

Inpatient Falls

An inpatient fall is defined as an unplanned descent to the floor or other lower surface with or without injury to the patient that occurs in an eligible nursing unit.

Falls are identified through incident reports and are reported as a total number per month.

Most falls in healthcare settings are multifactorial. They typically require an experienced expert to identify the factors that caused the fall and to determine if standards of care were provided to prevent it.

Seventy-four percent of the falls were not observed by clinicians.

Epidemiology and Impact of Patient Falls in Healthcare Facilities, 2009

Twenty nine percent of falls were from a standing position.

Epidemiology and Impact of Patient Falls in Healthcare Facilities, 2009

29%

74%

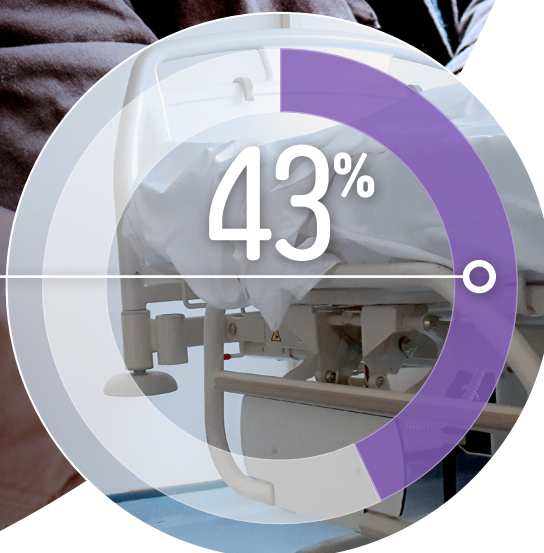
1 in 4 Americans aged 65 and older fall each year.

Prevention of falls in acute hospital settings: a multi-site audit and best practice implementation project, 2016



43% of falls occurred from , or near the patient's bed.

Epidemiology and Impact of Patient Falls in Healthcare Facilities, 2009



PHYSIOLOGIC FACTORS INFLUENCE A PERSON'S RISK FOR FALLS

Often a **disease process** or **side effect** resulting from a **surgery** or **injury** may have significance. For example, an injury or illness may lead to a person having weakness in one or more extremities, a decrease or absence of sensation, impaired or altered vision, or impaired safety awareness.¹

Patients may also experience significant **orthostatic hypotension** (a sudden drop in blood pressure when transitioning to an upright position) due to side effects of medication, dehydration, or immobility.¹

Environmental factors influence risk for falls. These can include slippery or uneven surfaces, obstacles or tripping hazards, inappropriate lighting, elevated noise levels, limited access to assistive devices or assistive equipment, and hazards related to the height of the bed, toilet, chairs, or equipment.¹

There may also be **opportunities for equipment failure** due to poor maintenance, overloading, non-compliant pairing of equipment (mattresses to beds, slings to lifts, leg rests to wheelchairs, etc.), or misuse.¹

¹ Review on prevention of falls in hospital settings, 2016

HOSPITAL FACTORS CONTRIBUTING TO INPATIENT FALLS

Many hospital factors contribute to an inpatient fall including: ²

- ▶ Fall risk assessment issues
- ▶ Hand off communication issues
- ▶ Toileting issues
- ▶ Call light issues
- ▶ Education and organizational culture issues
- ▶ Medication issues

PREVALENCE & INCIDENCE

1 in 4 Americans aged 65 and older fall each year. ³

The greatest percentage of falls (58%) is in the 70-to-99-year age group. ³

Depending on the setting, as many as 15% of inpatients experience at least one fall. ³

The Joint Commission estimates that 30% of falls in healthcare settings result in serious injury. ³

Rates of falls in U.S. hospitals range from 3.3 to 11.5 falls per 1,000 patient days. ³

² Preventing Patient Falls: A Systematic Approach from the Joint Commission Center for Transforming Healthcare Project, 2016

³ Prevention of falls in acute hospital settings: a multi-site audit and best practice implementation project, 2016

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IMPACT TO COST

Average hospital cost

The average cost for a fall with injury is \$12,000 - \$23,000. ⁴

Total cost in the U.S.

