Sentinel Event Alert

Preventing falls and fall-related injuries in health care facilities

Falls resulting in injury are a prevalent patient safety problem. Elderly and frail patients with fall risk factors are not the only ones who are vulnerable to falling in health care facilities. Any patient of any age or physical ability can be at risk for a fall due to physiological changes due to a medical condition, medications, surgery, procedures, or diagnostic testing that can leave them weakened or confused. Here are some statistics about falls in health care facilities:

- Every year in the United States, hundreds of thousands of patients fall in hospitals, with 30-50% resulting in injury.[1-6]
- Injured patients require additional treatment and sometimes prolonged hospital stays. In one study, a fall with injury added 6.3 days to the hospital stay.[7]
- The average cost for a fall with injury is about $14,000.[8,9]

Falls with serious injury are consistently among the Top 10 sentinel events reported to The Joint Commission's Sentinel Event database*, which has 465 reports of falls with injuries since 2009, with the majority of these falls occurring in hospitals. Approximately 63% of these falls resulted in death, while the remaining patients sustained injuries. In addition, ECRI Institute reports a significant number of falls occurring in non-hospital settings such as long-term care facilities.[10]

Analysis of falls with injury in the Sentinel Event database reveals the most common contributing factors pertain to:

- Inadequate assessment
- Communication failures
- Lack of adherence to protocols and safety practices
- Inadequate staff orientation, supervision, staffing levels or skill mix
- Deficiencies in the physical environment
- Lack of leadership

Research and quality improvement efforts

Preventing falls is difficult and complex. A considerable body of literature exists on falls prevention and reduction.[1-6,11,12] Successful strategies include the use of a standardized assessment tool to identify fall and injury risk factors, assessing an individual patient's risks that may not have been captured through the tool, and interventions tailored to an individual patient's identified risks. In addition, systematic reporting and analysis of falls incidents are important components of a falls prevention program. Historically, hospitals have tried to reduce falls – and to some extent have succeeded – but significant, sustained reduction has proven elusive. Numerous toolkits and resources have been assembled with the knowledge gained through research and quality improvement initiatives by organizations including the Agency for Healthcare Research and Quality (AHRQ), ECRI Institute, Institute for Healthcare Improvement (IHI), Institute for Clinical Systems Improvement (ISCI), and U.S. Department of Veterans Affairs National Center for Patient Safety. See the Resources section at the end of this alert for links to these organizations' work.

The Joint Commission

* The reporting of most sentinel events to The Joint Commission is voluntary and represents only a small proportion of actual events. Therefore, these data are not an epidemiologic data set and no conclusions should be drawn about the actual relative frequency of events or trends in events over time.

Actions suggested by The Joint Commission
The Joint Commission recommends the following actions to help health care organizations prevent falls and fall-related injury. Preventing falls requires leadership commitment and a systematic, data-driven approach to achieve risk reduction and continuous improvement within specific settings and among specific populations. All organizations should consider the items listed below.

1. **Lead an effort to raise awareness of the need to prevent falls resulting in injury**. Communicate safety information to clinical and non-clinical staff at every level. Incorporate safety precautions into the full continuum of patient care and education[13,14] by applying change management principles and tools, including how to set the stage for success, make the changes easy, empower staff, ensure accountability, get support and commitment, and sustain improvement. To support a robust change management effort, empower an executive sponsor to ensure adequate equipment and resources, including staffing and preventative devices such as alarms, as well as a clinical champion who can influence stakeholders and facilitate staff receptivity to patients requesting assistance.

2. **Establish an interdisciplinary falls injury prevention team or evaluate the membership of the team in place** to assure organizational infrastructure and capacity to reduce injury risk from falls.[14,15] Reducing falls resulting in injury is everyone's responsibility. Include nursing, physicians, environmental services, information technology, patient advocacy, pharmacy, physical and occupational therapy, quality and risk management, and other relevant stakeholders.

3. **Use a standardized, validated tool to identify risk factors for falls** (e.g., Morse Fall Scale[16-19] or Hendrich II Fall Risk Model[20-23]), preferably integrated into the electronic medical record. In addition to the tool, a comprehensive, individualized assessment for falls and injury risk should be performed. Ensure that the patient's age, gender, cognitive status, and level of function are included in the assessment. Provide training to staff on using the tool to ensure inter-rater reliability (the degree of consistency among raters).

