



Implementation Guide for Preventing Falls and Harm From Falls in Older People

Best Practice Guidelines for Australian Hospitals
and Residential Aged Care Facilities
2009



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The ACSQHC was established in January 2006 by the Australian Health Ministers to lead and coordinate improvements in safety and quality in Australian health care.

Copies of this document and further information on the work of the ACSQHC can be found at <http://www.safetyandquality.gov.au> or from the office of the ACSQHC on +61 2 9263 3633 or mail@safetyandquality.gov.au.

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The guidelines build on earlier work by the former Australian Council for Safety and Quality in Health Care and by Queensland Health. The contributions of the national and international external quality reviewers and the Office of the Australian Commission on Safety and Quality in Health Care are also acknowledged.

Preface

The Australian Commission on Safety and Quality in Health Care (ACSQHC) recognises that falls and fall-related injuries are a significant problem in Australian hospitals, residential aged care facilities (RACFs), and the general Australian community, due to the ageing population, the incidence of falls, and the negative impacts of falls for both individuals and organisations.

As a result, ACSQHC has developed three nationally consistent, evidence-based guidelines that focus on older people in hospital, RACF and community care settings:

- *Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Hospitals 2009*
- *Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Residential Aged Care Facilities 2009*
- *Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Community Care 2009.*

The guidelines are collectively referred to as the Falls Guidelines and are designed to inform clinical practice related to preventing falls and injuries from falls.

This implementation guide is designed for hospitals and RACFs, and is based on the implementation guide developed for the 2005 Falls Guidelines. National consultation in 2008 indicated that the original implementation guide was valued, the methodology on which it was based remained current, and the format and content should be retained. Consultation on the original implementation guide involved consumers, health care professionals and managers of hospitals and RACFs, other key stakeholders, and national peak bodies throughout metropolitan, regional, rural and remote Australia.

The implementation methodology used in this implementation guide does not lend itself to the community setting. A national implementation guide for the community Falls Guidelines is yet to be developed.

The Falls Guidelines outline best practice approaches for preventing falls in the hospital and residential aged care facility settings, including implementing standard falls prevention strategies; identifying falls risk; and implementing falls and injury prevention interventions. Falls prevention programs are most likely to be successful when all these components are implemented.

Falls are a risk for both individuals and organisations. Therefore, falls prevention programs in hospitals and RACFs must address both these aspects concurrently.¹ Successful implementation of the Falls Guidelines in these settings depends on strategic support and influence, as well as *change for improvement* at the point of care. This implementation guide provides a 15-step approach that includes how to plan, implement and evaluate a falls prevention program.

There is no simple approach to fall prevention; however, this implementation guide broadly outlines the steps that can be tailored for use by hospitals and residential aged care facilities that:

- do not have a falls prevention program in place
- have recently initiated a falls prevention program
- have a successful falls prevention program in place.

While some of the steps in the implementation guide will be of assistance to all hospitals and residential aged care facilities involved in a falls prevention program (ie the evaluation steps), others will be more useful for those facilities that are starting a program.

A team approach is required to effectively implement a falls prevention program within a hospital or residential aged care facility. The implementation guide is designed to help teams optimise falls prevention practices in their facility and should be read sequentially, but not used prescriptively or in isolation from existing quality-improvement and change-management processes and resources.

It is strongly recommended that team members possess expertise in data analysis, quality improvement and project management.

This implementation guide is one of a number of support materials that have been developed for use with the Falls Guidelines (see Table 2.1, which lists the resources to support the Falls Guidelines).

See Table 2.1 on page 17

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Introduction

This implementation guide has been developed to accompany the following documents, collectively referred to as the Falls Guidelines:

- *Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Hospitals 2009.*
- *Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Residential Aged Care Facilities 2009.*

This implementation guide is not written specifically for the community setting, although the general principles may be useful for health care professionals, service providers, family and carers in this setting.

The effectiveness of the Falls Guidelines relies on their implementation by hospitals and residential aged care facilities. Consequently, this implementation guide is designed as an adjunct to the Falls Guidelines for use by facility staff. Figure 1 (see page 2) is a diagrammatic representation of how to use the Falls Guidelines in the context of consumer involvement (that is, involving the older person themselves). The outer circle represents the strategic or organisational level. The inner circles represent interventions that can be applied at the point of care.

The implementation guide has three sections:

- Section 1 – Plan (Steps 1 to 6).
- Section 2 – Implement (Steps 7 to 12).
- Section 3 – Evaluate (Steps 13 to 15).

Section 1 (Plan) and Section 2 (Implement) will help hospitals and residential aged care facilities that do not have a falls prevention program in place or have recently started a program. The following steps are relevant for those facilities that have a successful falls prevention program in place:

- Review current clinical practice (Step 6).
- Decide on implementation approaches (Step 7).
- Sustain implementation (Step 12).

Section 3 (Evaluate) will help all hospitals and residential aged care facilities involved in a falls prevention program – regardless of their stage in the process.

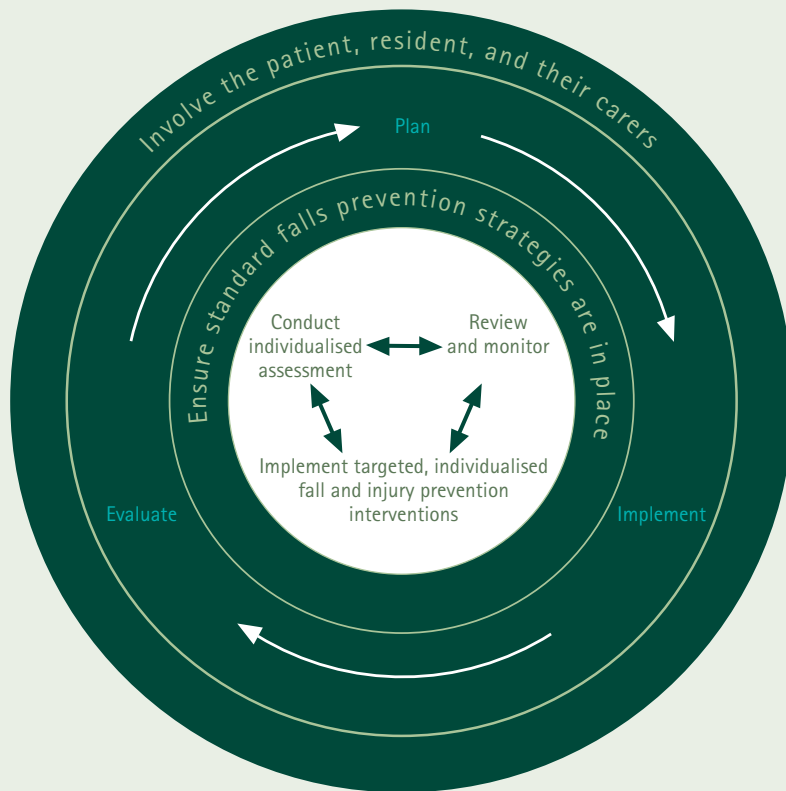
To implement the Falls Guidelines effectively:

- each hospital and residential aged care facility should recognise that falls are a problem worth solving, either reactively or proactively
- resource implications need to be addressed adequately.²

See Figure 1 – Step-by-step guide to preventing falls and harm from falls in older people in Australian hospitals and residential aged care facilities

Figure 1:

Step-by-step guide to preventing falls and harm from falls in older people in Australian hospitals and residential aged care facilities



PLAN

Plan for implementation

- Step 1: Identify teams
- Step 2: Identify, consult, analyse and engage key stakeholders
- Step 3: Assess organisational readiness
- Step 4: Analyse falls

Plan for evaluation

- Step 5: Establish a baseline

Plan for quality improvement

- Step 6: Review current clinical practice

IMPLEMENT

- Step 7: Decide on implementation approaches
- Step 8: Determine process for implementation
- Step 9: Conduct trial
- Step 10: Learn from trial
- Step 11: Proceed to widespread implementation for improvement
- Step 12: Sustain implementation

EVALUATE

- Step 13: Measure process
- Step 14: Measure outcomes
- Step 15: Report and respond to results

DEVELOPMENT OF THE IMPLEMENTATION GUIDE

This implementation guide is based on the 2005 Falls Guidelines implementation guide. A key document that informed development of the 2005 implementation guide was:

- Queensland Government (2002). *Implementation Workbook to Accompany the Fall Prevention Best Practice Guidelines for Public Hospitals and State Government Residential Aged Care Facilities*, Queensland Health, Brisbane.

