

***Customize interventions for high risk patients***

- Ask a pharmacist to help you design a process for medication review that includes how the pharmacy will be notified of a high-risk patient and how pharmacy will communicate the results of the review to the physician and nurse.
- Trial the process on one patient, and huddle afterwards to see how the process can be improved. Try the improved process on the next patient and incrementally increase the number of patients to be reviewed, each time huddling afterward for a few minutes to rapidly debrief what worked well and what did not work well.
- Voluntary participation through the method of “asking for help improving, not approving” will often generate momentum and rapid improvement of the process. A good question is “what do we need to do to make this work here?” rather than “can we make this work here?”

**Key Resources:**

Boushon B, Nielsen G, Quigley P, Rutherford P, Taylor J, Shannon D. *Transforming Care at the Bedside How-to Guide: Reducing Patient Injuries from Falls*. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: <http://www.IHI.org>.

ECRI Falls Prevention Resources <http://www.ecri.org/falls>

VA National Patient Safety Center Falls Prevention Toolkit  
<http://www.patientsafety.gov/SafetyTopics/fallstoolkit/index.html>

Massachusetts Hospitals <http://www.patientsfirstma.org/index.cfm>

Joint Commission Resources, *Good Practices in Preventing Patient Falls* <http://www.jcrinc.com/Preventing-Patient-Falls/>

Institute for Clinical Systems Improvement, *Health Care Protocol: Prevention of Falls (Acute Care)* [www.icsi.org](http://www.icsi.org)

## Appendix I: Morse Fall Scale

- **Morse Fall Scale:**

1. History of falling; immediate or within 3 months	No = 0 Yes = 25	
2. Secondary diagnosis	No = 0 Yes = 15	
3. Ambulatory aid	None, bed rest, wheel chair, nurse = 0 Crutches, cane, walker = 15 Furniture = 30	
4. IV/Heparin Lock	No = 0 Yes = 20	
5. Gait/Transferring	Normal, bed rest, immobile = 0 Weak = 10 Impaired = 20	
6. Mental status	Oriented to own ability = 0 Forgets limitations = 15	
<b>Risk Level</b>	<b>MFS Score</b>	<b>Action</b>
No Risk	0 - 24	None
Low Risk	25 - 44	See Standard Fall Prevention Interventions
High Risk	>45	See Moderate/High Risk Fall Prevention Interventions

Morse, J. (1997). *Preventing falls*. Thousands Oaks: Sage Publication.



**Appendix II: Environmental Fall Risk Assessment Sample****Environmental Fall Risk Assessment**

Date: \_\_\_\_\_ Hospital \_\_\_\_\_ Unit: \_\_\_\_\_

Rooms assessed: \_\_\_\_\_

(Minimum of 10% of rooms)

Individual(s) Surveying: \_\_\_\_\_

Item #	Environmental Consideration	Yes	No	N/A	Room # / area deficiencies found	Comments
<b>PATIENT ROOM</b>						
1	Is there adequate lighting in the patient's room? (Bright light – no burned out bulbs?)					
2	Is the nightlight on the patient's bed functional / operating?					
3	Does the patient have an unobstructed path to the bathroom?					
4	Are patient room furnishings safely arranged?					
5	Is bedside furniture free of sharp edges?					
6	Is the bedside furniture sturdy?					
7	Are beds /stretchers kept at lowest setting whenever possible?					
8	Are beds/ stretchers kept in locked position?					
9	Were the upper side rails in the up position for patient to reach controls?					
10	Was the bed check system on in the patient's room?					
11	Were the patient's personal belongings / telephone call bell within reach?					
12	Are handrails provided in patient bathroom and properly secured?					
13	Emergency call button / cord in patient care bathroom present and works properly?					
14	Are nonslip surfaces provided in patient showers?					
15	Are the door openings into the patient bathroom wide enough for an assistive device to fit through?					
16	Are door openings flush with the floor for ease of movement for patient equipment?					
<b>EQUIPMENT</b>						
17	Portable equipment pushed by patient (i.e. IV pole) sturdy and in good repair?					
18	Are bedside commodes available on the unit and have proper rubber slip tips on the legs?					
19	Do walkers / canes / crutches have the appropriate slip tips?					
20	Are wheelchairs locked when stationary?					
21	Is broken equipment properly tagged for non-use?					
<b>OTHER ENVIRONMENTAL CONSIDERATIONS</b>						
22	Are floor surfaces/carpeting free of cracks and tripping hazards?					
23	Are hallways kept adequately clear / clutter free to allow patient ambulation?					
24	Are floors properly marked when wet to avoid slipping or spill cleaned up immediately?					
25	Do parking lots have uneven pavement / potholes / tripping hazards?					