4. **Develop an individualized plan of care based on identified fall and injury risks, and implement interventions specific to a patient, population or setting.** Because all patients are at risk for a fall to a certain extent, the plan of care must identify particular kinds of risks specific to a patient and interventions to mitigate for that risk. A true risk assessment goes deeper than a "screening" and guides clinicians in developing prevention strategies specific to identified risk factors. For example, the Veterans Health Administration's approach since 2008 has been to assess patients for fall, injury risk, and both fracture and non-fracture injury history.[24]

5. **Standardize and apply practices and interventions demonstrated to be effective, including:**
   - **A standardized hand-off communication process** for communicating patient risk for falls with injury between caregivers that includes identifying specific areas of risk and patient-specific interventions to mitigate the risk.[11,25] For example, depending on the circumstances, the process may include using white boards to communicate falls risks to staff on all shifts; incorporating alerts, tasks, records and prompts into the electronic medical record; or initiating a bedside shift report with the patient that includes falls risk concerns.
   - **One-to-one education of each patient at the bedside** by trained health professionals using educational materials covering falls risk and causes, preventive strategies, and goal setting and review.[27]

6. **Conduct post-fall management, which includes: a post-fall huddle; a system of honest, transparent reporting; trending and analysis of falls**[13,14] **which can inform improvement efforts; and reassess the patient.**
   - **Conduct a post-fall huddle** as soon as possible after the fall. Involve staff at all levels and, if possible, the patient, to discuss the fall – what happened, how it happened, and why (such as physiological factors due to medication or medical condition). In addition, the huddle should include:
     - Whether appropriate interventions were in place
     - Specific considerations as to why the fall might have occurred, including but not limited to: whether the call light was on

and for how long, staffing at the time of the fall, and which environment of care factors were in play (such as toilet height and design, and slip and trip hazards)[25]
- o How similar outcomes can be avoided
- o How the care plan will change

The huddle should incorporate a standard post-fall huddle tool. A standard script ensures that all elements are covered.[25]

- **Report, aggregate and analyze the contributing factors on an ongoing basis to inform improvement efforts.** The analysis should be done in a data-driven, systematic manner to discover factors that are significant in your setting. This will lead to solutions that target these factors. This helps the falls prevention team to continually re-evaluate and improve the approach to patient falls prevention and injury reduction within specific settings and among specific populations when indicated.[15] For example, the VA implemented a bundled approach for specific fall-related injuries (hip fracture, head injury, bleed).[24,28]

- **Continued reassessment of the patient**, including medication changes, cognitive and functional status. Sentinel event reports reviewed by The Joint Commission's patient safety specialists show that a key to fall reduction is continued reassessment of patients who have fallen in order to identify, sooner rather than later, a change in the patient's medical condition that can precipitate a poor patient outcome (such as subdural hematoma or undiagnosed fracture). The AHRQ Toolkit includes a "Postfall Assessment, Clinical Review" (Tool 3N, page 159), which explains how to assess and follow injury risk in a patient who has fallen.[14]

Resources
These tools were developed through research and quality improvement initiatives:

AHRQ toolkit: Preventing Falls in Hospitals[14] – This toolkit focuses specifically on reducing falls during a patient's hospital stay. This resource helps with developing, implementing, and sustaining a falls prevention program, along with how to manage the change process. The toolkit was created by a team with expertise in falls prevention and organizational change, including staff from RAND Corporation, ECRI Institute, and Boston University.

ISCI: Prevention of Falls (Acute Care)[27] – This protocol includes recommendations for a falls and injury risk assessment and focuses on strategies and interventions for the prevention and eventual elimination of falls with injury among adult patients in acute care settings. This resource also contains a list of implementation tools, along with graded references.

IHI: Transforming Care at the Bedside How-to Guide: Reducing Patient Injuries from Falls[15] – This how-to guide was initially developed as part of the Transforming Care at the Bedside (TCAB) initiative that ran from 2003 through 2008. Updated in 2013, this resource focuses on approaches to reduce physical injury associated with patient falls occurring on inpatient units. The guide's model for improvement advises how to form the improvement team, set aims, establish measures, and select and test changes.

