

# Preventing falls and harm from falls in Older People

Best Practice Guidelines for **Australian Hospitals** 

Published by the Australian Commission on Safety and Quality in Health Care

Level 5, 255 Elizabeth Street, Sydney NSW 2000

Phone: (02) 9126 3600

Email: mail@safetyandquality.gov.au Website: www.safetyandquality.gov.au

ISBN: 978-1-923353-12-1

© Australian Commission on Safety and Quality in Health Care 2025

All material and work produced by the Australian Commission on Safety and Quality in Health Care is protected by copyright. The Commission reserves the right to set out the terms and conditions for the use of such material.

As far as practicable, material for which the copyright is owned by a third party will be clearly labelled. The Commission has made all reasonable efforts to ensure that this material has been reproduced in this publication with the full consent of the copyright owners.

With the exception of any material protected by a trademark, any content provided by third parties, and where otherwise noted, all material presented in this publication is licensed under a <u>Creative Commons</u> Attribution-NonCommercial-NoDerivatives 4.0 International licence.



Enquiries about the licence and any use of this publication are welcome and can be sent to communications@safetyandquality.gov.au.

The Commission's preference is that you attribute this publication (and any material sourced from it) using the following citation:

Australian Commission on Safety and Quality in Health Care. Preventing Falls and Harm from Falls in Older People: Best Practice Guidelines for Australian Hospitals. Sydney; ACSQHC, 2025.

#### **Disclaimer**

The content of this document is published in good faith by the Australian Commission on Safety and Quality in Health Care for information purposes. The document is not intended to provide guidance on particular healthcare choices. You should contact your healthcare provider on particular healthcare choices.

### **Contents**

Preventing falls and narm from fallsin nospitals	4
Recommendations in the Falls Guidelines	5
How to use the Falls Guidelines for Hospitals	6
Key messages of the Falls Guidlines	7
Falls and fall injuries in Australia	9
Interventions to prevent falls and harm from falls	11
Fall Risk Assessment for Tailoring Interventions	11
Balance and Mobility	12
Cognitive Impairment	13
Medicine and Medicines Review	14
Continence	15
Feet and Footwear	16
Syncope	17
Dizziness and Vertigo	18
Vision	19
Hearing	20
Environment	21
Monitoring and Observation	22
Restrictive Practices	23
Hip Protectors	24
Vitamin D and Calcium	25
Osteoporosis	26
Post-fall Management	27
Appendix	28

# Preventing falls and harm from falls in hospitals

The Preventing Falls and Harm from Falls in Older People: Best Practice Guidelines for Australian Hospitals (Falls Guidelines for Hospitals) aims to improve the safety and quality of care for older people and offers a nationally consistent approach to preventing falls and harm from falls in hospital settings. Separate Falls Guidelines have been developed for the community and residential aged care settings.

The Falls Guidelines for Hospitals have been developed for routine use by **health professionals** and other hospital staff in providing care to older people in Australian hospitals. While these guidelines refer to older people, they apply to all people who are at increased risk of falling while receiving care in hospital. Actions to prevent falls and harm from falls are part of Comprehensive Care in the National Safety and Quality Health Service (NSQHS) Standards. The NSQHS Standards apply to all public and private health service organisations providing acute care, subacute care and day procedure services in Australia.

### Recommendations and good practice points

The Falls Guidelines for Hospitals outline recommendations and good practice points for implementing person-centred fall prevention interventions in hospitals.

Recommendations are based on evidence from intervention trials in hospital settings with falls or fall injury outcomes. The associated level of evidence (see Appendix) is aligned with the modified GRADE approach used by the 2022 World Falls Guidelines 1:

- 1 indicates a strong recommendation
- 2 indicates a weak or conditional recommendation

**A, B and C** indicate high, intermediate and low-quality evidence, respectively.

**Good practice points** should also be considered as they guide all aspects of care of older people relevant to falls and fall injury prevention and are based on research and expert opinion on best practice.

<sup>1</sup> Montero-Odasso M, van der Velde N, Martin FC, et al. World guidelines for falls prevention and management for older adults: a global initiative. Age Ageing. 2022;51(9).

# Recommendations in the Falls Guidelines

The Falls Guidelines for Hospitals have four evidence-based recommendations:

#### 1. Education

Provide tailored education about fall prevention to older people who wish to participate, and to all staff and families. (Level 1B)

#### 2. Tailored interventions

Provide tailored multifactorial fall prevention interventions for all older people based on an assessment of individual risk factors. (Level 2B) Calculating a fall risk score is not necessary. (Level 2B)

### 3. Hip fracture care:

Following a hip fracture in an older person, provide post-operative care in a geriatric orthopaedic service with multidisciplinary comprehensive geriatric assessment, management and rehabilitation. (Level 1B)

### 4. Home safety after discharge:

As part of discharge planning, arrange home safety interventions delivered by an occupational therapist for older people at an increased risk of falls after they have returned home. (Level 1A)

The terms fall and falls are used interchangeably throughout the guidelines.

