

The third report from the Patient Safety Observatory

# Slips, trips and falls in hospital

PSO/3  
SUMMARY

Patient falls have both human and financial costs.

For individual patients, the consequences can range from distress and loss of confidence, to injuries that cause pain and suffering, loss of independence and, occasionally, death.

These incidents can also bring about feelings of anxiety and guilt for the patients' relatives and hospital staff.

NHS organisations can incur additional costs relating to extra treatment, increased lengths of stay, complaints and, in some cases, litigation.

The National Patient Safety Agency (NPSA) has worked with other organisations to examine research evidence and information on falls in hospitals, including over 200,000 incidents reported to the NPSA's National Reporting and Learning System (NRLS) in a one-year period from acute and community hospitals, and mental health units.

Although 96 per cent of these incidents resulted in minor injuries or no harm, even these can reduce patients' confidence, lead to delays in discharge and the loss of independent living.

From these incident reports it can be estimated that over 500 people suffer hip fractures each year following a fall in hospital, with potentially devastating consequences for their long-term health.

The analysis identified 26 deaths following falls in hospital, with those patients most likely to fall often being those who are most vulnerable to injury.

In addition, recovery time is prolonged when the fall injury is added to the underlying illness.

This booklet summarises key findings and recommendations from *Slips, trips and falls in hospital*, the third report from the NPSA's Patient Safety Observatory. The observatory was set up to examine and prioritise patient safety issues in order to support the NHS in making healthcare safer.

The aim of the report is to give NHS staff an understanding of the scale and consequences of patients falling in hospital, and suggests interventions that, when used together, can reduce falls and injuries.

The full report includes case studies, resources and practical examples of how to implement falls prevention policies and improve learning from falls.

### Causes and circumstances of falls

The reasons why patients fall are complex and influenced by contributing factors such as physical illness, mental health, medication and age, as well as environmental factors.

A fall can be the result of a single factor, such as tripping or fainting, affecting an otherwise fit and healthy person. However, most falls, particularly in older people, are the result of several interacting factors.

The factors that appear to be most significant in hospital patients are:

- walking unsteadily;
- being confused;
- being incontinent or needing to use the toilet frequently;
- having fallen before;
- taking sedatives or sleeping tablets.

Descriptions of incidents reported to the NRLS were reviewed in order to identify the circumstances of falls.

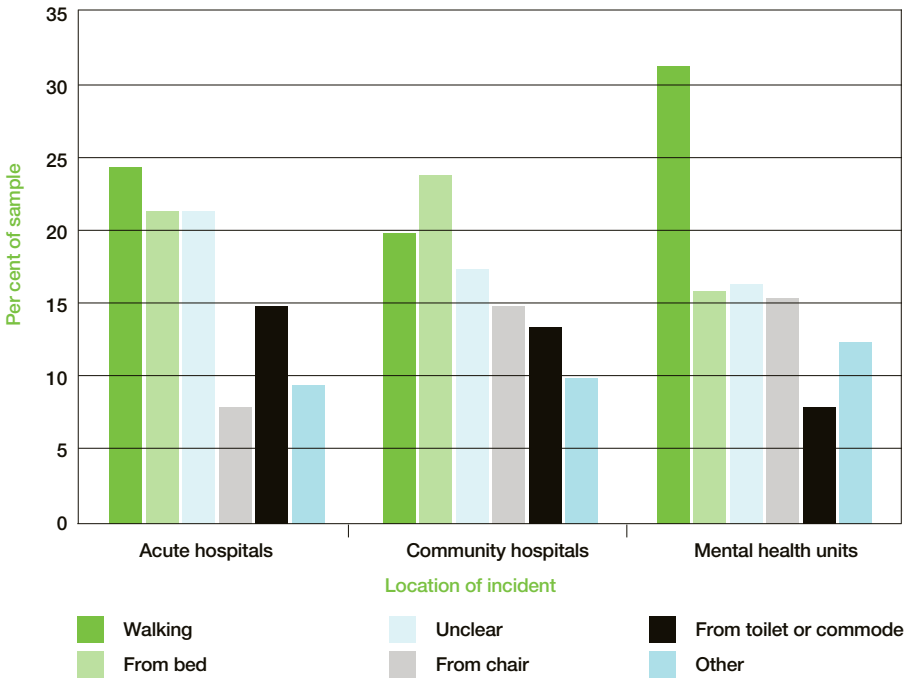
**Chart 1** shows the results for samples of incidents from three different care settings, from which it can be concluded that most falls tend to happen when patients are moving from a bed or chair, walking, or using a toilet or commode.

