AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Selected best practices and suggestions for improvement for clinicians and health system managers

Hospital-Acquired Complication **2**

FALLS RESULTING IN FRACTURE OR INTRACRANIAL INJURY

	HOSPITAL-ACQUIRED COMPLICATION	RATE[a]
1	Pressure injury	10
2	Falls resulting in fracture or intracranial injury	4
3	Healthcare-associated infection	135
4	Surgical complications requiring unplanned return to theatre	20
5	Unplanned intensive care unit admission	na[b]
6	Respiratory complications	24
7	Venous thromboembolism	8
8	Renal failure	2
9	Gastrointestinal bleeding	14
10	Medication complications	30
11	Delirium	51
12	Persistent incontinence	8
13	Malnutrition	12
14	Cardiac complications	69
15	Third and fourth degree perineal laceration during delivery (per 10,000 vaginal births)	358
16	Neonatal birth trauma (per 10,000 births)	49

a per 10,000 hospitalisations except where indicated
b na = national data not available

This hospital-acquired complication covers falls occurring in hospital which result in a fracture or intracranial injury resulting in diagnoses of intracranial injury, fractured neck of femur or other fractures.*

Why focus on falls?

Each year, patients in Australian hospitals experience a large number of falls, which collectively cause significant harm. In 2015–16, 1,756 such falls occurred in public hospitals.[1] This equates to 4 falls causing harm per 10,000 hospitalisations in 2015–16[1] in Australian public hospitals.

Fall-related injury is one of the leading causes of hospital-acquired morbidity and mortality in older Australians, and leads to pain, bruising and lacerations and fractures. Falls can also lead to intracranial bleeding, which can cause confusion, drowsiness, clouding, loss of consciousness and headache.[2] A fall can instil a fear of falling, in turn leading to a loss of confidence and decline in mobility, and an injurious fall can increase the likelihood of discharge to a residential aged care facility.

Falls in hospital which cause harm, such as intracranial injury, fractured neck of femur and other fractures, also prolong length of stay. Patients experiencing one of these falls remain in hospital for 18.8 days longer on average than patients who don't experience this hospital-acquired complication.[1] The national average cost per admitted acute overnight stay is $2,074.[3] Each hospitalisation involving a hospital-acquired fall injury may therefore be associated with $38,991 in extra costs.

In many cases, falls causing harm are preventable. Significant reductions in injurious falls rates are being achieved in some hospitals through preventive initiatives. The rate of falls at Principal Referral Hospitals† was 4 per 10,000 hospitalisations in 2015–16. If all Principal Referral Hospitals above this rate reduced their rate to 4 per 10,000 hospitalisations, then 251 falls causing harm would have been prevented, and more when other types of facilities are considered.[1]

* The specifications for the Hospital-Acquired Complications list providing the codes, inclusions and exclusions required to calculate rates is available on the Commission's website.

† Hospitals were classified in the Principal Referral Hospitals peer group for these purposes according to the Australian Institute of Health and Welfare's former definition of major city hospitals with more than 20,000 acute weighted separations and regional hospitals with more than 16,000 acute weighted separations.

What is considered best practice for preventing falls?

All hospital-acquired complications can be reduced (but not necessarily eliminated) by the provision of patient care that mitigates avoidable clinical risks to patients.

The **health service organisation** providing services to patients at risk of falls:

- Has systems that are consistent with best-practice guidelines for
  - falls prevention
  - minimising harm from falls
  - post-fall management
- Ensures that equipment, devices and tools are available to promote safe mobility and manage the risks of falls.

Clinicians caring for patients at risk of falls:

- Conduct comprehensive falls risk assessments in accordance with best practice
- Provide falls prevention and care in accordance with best-practice guidelines
- Provide patients, families and carers with information about reducing falls risks and falls prevention strategies.

The National Safety and Quality Health Service (NSQHS) Standards (second edition), in particular the Comprehensive Care Standard[4], support the delivery of safe patient care.

The advice contained in the hospital-acquired complication fact sheets aligns with the criteria in this standard, which are as follows:

- Clinical governance structures and quality-improvement processes supporting patient care
- Developing the comprehensive care plan
- Delivering the comprehensive care plan
- Minimising specific patient harms.

Top tips for prevention and management of falls resulting in fracture or intracranial injury

The following provides key points for clinicians to consider to avoid this hospital-acquired complication

Conduct risk assessment

- Conduct a comprehensive risk assessment
- Identify risk factors such as:
  - Agitation, delirium, confusion or impaired judgement
  - Gait instability
  - Lower limb weakness
  - Urinary incontinence, frequency or need for assisted toileting
  - Previous falls
  - Prescription of 'culprit' drugs, particularly central acting sedative hypnotics
  - Older age.

For a patient at risk, develop a prevention plan as part of a comprehensive care plan

Develop prevention plan

Clinicians, patients and carers develop an individualised, comprehensive prevention plan to prevent falls that identifies:

- Goals of treatment consistent with the patient's values
- Any specific nursing requirements, including equipment needs
- Any allied health interventions required, including equipment needs
- Observations or physical signs to monitor and determine frequency of monitoring
- Laboratory results to monitor and determine frequency of monitoring
- If specialist assistance is required.