# How to use the Falls Guidelines for Hospitals

The recommendations and good practice points in this document are designed to inform a hospital's fall and fall injury prevention program. Good practice points are listed in each chapter, but the order of these is **not** indicative of importance. Not all chapters contain recommendations.

The Falls Guidelines for Hospitals focus on older people aged 65 and over. A broader age group is used for older Aboriginal and Torres Strait Islander peoples aged 50 years and over.

People outside these age groups are also at risk of falling, including those with a history of falls, disability or conditions that alter functional ability. The recommendations and good practice points in these guidelines reflect the evidence related to older people but may also apply to others at risk of falling, where appropriate.

Fall prevention interventions are the actions and strategies used to prevent falls or harm from falls. Interventions are more effective when they target the individual's fall risk factors (multifactorial interventions) and when they are tailored and person-centred.

### Target the older person's risk factors

The Falls Guidelines for Hospitals focus on the risk factors relevant to the older person. The management and severity of certain conditions that an older person has may increase the likelihood of fall risk factors.

A range of health professionals, including nurses, medical practitioners and allied health professionals, may be involved in providing care to the older person in hospital. Certain health professionals have distinct roles in supporting the reablement and maintenance of an older person's functional capacities.

### Tailored interventions and the person-centred approach

It is recommended that hospitals apply a tailored approach to preventing falls by considering **all** older people at risk of falling. Each older person should be assessed to determine the relevant risk factors, and shared decision-making should be employed to determine the appropriate interventions to prevent falls and harm from falls.

The Falls Guidelines for Hospitals recognise the important role that an older person's carers, family and substitute decision-makers may play in fall prevention. The extent of involvement of these people in the care of the older person must be aligned with the wishes of the older person.

### Key messages of the Falls Guidlines

### Fall prevention is everyone's responsibility

A fall is defined as:

An event which results in a person coming to rest inadvertently on the ground or floor or other lower level. World Health Organization.<sup>2</sup>

Many falls can be prevented. Health professionals and other hospital staff play a key role in preventing falls in hospitals. Organisation-wide fall and injury prevention programs require a multidisciplinary perspective. They are most effective when health professionals and other hospital staff are included in the development of the program.

### All older people in hospital are at risk of falling

Falls are a common reason for older people presenting to a hospital. Falls can occur after admission to hospital or following discharge. Falls can occur in people of all ages and may result in injury, but they can also result in minimal or no harm. The risk, frequency and severity of fall-related injury increase with age.

In hospital, all older people should be considered at risk of falling and be individually assessed to identify necessary fall injury prevention interventions.

### Fall prevention is effective when tailored

Effective fall prevention involves tailored interventions based on the older person's individual risk factors. Using any one intervention alone is unlikely to reduce the risk of falling. Managing many of the risk factors for falls has wider health benefits for the older person beyond fall prevention.

Older people have the right to make decisions that affect their lives. Respecting these decisions is an important part of this right, even if there is some risk to themselves – this is called dignity of risk. To support the dignity of risk, partner with the older person to:

- identify their goals of care
- share the decision-making on fall prevention interventions
- maintain their independence and quality of life
- involve carers and family to the extent the older person chooses.

Provide education to older people, their carers and family about the older person's fall risk and any tailored fall prevention interventions.

### Safe staffing levels, skill mix and education support good clinical care

Safe staffing levels and a trained and skilled workforce support good clinical care in the prevention of falls and harm from falls.

Multidisciplinary collaboration by a range of skilled health professionals may be required to engage with the older person to support their dignity of risk in fall prevention and optimise their quality of life.

Fall prevention interventions should be monitored and reviewed regularly for safety and effectiveness. Changes to an older person's fall risk should be communicated with the multidisciplinary team.

<sup>2</sup> World Health Organization. Step Safely: Strategies for Preventing and Managing Falls across the Life-Course. Geneva: World Health Organization, 2021.

### Key messages of the Falls Guidlines

### Review and report every fall

Whether there is injury, minimal harm or no harm from a fall, all falls:

- must be taken seriously
- require an immediate response
- must be reviewed and reported in line with hospital requirements.

Falls may be the first indication of an underlying condition in an older person that may require assessment.

Determine how and why a fall may have occurred and reassess the older person to identify new fall risk factors. Implement tailored interventions to address risk factors and reduce the risk of another fall.

#### **Results will come**

The results of a fall prevention program may not be immediately clear. There may be a time lag between investment in a fall prevention program and measurable improvements in outcome measures related to falls and harm from falls. Outcome measurements may also include the tailored approach used with the older person in fall prevention.

Alignment with other hospital prevention programs (e.g. delirium) may be useful for informing broader quality improvements.

### Falls and fall injuries in Australia

### Falls in hospitals are a major issue in Australia and worldwide.

There is a human cost of falls for the older person and their carers and family. Most falls in hospitals result in injury, which leads to increased length of stay, loss of independence, fear of falling, loss of confidence in walking, premature entry to aged care and sometimes death.