VA National Center for Patient Safety: Falls Toolkit[24] – Staff from the VA's National Center for Patient Safety worked with the Veterans Integrated Service Network 8 Patient Safety Center of Inquiry (VISN 8 PSCI), part of the James A. Haley Veterans' Hospital in Tampa, and others to develop this toolkit, which is designed to aid facilities in developing comprehensive falls and injury prevention programs. Available since 2004, this was the first national toolkit to focus on fall injury reduction, specifically hip fractures and head injury.

VA National Center for Patient Safety: Implementation Guide for Fall Injury Reduction[28] – This guide is a focused version of eight goals to help prevent falls and fall-related injuries, continuing VA's national guidance to prevent moderate to serious fall-related injuries across settings of care. This implementation guide is designed for administrative, clinical, quality and patient safety personnel in hospitals, long-term care, and home care, to further enhance the program's infrastructure and capacity to fully implement a fall injury prevention program.

Related Joint Commission requirements

The Joint Commission hospital standard directly related to fall prevention is Provision of Care, Treatment, and Services (PC) standard PC.01.02.08: The hospital assesses and manages the patient's risk for falls. This standard includes Element of Performance (EP) 1: The hospital implements fall risk reduction interventions based on the patient population, setting, and individual patient's assessed risks.

Requirements	Hospital	Ambulatory	Home care	Nursing care
Human Resources (HR)				
HR.01.04.01 EPs 1, 3	✔	✔	✔	✔
HR.01.05.03 EP 1	✔	✔	✔	
HR.01.05.03 EP 5				✔
Leadership (LD)				
LD.04.01.05 EP 4			✔	✔
LD.04.01.07	✔	✔	✔	✔
National Patient Safety Goal (NPSG)				
NPSG.09.02.01 EPs 1, 2, 3, 4, 5			✔	✔
Provision of Care, Treatment, and Services (PC)				
PC.01.02.08 EPs 1	✔			
PC.02.03.01 EPs 1, 4, 5, 10, 25, 27, 28, 30, 31		✔		
PC.02.03.01 EPs 4, 5, 10, 25, 27			✔	
PC.02.03.01 EPs 5, 10, 25				✔
Environment of Care (EC)				
EC.02.06.01 EP 43				✚

✚*For organizations that elect Joint Commission Memory Care Certification option*

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Sentinel Event Alert **#55:** **Preventing falls and fall-related injuries in health care facilities**

Joint Commission requirements relevant to falls

HOSPITALS

Human Resources (HR)
HR.01.04.01 EP 1: The hospital orients its staff to the key safety content it identifies before staff provides care, treatment, and services. Completion of this orientation is documented Note: Key safety content may include specific processes and procedures related to the provision of care, treatment, or services; the environment of care; and infection control.
EP 3: The hospital orients staff on the following:
–Relevant hospitalwide and unit-specific policies and procedures.
–Their specific job duties, including those related to infection prevention and control and assessing and managing pain
–Sensitivity to cultural diversity based on their job duties and responsibilities
–Patient rights, including ethical aspects of care, treatment, or services and the process used to address ethical issues based on their job duties and responsibilities.
 Completion of this orientation is documented.

HR.01.05.03 EP 1: Staff participate in ongoing education and training to maintain or increase their competency and, as needed, when staff responsibilities change. Staff participation is documented.

Leadership (LD)
LD.04.01.07: The hospital has policies and procedures that guide and support patient care, treatment, and services.

Provision of Care, Treatment, and Services (PC)
PC.01.02.08: The hospital assesses and manages the patient's risk for falls.
EP 1: The hospital implements fall risk reduction interventions based on the patient population, setting, and individual patient's assessed risks.

AMBULATORY CARE

Human Resources (HR)
HR.01.04.01 EP 1: The organization orients its staff to the key safety content it identifies before staff provides care, treatment, and services. Completion of this orientation is documented.
EP 3: The organization orients staff on the following:
–Relevant policies and procedures.
–Their specific job duties, including those related to infection prevention and control and assessing and managing pain
–Sensitivity to cultural diversity based on their job duties and responsibilities
–Patient rights, including ethical aspects of care, treatment, or services and the process used to address ethical issues based on their job duties and responsibilities.
Completion of this orientation is documented.