The following resources were also used:

- Registered Nurses Association of Ontario (2002). *Implementation of Clinical Practice Guidelines Toolkit*, Registered Nurses Association of Ontario, Toronto.
- National Health and Medical Research Council (1998). *Guide to the Development, Implementation and Evaluation of Clinical Practice Guidelines*, National Health and Medical Research Council, Canberra.
- Langley G, Nolan K, Nolan T, Norman C, Provost L (1996). *The Improvement Guide: A Practical Approach to Enhancing Organisational Performance*, Jossey-Bass, San Francisco.

See Appendix A –
Implementation action
plan template

HOW TO USE THIS IMPLEMENTATION GUIDE

For ease of reference, a number of coded text boxes have been included. Each refers the reader to information as outlined below.



Good practice point

These boxes indicate good practice points. They recommend good practice based on clinical experience or expert consensus.



Point of interest

These boxes indicate points of interest. Most points of interest were drawn from the Australia-wide consultation process or from grey literature (conference proceedings, etc).



Case study

These boxes indicate case studies. These case studies provide information on likely scenarios, which are used as illustrative examples.

Cross reference –
Cross references in the
margins direct readers
to other sections
of the implementation
guide with similar
or supplementary material.

TOOLS AND APPENDICES

A series of tools are included at the end of each section of the implementation guide to help with each stage of the implementation process.

Additionally, a number of appendices provide general resources that can be used throughout the implementation process. An action plan template is included as a way for facility staff to work through the 15 steps detailed within this implementation guide (see Appendix A).

IMPLEMENTING CLINICAL PRACTICE GUIDELINES

Clinical practice guidelines improve processes of care and clinical outcomes.^{2,3} However, integrating clinical practice guidelines into everyday clinical care remains complex and, at times, problematic. Research in this field is in its infancy and continues to expand.² The following two case studies – one from Australia and one from the United States – outline the results from implementing clinical practice guidelines related to falls prevention.



Case study

AUSTRALIA

Through its quality-improvement and enhancement program, Queensland Health developed *Fall Prevention Best Practice Guidelines for Public Hospitals and State Government Residential Aged Care Facilities* (referred to as Queensland Health falls prevention guidelines).

These guidelines have been implemented across Queensland health care facilities since 2001 and were one of the key documents that informed the development of the 2005 Falls Guidelines – upon which the 2009 Falls Guidelines are based. The key findings from Queensland Health's experience with implementing the Queensland Health falls prevention guidelines were as follows:

- Engaging health care professionals is critical to success.
- A multidisciplinary approach is essential.
- A general readiness to change exists; however, timing is critical.
- Leadership is fundamental to success and sustainability.
- Interventions or changes should be kept simple and practical.
- Health services are busy and have a diverse workforce.



Case study

UNITED STATES

The following strategies were used to implement clinical practice guidelines for reducing falls in long-term care facilities in the United States:⁴

- Education and encouragement is essential, including an overview of guidelines and how they will be implemented.
- Establish responsibilities.
- Set examples, including reviewing with staff examples of effective intervention studies, reviewing falls, highlighting successes, and identifying positive impacts of implementation
- Provide regular updates of progress, encourage staff and review progress.

Findings from implementation of these guidelines identified the following:

- Challenges to implementation included staff education; getting staff 'buy-in'; dealing with staff turnover and temporary staff; accountability of staff; workload, assessment and documentation issues; and the ongoing maintenance of the program once it was initiated.
- Benefits of implementation included better assessments, improved documentation, improved care, and decreased number of falls.
- Recommendations to help with implementation included keeping guidelines short with user-friendly tools; support of clinical champion; and having a supportive team that included administrative staff, a medical director and clinical staff.

1 Plan



Good practice point

Establish the support processes necessary within hospitals and residential aged care facilities to prevent falls and harm from falls within a continuous quality improvement framework.

Time spent in planning and preparation is necessary to set the stage for implementing the Falls Guidelines. Planning the implementation of the Falls Guidelines should be based on three fundamental questions:

- *What is to be accomplished?*⁵
Clear identification of goals or targets is important. While the result may be preventing falls and harm from falls, there may be intermediate steps.
- *What changes can be made that will result in improvement?*⁵
The recommendations and good practice points within the Falls Guidelines outline clearly what changes can be made to prevent falls.
- *How will it be known whether a change is an improvement?*⁵



Point of interest

Goals need to be SMART (**s**pecific, **m**easurable, **a**chievable, **r**ealistic and **t**imely).

PLAN FOR IMPLEMENTATION

Step 1: Identify teams

Because there are multiple fall risk factors and interventions, a team approach is required to implement falls prevention practices effectively within hospitals and residential aged care facilities (RACFs). Teams are needed for implementation at both strategic and point-of-care levels.

Strategic-level teams are responsible for undertaking tasks including:

- identifying, consulting, analysing and engaging key stakeholders (Step 2)
- assessing organisational readiness (Step 3)
- identifying team at the point of care
- providing oversight (guidance, direction and monitoring) of team at the point of care
- ensuring appropriate allocation of resources (time, staff and finance)
- ensuring that barriers to successful functioning of the team at the point of care are removed or minimised⁶
- evaluating process and outcome measures on an ongoing basis and responding to results (Steps 13-15)
- sustaining improvements at the point of care
- spreading improvements across the facility.

Membership of a strategic-level team consists of high-level management.⁶ Alternatively, a high-level manager may be an executive sponsor to a team at the point of care.

Teams at the point of care are multidisciplinary (including health care professionals, consumers and nonclinical staff). Their responsibilities include:

- analysing falls (Step 4) to identify priority areas for implementation
- conducting trial (Step 9)
- learning from trial (Step 10)
- reporting (to the strategic-level team) the barriers to successful team functioning and results from the trial.

At least one team member should be trained in quality-improvement methodology, and the chairperson should be trained in the facilitation of teams. A team should ideally consist of five to nine members.⁶

Depending on local factors (such as the size of the hospital or residential aged care facility), teams may either be established or integrated into the role of existing and relevant teams (eg patient safety or quality improvement).

Local clinical experts may also be identified to 'champion' falls prevention at both strategic and point-of-care levels.

Step 2: Identify, consult, analyse and engage key stakeholders

Engaging key stakeholders from the outset is important. Key stakeholders are those people or groups with a particular interest in preventing falls in a hospital or RACF.²



Point of interest

Key stakeholders may:⁷

- be directly or indirectly affected by the implementation of the Falls Guidelines
- have an impact (positive or negative) on the implementation process
- be internal or external to the hospital or RACF
- include staff from all disciplines and levels of seniority, as well as consumers.

Consultation can be done in a number of ways, including focus groups, interviews, open forums or written surveys. During the consultation process, relevant information to be collected includes:

- what, if any, falls prevention practices exist
- how falls are currently recorded
- key stakeholder awareness or involvement in related initiatives or practices
- key stakeholder interest and reaction towards implementing a falls prevention program.

Analysis of the information obtained from consulting key stakeholders should occur in a timely manner. It will help to identify:

- the potential for cooperation, or potential for threat; and the level of support or influence
- level of support or influence.

It is important to consult key stakeholders regularly, because changes in support and influence can occur over time.²

Step 3: Assess organisational readiness

To ensure implementation of the Falls Guidelines, it is essential to have an understanding of the hospital or RACF's readiness for change. Given that each facility will differ, there is no one simple approach to this assessment. However, it may be useful to consider the barriers and facilitators.² Because of the complexity of most facilities, it is unlikely that the responses provided within an assessment of organisational readiness for change would be simply 'yes' or 'no'.²



Good practice point

When planning how to implement the Falls Guidelines, include time for evaluating how well the guidelines are implemented, so that progress can be measured.

Planning for evaluation will ensure that the right information is collected about how well the guidelines are implemented. It will also help to ensure that this information is collected from the start and along the way, and it is used in a meaningful way.

Quality-improvement initiatives can be informed by many sources of qualitative and quantitative information. Evaluation methodology must be developed after considering what skills, resources and datasets are available.