Preventing patients from falling is a particular challenge in hospital settings. Patients' safety has to be balanced against their right to make their own decisions about the risks they are prepared to take, their dignity and their privacy. A ward where no patient ever falls is likely to be a ward where patients are unable to regain their independence and return home.

Efforts to reduce falls and injuries need to involve a wide range of staff and, in particular, those working in nursing, medical, therapy, pharmacy, management and facilities services.

Staff in these areas need to work with patients and their carers to strike the right balance between preventing falls and rehabilitation.

Chart 1  
Circumstances of falls



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SUMMARY



*“The patient stood [up] from her chair at the bedside and fell... twisted her right ankle... wearing inappropriate footwear. Diabetic, has hypotension, was admitted following fall at home... normally uses nurse call bell but when checked after fall had low blood sugar, this probably made her momentarily forgetful.”*

*Anonymised extract from an incident reported to the NRLS*

### The most vulnerable patients

Hospital patients are at a greater risk of falling than people in the community. Hospital patients may undergo surgery that affects their mobility or memory, and they may need sedation, pain relief, anaesthetic or other medication, which can increase the risk of falling.

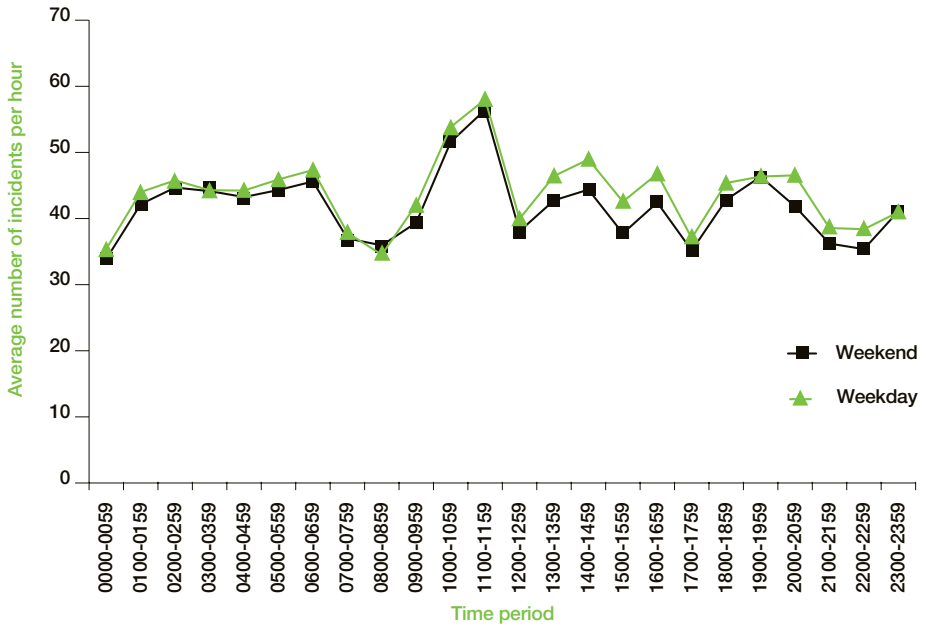
Older people are more vulnerable, and those that have fallen once are at a higher risk of falling again. Delirium increases the risk of falling and is particularly likely to affect patients on medical wards.

**Chart 2** shows the distribution of falls by time of day, for weekdays and weekends. The most common time for falls is mid-morning when patients are most active. There are few falls during mealtimes, and in the early hours of the morning. There are slightly more falls during weekdays than weekends, when there are more patients in hospital.

