SESLHD GUIDELINE COVER SHEET

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SUMMARY	The aim of this document is to provide Allied Health Professionals with an overview of falls prevention and management and to assist clinicians to make decisions based on the clients' needs.

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Health
South Eastern Sydney
Local Health District

Falls Prevention and Management: A Best Practice Guide for Allied Health Professionals

May 2022

ALLIED HEALTH DIRECTORATE

Falls Prevention and Management:

A best practice guide for Allied Health Professionals

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ACKNOWLEDGEMENT

South Eastern Sydney Local Health District respectfully acknowledges Aboriginal and Torres Strait Islander people as Traditional Custodians of their land, we also acknowledge both past and present Elders, and their continuing connection to country.

Section 1 Background

One in three people over the age of 65 fall each year, increasing to one in two people over the age of 80. Falls can have serious consequences for older people, their families, and carers. They can lead to reduced quality of life, injury, and disability, reduced physical activity, social isolation, functional decline, need for residential care and death. In NSW, falls are a major cause of harm to older people, and fall-related injuries impose a substantial burden on the health care and aged care systems (NSW Ministry of Health, 2014). No other single cause of injury, including road trauma, costs the health system more than falls. Falls are also significant cause of potential harm in health care and are a national safety and quality priority.

Falls is a leading cause of injury-related hospitalisation in older Aboriginal people in NSW and contributing to a significant number of deaths each year (Australian Institute of Health and Welfare, 2020). In 2016, people of Aboriginal heritage make up 1% of the SESLHD population.

This guide for Allied Health Professionals (AHP) includes details to assist in screening for and assessing a person's risk of falls, recommending interventions known to reduce the risk of falls and, where within the scope of practice, providing interventions to modify identified risk factors. AHP working in a variety of settings, including inpatient, outpatient, and community health, though the role of the individual AHP will depend on staffing, the structure of the team and the nature of the service. Falls risk screening, assessment and post-fall management are part of the Comprehensive Care of all patients (National Standard 5) and should be undertaken with consideration to other risks of harm, and in line with the person's goals and preferences for care.

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Section 3 Definitions

Fall

For the purposes of this Guideline, 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"[3].

High falls risk:

Refers to patients who score ≥ 9 on the Ontario Modified Stratify (Sydney Scoring) falls risk screening tool or are deemed clinically to be at risk of falls. Clinical judgement overrides an individual risk screen score.

Designated high risk observation room:

A designated patient care room which adheres to the recommendations within this Guideline and has been set up to allow for continuous visual monitoring of adult inpatients assessed as being at high risk of having a fall

Hi-lo bed:

An electric height adjustable bed that can be lowered for the patient to safely enter and exit the bed and raised to an appropriate height for staff to safely deliver care.

Lo-lo bed:

An electric height adjustable bed that can be lowered to a level below the standard minimum bed height, reducing the risk of injury to a patient who is impulsive or agitated and attempting to climb out of bed.

Equipment

Refers to patient care equipment that assists with safe manual handling, patient transfers and mobility. It includes, but is not limited to, transfer belts, walking aids, wheelchairs and hoists.

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Section 4 Australian Commission on Safety and Quality in Health Care Best Practice Guidelines

The Australian Commission on Safety and Quality in Health Care (ACSQHC) published best practice guidelines for fall prevention in hospitals, community care and residential aged care facilitates in 2009. These guidelines detail the key risk factors for each setting with recommended assessments and interventions outlined for each setting.

Preventing Falls and Harm from Falls in Older People:

- Best Practice Guidelines for Australian Hospitals
- Best Practice Guidelines for Australian Community Care
- Guidebook for Australian Residential Aged Care Facilities

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Section 5 SESLHD Summary based on the ACSQHC Best Practice Guidelines

