USING A RANGE OF INTERVENTIONS TO PREVENT FALLS IN HOSPITAL

AUTHOR Nerys Hairon, MA, is assistant clinical editor, Nursing Times.

ABSTRACT Hairon, N. (2007) Using a range of interventions to prevent falls in hospital. Nursing Times; 103: 9, 23–24. The National Patient Safety Agency (NPSA) has published a report this week on falls in hospital, which suggests that a range of interventions, when used together, could result in an 18% reduction in the number of falls. This article outlines the incidence and cost of falls in hospital and how nurses can help with falls prevention.

The National Patient Safety Agency (NPSA) has published the third report from its Patient Safety Observatory, Slips, Trips and Falls in Hospital. The NPSA worked with other organisations to examine research evidence and information on the subject, which included more than 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 (PSO, 2007). The report makes six key recommendations for NHS organisations to implement, covering issues such as local incident forms, creation of a falls prevention group and staff guidance. It also contains 13 real-life examples of putting evidence into practice.

Data from the report shows that during the 12-month period from 1 September 2005 to 31 August 2006 some 206,350 reports of falls were sent to the NRLS from inpatient settings in 472 NHS organisations. This represents 98% of the 480 NHS organisations providing inpatient care in England and Wales at that time. The report states that it is “believed to be the largest dataset on the circumstances of falls ever analysed” (PSO, 2007).

Reported falls rates in acute hospitals range from almost zero to more than 10 falls per 1,000 bed days, with an average of 4.8 falls reported for every 1,000 bed days. This average rate would be equivalent to about 1,260 falls reported each year in an 800-bed acute hospital trust (PSO, 2007).

The report states that although 96% of falls result in minor injuries or no harm, even these can lead to loss of confidence, delays in discharge and increased likelihood of discharge to residential or nursing home care (Oliver and Healey, 2006). Across all three settings, 65% of reported falls resulted in no harm, and a further 31% resulted in low harm (PSO, 2007).

The report estimates that 530 patients were reported to have a confirmed fracture of the neck of femur, which is likely to be an underestimate, and most of these fractures are likely to fall within the definition of severe harm. It adds that the NRLS data includes 26 reports of falls that appear to have directly resulted in death. These were mainly from head injuries or following fractured neck of femur. Mortality following a hip fracture is estimated at 18%, which suggests that around 95 further deaths may have occurred following the estimated 530 fractured neck of femurs.

THE COST OF FALLS

The overall direct healthcare cost to the NHS is estimated at £15m every year. This equates to a cost of £92,000 a year for an 800-bed acute hospital trust (PSO, 2007). The report adds that there are other costs that are difficult to quantify, such as extra healthcare, social care or residential care after discharge (Oliver and Healey, 2006), as well as transport costs for community hospitals and mental health units taking patients to A&E. It suggests that if the 18% reduction in falls was achieved, this could result in cost savings of £16,560 each year in an average 800-bed acute hospital trust.

CAUSES OF FALLS

The report summary explains that hospital patients are at a greater risk of falling than people in the community. This is because 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 a fall.

Older people are more vulnerable and those who have already fallen are at increased risk of another fall. Delirium also increases the risk and is particularly likely to affect patients on medical wards. Patients aged over 80 are particularly vulnerable to falls and there are more reported falls of men than women relative to the proportion of men and women in hospital.

The report examines the causes and circumstances of falls and also analyses the times when falls are most likely to occur. It explains that the reasons why patients fall are complex and influenced by physical illness, mental health problems, medication and age-related issues, as well as the environment (PSO, 2007). The majority of falls, especially in older people, are the result of a combination of several factors and the interaction between factors is crucial, it concludes.

Those risk factors that appear to be most significant in hospital patients are:
- Walking unsteadily;
- Being confused and agitated;
- Incontinence or needing to use the toilet frequently;
- Having fallen before;
- Taking sedatives or sleeping tablets (Oliver et al, 2004).

The analysis identified the circumstances of falls by reviewing descriptions of incidents reported to the NRLS. The report concludes that most falls tend to happen when patients are moving from a bed or chair, walking, or using a toilet or commode.

A summary of the report also explains the issues around striking the appropriate balance between preventing patients from falling and rehabilitation. For this reason, it says that preventing falls is a particular challenge in hospital settings (PSO, 2007).

It argues that a ward where no patient ever falls is likely to be a ward where patients are unable to regain their independence and return home. The NPSA emphasises the need to involve a wide range of staff in falls prevention, and for these staff to work with patients and their carers to strike the appropriate balance in this area.

The most common time for falls is mid-morning, when patients are most likely to be active. Fall rates begin to rise about 9am and peak in the period between 10am and 12 noon. Staffing levels are usually highest during this period but workload may also be high. Many nursing activities will involve caring for one patient behind closed curtains or doors, which makes observing other patients more difficult.

There are few falls during mealtimes and in the early hours of the morning. The number of falls dips at about 8am, 12 noon and 5pm, which coincides with mealtimes – the report speculates this may be because patients spend mealtimes sitting still.

There are slightly more falls during weekdays than weekends, when there are more patients in hospital.

The analysis of incident reports shows that most falls are not witnessed by staff, and even when they are witnessed, staff are unlikely to be able to prevent them.

FALLS PREVENTION

The literature review found reasonable evidence that using multifaceted interventions was an effective way to reduce the number of falls by 18% (see box). However, the report adds that the literature review did not find enough evidence to say whether the numbers of injuries were also reduced. These interventions should be developed by a team that includes nurses, doctors, psychiatrists, physiotherapists, occupational therapists and pharmacists.

The report stresses that the literature review found little evidence to suggest that, on their own, either a review of medication or exercise can reduce falls, although they may be effective as part of multifaceted interventions.

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

The analysis also found some hospitals were using falls risk scores without having checked how well they over-predicted or under-predicted falls in patients. The report explains that using a falls risk score is not an essential part of falls prevention.

CARE AFTER FALLS

After a patient fall healthcare staff should seek to reduce harm by quickly identifying and effectively treating injuries. Staff should also find out why the fall occurred and implement measures that could reduce the risk of further falls. Each incident should trigger a review of whether further interventions could reduce the risk of falling again.

The report says that while some NHS trusts provide excellent advice on procedures to follow after a fall, the analysis illustrates that care following a fall could be improved for many patients.

REFERENCES