Analysis of incident reports shows that most falls are not witnessed by staff. Even when patient falls are witnessed, staff are unlikely to be able to prevent them. Constant observation of individual patients by staff may not be feasible or effective in stopping them from falling.

Chart 2

Distribution of falls by time of day, for weekdays and weekends



### Learning from the circumstances of falls

NHS organisations need to make sure reports from their local risk management systems are analysed in order to understand where, when and why their patients are most vulnerable to falls, and whether changes in care can reduce falls and injury over time.

This can help NHS organisations direct their resources to where they are most needed.

An example of what to report about a fall is included in *Slips, trips and falls in hospital*.

### Assessment of patients for risk of falls

The NPSA found that some hospitals were using falls risk scores without having checked how well they over-predicted or under-predicted falls in their patients.

*Slips, trips and falls in hospital* explains how to test existing tools, and explains that using a falls risk score to predict falls is not an essential part of falls prevention.

Looking directly for risk factors that can be changed or avoided may be more effective at preventing falls.

### Preventing falls and reducing injury

A range of interventions, used together and tailored to reduce individual patients' specific risks, can be effective. Possible interventions include:

- reviewing medication associated with a risk of falling;
- detecting and treating causes of delirium;
- detecting and treating cardiovascular illness;
- detecting and treating or managing incontinence or urgency;
- detecting and treating eyesight problems;
- providing safe footwear;
- physiotherapy, exercise and walking aids.

It is unclear from the research evidence whether these interventions are as effective for patients with dementia. There is not enough evidence from research to recommend either hip protectors or movement alarms in hospitals.

Many aspects of the hospital environment may also have an impact on the risk of falls or injury. These include:

- flooring surface and pattern, and hardness or softness of floor;
- lighting, including sudden changes from dim to bright lighting;
- the design of doors and hand rails;
- the layout of toilets and bathrooms;
- the distance and spaces between hand holds, beds, chairs and toilets;
- the line of sight for staff observing patients;
- trip hazards, including steps, clutter and cables;
- furniture and medical equipment.

### After a fall

In-depth information on interventions, case studies, resources and practical examples of how to implement effective falls prevention policies can be found in *Slips, trips and falls in hospital*. There are 13 real-life examples of putting the evidence into practice, covering acute hospitals, community hospitals and mental health units. These include:

- core care plans for falls prevention;
- testing safer flooring to reduce injury;
- zone or cohort observation;
- involving patients in falls prevention;
- safer bathrooms;
- safe slipper provision;
- basic eyesight testing;
- linking hospital and community falls prevention;
- improvements to call bells;
- safer, more consistent light at night.

After a patient has fallen, there is still an opportunity to reduce the degree of harm by promptly detecting and effectively treating any injuries. Staff should also ascertain why the fall occurred and apply measures that could reduce the risk of further falls or injuries. Because patients may fall more than once, each incident should trigger a review of whether further interventions could reduce the risk of the patient falling again.

Some NHS organisations provide excellent advice on what should happen after a fall, including checklists and flowcharts to guide staff checking for injuries, deciding how urgently medical review is needed, considering underlying illness, and acting to prevent another fall. However, the analysis of incident reports shows that care after a fall could be improved for many patients.

### Cost benefits of preventing falls

The overall direct healthcare cost to the NHS of patient falls is estimated at £15 million every year. This represents a cost of £92,000 a year for an 800-bed acute hospital trust. In addition, there are other costs that are more difficult to quantify. Falls can result in patients needing extra healthcare, social care or residential care after discharge from hospital. Even minor injuries can require prolonged and expensive treatment.

Community hospitals and mental health units can also incur the cost of transporting and escorting patients to accident and emergency departments for investigation and treatment.

Research studies estimate that a range of individually targeted interventions could produce an 18 per cent reduction in the number of falls. This would result in cost savings of £16,560 in an average acute hospital.