### **Characteristics of falls in hospital**

The relationship between the time of falls and the level of staffing suggests that most falls in hospitals occur in daylight hours when staffing levels are at their highest but when there is the greatest level of concurrent work demands. The pattern of falls also depends on the setting and case mix.

Reported data for hospitals show:

- falls occur across all age groups, with an increasing prevalence of falls in older people
- the bedside is the most common place for falls to occur, followed by the bathroom
- a high percentage of falls are associated with the need to use the toilet
- a high percentage of falls are unwitnessed, with falls occurring most often at times when there are fewer observers around, such as during showers and mealtimes, and outside visiting hours.

### Risk factors for falling in hospital

A person's risk of falling increases with age, degree of frailty, acute or chronic medical conditions, and a history of falls. General poor health or deterioration in capacity for activities of daily living are also risk factors for falls.

A person's risk of falling increases as the number of risk factors increases. Prolonged hospitalisation also increases a person's risk. Most risk factors can be addressed systematically to help prevent falls and harm from falls. These include:

- intrinsic risk factors: those that relate to a person's behaviour or condition, and
- extrinsic risk factors: those that relate to a person's environment or their interaction with the environment.

### Falls after discharge

Older people have a higher risk of falls and falls with serious injury in the first month after hospital discharge. For those older people with a higher risk of falls, interventions to reduce the risk should be included in discharge planning. Discharge planning should start early during admission to ensure all aspects of care for the older person can be addressed.

Ensure safe transitions of care by providing interventions and referral pathways to address identified fall risk factors, including at-home safety interventions to prevent further falls and harm from falls.

Best practice supports the coordination and continuity of care between the hospital, the older person, their carers and family, the older person's general practitioner and the receiving health service. By working in an integrated manner, the needs of the older person across the broader spectrum of health service delivery are more likely to be met.

### Falls and fall injuries in Australia

### Involving older people, carers and family in fall prevention

It is critical that all people are supported to exercise choice and that care is tailored to their different needs and preferences.

Good clinical care can optimise a person's quality of life, reablement and maintenance of function.

Carers, family and substitute decision-makers may play an important role in a person's life, and relationships should be recognised and respected.

Communication with and between the multidisciplinary team, including the person and carers and family, is critical to effectively preventing falls and responding to them. Risks, change or deterioration in a person's condition should be escalated and communicated as appropriate.

Older people in Australia may experience greater challenges in accessing care due to geographical location, mobility, and limitations in the availability of services and workforce. The use of telehealth should be supported to facilitate fall prevention interventions when appropriate and available.

# Best-practice approach for implementing fall prevention in the older person

Best-practice approach to partnering with older people in fall prevention:

- Present the fall prevention message in the context of staying independent for longer.
- Be aware that the term' fall prevention' could be unfamiliar or difficult to understand, and support understanding through tailored communication.
- Identify health literacy and communication needs and preferences, considering any relevant impairments, including in the person's cognitive function.

- Provide information in a way the person can understand. This may include providing information in the person's own language, using alternative communication approaches such as written formats (e.g. easy read, easy English and accessible formats), multimedia (e.g. images, animation and video), and offering and facilitating access to interpreters and translations.
- Identify the person's needs, goals and preferences and support the older person, their carers and their family in engaging in discussions about preventing falls.
- Find out what personal changes the person can make to prevent falls and support shared and supported decision-making. This may include changes to the behaviour, environment, clothing and footwear.
- Explore the person's concerns about what makes it difficult for them to take action to reduce their risk of falls (such as fear of falling, loss of confidence or concern about the stigma associated with using mobility aids) and provide support to overcome these issues.
- Develop fall prevention programs that are flexible and tailored to the person's individual needs, goals, circumstances and interests.
- Trial a range of fall prevention interventions and review their effectiveness in partnership with the person and their carers or family.
- Support people to discuss their ongoing care needs and future medical treatment, including in relation to fall risk, and develop or review advance care planning documents (if and when they choose).
- Ensure the person in hospital and their carers, family and substitute decision-makers know how to provide feedback and raise concerns.



### Pall Risk Assessment for Tailoring Interventions

A targeted approach to preventing falls in hospital involves considering **all** older people at high risk of falling and assessing their fall risk as soon as practical. Hospitals should apply a person-centred approach to patients aged less than 65 years.

**Fall risk assessments** aim to identify factors that increase the fall risk for a person that may be addressed through a fall prevention intervention. Assessment of fall risks alone does not prevent falls.

It is important that a fall risk assessment is prioritised for those older people who are admitted to hospital following a fall, who are in a setting in which most older people are considered to have a higher risk of falls (e.g. a rehabilitation unit) or who experience a fall in hospital.

A comprehensive fall risk assessment will assess both intrinsic and extrinsic fall risk factors related to a person's health, functional status and environment. Identified risks must be addressed by reliably planning, tailoring and implementing interventions shown to minimise the risk of falls and harm from falls.

