

**Safety Advocate** informs about incidents or sentinel events that have been reported to public and private health care organisations in NSW, Australia and overseas.

It describes the common underlying causes of the events, suggests steps to prevent occurrences in the future and provides information sources to assist organisations in reviewing and updating their own systems.

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## Fall injury prevention in acute care

The increasing number of falls and fall injuries in older people (those aged 65 and over) is an issue of serious and growing concern. The reported rate of inpatient fall incidents varies considerably, with figures ranging from between two to five per cent of all admissions. In Australian hospitals, 38 per cent of all reported patient incidents involve a fall. In sub-acute, or rehabilitation settings, up to 46 per cent of patients have been reported to have fallen at least once during their hospitalisation and this percentage increases for certain conditions, such as stroke patients.

The cost to the health system in NSW for fall injury admission (aged 65 and over) has been estimated at \$292 million in 1995-96 and is projected to double by 2050. This estimate did not account for injury incurred as a result of a fall in hospital or nursing home care, nor do the projected increases take into account expected increases in the incidence of chronic conditions such as osteoporosis, which enhance the likelihood of fracture.

Given the increasing number of in-hospital falls and their subsequent effects on the individual, and the likelihood of extended bed days as a result, fall and fall injury prevention initiatives in the acute care setting should be an area for action.

### Factors that may result in falls

A number of risk factors for falls in the acute care setting have been identified.

Intrinsic factors include:

- Age (sharp rise over 60 years of age)
- Diagnostic status (patients with circulatory system disorders are most likely to fall)
- Previous cerebrovascular incident
- History of falls
- Depression
- Confusion or dementia
- Incontinence of bowel and bladder
- Requiring assistance for ambulation/impaired balance
- Sensory deficiencies, such as impaired vision or dizziness/vertigo
- Use of psychotropic medications.

Extrinsic factors include:

- Hospitalised for 19 days or more
- Environmental factors such as unstable furniture, inadequate lighting, slippery floors, cluttered areas, poorly fitting shoes, inappropriate footwear eg socks or anti-embolism stockings and improper use of bedrails and physical restraints
- Time of day.

It is expected that health care organisations will become familiar with and use the information from the **Safety Advocate** to:

### Plan

Plan the changes by reviewing and considering the information, if appropriate to the organisation's services.

### Do

Test the planned changes when designing or redesigning relevant systems.

### Study

Study these systems in light of information in the **Safety Advocate** and the results of the testing.

### Act

Act on relevant suggestions or reasonable alternatives or provide a reasonable explanation for taking no action.

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## Strategies to reduce falls and fall injuries

There are many strategies to reduce falls and fall injuries that are supported by the current research. They include:

### Clinical assessment and review

- Assess the patient's fall risk upon admission, change in status, transfer to another unit and discharge by using a falls risk screening tool.
- Assess the patient's coordination and balance before assisting with transfer and mobility activities.
- Manage risks associated with certain medications and medication combinations.

### Environmental modifications

- Provide a physically safe environment (eliminate spills, clutter, electrical cords and unnecessary equipment, and provide adequate lighting).
- Consider building layout, floor surfaces and coverings, access to and design of toilets and showers, wheelchair access and provision of storage space for equipment.
- Use appropriately modified chairs, low beds and mattresses with raised edges.
- Reduce the use of physical restraints.
- Lock all moveable equipment before moving patients.
- Place patient care articles within reach.
- Minimise the use of bed rails.

### Injury minimisation

- Use protective equipment and care systems, eg hip protectors, alarm systems.
- Employ appropriate staffing ratios for patient requirements.
- Utilise a mechanism such as identification bracelets, to clearly identify patients with a high risk of falling.

### Education

- Actively engage patients and family in education about fall risk factors, safety issues and activity/mobility limitations.

- Train patients in safe methods of transferring and completion of activities of daily living.
- Orientate patients to their immediate environment and describe methods for obtaining assistance.
- Train staff to increase their awareness of fall risk factors and appropriate intervention strategies.
- Teach patients to use grab bars.

### Strategies to ensure compliance

- Incorporate the risk assessment tool into already existing admission forms and ensure that it becomes a part of the admission process.
- There needs to be continual measurement.
- Reporting should be encouraged in a non-punitive environment.
- All reports must be acted on.
- Feedback to staff involved is necessary, especially on improvements. Feedback to all staff is desirable, eg graphs of numbers of falls posted on a noticeboard.

The literature suggests that best practice involves the implementation of multiple strategies aimed at addressing falls risk factors.

### Further information

NSW Health [www.health.nsw.gov.au/public-health/health-promotion/improve/injuryprev/fallsprevention/falls\\_tips.htm](http://www.health.nsw.gov.au/public-health/health-promotion/improve/injuryprev/fallsprevention/falls_tips.htm)

*NSW Public Health Bulletin*  
Jan-Feb 2002, Vol 13, No. 1-2  
[www.health.nsw.gov.au/public-health/phb/phbjanfeb02.pdf](http://www.health.nsw.gov.au/public-health/phb/phbjanfeb02.pdf)

*Changing resource demands relating to fall injury in an ageing population.*  
Moller, J. January 2000

*Falls Prevention Best Practice Guidelines for Public Hospitals and State Government Residential Aged Care Facilities*  
Queensland Health, 2001