Assessment	Intervention
Balance and mobility limitations	
▪ **Quantify the extent of balance and mobility limitations and muscle weakness.** ▪ **Guide exercise prescription.** ▪ **Measure improvements in balance, mobility, and strength.** ▪ **Assess whether the older person has a high risk of falling.**	▪ Refer client for physiotherapy (PT) assessment and intervention, where available. ▪ Offer falls prevention exercise programs to at-risk people who live in the community (e.g., Stepping On, group exercise classes, balance and functional exercise training at home, tai chi classes). ▪ Improve the effectiveness of current exercise programs for preventing falls by including challenging balance training and frequent exercise. ▪ Encourage exercise and increased physical activity in all people in the community, not only those who have an increased risk of falls.
Cognitive impairment	
▪ **People with cognitive impairment have an increased risk of falls.** ▪ **People presenting with an acute change in cognitive function should be assessed for delirium and the underlying cause of this change.** ▪ **People with gradual onset, progressive cognitive impairment should undergo detailed assessment to determine diagnosis, and where possible, reversible causes of the cognitive decline. Reversible causes of acute or progressive cognitive decline should be addressed and treated.** ▪ **Consider referral to a Geriatrician or specialist clinic for assessment.** ▪ **If a person with cognitive impairment does fall, reassess their cognitive status, including presence of delirium (e.g., using the Confusion Assessment Method tool).**	▪ Interventions shown to work in cognitively intact populations should be offered to cognitively impaired populations; however, may need to be modified and supervised, as appropriate. ▪ The Clinical practice guidelines and principles of care for people with dementia clearly state that people with dementia should not be excluded from any health care services because of their diagnosis, whatever their age.

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Continence	
▪ **Older people should be offered a continence assessment to check for problems that can be modified or prevented. Consider common causes of urinary and bowel dysfunction including urinary tract infection, nocturia, urinary frequency, constipation (causing overflow diarrhoea).**	▪ Manage problems associated with urinary tract function as part of a multifactorial approach to care. ▪ Consider referral to a Continence nurse or clinic, where available.
Feet and footwear	
▪ **Assessment should include screening for ill-fitting or inappropriate footwear and for foot pain and other foot problems because these are risk factors for falls.**	▪ Refer to a podiatrist for assessment, where available. ▪ Include an assessment of footwear and foot problems as part of an individualised, multifactorial intervention for preventing falls in the community. ▪ Health care providers should provide education and information about footwear features that may reduce falls risk. ▪ Safe footwear characteristics include: ○ soles: shoes with thinner, firmer soles appear to improve foot position sense; a tread sole. ○ may further prevent slips on slippery surfaces, ○ heels: a low, square heel improves stability ○ collar: shoes with a supporting collar improve stability.
Syncope	
▪ **Older people who report unexplained falls or episodes of collapse should be assessed for the underlying cause.**	▪ Assessment and management of potential causes of pre-syncope and syncope should form part of a multifactorial intervention to reduce the rate of falls in older people. ▪ Refer to the patient's General Practitioner or to a specialist for review as cardiac pacing is effective in older people who live in the community, and who have carotid sinus hypersensitivity and a history of syncope or falls, to reduce the rate of falls.

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Dizziness and vertigo	
▪ **Vestibular disorders as a cause of dizziness, vertigo and imbalance need to be identified in the community setting. A history of vertigo or a sensation of spinning is highly characteristic of vestibular pathology.** ▪ **Trained health professionals can use the Dix–Hallpike test to diagnose benign paroxysmal positional vertigo, which is the most common cause of vertigo among older people, and which can be identified in the community setting. This is the only cause of vertigo that can be treated easily.**	▪ Use vestibular rehabilitation to treat dizziness and balance problems where indicated. ▪ Use the Epley manoeuvre to manage benign paroxysmal positional vertigo ▪ All manoeuvres should only be done by an experienced person.
Medications	
▪ **Older people living in the community and people with chronic conditions should have their medications (prescribed and non-prescribed) reviewed at least yearly, and for those on four or more medications, at least six monthly.**	▪ Medication review and modification should be undertaken as part of a multifactorial approach to falls prevention. Clients in SESLHD can be referred for a Home Medicines Review by their General Practitioner or pharmacist. ▪ For individual older people, gradual and supervised withdrawal of psychoactive medications should be considered to prevent falls. ▪ Pharmacist-led education on medication and a program of facilitated medication review by general practitioners should be encouraged in the community setting. ▪ Consider likely pharmacological changes when prescribing any new medication to an older person and avoid prescribing psychoactive drugs if clinically possible.