#### Recommendations

**Education:** Provide tailored education about fall prevention to older people who wish to participate, and to all staff and families. (Level 1B)

**Tailor interventions:** Provide tailored multifactorial fall prevention interventions for all older people based on an assessment of individual risk factors. (Level 2B) Calculating a fall risk score is not necessary. (Level 2B)

- Consider all older people in hospital to be at high risk of falls. Identify risk factors for people admitted to hospital, attending the emergency department or outpatient services, especially for people with a history of falls or comorbidities that may influence their fall risk.
- Consider all people with mobility or cognitive disabilities to be at high risk, regardless of age.
- Implement tailored interventions informed by a multifactorial comprehensive assessment and goals of care to systematically address fall risk factors during hospital admission, inpatient stays, discharge planning and referral to community services. Ensure that delirium prevention, assessment and management are part of fall prevention programs.
- Ensure all health professionals involved in the care of older people receive ongoing education about fall risk and fall prevention.
- Facilitate regular and effective communication among members of multidisciplinary teams that care for older people, including the person's carers and family.
- Ensure people are provided with nutritious diets in line with their preferences, which contain sufficient protein to maintain muscle mass, include potassium, calcium, vitamin D, dietary fibre and vitamin B12, and contain little to no added sugar, saturated fats and sodium.
- Provide meal assistance and fluids when requested or needed to support nutritional intake and hydration.
- Support behavioural strategies to help regulate sleep-wakefulness cycles and improve sleep quality.
- Minimise disturbing noise and disruptive care practices to optimise sleep duration and quality for all people admitted to hospital.

## Balance and Mobility

Balance plays an essential role in managing everyday activities. Increasing age, inactivity, disease processes and muscle weakness contribute to impaired balance.

An older person's balance, mobility and strength are often poorer when they are in hospital and may further deteriorate during a hospital stay because of illness and because hospital environments discourage mobility. Health professionals should encourage and support safe mobilisation.

As part of a mobility assessment, it is important to establish whether an older person's level of mobility in hospital is usual for them.

- Assess the person's balance, mobility and strength using validated tools to:
  - quantify the extent of the person's balance, mobility and muscle strength
  - ☐ guide the prescription of exercise, mobility aids and equipment
  - ☐ measure improvements in the person's balance, mobility and strength.
- Provide the level of hands-on assistance required to meet the person's mobility needs.
- Balance the risks and benefits of restricting the person's activity with maintaining their mobility to restore function and support safe mobilisation.
- Refer people with ongoing balance and mobility issues to a post-hospital fall prevention exercise program in the community.

## © Cognitive Impairment

Cognitive impairment, including delirium and dementia, is associated with increasing age and is a major risk factor for falls. Cognitive impairment may directly influence a person's ability to evaluate and respond to their environment and safely carry out everyday activities.

Delirium is more common when an older person is acutely unwell and in hospital. Preventing and managing delirium is important for the prevention of injuries from falls.

People at any age can have cognitive impairment due to illness, acquired brain injury, mental health conditions and other pre-existing conditions.

- Identify and assess fall risk factors for people with cognitive impairment early in the hospital admission.
- Regularly reassess the person's cognitive status, including when their condition changes, such as after a fall or surgery.
- Use a validated tool\_to assess older people for delirium, particularly for those who present with an acute change in cognitive function. Consider sepsis as a cause for delirium. See the <a href="Sepsis">Sepsis</a> Clinical Care Standard.
- Where delirium has been identified, use a delirium pathway to determine the cause, implement delirium prevention interventions and manage the delirium by following the evidence-based interventions in the Australian Clinical Practice Guidelines for the Management of Delirium in Older People and the Delirium Clinical Care Standard.
- Assess people with gradual-onset, progressive cognitive impairment to determine diagnosis and, where possible, identify and address reversible causes. Use the Australian Clinical Practice Guidelines and Principles of Care for People with Dementia.

- Involve people with cognitive impairment and substitute decision-makers in supported decision-making about which fall prevention interventions to use and how to use them. Carers and family who know the person may suggest ways to support them.
- Implement models of care that enable adequate supervision, equipment and support for the person with cognitive impairment, and respond to fluctuations in the person's mobility, cognitive state and the impact of changed behaviours on others.
- For people with cognitive impairment, use reasonable adjustments to implement the Falls Guidelines for Hospitals. Reasonable adjustments should include (but are not limited to):
  - employing dementia-enabling techniques to manage the physical environment that facilitates people living with dementia to feel supported and engaged
  - ☐ using tailored communication approaches to encourage the person's participation in decision-making and care planning
  - ☐ involving the person's carers and family in the assessment and design of fall prevention interventions.



### Medicine and Medicines Review

There is a recognised association between medication use and falls in older people. Medicines can contribute to falls, and the risk is increased when new medicines are started, ceased or changed. A medication review is a core part of assessment at presentation, particularly after a fall.

Medicine classes that increase the risk of falling include opioids, sedatives and hypnotics, neuroleptics and antipsychotics, antidepressants, benzodiazepines and certain classes of cardiovascular medicines.