See Appendix D –
Sample staff survey

Step 4: Analyse falls

Teams at the point of care require both qualitative and quantitative data to investigate the local causes of falls.

The following diagnostic tools may be used:

- cause-and-effect diagrams
- pareto charts (simple bar charts that are used to rank information, so priorities can be assigned)
- statistical process control charts (which plot the relevant data against time).

A range of texts provide more information on these diagnostic tools, including Scholtes PR, Joiner BL, Streibel BJ (2000). *The Team Handbook*, 2nd ed, Griel Inc, Madison.

Review of existing incident forms detailing falls will provide baseline data for evaluation. Reviewing such forms will also help to identify contributory factors and hence priority areas for implementation. For example, it might be established that a person fell because of a combination of the following factors:⁷

- they were wearing inappropriate footwear
- they were unsafe when mobilising or transferring
- they were taking a psychoactive medication
- their vision was impaired, limiting their ability to see obstacles.

Review of the incident report may reveal that, despite having a range of risk factors, the person was not assessed for their fall risk.⁷



Good practice point

Systematic and consistent recording of all fall incidents is required.

See the Evaluation supplement

See Part E of the Falls Guidelines (Responding to falls) for the recommended minimum dataset for reporting falls incidents in facilities

See Section 3 – Evaluate, and the Evaluation supplement

See Step 3 – Assess organisational readiness

Step 5: Establish a baseline

Baseline data of key indicators identify current performance. They can also be useful in articulating future goals. For example, if the fall rate is known for a particular facility, ward or unit over a particular time period, a goal can be to reduce this rate. Furthermore, a baseline is used to monitor trends over time. Rates can also be used to compare one organisation or unit with another (a process called *benchmarking*; see Glossary).

For accurate data, at least five or six baseline datapoints are required.⁸ These should include both process and outcome indicators.⁹ *Process indicators* are used to monitor the process of implementation, while *outcome indicators* are used to monitor the effects of implementation (see Glossary).

Comprehensive information on indicators is presented in Section 3 – Evaluate.

The answer to the question, 'How will it be known whether a change is an improvement?', needs to be considered so that all relevant information is collected.

PLAN FOR CONTINUOUS QUALITY IMPROVEMENT

Step 6: Review current clinical practice

Clinical practice must be reviewed continuously to ensure currency of approach. Recommendations and good practice points within the Falls Guidelines can be used to direct efforts, according to how 'ready' each organisation or health setting is to respond to change.



Good practice point

In any stage of implementing a falls prevention program, hospitals and RACFs should regularly review their clinical practice as part of the continuous quality-improvement process. This should involve reflection and review of current practice against identified best practice. Changes should be made as indicated.

Changes to clinical practice should be integrated into existing and relevant systems, such as admission and discharge procedures. There may also be potential to link into community and public health strategies. This will benefit older people in their transition from hospital to the community, and provide ongoing support and reinforcement for falls prevention interventions that were started during hospitalisation.

The following section provides tools for planning how to implement the Falls Guidelines in a hospital or RACF.

Planning tools

TOOL P1

Team membership⁷

Name	Role	Position in organisation	Contact details
1	(Chairperson)		
2			
3			
4			
5			
6			
7			
8			
9			

TOOL P2

Meeting protocol for teams⁷

Issue	Decision
How often will meetings be held?	
What times will the meetings start and finish?	
Where will the meetings be held?	
What materials are needed?	
What should the agenda include?	
Who will take the minutes?	
Who else should be involved?	
What else needs to be considered?	

TOOL P3

Procedures for team decision making⁷

Issue	Procedure	Who is responsible?
What is the usual procedure for making decisions (consensus, majority vote, final say, etc)?		
What procedure will be followed if agreement cannot be reached?		

TOOL P4

Key stakeholder information⁷

Issue	Decision
Who are the internal stakeholders?	
How will they be consulted?	
When and how often will they be consulted?	
Which team member are responsible for consultation with internal stakeholders?	
Who are the external stakeholders?	
How will be they be consulted?	
When and how often will they be consulted?	
Which team member(s) are responsible for consultation with external stakeholders?	

TOOL P5

Falls prevention interventions currently in use⁷

Issues	Response
<p>What interventions are staff currently using to reduce the risk of falls and fall-related injuries? Are these interventions effective? Examples include:</p> <ul style="list-style-type: none"> • using standard falls prevention strategies • assessing and identifying high-risk patients or residents • assessing the environment for hazards • flagging high fall risk patients or residents • reviewing medication • reviewing footwear • developing physical activity programs • managing continence • revising the use of restraints • providing hip protectors • reviewing mobility and walking aids • using observation and surveillance measures, as appropriate • educating the patient or resident • educating staff and members of the health care team (including carers) • referring the older person, patient or resident to other health care professionals (eg a podiatrist for foot problems). 	

TOOL P6

Methods for implementing falls prevention interventions⁷

Issues	Response
Which staff implement falls prevention interventions?	
Are these staff the most appropriate?	
Which patients or residents are targeted for falls prevention interventions?	
How is this determined?	
When are falls prevention interventions implemented (eg is this done on admission or only after a fall)?	
Are interventions reviewed routinely? If so, how often?	
What training is provided to staff about falls prevention?	
When is this done?	
Which staff receive this training?	
In general, do staff feel that the interventions are working? If not, what could be improved?	

TOOL P7

Current methods for recording fall-related incidents⁷

Issues	Response
When is falls documentation recorded (eg only for falls that result in major injury or for all falls)?	
How is this information recorded (eg computer database, paper record)?	
Who currently completes the documentation of falls?	
What information is currently recorded (eg location of falls, injuries, time of fall, activity at time of fall, previously identified as high-risk faller)?	
What is done with this information?	
Is this information collated and reviewed to identify problem areas? If so, who does this?	
Is this information fed back to staff? If so, how and when is this done?	

TOOL P8

Analysis of key stakeholder consultation²

List key stakeholders						
What is their current interest or activity in falls prevention? (Identify existing opportunities or threats)						
Do they have high or low influence?						
Do they offer high or low support?						
Management strategies (ie how to engage key stakeholders and address identified opportunities or threats)						
Other comments						

TOOL P9

Organisational readiness worksheet²

Element	Question (to be decided locally)	Opportunities	Barriers	Comments
Structural supports (including decision-making processes, staffing practices, workload patterns and physical facilities)				
Workplace culture (values, attitudes and beliefs) towards change in clinical practice				
Communication systems and processes (formal and informal) that are available and accessible for information exchange				
Leadership support (visible and behind the scenes) at all levels to promote, facilitate and enable facilitation				
Staff knowledge, skills and attitude or motivation towards adopting new ideas and practices				
Commitment to use of quality-improvement processes, including systems to monitor or measure and feed back results of implementation				
Availability of resources (human, physical and financial) to support implementation				
Use of multidisciplinary approaches towards clinical practice improvement				

TOOL P10

Facility fall rates⁷

Issue	Response
How many falls have occurred in the facility in the past 12 months?	
Look at the number of falls, month by month. Which month(s) have the highest fall incident rates?	
Why might this have happened?	
Hospitals Work out the rate of falls using the following formula, which calculates the number of falls per 1000 occupied bed days: (Total number of falls in 12-month period ÷ total occupied bed days in 12-month period) × 1000	= _____ falls per 1000 occupied bed days
Residential aged care facilities Work out the rate of falls using the following formula, which calculates the number of falls per 1000 occupied bed days: (Total number of falls in 12-month period ÷ total occupied bed days in 12-month period) × 1000	= _____ falls per 1000 occupied bed days
How many of the falls reported occurred in patients or residents who experienced multiple falls? What percentage of all falls reported occurred in these multiple fallers?	_____ %

TOOL P11

Areas with highest fall rates⁷

Which ward or area have the highest fall rates?

TOOL P12

Places where falls occurred⁷

Places where falls occurred	Number of falls	Percentage of total falls (%)
How many falls occurred in bedroom areas?		
How many falls occurred in toilet areas?		
How many falls occurred in bathroom areas?		
How many falls occurred in hallways?		
How many falls occurred in other areas? Where were they?		