Deliver prevention plan

Where indicated, deliver falls prevention strategies such as:

- Assess cognition and screen for delirium
- Manage continence, such as toilet frequently
- Review medications
- Monitor orthostatic blood pressure
- Implement fall injury prevention strategies where clinically indicated, which could include:
  - using a validated falls risk assessment that includes a standardised cognitive assessment tool
  - ensuring consistent and complete communication between all care providers
  - providing a buzzer or call bell to patients to contact nurses for assistance
  - having a protocol in place to address extra precautions needed for patients with dementia or other diseases that affect memory.

Monitor

- Monitor the effectiveness of any fall prevention strategies, and reassess the patient if falls occurs
- Review and update the care plan if it is not effective or is causing side effects
- Engage in reviewing clinical outcomes, identifying gaps and opportunities for improvement
- Put referrals in place in order to minimise future falls and address deconditioning.

Clinical governance structures and quality-improvement processes

to support best practice in falls prevention and management

Health service organisations need to ensure systems are in place to prevent falls through effective clinical governance and quality-improvement processes.

The NSQHS Standards (2nd ed.) describe actions that are relevant to the prevention and management strategies outlined below. These actions are identified in brackets.

Policies, procedures and/or protocols

Health service organisations ensure policies, procedures and/or protocols are consistent with national evidence-based guidelines for the risk assessment, prevention and management of falls. **(1.27, 5.1a, 5.24)**

Best-practice screening and management

Health service organisations:

- Agree on the process and criteria for falls risk screening using a validated falls risk screening tool **(5.7)**
- Inform the clinical workforce of screening requirements **(5.1c)**
- Identify a format for prevention plans for high-risk patients **(5.1b, 5.4)**
- Identify a management plan format for patients with a fall. **(5.12, 5.13)**

Identification of key individuals/ governance groups

Health service organisations identify an individual or a governance group that is:

- Responsible for monitoring compliance with the organisation's falls policies, procedures and protocols **(1.7, 5.2a)**
- Responsible for presenting data on the performance of falls prevention and management systems to the governing body. **(1.25b, 5,5b)**

Training requirements

Health service organisations:

- Identify workforce training requirements **(1.20a)**
- Train relevant workers in the use of risk screening, prevention plans and falls management plans **(1.20b, 1.20c**)
- Ensure workforce proficiency is maintained. **(1.20d, 1.22, 1.28b)**

Monitoring the delivery of prevention and care

Health service organisations ensure mechanisms are in place to:

- Report falls **(1.9, 5.2)**
- Manage risks associated with falls prevention and management **(5.1b, 5.26)**
- Identify performance measures and the format and frequency of reporting **(1.8a)**
- Set performance measurement goals **(1.8a)**
- Collect data on compliance with policies **(1.7b)**
- Collect data about falls-risk screening activities including whether risk assessment is leading to appropriate action **(1.8, 5.1b, 5.2)**
- Identify gaps in systems for screening patients for falls **(5.2b)**
- Collect data on falls incidence (1.11, 5.2)
- Ensure root cause analysis is conducted for any deaths arising from a fall in hospital **(1.11, 5.2)**
- Provide timely feedback and outcomes data to staff. **(1.9)**

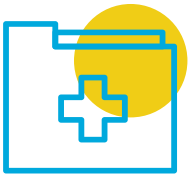
Quality-improvement activities

Health service organisations:

- Implement and evaluate quality-improvement strategies to reduce the frequency and harm from falls **(1.8, 5.2**)
- Use audits of patient clinical records and other data to:
  - identify opportunities for improving falls prevention plans **(5.2)**
  - identify gaps and opportunities to improve the use of falls prevention plans (such as increasing the number of at-risk patients who have falls prevention plans implemented) **(5.2)**
  - monitor the overall effectiveness of your systems for prevention and management of falls **(5.2)**
- Use audits of patient clinical records, transfer and discharge documentation and other data to: **(1.16d)**
  - identify opportunities for improving falls management plans **(5.2)**
  - assess compliance with falls management plan requirements **(1.7b)**
  - identify strategies to improve the use and effectiveness of falls management plans. **(1.8, 5.2)**

Equipment and devices

Health service organisations facilitate access to equipment and devices for the prevention and management of falls. **(1.29b, 5.25)**



Developing the patient's comprehensive care plan to support best practice in falls prevention

Clinicians should partner with patients, carers and families in assessing risk, in providing appropriate information to support shared decision making, and in planning care that meets the needs of patients and their carers.

Identifying risk factors for falls

Clinicians assess for risk factors associated with falls including[5,6]:

- Agitation, delirium, confusion or impaired judgement
- Gait instability
- Lower limb weakness
- Urinary incontinence, frequency or need for assisted toileting
- Previous falls
- Prescription of 'culprit' drugs, particularly central acting sedative hypnotics
- Older age.