When an older person is acutely unwell in hospital, the doses of their regular medicines may need to be adjusted to minimise their risk of falling.

- **Good practice points**
- Take a best possible medicine history and review all of the person's medicines while in hospital.
- Adjust, taper or cease medicines that increase the person's fall risk, where possible.
- Ensure medicines are commenced with an ageappropriate dose and doses are adjusted slowly based on regular monitoring for efficacy and emergence of adverse effects.
- Advise people taking medicines that increase fall risk about ways to reduce their risk.
- Complete a medication review to improve the likelihood of identifying medicines that increase the risk of falls (sometimes referred to as fall-risk-increasing drugs). Tapering or cessing of these medicines where possible may significantly reduce fall risk.

- Implement alternative strategies for behaviour support planning, promoting sleep, and addressing anxiety, depression and pain when indicated. Psychotropic medicines should only be considered for managing changed behaviours when there has been an adequate trial of non-medication strategies and they have been ineffective. Document the purpose and the plan for review. See Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standard and Clinical Practice Guidelines and Principles of Care for People with Dementia.
- Communicate any recent or proposed changes to a person's medicine regimen to the multidisciplinary team at transitions of care.



### Bladder and bowel symptoms are common in older people.

Older people may make extraordinary efforts to avoid an incontinent episode, which may increase their risk of falling.

Good continence care is person-centred, evidencebased and optimises a person's dignity, comfort, function and mobility. Supporting people to manage incontinence may improve overall care and reduce the risk of falls and harm from falls and should be considered in a multifactorial fall prevention program.

People are often reluctant or embarrassed to discuss continence issues. Health professionals and hospital staff should enquire openly and routinely about incontinence symptoms rather than rely on the person to mention it during a consultation.

- Complete a continence assessment with the older person to identify and treat factors that can cause or contribute to incontinence. Implement interventions to minimise fall risk related to incontinence and facilitate the older person's access to a specialist continence service when required.
- Proactively manage the older person's toileting needs, including nocturia (urge to urinate at night), urgency and frequency as part of a multifactorial approach to care. This may include providing regular proactive toileting assistance, use of continence aids or facilitating supervision in bathrooms.
- Manage urinary tract infections and reduce inappropriate use of antimicrobials.



Foot problems and inappropriate footwear can cause mobility impairment and are risk factors for falls and fractures in older people. The wearing of inappropriate footwear by older people is a significant safety issue in hospital settings.

Appropriate footwear can improve the mobility, balance and gait of an older person and reduce their risk of falling.

### **Good practice points**

- Assess if the person has any foot pain or problems and if their footwear is safe and wellfitted.
- Refer people with foot conditions and foot pain to a podiatrist for assessment and treatment in hospital or after discharge.
- Encourage people to use safe, well-fitting footwear (in hospital and after discharge) that includes:

heels that are low and square to improve stability
a supporting ankle collar to improve stability
soles with tread to prevent slips
firm soles to optimise foot position sense
easy fastening and only including laces if the person can tie them.

■ Encourage the older person to wear safe, wellfitting footwear rather than non-slip socks, as these are better for fall prevention.



Syncope is a brief loss of consciousness and is commonly described as fainting or passing out.

Older people are more likely to experience syncopal events due to age-related physiological changes that affect their ability to adapt to changes in cerebral perfusion (the amount of pressure needed to maintain blood flow to the brain).

- Ensure older people who experience unexplained falls or episodes of collapse, including presyncopal or syncopal episodes (including postural hypotension), are urgently assessed by a medical practitioner to establish the underlying cause.
- Facilitate a medication review of the older person to identify medicines that may cause postural hypotension.
- Assess all appropriate treatment options for people diagnosed with the cardio-inhibitory forms of carotid sinus hypersensitivity, including the fitting of a dual-chamber cardiac pacemaker.



Dizziness is a term used to describe a range of sensations, such as feeling lightheaded, foggy or unsteady. Vertigo is a sensation of spinning. The most common diagnosis for dizziness is benign paroxysmal positional vertigo.

Dizziness is associated with an increased risk of falling. Poor sensorimotor function, impaired balance control, anxiety and neck and back pain have been identified as mediators of the relationship between dizziness and falls. Older people with dizziness are also at high risk of experiencing fall-related fractures.

- Assess older people complaining of dizziness and vertigo for vestibular dysfunction (balance problems), gait problems, postural hypotension and anxiety.
- Assess the older person for postural hypotension with tests of lying and standing blood pressure.
- Facilitate a review of the older person's medicine regimen to identify medicines that may cause or contribute to dizziness or postural hypotension, including, but not limited to, antihypertensives, antidepressants, anticholinergics and hypoglycaemics.
- Facilitate access to an appropriately trained medical practitioner or vestibular physiotherapist to assess dizziness and vestibular-related balance problems. Implement interventions for benign paroxysmal positional vertigo and vestibular rehabilitation when indicated.



Vision loss is a common chronic condition in older people.

Older people with impaired vision are twice as likely to fall compared to older people without vision problems.