HR.01.05.03 EP 1: Staff participate in ongoing education and training to maintain or increase their competency and, as needed, when staff responsibilities change. Staff participation is documented. For ambulatory surgical centers that elect to use The Joint Commission deemed status option: Staff

participate in ongoing education and training with respect to their roles in the fire response plan. (For information on staff's roles in the fire response plan, see EC.02.03.01, EP 10.)

Leadership (LD)
LD.04.01.07: The organization has policies and procedures that guide and support patient care, treatment, or services.

Provision of Care, Treatment, and Services (PC)
PC.02.03.01 EP 1: The organization assesses the patient's learning needs.
EP 4: The organization provides education and training to the patient based on the patient's assessed needs.
EP 5: The organization coordinates the patient education and training provided by all disciplines involved in the patient's care, treatment, or services.
EP 10: Based on the patient's condition and assessed needs, the education and training provided to the patient by the organization include the following:
–An explanation of the plan for care, treatment, or services
–Basic health practices and safety
–Information on the safe and effective use of medications
–Nutrition interventions (for example, supplements) and modified diets
–Discussion of pain, the risk for pain, the importance of effective pain management, the pain assessment process, and methods for pain management
–Information on oral health
–Information on the safe and effective use of medical equipment or supplies provided by the organization
–Habilitation or rehabilitation techniques to help the patient reach maximum independence
EP 25: The organization evaluates the patient's understanding of the education and training it provided.
EP 27: The organization provides the patient education on how to communicate concerns about patient safety issues that occur before, during, and after care is received.
EP 28: For organizations that elect The Joint Commission Primary Care Medical Home option: The primary care clinician and the interdisciplinary team educate the patient on self-management tools and techniques based on the patient's individual needs.
EP 30: For organizations that elect The Joint Commission Primary Care Medical Home option: The interdisciplinary team identifies the patient's health literacy needs.
EP 31: For organizations that elect The Joint Commission Primary Care Medical Home option: Patient education is consistent with the patient's health literacy needs.

HOME CARE

Human Resources (HR)
HR.01.04.01 EP 1: The organization orients its staff to the key safety content it identifies before staff provides care, treatment, and services. Completion of this orientation is documented.
EP 3: The organization orients staff on the following:
Relevant policies and procedures.
–Their specific job duties, including those related to infection prevention and control and assessing and managing pain
Completion of this orientation is documented.

HR.01.05.03 EP 1: Staff participate in ongoing education and training to maintain or increase their competency and, as needed, when staff responsibilities change. Staff participation is documented.

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Leadership (LD)
LD.04.01.05 EP 4: Staff are held accountable for their responsibilities.

LD.04.01.07: The organization has policies and procedures that guide and support patient care, treatment, or services.

National Patient Safety Goal (NPSG)
NPSG.09.02.01: Reduce the risk of falls.
EP 1: Assess the patient's risk for falls.
EP 2: Implement interventions to reduce falls based on the patient's assessed risk.
EP 3: Educate staff on the fall reduction program in time frames determined by the organization.
EP 4: Educate the patient and, as needed, the family on any individualized fall reduction strategies.
EP 5: Evaluate the effectiveness of all fall reduction activities including assessment, interventions, and education.

