Sentinel Event Alert

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Published for Joint Commission accredited organizations and interested health care professionals, *Sentinel Event Alert* identifies specific types of sentinel and adverse events and high risk conditions, describes their common underlying causes, and recommends steps to reduce risk and prevent future occurrences.

Accredited organizations should consider information in a *Sentinel Event Alert* when designing or redesigning processes and consider implementing relevant suggestions contained in the alert or reasonable alternatives.

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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 percent 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 percent 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), the Joint Commission Center for Transforming Healthcare, 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 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.

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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.[14,15,16] 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[17-20] or Hendrich II Fall Risk Model[21-24]), 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.[25]

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.[11,26] 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.[16]

   - **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.[28]

6. **Conduct post-fall management, which includes: a post-fall huddle; a system of honest, transparent reporting; trending and analysis of falls[13,14,16] 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)[16,25]
  - How similar outcomes can be avoided
  - 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.[16,25]

- **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.[15,16] For example, the VA implemented a bundled approach for specific fall-related injuries (hip fracture, head injury, bleed).[25,29] The Joint Commission Center for Transforming Healthcare's Targeted Solutions Tool® (TST®) aggregates contributing factors for each Preventing Falls project and analyzes the data to inform the project leader and core team what factors matter the most in their project area, and directs them to targeted solutions.[16]

- **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.

ECRI Institute: Falls[10] – This resource provides a summary of evidence and offers recommendations and links to resources. The recommendations were developed to assist accreditation coordinators, patient safety officers, and professionals in facilities/ building management, home care, human resources, long-term care services, nursing, outpatient services, pharmacy, quality improvement, and staff education.

ICSI: Prevention of Falls (Acute Care)[28] – 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.

Joint Commission Center for Transforming Healthcare: Preventing Falls Targeted Solutions Tool® (TST®)[16] – This online web application guides a project leader through a robust approach to preventing falls using Lean, Six Sigma, and change management methodology and tools. The TST® guides data collection, measurement and the discovery of contributing factors in the specific project area. The aggregation of contributing factors directs the project leader and team to targeted solutions. The tool was developed through a

collaborative project involving seven hospitals and the Joint Commission Center for Transforming Healthcare, and subsequently validated in five additional hospitals. It is currently being pilot tested in non-hospital settings, such as ambulatory and long-term care facilities.

Joint Commission-accredited organizations can access the TST® through (1) a quick registration process by clicking the "Request Access" button, or (2) the organization's secure Joint Commission Connect extranet. *Note: Data entered into the TST® are not shared with Joint Commission surveyors or staff.*

VA National Center for Patient Safety: Falls Toolkit[25] – 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. The current edition, with updates and revisions, was posted in July 2014.

VA National Center for Patient Safety: Implementation Guide for Fall Injury Reduction[29] – 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

Requirements	Hospital	Ambulatory	Home care	Nursing care
Human Resources (HR)				
HR.01.04.01 EPs 1, 2, 3, 4	✔	✔	✔	✔
HR.01.05.03 EPs 1, 5, 7	✔	✔	✔	
HR.01.05.03 EP 5				✔
Leadership (LD)				
LD.04.01.05 EPs 1, 4			✔	✔
LD.04.01.07	✔	✔	✔	✔
LD.04.04.01	✔	✔	✔	✔
LD.04.04.03			✔	✔
LD.04.04.05 EPs 1, 2, 3, 4, 5, 13	✔	✔	✔	✔
National Patient Safety Goal (NPSG)				
NPSG.09.02.01 EPs 1, 2, 3, 4, 5			✔	✔
Performance Improvement (PI)				
PI.01.01.01 EP 1			✔	✔
PI.01.01.01 EP 38	✔			
Provision of Care, Treatment, and Services (PC)				
PC.01.02.08 EPs 1, 2	✔			
PC.02.03.01 EPs 1, 4, 5, 10, 25, 27, 28, 30, 31		✔		
PC.02.03.01 EPs 4, 5, 10, 25, 27			✔	✔
Environment of Care (EC)				
EC.02.06.01 EP 43				✚

✚*For nursing care centers that elect Joint Commission Memory Care Certification option*

Hospital standards directly related to fall prevention

Performance Improvement (PI)
PI.01.01.01 EP 38: The hospital evaluates the effectiveness of all fall reduction activities including assessment, interventions, and education. Note: Examples of outcome indicators to use in the evaluation include number of falls and number and severity of fall-related injuries.

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 assesses the patient's risk for falls based on the patient population and setting.
EP 2: The hospital implements interventions to reduce falls based on the patient's assessed risk.

See the content of these standards on The Joint Commission website, posted with this alert.

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