TOOL P13

Activities when falls occurred⁷

Activities undertaken at time of falls	Number of falls	Percentage of total falls (%)
Transfer to or from bed		
Transfer to or from chair		
Toileting (transfers on/off or during toileting)		
Other transfer (eg wheelchair)		
During ambulation		
Using a commode		
While showering		
Other bathroom activities		
Faint or fit		
Other activities (list)		

TOOL P14

Injuries resulting from falls⁷

Injuries resulting from falls	Number of injuries	Total injuries resulting from falls (%)
Death		
Fracture – neck of femur		
Fracture – other		
Lacerations		
Abrasions		
Bruising		
Other injuries (list)		
No injury sustained or recorded		

TOOL P15

Factors contributing to falls⁷

Other (list)									
Impaired vision/ hearing									
Malnutrition									
No hip protectors									
Restraints/bedrails									
Incontinence									
Lack of exercise									
Reduced mobility/ transfers									
Inappropriate footwear									
Medications									
No environmental assessment									
No risk assessment									
	Fall no ___	Fall no ___	Fall no ___	Fall no ___	Fall no ___	Fall no ___	Fall no ___	Fall no ___	Fall no ___

2 Implement



Good practice point

- Guideline implementation needs to be based on planning (including local needs and issues) and on evidence of what works.
- Use a trial and learning approach to implement guidelines.

The process of putting the Falls Guidelines into practice should occur through a combination of informed decision making and a *trial and learning approach* (see Glossary).⁶

Each hospital and RACF is different, with unique wards and units. Therefore, it is only possible to provide general guidance because what works in one setting or situation may not work in another.

Step 7: Decide on implementation approaches

At first, it may be too difficult to address falls prevention in its entirety. In these cases, it is helpful to:

- narrow the initial focus of implementation and prioritise efforts; reviewing falls incident forms may be useful when prioritising⁷
- be opportunistic and take advantage of an organisational facilitator.

A comprehensive, multifactorial and multidisciplinary approach to falls prevention should be the long-term aim.¹⁰

See Step 3 – Assess organisational readiness



Point of interest

Start work on the high-priority areas first, and when these interventions are established and working well, pay attention to lower priority areas.⁷

The following strategies are likely to result in moderate improvements in care when implementing guidelines:⁹

- Use reminders that are specific to the patient or resident (or to the individual situation). The reminders should include information provided verbally, on paper or on a computer screen to prompt a health professional to recall information.
- Use patient-directed interventions where older people are encouraged to influence service providers.
- Provide educational outreach, in which a trained person meets targeted providers in their practice setting and explains the desired change.
- Distribute educational materials, including printed, audiovisual or electronic information.
- Audit progress and provide feedback that uses summaries of clinical performance over a specified period to increase the target group's awareness of their practice and that of others.

See Tool P15 – Factors contributing to falls

Multifactorial approaches with a theoretical basis and assessment of potential barriers to change may be more effective than single interventions in some settings (eg hospital and residential aged care facilities),⁹ although some single interventions (exercise programs, vitamin D with calcium supplementation) are effective in the RACF setting for certain groups.¹¹ This information can be used to guide decision making within local contexts, taking into account resource availability, and practicality and acceptability to patients, residents and staff.

Table 2.1 lists the other resources that support the implementation of the Falls Guidelines.

Table 2.1 Resources to support the Falls Guidelines

Resource	Suggested use	Audience
<p><i>Guidebook for Preventing Falls and Harm From Falls in Older People: Australian Residential Aged Care Facilities 2009. A short version of Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Residential Aged Care Facilities 2009</i></p> <p>and</p> <p><i>Guidebook for Preventing Falls and Harm From Falls in Older People: Australian Hospitals 2009. A short version of Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Hospitals 2009</i></p>	Information and education	All staff
<p>Brochures:</p> <p>Hospitals: <i>Fall Prevention: Information for Patients and Carers</i></p> <p>Residential aged care facilities: <i>I Want to Stay Independent:</i> <i>Slips, Trips and Broken Hips are not for Me</i></p>	Information and education	Patients, residents, and their family and carers
<p>Fact sheets:</p> <p>Fall facts for doctors</p> <p>Fall facts for nurses</p> <p>Fall facts for allied health professionals</p> <p>Fall facts for support services</p> <p>Fall facts for health managers</p>	Information and education	All staff

Step 8: Determine the process for implementation (plan, do, study, act)⁷

The 'plan, do, study, act' cycle of continuous quality improvement informs Steps 8-11 of this implementation guide. Determining the process for implementation involves defining what will occur, who is responsible, how it will occur, where it will occur and when it will occur. Certain disciplines will be better qualified and positioned to implement and manage particular strategies.



Example: Hip protectors⁷

If hip protectors are to be used in a hospital or residential aged care facility, the following questions need to be answered:

- Who will prescribe them?
- Who will order them?
- Who will fit them?
- Will the patient or resident have to purchase their own or will they be supplied?
- Where will they be stored?
- How will compliance be monitored?
- How will they be laundered?
- Who will provide education to the patient or resident about the purpose of the hip protectors, and how they should be worn and cared for?
- What education will be provided to staff about these issues?
- Who will provide this education?



Example: Risk assessment documentation⁷

The results of any falls risk assessments undertaken and the interventions selected to minimise a patient or resident's risk need to be documented clearly. This information needs to be recorded in a place where all staff can access it readily. Consider the following:

- If this information is to be recorded in the patient or resident's medical record, where will it be documented?
- Will assessment forms be filed in the medical record and if so, where?
- If assessment forms are not filed in the medical record, how will this information be available to all staff?
- Where will the interventions selected to minimise the patient or resident's fall risk be documented?
- How will these interventions be communicated to staff, patients or residents, and their families or carers?

Step 9: Conduct trial (plan, do, study, act)

At this stage, teams at the point of care may trial various ways of implementing the recommendations and good practice points within the Falls Guidelines. It is important to undertake trial on a small scale (before the widespread rollout) to ensure that implementation is suited to the local context.⁶ The duration of the trial will depend on the extent of the change involved and is best determined locally. Data on the impact of changes should be collected during the trial so they can be analysed when the trial is finished.⁶ Trials of change associated with implementation may occur more than once, taking on board refinements from previous trials as necessary.

Step 10: Learn from trial (plan, do, study, act)

When the trial finish, teams at the point of care will gain the necessary information to be able to make decisions on how to best implement the recommendations and good practice points within the Falls Guidelines, and what is required for their ongoing implementation and spread across the facility. Data that have been collected from the trial should be shared with the strategic-level team within the context of what has been learnt regarding the following:⁶

- what worked
- what did not work
- what needs to be changed
- what should be kept.

Depending on the results from the trial, the strategic-level team will decide whether further trial are needed (ie where there is no improvement or minimal improvement), or whether to sustain the improvement made at the point of care, or spread the improvement across the facility.

Step 11: Proceed to widespread implementation for improvement (plan, do, study, act)

After a trial has improved falls rates at the point of care, the next step is to make the changes a permanent part of normal care and service delivery across the facility. This step needs the leadership of the strategic-level team, because this is the most difficult step of the process, and because implementation will be on a larger scale and be permanent. Relevant support processes need to occur concurrently with implementation, including:⁶

- standardisation of work practices and processes by including them in existing policies and procedures, or by developing additional policies and procedures
- documentation to support work practices and processes (eg tools, pathways)
- training and education of staff to ensure knowledge and skill, as well as creating a supportive workforce culture.

Step 12: Sustain implementation

See Section 3 – Evaluate

Implementation needs to be sustained to maintain improvements at the point of care and across the facility. Regular measurement, monitoring, review and reporting of progress is a way of maintaining improvement, in addition to the support processes of standardisation, documentation, training and education.⁶ It is important for staff to celebrate achievements and the improvements that have been made and sustained.



Point of interest

Sustainability of falls prevention programs is an important and ongoing issue that requires monitoring, particularly within the context of other priorities and after fall rates reduce.



Implementation tools

TOOL I1

Processes for implementing the falls prevention interventions chosen⁷

Intervention chosen	
Who is responsible for implementing the intervention?	
Who has responsibility for overall coordination of the intervention?	
How will the intervention be implemented?	
When will the intervention be implemented?	
How will this be communicated to others?	