Older people rely heavily on vision to control their balance, identify hazards or obstacles and navigate safely around them. Poor vision is also associated with increased frailty. Regular vision assessment is an important part of falls prevention.

### **Good practice points**

- Include a vision test as part of an older person's fall risk assessment.
- Ensure older people who use glasses have accessible, clean glasses and wear them in hospital. If the older person has different glasses for reading and distance, ensure they wear distance glasses when mobilising.
- Assess environmental factors, such as adequate lighting, contrasting fixtures, painted white strips along the edges of stairs and pathways and clear signage, to help maximise visual cues and wayfinding.
- Provide increased supervision for older people with impaired vision when they are moving away from their immediate bed surrounds, as required.

		4a ca.			
ı	As	As part of good discharge planning:			
		refer older people with undiagnosed visual problems to an optometrist, orthoptist or ophthalmologist			
		facilitate timely access to cataract surgery for both eyes for older people with clinically significant visual impairment primarily due to cataracts (unless contraindicated). See the Cataract Clinical Care Standard.			
		arrange for an occupational therapist to conduct a home environmental assessment			

and modification for those older people with

severe visual impairment.



Hearing impairment contributes to falls in older people, as those with hearing impairments may fail to detect environmental hazards outside their line of sight.

Poor balance, walking difficulties, impaired cognition and functional decline further increase this risk.

- Identify any hearing problems that an older person may have as part of the fall risk assessment.
- Ensure older people who use hearing aids have them within easy reach, that they wear them when mobilising and that they are working.
- Use a pocket talker (a device that amplifies sound closest to the listener while reducing background noise) to communicate with an older person with a hearing impairment, as required and in line with the older person's preferences.
- Provide increased supervision for older people with impaired hearing when they are moving away from their immediate bed surrounds.
- As part of good discharge planning refer older people with undiagnosed hearing problems to an audiologist.



For older people, the risk of falling while in hospital may be greater than in other settings because of unfamiliar surroundings and being unwell.

The risk can be reduced by checking the hospital room for hazards that might cause people to fall and then modifying or rearranging the environment to remove or minimise these hazards and obvious risk factors. This could include removing clutter, improving lighting and installing handrails.

Environmental modification interventions are most likely to be effective in older people who have an increased risk of falls.

#### Recommendation

**Home safety after discharge:** As part of discharge planning, arrange home safety interventions delivered by an occupational therapist for older people at an increased risk of falls after they have returned home. (Level 1A)

- Provide orientation to the hospital environment, including the layout of the ward, the location and operation of nurse call bells and the safe operation of the hospital bed functions. Minimise transfers and changes in the physical environment during admission where possible.
- Ensure regular contact between the multidisciplinary team and the person (intentional rounding) to evaluate and modify the person's environment, and provide, review and assess the person for any care needs.
- Conduct comprehensive environmental reviews regularly and modify the hospital environment as necessary to reduce the risk of falls. This includes furniture, lighting, floor surfaces, signage to maximise visual cues and wayfinding, clutter and spills, and mobility aids. Best practice is to combine environmental reviews with work health and safety audits.
- Ensure procedures are in place to document environmental causes of falls and educate staff about environmental risk factors for falls in hospitals.
- Ensure personal belongings and equipment are easily and safely accessible.
- Arrange for people at a higher risk of falls to be assessed by an occupational therapist or physiotherapist for specific environmental or equipment needs and training to maximise safety.



### **Monitoring and Observation**

Many falls in hospitals are unwitnessed and often happen in the immediate bedside area. Falls may be associated with delirium, restlessness, agitation, attempts to mobilise to the toilet, stand, turn and transfer, or due to reduced problem-solving abilities in people living with dementia.

Monitoring and observation approaches are useful in preventing falls when a person is identified as being at risk of falling, particularly when getting out of a bed or a chair unsupervised.

Care must be taken to ensure that monitoring does not infringe on a person's autonomy or dignity. Hospitals must have clear policies and procedures in place for monitoring and observation.

- Discuss the risk of falling and the need for close observation with the person, carers and family and develop a collaborative management plan to reduce identified risks.
- Create a clear monitoring plan that specifies the vital signs and other relevant physiological observations to be recorded on an observation and response chart, including the frequency of observation to match the person's needs. See the National Consensus Statement: Essential elements for recognising and responding to acute physiological deterioration.

- Provide frequent monitoring and observation of people living with dementia or delirium and those who have been administered a general anaesthetic or sedation. Where appropriate, fall risk alert cards and symbols should be used in the clinical record to flag people at risk of a fall.
- Provide carers and family members with information about managing fall risk to use in their own discussions about falls in hospitals.
- Encourage carers and family to notify staff if the person requires assistance.
- Identify appropriate resources (including workforce and support systems) for people who have a higher risk of falling. Ensure policies are in place and roles are clearly defined.

## Restrictive Practices

Restrictive practices refer to any intervention that restricts the rights or freedom of movement of individuals. Restrictive practices are mechanisms used to control or modify a person's behaviour, including reducing a person's risk of falling. If used, restraints should be the last option considered. The use of physical restraints during hospitalisation has been linked to an increased risk of adverse hospital outcomes.