### Next steps

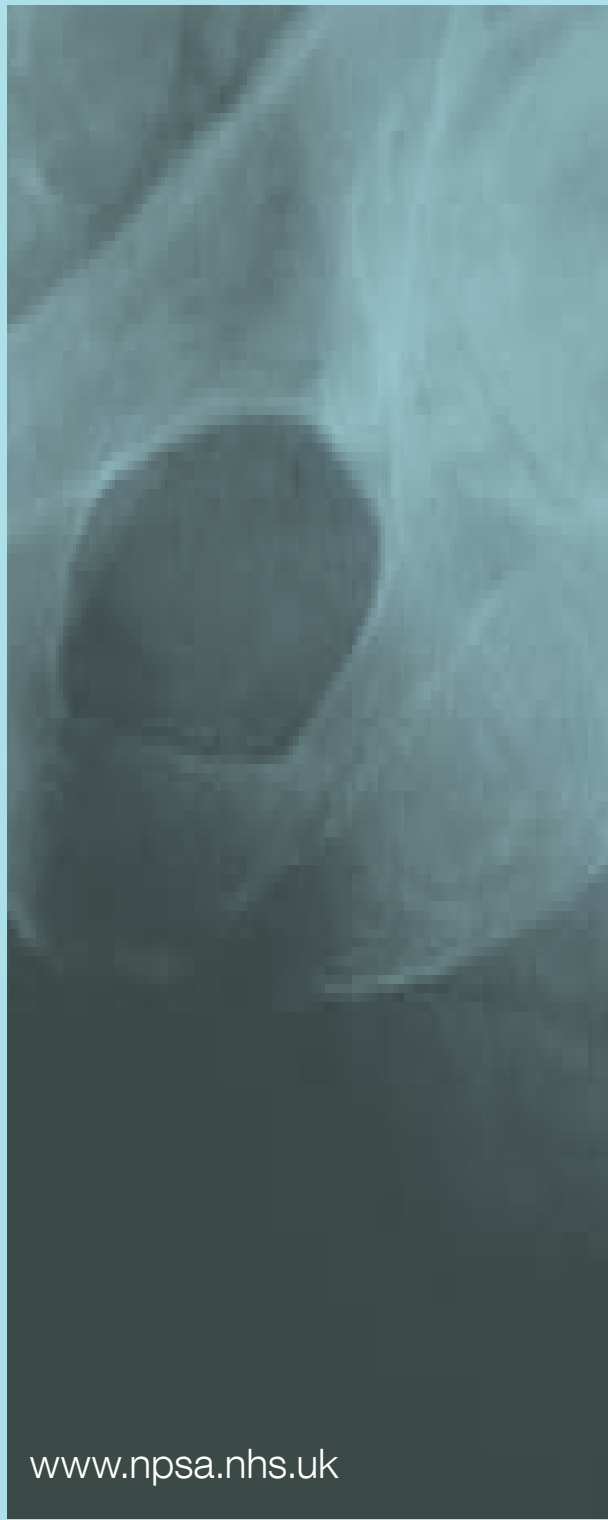
The full Patient Safety Observatory report, *Slips, trips and falls in hospital*, includes an in-depth analysis of data from the NRLS. It has examples of good practice from NHS organisations and practical advice on implementing an effective falls prevention policy.

This report is supported by a safer practice notice on the safe and effective use of bedrails, which can be downloaded from [www.npsa.nhs.uk/alerts](http://www.npsa.nhs.uk/alerts)

If you would like a copy of the full Patient Safety Observatory report, *Slips, trips and falls in hospital*, you can download it from [www.npsa.nhs.uk](http://www.npsa.nhs.uk) or order a free hard copy by calling 08701 5554555.

## The National Patient Safety Agency

We recognise that healthcare will always involve risks, but these risks can be reduced by analysing and tackling the root causes of patient safety incidents. We are working with NHS staff and organisations to promote an open and fair culture, and to encourage staff to inform their local organisations and the NPSA when things have gone wrong. In this way, we can build a better picture of the patient safety issues that need to be addressed.



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