TOOL I2

Trial report template – falls prevention implementation report¹²⁻¹⁴

Title	The name of quality-improvement initiative being trialled
Name of reporter	The name of the person who wrote and submitted the report.
What is the report about?	A brief sentence about trial initiative.
Why was this trial done?	Provide any specific reasons for undertaking this initiative.
When did the trial begin?	
How long did the trial take?	
What was the aim of the trial?	Outline what the initiative was trying to do or achieve.
Who was being targeted?	Which people was the initiative for?
Who was involved?	
What was done?	Provide details about how the initiative was implemented.
What was found?	Outline the outcomes achieved, including what changed or did not change.
What worked well?	
What did not work well?	
What can be learnt from the trial?	
What is going to happen as a result of the trial?	Outline recommendations for what happens next (ie will the initiative be implemented more widely; will it be changed and trialled again; etc).

3 Evaluate



Good practice points

- Regularly monitor, review, measure and report on progress of implementation.
- Use regular evaluation of the progress of implementation as the basis for continuous quality improvement.
- Use process indicators (used to monitor the process of implementation) and outcome indicators (used to monitor effects of implementation).

Planning for evaluation should have begun from the outset of implementing the Falls Guidelines, and should be logical and sequenced. For example, while the long-term goal may be to prevent falls and reduce costs associated with falls, a statistically significant reduction may not be evident in the short term.

Evaluation is an ongoing process that measures both the process and the outcomes of implementation and has a role to play in sustaining improvement. Sound evaluation will also provide meaningful information and data for accreditation purposes, as well as being used in strategic and point-of-care planning processes.



Point of interest

Outcome indicators will provide information about the end point, but they do not necessarily provide information on how an intervention was put into place. For this, process indicators are required. *Process indicators* are useful for measuring progress in the short term – something that is helpful in maintaining the motivation of the workforce in achieving the longer-term outcome, which is to prevent falls.

See Step 12
– Sustain implementation

Step 13: Measure process (implementation operation)

Before assessing the *outcomes* of implementation, it is important to assess the *process* of implementation. This is because the desired results from implementation cannot be realised unless implementation is occurring as planned.¹⁵ Recommended process indicators include:

- percentage of staff trained in falls prevention
- percentage of patients or residents assessed for falls risk
- percentage of patients, residents and staff satisfied with the falls prevention program
- use of falls prevention and injury prevention interventions.

A range of tools can be used to measure progress, including surveys, observation and focus groups. Existing tools and processes should be used whenever possible (rather than developing new ones), and both quantitative and qualitative data should be collected.

See the
Evaluation supplement

When process measurements indicate that implementation is functioning well, the outcomes of implementation can be assessed.¹⁵ A scaled-down version of process evaluation should continue to ensure that implementation is still occurring as planned.¹⁵

Step 14: Measure outcomes (implementation performance or effects)

If process indicators from Step 13 show that implementation is functioning well, the effects of the implementation can be assessed. Measuring outcomes over time helps determine whether the desired results are being achieved and sustained.

Recommended outcome indicators include:

- incidence of falls
- percentage of multiple fallers
- severity of injuries from falls.

Often, improvements in outcome indicators are not seen in the short term. Instead, an initial increase in reported falls can occur due to greater staff awareness and improved incident-reporting processes.⁷

Reporting falls is voluntary. Therefore, falls may be under-reported, depending on the culture of the hospital or residential aged care facility. In this instance, measures may need to be considered to improve reporting, such as anonymous reporting, and ensuring a workplace culture where incident reports are used for improvement and not to apportion blame. An increase in the number of falls can also be due to random variation.

It is important to consider which factors to monitor so that, when attempting to improve one area of care, another area of care does not become worse.⁸ For example, check that restraint use is not increasing, or that patients or residents are not being discouraged from physical activity in misguided attempts to reduce falls by being less mobile.

See the
Evaluation supplement

Step 15: Report and respond to results

Results from the analysis of process and outcome indicators need to be fed back to staff and management in an ongoing, timely and easily understood manner, for discussion and action. Reporting on the total number of falls and fallers (rather than a rate per 1000 bed days) may be more meaningful to staff at a ward or unit level to drive and maintain change for falls prevention.¹⁶ Rates are more appropriate when making comparisons between facilities.

As part of continuous quality improvement, results of the evaluation may require a response, such as the need for further 'plan, do, study and act' cycles.



Evaluation supplement

HOW WILL IMPROVEMENTS BE DETECTED?

To know whether there has been an improvement, the standard error (SE) of the number of falls or the fall rate must be known. A change in the number of falls or the fall rate must be greater than two times the SE ($2 \times \text{SE}$) to be statistically significant.



Point of interest

The magnitude of the change in the number of falls or fall rate due to random variation can be larger than the effect of a falls prevention program, and therefore conceal the 'true' change.

RATE OF FALLS

It is important to know the rate of falls before calculating the SE:

Rate of falls = (number of falls/number of bed days) \times 1000

Example

For a facility with 49 falls in 7000 bed days, the falls rate is:

Falls rate = $(49/7000) \times 1000 = 7$ per 1000 bed days

STANDARD ERROR

To estimate how precise the indicators are, the standard error (SE) is used:

- SE for the number of falls:
 - $\sqrt{\text{number of falls}}$
 - *Example:* the SE for 49 falls is $\sqrt{49} = 7$
- SE for the rate of falls (per 1000 bed days):
 - (SE number of falls \div number of bed days) \times 1000
 - *Example:* the SE for 49 falls in 7000 bed days is $(\sqrt{49}/7000) \times 1000 = 1$.

The number of falls in the above example could vary by chance from 36–64 falls.*

The rate of falls in the above example could vary by chance from 5–9 falls per 1000 bed days.†

* Number of falls $\pm (2 \times \text{SE}) = 49 \text{ falls} \pm 14 = 36\text{--}64$ falls

† Rate of falls $\pm (2 \times \text{SE}) = 7 \pm 2 = 5\text{--}9$ falls per 1000 bed days

Statistical expertise should be sought and used where appropriate.

A hierarchy of evaluation measures (consisting of process and outcome indicators) follow.

Each level links to a goal and evaluation question:

- Level 1: Increase awareness and knowledge.
- Level 2: Change behaviour or clinical practice.
- Level 3: Change organisational approach.
- Level 4: Change outcomes.
- Level 5: Sustain change and benefits.

Level 1: Increase awareness and knowledge

Goal: To increase staff awareness in:

- (a) falls risk assessment
- (b) falls prevention
- (c) injury prevention interventions.

Evaluation question 1: What percentage of staff are trained in terms of (a), (b) and (c)?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Staff trained in (a), (b) and (c) per number of staff requiring training	Total number of staff trained in (a), (b) and (c)	Total number of staff that should be trained in (a), (b) and (c) as identified by organisational training requirements

Staff knowledge can be assessed before and after the intervention.

Level 2: Change behaviour or clinical practice

Goal: To increase the use of:

- (a) risk assessment
- (b) falls prevention
- (c) injury prevention interventions.

Evaluation question 1: What percentage of patients or residents are assessed for falls risk?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Patient or residents assessed for fall risk per number of eligible patients or residents	Total number of assessments	Total number of eligible patients or residents (criteria to be identified at an organisational level)

This information can be collected by a retrospective chart audit over a specified time period.

Evaluation question 2: What percentage of patients or residents assessed have a high risk of falling?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Patients or residents identified as high falls risk per number of completed risk assessments	Total number of patients or residents identified as high falls risk	Total number of completed risk assessments

Evaluation question 3: What is the use of falls prevention intervention X?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Use of falls prevention interventions	Total number of patients or residents where falls prevention intervention X is used	Total number of completed falls risk assessments

Evaluation question 4: What is the use of injury prevention intervention Y?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Use of primary interventions	Total number of patients or residents where injury prevention intervention Y is used	Total number of completed falls risk assessments

Level 3: Change organisational approach

Goal: To implement a falls prevention program that is satisfactory to patients or residents and staff.

Evaluation question 1: What percentage of wards or units have started a falls prevention program?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Implementation of falls prevention programs	Total number of wards or units starting a falls prevention program	Total number of wards or units

Evaluation question 2: What percentage of wards or units are sustaining a falls prevention program at Z months?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Sustaining a falls prevention program at Z months	Total number of wards or units sustaining a falls prevention program	Total number of wards or units

These are useful indicators to monitor organisational implementation and sustainability of processes.

Evaluation question 3: How satisfied are patients, residents or staff with the falls prevention program?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Percentage of patients, residents or staff satisfied	Total number of people satisfied	Total number of people surveyed

This is a useful indicator that can be measured using information from surveys and questionnaires.