26	Do sidewalks have uneven pavement / tripping hazards?				
27	Entrance areas free and clear?				
28	Parking areas / entrances well – lit?				
29	Parking lots well marked?				

ENVIRONMENTAL FALL RISK ASSESSMENT FOLLOW-UP

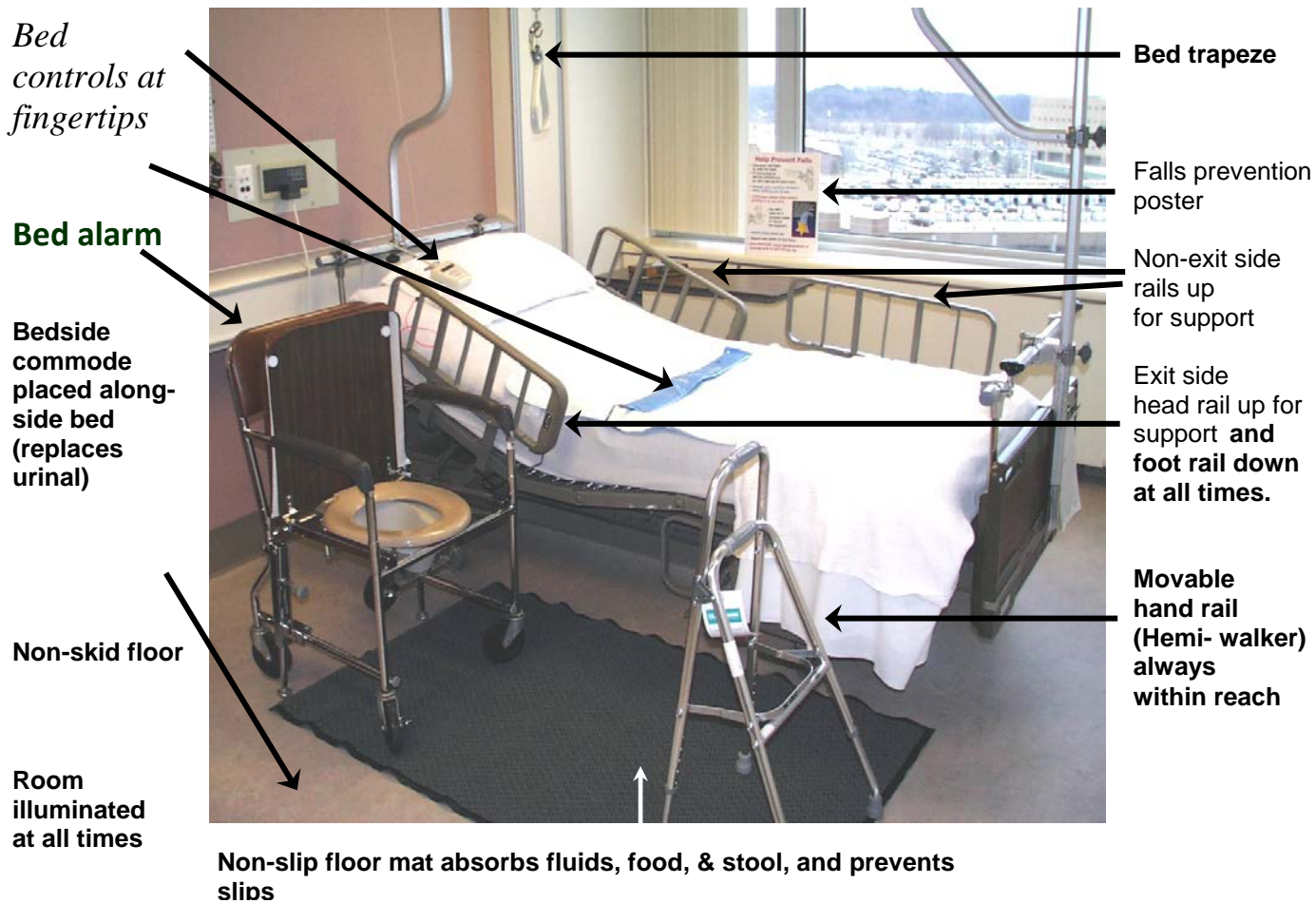
ITEM #	CORRECTIVE ACTION	DATE INITIATED	RESPONSIBLE INDIVIDUAL(S)	ANTICIPATED DATE OF COMPLETION

Boushon B, Nielsen G, Quigley P, Rutherford P, Taylor J, Shannon D. *Transforming Care at the Bedside How-to Guide: Reducing Patient Injuries from Falls*. Cambridge, MA: Institute for Healthcare Improvement; 2008. Available at: <http://www.IHI.org>.