In 2013, the gross expenditure from falls in the U.S. was more than \$34 billion dollars.

The Centers for Disease Control estimates that costs related to falls could increase to \$67.7 billion by 2020.

Gross Expenditure from Falls in the U.S.

■ 2013 ■ 2020

2013

\$34 billion

2020

\$67.7 billion

IMPACT TO PATIENT OUTCOMES

Inpatient mortality

Approximately 11,000 out of 1 million annual falls are fatal. ⁵

Average increase in length of stay

Patients who have a serious injury related to a fall stay an average **additional 6-12 days** and incur higher costs than comparison patients (\$13,316 more, on average).

Burden to patient

A fall may result in fractures, lacerations, head injury, and/or internal bleeding. ⁶

Hip fractures are one of the most common types of serious injuries sustained because of a fall. ⁷

A 2010 study found that, of 758 patients over the age of 60 who sustained hip fractures between April 15, 2005, and March 1, 2009, 21.2% died within one year. ⁸

⁴ Data Trends: Epidemiology and Impact of Patient Falls in Healthcare Facilities, 2009

⁵ Preventing Patient Falls: A Systematic Approach from the Joint Commission Center for Transforming Healthcare Project, 2016

⁶ Falls prevention in hospitals-the need for a new approach an integrative article, 2017

⁷ Preventing Fall-Related Injuries , 2015

⁸ The extra resource burden of in-hospital falls: a cost of falls study, 2015

REGULATORY IMPACT

Effective October 1, 2008, the Centers for Medicare & Medicaid Services no longer pays for health care costs associated with falls that occurred during hospitalization deeming them events that should never occur during hospitalization.

Claims related to falls accounted for the bulk of healthcare-acquired injuries, which includes fractures, dislocations, intracranial and crushing injuries, and burns. Healthcare-acquired injuries were the most frequently occurring claims for healthcare-acquired conditions.

Centers for Medicare and Medicaid Services: Hospital-Acquired Condition Reduction Program (HACRP). <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>



Centers for Medicare & Medicaid Services no longer pays for health care costs associated with falls that occurred during hospitalization.

A photograph of an elderly couple embracing outdoors. The man is on the left, wearing a light blue shirt, and the woman is on the right, wearing a light purple shirt. They are both smiling and looking towards the camera. The background is a blurred green landscape with trees.

nationwide cognitive machine
potential inpatient falls avoided

851,000

Jvion falls vector
vs. Morse Falls Scale
has demonstrated a 75%
reduction in resource demands.

A circular graphic with a dark blue background and a lighter blue border. Inside the circle, the text "75%" is written in a large, white, sans-serif font. The background of the circle features a faint, abstract pattern of orange and yellow dots and lines, resembling a molecular or network structure.

75%

MACHINE PERFORMANCE

- ▶ Jvion's Cognitive Machine has demonstrated a 75% reduction in resource demands based on a comparison of the Jvion falls vector versus the Morse Falls Scale.
- ▶ The Jvion Cognitive Machine outperforms all other published screens for falls.
- ▶ Using the Jvion solution, providers are projecting a greater than a 20% reduction in the incidence of falls.

INDUSTRY IMPACT

The average cost estimate per inpatient fall (The Joint Commission) is \$14,000. By preventing 20% (based on Jvion Falls Vector performance) of the anticipated median 11.5% (3-20% incidence) of inpatient falls, Jvion would prevent 2.3% of all fall incidents.

Considering the approximate 37.1 million admissions each year in the United States, nationwide we would avoid approximately 851,000 falls annually and drive \$11,914,000,000 in total (potential) cost avoidance.

Preventing Fall-Related Injuries , 2015

cognitive machine potential cost avoidance nationwide

\$11,914,000,000