Level 4: Change outcomes

Goal: To reduce the incidence and severity of falls.

Evaluation question 1: What is the incidence of falls?

Facility	Unit	Numerator	Denominator
Hospital and residential aged care facility	Falls per occupied bed days ^a	Total number of falls during the time period under study	Total number of occupied bed days during the time period under study
Hospital and residential aged care facility	Falls requiring intervention (therapeutic treatment, diagnostic procedures and increased nursing care or monitoring) per occupied bed days	Total number of falls requiring intervention during the time period under study	Total number of occupied bed days during the time period under study
Hospital	Falls in people aged 65 years and older per occupied bed days of people aged 65 years and older	Total number of falls in people aged 65 years and older during the time period under study	Total occupied bed days of people aged 65 years and older during the time period under study

^a This number can be measured by reviewing incident forms, preferably over the previous 12-month period. The formula to be used to calculate a rate is $(\text{numerator} \div \text{denominator}) \times 1000$. The rate per 1000 bed days will standardise data

across units, facilities and time periods, making comparisons easier. The limitation of this indicator is that, in some facilities, there may be a small cohort of patients or residents who fall more than once and therefore distort the information.

Evaluation question 2: What is the percentage of people who have fallen?

Facility	Unit	Numerator	Denominator
Hospital	Percentage of patients who fall	Total number of individual patients who fall during the time period under study	Total number of individual patients (admissions) during the time period under study
Residential aged care facility	Percentage of residents who fall	Total number of individual residents who fall during the time period under study	Total number of individual residents during the time period under study

This takes into account the fact that some people may fall more than once, and is a more sensitive indicator for long-stay units with high-risk populations.

Evaluation question 3: What percentage of people who fell, fell more than once?

Facility	Unit	Numerator	Denominator
Hospital	Percentage of patients who had multiple falls	Total number of patients who had two or more falls in the same admission	Total number of patients who had a fall during the time period under study
Residential aged care facility	Percentage of residents who had multiple falls	Total number of residents who had two or more falls during the time period under study	Total number of residents who had a fall during the time period under study

Evaluation question 4: What was the severity of injuries due to falls?

Facility	Unit	Numerator	Denominator
Hospital	Injurious falls requiring increased length of stay per 1000 occupied bed days	Total number of patients who fell and had an injury or disability from the fall resulting in extra length of stay	Total occupied bed days during the time period under study
Residential aged care facility	Injurious falls per occupied bed day	Total number of residents who fell and had an injury or disability from the fall during the time period under study	Total occupied bed days during the time period under study



Point of interest

- The Falls Guidelines use the Prevention of Falls Network Europe (ProFaNE) definition of an *injurious fall*. They consider that the only injuries that could be confirmed accurately using existing data sources are peripheral fractures – defined as any fracture of the limb girdles and of the limbs. Head injuries, maxillo-facial injuries, abdominal, soft tissue and other injuries are not included in the recommendation for a core dataset.
- However, other definitions of an injurious fall include traumatic brain injuries (TBIs) as a fall-related injury, particularly as falls are the leading cause of TBIs in Australia (representing 42% of TBI-related hospitalisations in 2004–05).¹⁷

See <http://www.propane.eu.org>

Level 5: Sustain change and benefits

Goal: To achieve sustainability of falls prevention programs or initiatives.

The evaluation questions in Tool E1 (Sustainability checklist; see below) should be asked at predetermined times. These are simple yes/no questions that indicate the ongoing commitment and survival of a falls prevention program at an organisational level.

Tool E1 Sustainability checklist

Issues	Response (Yes/No)
Does fall risk assessment screening continue to be a part of the admission process to the unit or facility?	
Is information on best practice in falls prevention included in the orientation of new staff or included as a part of an ongoing training or education program?	
Are falls incident reporting, monitoring and action processes in place?	
Is there evidence that falls prevention and injury prevention interventions are in place?	
Is falls prevention included as a standing agenda item on relevant management or executive committees, or does a specialised falls prevention committee meet on a regular basis?	



Case studies

HOSPITAL

The Jacaranda Hospital has 162 beds and is located in an outer suburb of a major city. Services provided include a general medical and surgical ward, elective orthopaedic services, and a 28-bed geriatric and rehabilitation unit. In 2002, falls were the most common reason for completing a falls incident form and accounted for approximately 60% of all patient-related incidents. A falls committee was established with the support of the district executive. Representation for this committee was sought from across the hospital, and included interested parties from nursing, geriatric medicine, pharmacy, physiotherapy, occupational therapy, work place health and safety, support services and the patient liaison officer. Terms of reference were established and the committee chose to meet monthly to review all falls incidents forms. An initial 12-month retrospective audit was conducted of all falls, identifying that a total of 5.39 falls per 1000 bed days had occurred in the previous year. Following implementation of a hospital-wide falls prevention program, falls incidences were reported as 4.3 per 1000 bed days in 2002-03, and 4 per 1000 bed days in 2003-04. Compared with the baseline rate, reductions in falls had not only been achieved but also sustained. The falls prevention program received a commendation when the organisation achieved four-year accreditation.

Two examples from the hospital-wide falls prevention program are included below.

Acute medical ward

The team on the 42-bed acute medical ward had been collecting falls incidents forms for a number of years and decided to analyse this information. As the ward had a pattern of peak activity during the winter months and lower activity in the summer, the team decided to analyse information from a full 12-month period. One of the data items included location of falls. The team noticed that the women's bathroom in the north wing was listed as the location for the fall in more than 30% of falls, compared with other bathrooms (which were mentioned in fewer than 5% of falls). Further investigation found that the women's bathroom in the north wing was the largest bathroom, and consequently the best bathroom to move people around in. Upon inspection of the north wing bathroom, the following observations were made:

- there was an unusual outward-opening door (whereas the other three bathrooms had sliding doors)
- there was no shelving for the patients to put their clothes and toiletries on
- the towel hook was on the back of the door, which meant that patients had to walk a few steps to reach a dry towel
- the open area also meant that the wall rails were more difficult to reach.

Based on the advice of the unit's occupational therapist, the team requested some minor modifications, such as additional towel hangers, the placement of a permanent shower seat in the room, and some extra grab rails. The assistant nurse suggested that the north wing bathroom should be used specifically for patients requiring supervised assistance with showering, because it was larger and could easily accommodate two people.

These changes were supported by management, and the baseline data recorded for future comparison.

Elective surgery unit

At a recent ward meeting, one of the registrars commented on the number of patients admitted for elective surgery who then fell after surgery and consequently had longer lengths of stay in the hospital. This patient group had distorted the average length of stay in some of the diagnostic groups. This observation started lively discussion, because the unit had tight activity targets to meet, as well as general concerns about maintaining optimal postoperative outcomes.

It emerged that the hospital falls prevention program had been developed to include a falls risk assessment on admission to the ward. Because of the surgery admission process and theatre schedules, some patients did not arrive to the admitting ward until late in the day after their surgery. This resulted in a number of flow-on effects:

- Falls risk assessments were often delayed until the morning after surgery, because the evening shift staff were busy receiving late arrivals to the ward, as well as preparing patients for the next day's theatre list. This was also a time when several of the visiting medical officers did their rounds.
- Patients were in a postoperative, postanaesthetic state and frequently unable to contribute meaningful information to the assessment process.
- The hospital had a high percentage of patients from culturally and linguistically diverse backgrounds, so interpreter services were often required.
- The ward's allied health staff only worked day shifts.

Additionally, falls risk assessment was not seen as a priority, because of the busy nature of the ward and the competing demands to meet patients' needs for pain relief and postoperative care.

At a case conference, one of the nurses commented, 'We used to worry mostly about postoperative infection, clots, and readmission due to wound breakdown... we reduced this by identifying those patients at higher risk of complication at preadmission, and putting steps in place to better prepare people for hospital.'

The team decided to trial a similar process with falls. This meant transferring the falls risk assessment process and integrating this with the preadmission process. The clinic was already multidisciplinary, and included anaesthetic, general medical and nursing assessments, with access to the services of a physiotherapist and pharmacist who could follow up with specific cases, as required. In addition, interpreters were always organised for people who required assistance.