Mechanical restraints include bed rails, lap belts, tabletops, meal trays and backwards-leaning chairs (or 'stroke chairs') that are difficult to get out of, and possibly bed alarm devices.

If medicines are used specifically to restrain an older person, a minimal dose should be used, and the older person should be reviewed and monitored to ensure their safety. Importantly, chemical restraint must not be a substitute for alternative methods of restraint outlined below.

Hospitals should have clear policies and procedures on the use of restraints aligned with state or territory legislation and guidelines, and the use of restraints must be documented clearly.

#### **Good practice points**

When a person exhibits changed behaviours (i.e. agitation or aggression), assess and respond to any immediate risks to the person or others, including an increased risk of falls.

- Conduct a comprehensive assessment of the person to identify possible causes of changed behaviours. Treat and manage any causes of these behaviours, such as delirium or other unmet needs, including pain, thirst, hunger or feeling hot or cold. Use the Clinical Practice Guidelines for the Management of Delirium in Older People. Non-medication strategies should always be used as the primary strategies for managing changed behaviours. See the Clinical Practice Guidelines and Principles of Care for People with Dementia, the Delirium Clinical Care Standard and the Clinical Care Standard on Psychotropic Medicines in Cognitive Disability or Impairment.
- Use a person-centred behaviour support plan for a person with cognitive impairment, including delirium. If a behaviour support plan is not available, discuss all appropriate behaviour support strategies with the person and their carers, family and substitute decision-maker. Focus on caring for people with changed behaviours by understanding the cause of the behaviour and treating reversible causes.
- Restrictive practices must only be used as a last resort, in the least restrictive form and for the shortest possible time necessary to prevent harm to the person or others. Follow relevant national, local or state policies, procedures and regulations.
- If alternatives to restrictive practices are exhausted in addressing the changed behaviours, discuss options with the person or substitute decision maker, explain the benefits and risks of the restrictive practice to be used and document informed consent. Document the rationale for using restrictive practices, the anticipated duration and criteria for cessation agreed by the health care team.
- Continue non-medication behaviour support strategies in the event a restrictive practice is used.



Hip fractures are usually the result of a fall and are one of the more severe injuries associated with a fall.

Hip protectors are one approach to reducing the risk of hip fracture. They aim to reduce the risk of hip fracture by absorbing or dispersing forces away from the hip if a fall occurs on the hip area. There are three types of hip protectors: soft, hard and adhesive.

Key factors to the success of hip protectors in preventing harm from falls in hospital appear to be the:

- commitment of hospital staff to encourage the use of hip protectors by older people to improve health outcomes, particularly when supported by senior staff, and
- education of hospital staff and the older person as to how to wear hip protectors and the benefits of wearing hip protectors.

- As part of a multifactorial approach, prioritise older people who fall frequently, have osteoporosis or have a low body mass index for consideration of the use of hip protectors to reduce the risk of fall-related fractures.
- Provide information to people and their carers, family and substitute decision-makers to support informed decision-making about the use of hip protectors. Provide training to the workforce, the older person and their carers and family in the correct use and care of hip protectors.

•	When using hip protectors, regularly check that:				
		the person is wearing their hip protectors			
		the hip protectors are in the correct position			
		the hip protectors do not cause pressure on the person's skin that may contribute to pressure injuries			
		the hip protectors do not impact on the ability of the person to toilet independently			
		the person has not stopped wearing the hip protectors because of discomfort, inconvenience or another reason			
		do not share hip protectors among people, as they are a personal garment.			

## Vitamin D and Calcium

Low vitamin D levels are associated with an increased risk of hip fracture resulting from a fall and are significantly more common among older people who are frail, live with dementia, have dark skin (as increased skin pigment reduces the amount of vitamin D production after sun exposure), and who are heavily clothed and veiled (such as for cultural or religious reasons).

Calcium is essential for building and maintaining healthy bones throughout life. When consumed, a small amount of calcium is absorbed into the blood and used for the healthy functioning of the heart, muscles, blood and nerves.

Vitamin D may prevent falls by improving muscle strength and maintaining bone mineral density. Improving calcium and protein intake has also been shown to reduce falls and harm from falls in older people.

Nutrition management can play an important role in fall prevention.

- Monitor older people's nutritional needs, requirements and preferences and refer them to a dietitian if required.
- Facilitate vitamin D supplementation for older people who are unlikely to receive adequate sunlight for vitamin D production.
- Facilitate a review of the older person's diet if dietary calcium intake is insufficient. Calcium supplementation for older people should be restricted to a maximum dose of 500 600 mg of elemental calcium per day. There is concern that calcium supplementation increases the risk of cardiovascular events.



Osteoporosis is a condition that causes bones to become thin, weak and fragile. This occurs when bones lose minerals, such as calcium, faster than the body can replace them.