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Vision	
▪ **Where possible, include a test of vision as part of a falls risk assessment e.g., Melbourne Edge test.** ▪ **Clients/patients who have double vision, visual perceptive, nystagmus (quick involuntary eye movements), eye tracking disorders or visual field loss (from conditions including stroke, retinal or optic nerve disease) are also at higher risk of falls.** ▪ **Encourage older people to have regular eye examinations (every two years) to reduce the incidence of visual impairment related to ocular pathology, which is associated with an increased risk of falls.** ▪ **Encourage any client with auto-immune disease, diabetes, vascular problems, or chronic blood pressure to have yearly eye examinations.** ▪ **Educate clients who suffer with monocular or binocular double vision or visual field defects to have an eye examination.**	▪ Clients with visual impairment only caused by cataracts should undergo cataract surgery as soon as practicable. ▪ Any other eye disease that causes damage to the retina (e.g.: diabetes, age related macula degeneration, congenital degenerative disease etc.) or optic nerve disease (e.g.: glaucoma, raised intracranial pressure) should be referred to ophthalmology and Orthoptics. ▪ Refer to Orthoptics for a vision, visual function, and ocular motility assessment. Referrals can be made to Orthoptics and Ophthalmology, depending on local services and the clinical presentation, via a GP, Medical Specialist or Optometrist. ▪ When a patient is prescribed new spectacles to correct their vision or new prisms grounded into their glasses, explain to the client/patient, their family, and carers (where appropriate) that extra care is needed while the client/patient gets used to the new glasses. Encourage the client/patient to begin wearing them whilst in familiar environment e.g.: at home. ▪ Advise the client/patient who are unfamiliar with multifocals or bifocals who take part in regular outdoor activities to avoid bifocals or multifocals and to use single-vision distance spectacles when walking (in most cases) — especially when negotiating steps or walking in unfamiliar surroundings. ▪ Clients/patients who are fitted with temporary prisms (Fresnels) either for double vision, nystagmus or visual field deficits should be encouraged to move their head to scan their environment rather than their eyes unless the prism has been placed on a section of their glasses. These patients should be encouraged to follow up with Orthoptics for visual rehabilitation. ▪ People with severe visual impairment should receive a home safety assessment and modification program specifically designed to prevent falls and be referred to vision Australia.

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Environmental considerations	
▪ **People considered to be at higher risk of falling should be assessed by an occupational therapist (OT) for specific environmental or equipment needs and training to maximise safety.**	▪ Environmental review and home hazard modification by an OT should be considered as part of a multifactorial approach in a falls prevention program for people at high risk of falls in the community. ▪ When conducted as a single intervention, home environment interventions are effective for reducing falls in high-risk older people.

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Section 6 SESLHD Procedures and Guidelines

SESLHD has a procedure that outlines the process for prevention and management of falls in people who are admitted to our health care facilities (SESLHDPR/380), and a guideline for people who receive SESLHD services but are not inpatients (SESLHDGL/044).

SESLHD guidelines that support falls prevention also include; Standardised mobility terminology for use across SESLHD (SESHDGL/047), Care Champion for Falls Prevention : Key Roles and Standards (SESLHDGL/057), Designated High Risk Observation Room (SESLHDGL/042), Use of bed/chair alarm units (SESLHDGL/054), Post Incident Bedside Safety Huddles and effective use of the HUDDLE UP tool (SESLHDGL/072).

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Good Practice Point: Allied Health Screening

SESLHD services for admitted and non-admitted patients are extremely diverse. For many services, such as specialist outpatient clinics and group programs, routine falls risk screening will not be feasible or appropriate. Services should consider their client population, the purpose of the service, the setting in which care is provided, access to resources including multidisciplinary team members, opportunities to build falls screening and management into care provision and transfer of care, including communication with primary care practitioners.

The following best practice recommendations are relevant to all Allied Health Professionals (AHP) and should be considered together with local procedures and guidelines.

- Routinely ask clients over the age of 65 years, Aboriginal and Torres Strait Islander people over the age of 45, and people with chronic health conditions about any falls in the last 12 months.
- Falls is a leading cause of injury-related hospitalisation in older Aboriginal people in NSW and contributing to a significant number of deaths each year (Australian Institute of Health and Welfare, 2020). In 2016, people of Aboriginal heritage make up 1% of the SESLHD population.
- All adults admitted to SESLHD acute and sub-acute facilities must be screened for falls risk factors using an agreed risk screening process to guide clinical decision making. This is currently the Ontario Modified Stratify (OMS) falls risk screen.

  Screening must be repeated post-operatively, following a fall, on transfer to a new ward/unit or if there is a change in physical or mental condition.
- The recommended falls risk screening tool for non-admitted patients is currently the FROP-Com Community Falls Risk Screen.

  Screening should be repeated if the client's condition changes e.g., fall, post hospital admission, deterioration in physical or mental condition and periodically, as determined appropriate by the specific service e.g., every three months.
- Local processes guide who completes the falls risk screen. AHPs may have a formal role in completing screening e.g., first point of contact for a non-admitted patient but regardless, should contribute to the identification and management of people at risk of falls.
- Falls risk screening is a guide for staff and does not replace clinical judgement, as any risk screening process will not include all potential factors that contribute to a risk of falls. Clinical judgement should always override an individual risk score.