Not only did preadmission provide the opportunity for more in-depth assessment of falls risk factors, it also provided the opportunity for referral to other services for follow-up. The patients appreciated this concern for their broader health and wellbeing.

Patients were provided with falls prevention information in hand-out form (available in several languages), as well as other operative instructions. Information was included on what to bring into hospital, including suitable footwear, spectacles and mobility aids. These brochures were

particularly liked by the family members who accompanied patients to hospital, because they could take this information home and reinforce the messages.

The hospital had a chart risk alert system that used a risk alert sticker on the patient's chart, as well as a flag on the clinical information system. Because falls risk information was now included with the preadmission documentation, admission was streamlined to the ward postoperatively. Preoperative risk status provided a valuable baseline for immediate care and the implementation of falls prevention strategies.

A retrospective chart audit showed that the percentage of patients being screened for risk of falls increased from 23% with ward-based screening, to 100% with the new preadmission process.



Case studies

RESIDENTIAL AGED CARE FACILITY

Gum Trees is a 40-bed residential aged care facility located in a provincial town with a local population of 1800 people. The falls prevention program at Gum Trees started approximately one year ago. Management have actively encouraged the falls prevention program by supporting a falls prevention resource member on staff who has developed expert knowledge at a local level in implementing falls prevention strategies. Other strategies used in the residential aged care facility to reduce harm from falls include the following:

- All residents have a risk assessment on admission.
- Flow charts for managing high, medium and low-risk fallers are kept in the resident's nursing record.
- Menus were reviewed in light of advice from a dietician.
- Lighting levels were checked across the residential aged care facility and, where possible, increased by the addition of sky lights.
- Falls prevention education is a part of the orientation for all new staff.
- Information on falls risk is communicated to visiting general practitioners and allied health workers, who are a part of the local falls prevention network.
- Exercise programs were introduced.
- When the local '60s and better program' was looking for a venue to run their balance and exercise classes, Gum Trees offered its grounds. This meant that suitable residents could benefit from joining in with some of the tai chi classes. A physiotherapist visits one day a week from a neighbouring town and checks that residents are screened and monitored.
- Reviewing systems were put into place to provide hip protectors for residents. The local pharmacy offered to help find a suitable supplier.
- One resident who fell frequently was fitted with a football helmet, which decreased his fear of falling and increased his confidence to move around. In turn, this improved his general activity levels – he now goes on short walks with the other residents rather than being pushed in a wheelchair.

Staff and residents have created an innovative way of conveying each resident's fall risk. Each resident has a laminated picture of a gum tree on the wall over their bed. Risk is conveyed by means of a moveable felt koala. If the koala is high in the tree then fall risk is high; if the koala is on the trunk, then risk is medium; if the koala is on the ground, then risk is low. This concept was discussed with residents and family members. One of the resident's grandchildren organised to have the gum tree boards painted at the local high school. The diversional therapist organised for the koalas to be made.

Based on previous falls data and recent information, falls in Gum Trees have reduced by 30% since the program started. It is unclear what has worked, because all staff – from the nursing director to the gardener – have their role in reducing the risk of falls. The results have encouraged multidisciplinary teamwork and have improved outcomes for the residents.

Appendix A

Implementation action plan template²

This template may be used to develop an implementation action plan. When completing this implementation action plan, consider the following points at the outset:

- Identify that falls are a problem worth solving (considering that falls require reactive and proactive risk management).
- What is to be accomplished?⁵ Set goals or targets that are **s**pecific, **m**easurable, **a**chievable, **r**ealistic and **t**imely (SMART).
- How will it be known whether a change is an improvement?⁵ Set a range of indicators to monitor process and outcome.
- What changes can be made that will result in an improvement?⁵ Review specific recommendations and good practice points from the Falls Guidelines.

Step	Activity
1 Identify teams (at both the strategic level and point of care): <ul style="list-style-type: none"> • confirm membership • define parameters of operation • identify champions • identify resource requirements • define roles and responsibilities. 	
2 Identify, consult, analyse and engage key stakeholders: <ul style="list-style-type: none"> • establish means on consultation and ongoing engagement. 	
3 Assess organisational readiness: <ul style="list-style-type: none"> • establish means of assessment • identify barriers and facilitators. 	
4 Analyse falls: <ul style="list-style-type: none"> • collect relevant quantitative and qualitative data • identify contributory factors • prioritise areas for improvement. 	
5 Establish a baseline: <ul style="list-style-type: none"> • set range of indicators to monitor process and outcomes, considering existing sources of data. 	
6 Review current clinical practice: <ul style="list-style-type: none"> • use recommendations and good practice points from the Falls Guidelines. 	
7 Decide on implementation approaches: <ul style="list-style-type: none"> • consider use of support materials (ie fact sheets, video) developed for implementing the Falls Guidelines. 	
8 Determine the process for implementation: <ul style="list-style-type: none"> • establish what will occur, who is responsible, how it will occur, where it will occur, and when it will occur. 	
9 Conduct trial: <ul style="list-style-type: none"> • identify trial parameters, including duration • collect qualitative and quantitative data to evaluate the effectiveness of trial. 	
10 Learn from trial: <ul style="list-style-type: none"> • share learning • identify next steps (ie further trials, sustain improvement at the point of care and spread improvement across the facility). 	
11 Proceed to widespread implementation for improvement: <ul style="list-style-type: none"> • establish support processes of standardisation or work practices, documentation to support work practices, and staff training and education. 	
12 Sustain implementation: <ul style="list-style-type: none"> • establish process of regular measurement, monitoring, review and reporting of progress • celebrate achievements and the improvements that have been made and sustained. 	
13 Measure process: <ul style="list-style-type: none"> • review set indicators • collect relevant quantitative and qualitative data. 	
14 Measure outcomes: <ul style="list-style-type: none"> • review set indicators • collect relevant quantitative and qualitative data. 	
15 Report and respond to results: <ul style="list-style-type: none"> • consider target audience for results • review progress regularly and identify areas for improvement. 	

Target date	Responsible person	Deliverable outcomes	Progress

Appendix B

Sample – Meeting agenda⁷

Meeting agenda

Date:

Time:

Venue:

Attendance:

Apologies:

Agenda

1. Previous minutes
2. Falls reporting update (incident reports: analysis of information from incident reports)
3. Implementation issues
4. New issues
5. Other business
6. Next meeting (date, time and venue)

Appendix C

Sample – Terms of reference⁷

Terms of reference

Purpose

- To reduce falls and fall-related injuries in hospital patients and residential aged care facility residents.
- To oversee implementation of falls prevention practices for people aged 65 years and over.

Objectives

- Reduction in falls and fall-related injuries.
- Reduction of litigious risk arising from falls.
- Improvement in management of patients or residents at risk of falling.
- Achievement of best practice in implementation of falls prevention interventions.
- Revision and monitoring the management of falls.
- Analysis of trends in falls data and support for interventions to respond to emergent needs.
- Provision of recommendations to facility executive regarding falls prevention and injury prevention interventions.
- Monitoring implementation of the Falls Guidelines.

Sponsor

An executive sponsor is suggested.

Election of members		
Position	Name	Role
Chairperson		
Secretary		

Quorum: Representation of _____ people will constitute a quorum.

Frequency of meetings: _____

Reporting: To the facility executive.
Minutes to all members and the facility executive.

Appendix D

Sample staff survey⁷

To help us evaluate current falls prevention practices, it would be appreciated if you would complete the following survey. All responses will remain confidential.

Date survey completed: _____ / _____ / _____

Your position: _____

Please circle the number corresponding to your response for each question, unless otherwise indicated. You may circle more than one response if required.