### Appendix III: Environmental precautions in the patient room

Veterans Administration National Falls Toolkit, National Center for Patient Safety

[http://www.patientsafety.gov/SafetyTopics/fallstoolkit/notebook/06\\_interventions.pdf](http://www.patientsafety.gov/SafetyTopics/fallstoolkit/notebook/06_interventions.pdf) (page 3)<sup>12</sup>



## Appendix IV: Visual Cue Fall Risk Examples



Catch a Falling Star Program: falling star on door to patient room, yellow armband on patient, non-skid slipper socks on patients.



Ruby Slippers Program: Ruby Slippers or Red Star sign on door to patient room, red non-skid slipper socks on patient's feet, red stickers on front of chart/cardex, special ruby slipper marker on patient's census board.



SAFE Program: "Stay Alert for Falls Event": yellow SAFE sign on door, yellow armband on patient, non-skid slipper socks on patient.



LAMP Program: "Look at Me Please": yellow lamp sign on door, yellow armband on patient, non-skid slipper socks on patient.



IRIS Program: "I Require Intensive Surveillance:" Sign on door, pink armband in place, non-skid slipper socks on patient.

Visual Cues Program from The Joint Commission Journal on Quality and Patient Safety July 2007 (*Lancaster, 2007 [D]*)

## Endnotes:

<sup>1</sup> <http://www.healthcare.gov/compare/partnership-for-patients/resources/index.html>

<sup>2</sup> Conley D, Schultz A, Selrin R. The challenge of predicting patients at risk for falling: Development of the Conley Scale. *MEDSURG Nursing*. 1999;8(6):348-354.

<sup>3</sup> Hendrich A, Bender P, Nyhuis A. Validation of the Hendrich II Fall Risk Model: A large concurrent case/control study of hospitalized patients. *Applied Nursing Research*. 2003 Feb;16(1):9-21.

<sup>4</sup> Morse JM, Morse R, Tylko S. Development of a scale to identify the fall-prone patient. *Canadian Journal on Aging*. 1989;8:366-377.

<sup>6</sup> Teach Back use by Transitions Home innovation units. Institute for Healthcare Improvement. *Good Heart Failure Care Follows Patients Home*. Available at: <http://www.ihl.org/IHI/Topics/ChronicConditions/AllConditions/ImprovementStories/GoodHeartFailureCareFollowsPatientsHome.htm>.

<sup>7</sup> The American Geriatric Society list of inappropriate medications for elderly patients – the Beers Criteria [http://www.americangeriatrics.org/health\\_care\\_professionals/clinical\\_practice/clinical\\_guidelines\\_recommendations/2012](http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/2012)

<sup>8</sup> Lancaster AD, Ayers A, Belbot B, et al. Preventing falls and eliminating injury at Ascension Health. *The Joint Commission Journal on Quality and Patient Safety*. 2007;33(7):367-375.

<sup>9</sup> The American Geriatric Society list of inappropriate medications for elderly patients – the Beers Criteria [http://www.americangeriatrics.org/health\\_care\\_professionals/clinical\\_practice/clinical\\_guidelines\\_recommendations/2012](http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/2012)

<sup>10</sup> McDonald S, Tullai-McGuinness S, Madigan E, Shiverly M. Relationship between staff nurse involvement in organizational structures and perception of empowerment. *Crt Care Nurs Q*. 2010;33(2):148-162.

<sup>11</sup> Brody, AA. Barnes K, Ruble C, Sakowski J. Evidence-based practice councils: Potential path to staff nurse empowerment and leadership growth. *JONA*. 2012;42(1):28-33.

<sup>12</sup> National Falls Toolkit (2004). National Center for Patient Safety. <http://www.patientsafety.gov/SafetyTopics/fallstoolkit/index.html>