The ACSQHC Best Practice Guidelines Management strategies for common falls risk factors is summarised above, i.e., balance and mobility limitations, cognitive impairment etc.

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Good Practice Points: Allied Health Assessment and Management

- People who are deemed at risk of falling after completion of a falls risk screening process / tool should undergo a more detailed assessment to identify contributory risk factors and enable targeted intervention.
- Adults who are identified at risk of falls and are admitted/inpatients require a care plan detailing management strategies in place to reduce the risk of an inpatient fall, currently the Falls Risk Assessment and Management Plan (FRAMP).
- For a non-admitted patient who is identified at risk of falls, further assessment may be done by the clinician who identifies the risk e.g., AHPs working within a community health team and/or via referral to other Health Care Professionals (HCPs).
- Referrals to other HCPs should also be considered on discharge from hospital and communicated to the primary care practitioner in the discharge summary.
- Referrals may include but are not limited to:
    - Specialist medical practitioners such as a Geriatrician or Ophthalmologist
    - Specialist clinics e.g., falls clinic, osteoporosis clinic or aged care clinics
    - AHP e.g., PT, OT, exercise physiologists, dietitians, podiatrists, orthoptics, pharmacist
    - Other HCP e.g., continence advisors
    - Evidence-based multifactorial falls prevention programs such as Stepping On
    - Evidence-based exercise such as Otago exercise program or Tai Chi
- Consider whether cognitive impairment is acute or long-standing. Acute cognitive impairment assessment should include medical review and delirium screening e.g., CAMS or 4AT. People with poorly managed or undiagnosed long-standing cognitive impairment need a medical review and OT functional cognition assessment.
- Check gait aids and/or transfer equipment for safety e.g., brakes on 4-wheeled walkers are functioning and the person knows how to use them.
- Unmanaged continence issues should be referred to a Continence Clinic or OT if the issue is with access to the bathroom / toilet.
- Syncope or dizziness symptoms should be referred for medical review and management.
- Medication concerns including polypharmacy or difficulty managing medications should be referred for a Medication review.
- Encourage annual vision screening with optometrist. Clients/patients with higher risk of falls require follow up with eye care professional Ophthalmologist or orthoptist. Refer to Guide Dogs Australia or Vision Australia for specialist management of low vision.
- Encourage assessment with ophthalmologist for any patients with reduction of vision, cataracts, glaucoma, macular degeneration, auto-immune disease, or diabetes.

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- Encourage assessment and management with an Orthoptist for patients with visual field deficits, double vision, nystagmus, and visual perception disorders.
- Discuss falls risk and develop any interventions in partnership with clients, families, and carers. Use interpreters (face to face or telephone) if necessary for people who speak a language other than English.
- Document the outcome of falls risk screening, assessment, and management strategies, including any referrals made in the client's health care record.
- Communicate falls risk and the risk management plan as a routine part of clinical handover, and to other professionals involved in the person's care e.g., General practitioner.
- There is a gap in acceptable fall prevention programs for Aboriginal people in NSW. The Ironbark Project is an Aboriginal healthy ageing research program. The program is currently being trialled in NSW; more information can be found https://www.ironbarkproject.org.au/
- Murrumbidgee Local Health District collaborated with local Aboriginal Health Services to deliver a culturally sensitive Stepping On program. More information is available on the Allied Health Falls Allied Health Falls Resources on the Allied Health SharePoint site.
- The Aboriginal Hospital Liaison Officer (AHLO) provides a liaison service to Aboriginal and Torres Strait Islander inpatients and outpatients, their families and support people. An AHLO can support education, prevention, and management of health problems in collaboration with culturally appropriate services, for example falls prevention.
- Provide resource material to patients and their carers on preventing falls and harm from falls. People of CALD backgrounds should be provided with translated resources, where available, in their preferred language.
- The Clinical Excellence Commission (CEC) provide handouts for patients, carers and families on a range of topics including urge incontinence, footwear, dizziness, medications, vision, and home exercise.
- The Staying Active on your Feet booklet covers ways to keep active and independent at home, and includes a home safety checklist, this can be purchased or downloaded and printed.
- Information handout for personal alarms e.g., is at risk of a long lie post-fall.
- Referral to community-based exercise group (particularly programs that involve balance training). Find a program on the Active and Health website.
- Record any fall incidents (related to an inpatient fall or outpatient occasion of service) in the incident management system.
- Contribute to the review of fall incidents at service meetings.
- Lead and contribute to quality improvement projects including audits.
- Complete mandatory and other relevant training in falls risk screening, assessment, and management.