Risk identification

1. *Are you aware of any falls risk identification tools?*
 - Risk assessment tool 1
 - Environmental audit tool 2
 - Sensory assessment 3
 - Contenance assessment 4
 - Other 5
 - None of the above 6
2. *What falls risk identification tools are currently used in your work area?*
 - Risk assessment tool 1
 - Environmental audit tool 2
 - Sensory assessment 3
 - Contenance assessment 4
 - Other 5
 - None of the above 6
3. *What barriers (if any) prevent you from using falls risk identification tools?*
 - No access to falls risk identification tool 1
 - Lack of time 2
 - Lack of knowledge about falls risk identification tools 3
 - Other 4
 - None of the above 5

Falls prevention

4. *Are you aware of any of the following falls prevention interventions?*
 - Flagging high fall risk patients or residents 1
 - Medication review 2
 - Appropriate footwear 3
 - Contenance management 4
 - Nutrition 5
 - Alarms 6
 - Exercise programs 7
 - Environmental modifications 8
 - Other 9
 - None of the above 10
5. *What falls prevention interventions are currently used in your work area?*
 - Flagging high falls risk patients or residents 1
 - Medication review 2
 - Appropriate footwear 3
 - Contenance management 4
 - Nutrition 5

Alarms	6
Exercise programs	7
Environmental modifications	8
Other	9
None of the above	10
6. What barriers (if any) prevent you from using falls prevention interventions?	
No access to falls prevention interventions	1
Lack of time	2
Lack of knowledge about falls prevention interventions	3
Other	4
None of the above	5

Injury prevention

7. Are you aware of any injury prevention interventions?	
Hip protectors	1
Other	2
None of the above	3
8. What injury prevention interventions are currently used in your work area?	
Hip protectors	1
Other	2
None of the above	3
9. What barriers (if any) prevent you from using injury prevention interventions?	
No access to injury-prevention interventions	1
Lack of time	2
Lack of knowledge about injury prevention interventions	3
Other	4
None of the above	5

Documentation of falls information

10. Under what circumstances do you record falls?	
If the patient or resident sustains an injury	1
If the patient or resident does not sustain an injury	2
No set circumstances	3
Falls are not recorded (go to Q12)	4
11. How do you record falls?	
In the progress notes in the medical chart	1
On the admission sheet in the medical chart	2
By completing an incident report	3
Other	4

Education

12. Have you attended any falls prevention education sessions?	
Yes	1
No	2
13. How would you rate your current knowledge of falls prevention?	
Very poor	1
Poor	2
Fair	3
Good	4
Excellent	5
14. Do you have any other comments regarding falls prevention?	

Thank you for completing this survey. Please return to _____
by _____ / _____ / _____

Appendix E

Potential barriers and possible solutions to implementation

The following table lists potential barriers and possible solutions to implementing falls and injury prevention strategies. (These are summary findings from the Australian Falls Prevention Project from Hospitals and Residential Aged Care Facilities.¹⁹)

Potential barriers	Possible solutions
Individual factors (staff)	
Belief that nothing can be done (falls are going to happen) or 'that won't work here; we have tried that before'	<ul style="list-style-type: none"> • Use previous experiences to build on or learn from • Provide examples or case studies showing how it has worked, and outcomes in other, similar facilities
Staff compliance (due to high workloads; complexity of documentation; changing staff; shortage of staff; difficulty educating everyone despite all having a role to play; time constraints; lengths of patient stay; levels of staff knowledge; and plateauing of results once good outcomes are achieved, etc)	<ul style="list-style-type: none"> • Use an organisationally driven and supported approach • Provide staff training based on adult learning principles (preferably in paid time) that covers the diversity of the workforce (compulsory on orientation, and ongoing) • Use reminders and alerts • Standardise processes and practices • Initially involve keen and motivated staff ('start softly') and identify long-term benefits and gains • Celebrate achievements (work towards early wins), use positive reinforcement • Identify a local advocate or driver (but avoid making this person solely responsible) • Develop a simple, easy-to-use, standardised and integrated assessment (could be multifactorial, including falls, manual handling, etc) and reporting tools that do not take a lot of time to administer • Promote a whole-of-organisation approach where the program is not seen to be imposed but developed through involvement of all levels of staff to promote ownership and empowerment and avoid acceptance being undermined • Show evidence of applicability and proof that it works • Provide feedback on progress and outcomes to staff involved in implementation (to identify or verify benefits, such as considering the number of falls prevented) • Give resistors responsibilities or tasks • Allow time and do not expect changes quickly (consider a staggered implementation process)
Staff confidence	<ul style="list-style-type: none"> • Provide ongoing support (such as through mentoring) • Provide staff training based on adult learning principles (preferably in paid time)

Potential barriers	Possible solutions
Individual factors (patient or resident)	
Simultaneous project implementation	<ul style="list-style-type: none"> • Coordinate implementation process with other initiatives
Organisational commitment and support	<ul style="list-style-type: none"> • Raise profile of falls • Promote a whole-of-organisation approach where the program is not seen to be imposed but developed through involvement of all levels of staff, to promote ownership and empowerment
Sustainability (particularly given competing priorities, but also once good outcomes are being achieved and results are beginning to plateau)	<ul style="list-style-type: none"> • Identify coordinator(s) at unit and organisational levels • Promote a whole-of-organisation approach where the program is not seen to be imposed but developed through involvement of all levels of staff to promote ownership and empowerment • Promote integration of the Falls Guidelines within existing programs and activities, such as quality improvement, workplace health and safety and streamline processes such as admission procedures to stop overlapping paperwork; recognition of existing activities (such as those focused on incontinence, nutrition, mobility, etc) as part of a falls prevention program or policy • Consider involving volunteers in falls prevention • Make a regular agenda item for existing meetings at unit or ward and organisational levels • Avoid relying on external or additional funding • Provide feedback on progress and outcomes to staff involved in implementation
Current facility culture and traditional practices and perception that facility culture change allows patients and residents to take more risks (allowing patients or residents to mobilise more, keep bed sides down, etc)	<ul style="list-style-type: none"> • Use an organisationally driven and supported approach • Provide staff training (based on adult learning techniques) in best practice approaches (preferably in paid time) • Use reminders and alerts • Allow time and do not expect changes quickly (consider a staggered implementation process)
Fragmented delivery of care or lack of ownership across staff (falls prevention seen only as an aged care roll); lack of access or availability to allied health professionals	<ul style="list-style-type: none"> • Promote a coordinated, multidisciplinary approach (which includes medical professionals) of shared responsibility that acknowledges roles and opportunities for collaboration and fosters communication or referral and follow-up • Provide staff training (preferably in paid time) based on adult learning techniques (orientation and ongoing education for all staff) • Develop a local team or network that focuses on falls prevention
Environmental factors	
Access, affordability and availability of programs and equipment	<ul style="list-style-type: none"> • Identify available programs and equipment • Identify potential funding options
Facility furnishings (inappropriate and outdated beds, chairs, etc)	<ul style="list-style-type: none"> • Identify appropriate facility furnishings • Identify potential funding options

Glossary

Benchmarking	In the context of the Falls Guidelines and this implementation guide, <i>benchmarking</i> refers to comparing falls rates in one organisation or unit with falls rates from another.
Facility	Refers to both hospitals and residential aged care facilities.
Fall	For a nationally consistent approach to falls prevention within Australia, it is important that a standard definition of a <i>fall</i> be used. For the purpose of these guidelines, the following definition applies: <i>'A fall is an event which results in a person coming to rest inadvertently on the ground or floor or other lower level.'</i> ¹⁸ To date, no national data definition for a fall exists in the National Health Data Dictionary (run by the Australian Government's Australian Institute of Health and Welfare).
Falls Guidelines	The Falls Guidelines is used to refer to the full name of all three guidelines: <ul style="list-style-type: none"> • <i>Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Hospitals 2009</i> • <i>Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Residential Aged Care Facilities 2009</i> • <i>Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Community Care 2009.</i>
Hospital	Refers to both acute and subacute settings.
Key stakeholders	Those individuals or groups with a particular interest in preventing falls in a hospital or residential aged care facility.
Outcome indicator	Measure used to monitor the effects of implementing a falls prevention strategy or program.
Patient	Refers to both patients and clients in acute and subacute settings.
Point-of-care level	Refers to the operational level of service delivery to individual patients or residents.
Process indicator	Measure used to monitor the process of implementing a falls prevention strategy or program.
Qualitative data	Subjective data that describe the range of responses and variation between responses, but not the frequency of responses.
Quantitative data	Objective data recorded as a numerical frequency.
Resident	Refers to people receiving care in residential aged care facilities.
Residential aged care facility	Refers to both high and low-care settings.
Strategic level	Refers to the level of the whole organisation or facility.
Standard error (SE)	Statistical calculation to estimate the preciseness of indicators.
Trial and learning approach	Continuous quality improvement is based on the <i>trial and learning approach</i> to improvement, which involves trying a change, observing the consequences, and learning from those consequences.

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