A small proportion of falls result in fractures, and most fractures occur after falls. For people with osteoporosis or osteopenia (low bone density), fracture risk increases with each additional fall. In these cases, hospital staff should assess the need for bone densitometry and specific antiosteoporosis therapy. Interventions that reduce the risk of falls in older people in hospital may prevent fractures, even if bone density is not low.

Bone mineral density (BMD), quadriceps strength, and postural sway are important measures in predicting fractures in men and women. No therapy is likely to normalise BMD, but small improvements can reduce fracture risk.

#### Recommendation

**Hip fracture care:** Following a hip fracture in an older person, provide post-operative care in a geriatric orthopaedic service with multidisciplinary comprehensive geriatric assessment, management and rehabilitation. (Level 1B)

- Develop strategies for strengthening and protecting the person's bones to reduce bone injuries from falls when appropriate. This includes improving muscle strength, optimising function and improving the safety of the older person's environment.
- Refer people with a history of recurrent falls for bone mineral density testing to identify possible osteoporosis.
- Review the person's medicine regimen to reduce osteoporosis risk (e.g., corticosteroids, longterm anticonvulsant treatment). Alternative medicines may not confer this risk.
- Establish hospital protocols to ensure pathways for intervention and management of bone health in people who have sustained a minimal trauma fracture in partnership with the person's general practitioner. Refer to the fracture liaison service where available.
- Ensure that before a person leaves hospital after a hip fracture, they receive a falls and bone mineral densitometry assessment / Dual Energy X-Ray (DXA) scan and management plan, with appropriate referral for secondary fracture prevention. Involve the person's general practitioner. See the <a href="Hip Fracture Clinical Care">Hip Fracture Clinical Care</a> Standard.
- Communicate any recommendations to the multidisciplinary team involved in the person's care at transitions.

## Post-fall Management

Hospital staff must take all falls seriously, including those falls that result in minor or no injury. Falls may be the first and main indication of another underlying and treatable problem. Older people who fall are also more likely to fall again.

All hospital staff should be aware of:

- what constitutes a fall
- what to do when a person falls
- what follow-up is necessary, including reporting and incident management processes
- the need to reassess the person's fall risk following a fall, and
- the need to implement actions to address the person's fall risk factors to reduce the risk of another fall.

- Provide post-fall response and clinical care to the person immediately after a fall. Complete the relevant immediate intervention, assessment and investigations, as well as increase the frequency of monitoring vital signs and other relevant physiological observations to be recorded on an observation and response chart to match the older person's needs.
- Assess and monitor the patient for signs and symptoms of injury and use local escalation processes as determined by the clinical condition of the person who has fallen.
- Identify, investigate and report the cause and the consequences of every fall. See <u>Hip Fracture</u> Clinical Care Standard where appropriate.

- Complete a comprehensive assessment for every person who has fallen, including a medication review. Inform the multidisciplinary team and update the care plan to address comorbidities and fall risk factors to reduce the risk of another fall. Implement immediate actions to reduce the risk of subsequent falls. Where appropriate, include the person and their carers and family in decision-making to reduce the risk of further falls.
- Conduct an in-depth analysis of every fall event, particularly if there has been a serious injury or death. Analyse falls with a view to informing how changes to organisational practices and policies can prevent falls more broadly.
- Train and educate staff in post-fall management, reporting and documentation.
- Analyse fall data and delirium data to inform how changes to organisational practices can prevent falls.
- At discharge or transitions of care, ensure communication of any in-hospital falls or identification of fall risks with all relevant members of the person's primary health care team and include in the discharge summary, together with information on any interventions, including medication changes. See <a href="Principles for safe">Principles for safe and high-quality transitions of care</a>.

### **Appendix**

### Levels of evidence

The table below outlines the modified GRADE system used in the guidelines to evaluate the strength of evidence of fall prevention interventions. This system is adapted from the 2022 World Falls Guidelines for Prevention and Management of Falls in Older Adults.<sup>3</sup>

	Strength of Recommendation	1	Strong: benefits clearly outweigh undesirable effects.
ons		2	<b>Weak or conditional:</b> either lower quality evidence or desirable and undesirable effects are more closely balanced.
Recommendations	Quality of evidence	A	<b>High:</b> further research is unlikely to change confidence in the estimate of effect.
Reco		В	Intermediate: further research is likely to have an important impact on the confidence in the estimate of effect and may change the estimate.
		С	<b>Low:</b> further research is very likely to have an important impact on the confidence in the estimate of effect and is likely to change the estimate.
Good practice points	In cases where no quality studies are available for interventions likely to have benefits based on expert opinion, good practice points were formulated.		

<sup>3</sup> Montero-Odasso M, van der Velde N, Martin FC, et al. World guidelines for falls prevention and management for older adults: a global initiative. Age Ageing. 2022;51(9).

### AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Level 5, 255 Elizabeth Street, Sydney NSW 2000 GPO Box 5480, Sydney NSW 2001

Phone: (02) 9126 3600

Email: mail@safetyandquality.gov.au Website: www.safetyandquality.gov.au