Implement risk assessment screening

Clinicians use relevant screening processes at presentation to service to assess the risk of falls and requirements for prevention strategies.

Clinical assessment

Clinicians comprehensively assess:

- Conditions
- Medications
- Cognition
- Risks identified through screening process.

Informing patients with a high risk

Clinicians provide information to high-risk patients and their carers about falls prevention and management.

Planning in partnership with patients and carers

Clinicians inform patients, family and carers about the purpose and process of developing a falls management plan and invite them to be involved in its development.

Collaborating and working as a team

Medical, nursing, pharmacy and allied health staff work collaboratively to perform falls risk assessment and clinical assessment.

Documenting and communicating the care plan

Clinicians document in the clinical record and communicate:

- The findings of the screening process
- The findings of the clinical assessment process
- The falls prevention plan.

Delivering comprehensive care to prevent and manage falls

Safe care is delivered when the individualised care plan, that has been developed in partnership with patients, carers and family, is followed.

Collaborating and working as a team

Medical, nursing, pharmacy and allied health staff work collaboratively to deliver falls prevention and management.

Delivering falls prevention strategies in partnership with patients and carers

Clinicians work in partnership with patients and carers to use the comprehensive care plan to deliver falls prevention strategies where clinically indicated, for example:

- Assess cognition and screen for delirium
- Manage continence, such as toilet frequently
- Review medications
- Monitor orthostatic blood pressure
- Implement fall injury prevention strategies where clinically indicated, for example:
  - use a validated falls risk assessment that includes a standardised cognitive assessment tool
  - undertake regular clinical risk assessment and modify prevention measures accordingly (reassess, monitor and document)
  - systematise communication during transitions of care to ensure consistent and complete communication between all care providers
  - address toileting issues by proactive rounding if needed for at risk patients
  - educate on potential medication issues that increase risk
  - provide a buzzer or call bell to patients to contact nurses for assistance
  - have a protocol in place to address extra precautions needed for patients with dementia or other diseases that affect memory.

Delivering falls management in partnership

Clinicians work in partnership with patients and carers to ensure patients who have falls are managed according to best-practice guidelines.

Monitoring and improving care

Clinicians should:

- Monitor the effectiveness of these strategies in preventing falls and reassess the patient if a fall occurs
- Review and update the care plan if it is not effective or is causing side effects
- Engage in reviewing clinical outcomes, identifying gaps and opportunities for improvement
- Put referrals in place in order to minimise future falls and address deconditioning.

Additional Resources

American Geriatrics Society, British Geriatrics Society. Clinical Practice Guideline for Prevention of Falls in Older Persons 2010..

Australian Commission on Safety and Quality in Health Care. Guidebook for Preventing Falls and Harm From Falls in Older People: Australian Hospitals 2009. Sydney: ACSQHC; 2009.

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Degelau J, Belz M, Bungum L, Flavin PL, Harper C, Leys K, et al. Prevention of falls (acute care). Health care protocol 2012.

Ganz DA, Huang C, Saliba D, Shier V. Preventing falls in hospitals: a toolkit for improving quality of care. Rockville, MD: Agency for Healthcare Research and Quality; 2013.

National Institute for Health and Care Excellence (UK). Falls in older people: assessing risk and prevention. Clinical Guideline 161. 2013 12 June 2013.

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Panel on Prevention of Falls in Older Persons, American Geriatrics Society, British Geriatrics Society. Summary of the Updated American Geriatrics Society/ British Geriatrics Society Clinical Practice Guideline for Prevention of Falls in Older Persons. Journal of the American Geriatrics Society [Internet]. 2011; 59(1):[148-57 pp.].

Safer Healthcare Now! (CA). Reducing Falls and Injuries From Falls: Getting Started Kit 2013.

Note on Data

The data used in this sheet are for hospital-acquired complications recorded during overnight acute episodes of care in Australian public hospitals in 2015-16. Data are included where hospitals were able to identify that the complication had arisen during an admission using the condition onset flag. Figures reported by Independent Hospitals Pricing Authority may differ due to their methodology, which applies different inclusion/ exclusion criteria.

References

1. Independent Hospital Pricing Authority (AU). Activity Based Funding Admitted Patient Care 2015-16, acute admitted episodes, excluding same day.
2. Australian Commission on Safety and Quality in Health Care. Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Hospitals 2009. Sydney: ACSQHC; 2009.
3. Independent Hospital Pricing Authority (AU). National Hospital Cost Data Collection 2015-16, acute admitted episodes, excluding same day.
4. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards (second edition). Sydney 2017.
5. Taylor E, Hignett S. The SCOPE of Hospital Falls: A Systematic Mixed Studies Review. Health Environments Research & Design Journal. 2016;9(4):86-109. Epub 2016/06/01.
6. Australian Commission on Safety and Quality in Health Care. Safety and Quality Improvement Guide Standard 10: Preventing Falls and Harm from Falls 2012. Available from: https://www.safetyandquality.gov.au/publications/safety-and-quality-improvement-guide-standard-10-preventing-falls-and-harm-from-falls-october-2012/.

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