Provision of Care, Treatment, and Services (PC)
PC.02.03.01 EP 4: The organization provides education and training to the patient based on the patient's assessed needs. For hospices that elect to use The Joint Commission deemed status option: The hospice also provides education and training to the primary caregiver as appropriate to the responsibilities assigned to the caregiver in the plan of care. For home health agencies that elect to use The Joint Commission deemed status option: Each patient, and their caregiver(s) where applicable, receive ongoing education and training regarding the care and services identified in the plan of care. The organization must provide training, as necessary, to ensure a timely discharge.
EP 5: The organization coordinates the patient education and training provided by all disciplines involved in the patient's care, treatment, or services.
EP 10: Based on the patient's condition and assessed needs, the education and training provided to the patient by the organization include the following:
–An explanation of the plan for care, treatment, or services
–Procedures to follow if care, treatment, or services are disrupted by a natural disaster or an emergency
–Basic health practices and safety
–Information on the safe and effective use of medications.
–Nutrition interventions (for example, supplements) and modified diets
–Infection prevention and control
–Discussion of pain, the risk for pain, the importance of effective pain management, the pain assessment process, and methods for pain management
–Information on personal hygiene and grooming
–Information on oral health
–Basic physical and structural home safety
–Information on the safe and effective use of medical equipment or supplies provided by the organization
–Information on the storage, handling, and access to medical gases and supplies
–Information on the identification, handling, and safe disposal of hazardous medications and infectious wastes
–Habilitation or rehabilitation techniques to help the patient reach maximum independence
–Information on the use of restraint
EP 25: The organization evaluates the patient's understanding of the education and training it provided.
EP 27: The organization provides the patient education on how to communicate concerns about patient safety issues that occur before, during, and after care is received.

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NURSING CARE CENTERS

Human Resources (HR)
HR.01.04.01 EP 1: The organization orients its staff tos the key safety content it identifies before staff provides care, treatment, and services. Completion of this orientation is documented.
EP 3: The organization orients staff on the following:
–Organizationwide and unit-specific policies and procedures related to job duties and responsibilities.
–Their specific job duties and responsibilities, including those related to infection prevention and control and, if applicable to their role, assessing and managing pain
–Detecting and reporting a change in a patient's or resident's physical or psychological condition
–Sensitivity to cultural diversity based on their job duties and responsibilities
–Patient and resident rights, including ethical aspects of care, treatment, and services and the process used to address ethical issues based on their job duties and responsibilities
–Abuse, exploitation, and neglect identification, prevention, and reporting
–Confidentiality of patient or resident information
Completion of this orientation is documented.

HR.01.05.03 EP 5: Staff participate in education and training that is specific to the needs of the patients and residents served by the organization. Staff participation is documented.

Leadership (LD)
LD.04.01.05 EP 4: Staff are held accountable for their responsibilities.

LD.04.01.07: The organization has policies and procedures that guide and support patient and resident care, treatment, and services

National Patient Safety Goal (NPSG)
NPSG.09.02.01: Reduce the risk of falls.
EP 1: Assess the patient's or resident's risk for falls.
EP 2: Implement interventions to reduce falls based on the patient's or resident's assessed risk.
EP 3: Educate staff on the fall reduction program in time frames determined by the organization.
EP 4: Educate the patient or resident and, as needed, the family on any individualized fall reduction strategies.
EP 5: Evaluate the effectiveness of all fall reduction activities including assessment, interventions, and education.

Provision of Care, Treatment, and Services (PC)
PC.02.03.01 EP 5: The organization coordinates the patient's or resident's education and training provided by all disciplines involved in the patient's or resident's care, treatment, and services.
EP 10: Based on the patient's or resident's assessed needs, the education and training provided to the patient or resident by the organization include, but are not limited to, the following:
–Education regarding the patient's or resident's illness
–An explanation of the plan for care, treatment, and services
–Procedures to follow if care, treatment, or services are disrupted by a natural disaster or an emergency
–Basic health practices and safety
–Fall reduction strategies
–Person-centered care strategies
–Patient's and resident's rights and responsibilities
–Information on the safe and effective use of medications
–Nutrition interventions (for example, supplements) and modified diets

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–Infection prevention and control policies and procedures, including reasons for using personal protective equipment or for cohorting
–Discussion of pain, the risk for pain, the importance of effective pain management, the pain assessment process, and methods for pain management
–Information on oral health
–Information on the safe and effective use of medical and nonmedical equipment or supplies provided by the organization
–Habilitation or rehabilitation techniques to help the patient or resident reach maximum independence
–Physical risks within the environment of care
EP 25: The organization evaluates the patient's or resident's understanding of the education and training it provided.

For organizations that elect The Joint Commission Memory Care Certification option:
Environment of Care (EC)
EC.02.06.01 EP 43: To minimize distress for patients and residents with dementia, the organization provides an environment for walking and exploring that is free of obstructions and barriers that may cause falls.