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Good practice Points: Exercise Physiology

Exercise plays a key role in falls prevention and management. Exercise physiologists deliver evidence-based exercise interventions to people living with chronic and complex health conditions including those at high risk of falls. With regard to falls risk screening, assessment and intervention aims to address function, strength, balance, co-ordination, confidence and quality of life. Management of other conditions may also need to be addressed.

SCREENING:

Falls related questionnaires:

- Modified Falls Efficacy Scale
- Health Related Quality of Life
- Frailty Questionnaire (FRAIL)
- Frailty Index for Older Adults (FIFE)
- San Francisco Falls Efficacy Scale

ASSESSMENT:

- Past medical history
- Physical, cognitive, and mental health co-morbidities
- Current treatment (e.g., medication, electroconvulsive therapy)
- Falls history, including frequency, mechanism, fatigue state and location
- Psychosocial factors including carer support, resources available to support exercise, other services available, individual motivation and 'readiness to change'.

Exercise history:

- Current exercise/physical activity levels including frequency, intensity & duration.
- Type of physical activity – does it incorporate balance and functional exercises?
- Barriers to exercise i.e., motivation, physical function/pain, support required, fear of falling/safety.

Physical outcome measures:

- Objective assessments that are easy to administer include:

  Balance
  - Berg balance scale - Assesses various aspects of balance
  - 4 stage balance test - Assesses static balance
  - CTSIB (Clinical Test of Sensory Interaction on Balance) – Assesses vestibular balance
  - Step tap test – Assess dynamic balance

  Mobility
  - Timed up and go - Assesses ability to stand up, walk & turn – a functional assessment
  - Alternate step test - Assesses co-ordination
  - Functional Reach Test – Assess anterior-posterior stability
  - Four Square Step Test – Assesses ability to step over objects and change direction
  - 10 meter walk test - Assesses walking speed
  - Short Physical Performance Battery – Assesses lower limb functioning

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Strength & Endurance

- Sit to stand x 5 -Assesses leg strength
- 2 & 6 minute walk test – Assesses walking speed and activity tolerance

INTERVENTIONS:

Exercise:

- Fall prevention exercises should be targeted at the general community as well as community-dwellers with an increased risk of falls. Exercise may be completed at home or in a group.
- Exercise programs are most effective if they aim provide a high or moderate challenge to an individual's balance.
- Exercise programs should include balance, functional exercise, or multi-component exercises.
- Incorporates skills practice of getting up from a fall/ the floor.
- Implement programs such as:
  - The Otago Program, an evidence-based progressive fall prevention exercise program which can be done at home
  - Stepping On, a falls prevention program offered across SESLHD
  - Other falls prevention and other exercise programs can be found on the Active and Healthy Website

Education:

- Appropriate use of walking aids, common situations that lead to falls and how to prevent them.
- The role of different modes of exercise for addressing physical and mental co-morbidities and falls prevention.
- Behaviour change counselling to address fear of falling and facilitate long term physical activity.

Monitoring:

Regular monitoring and reassessment to identify efficacy of individual programming including changes in falls-related risk factors (strength, mobility, balance, confidence etc.) and to encourage independence.

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Good Practice Points: Nutrition and Dietetics

Nutritional status, especially in elderly adults, has been shown to be a determining factor in their risk of falls, severity of injuries incurred and recovery time after a fall related injury. Addressing poor nutritional status and subsequent reduction in muscle mass, strength and function should be a priority for those at risk of falls.

SCREENING:

Screening for risk of malnutrition should take place routinely with an appropriately validated tool. Additional considerations for risk of falls include patients identified with a low body weight, frailty, and dehydration due to a poor oral intake.

ASSESSMENT:

- Weight History including a nutrition-focused physical assessment.
- Biochemistry - this may include micronutrient deficiencies such as Vitamin D.
- Include clinical and social assessments such as dentition, appetite, cognition, and food access insecurity/food safety.
- Diet history including quantification of intake and comparison to individual requirements - to identify inadequacies in macro and micro nutrient intake.
- Hydration status.
- Nutritional diagnosis utilising a validated assessment tool such as Subjective Global Assessment.

INTERVENTIONS:

- Dietary modification - this may include fortification, substitution of foods, or texture modification to improve hydration, macronutrient intake and address micronutrient deficiencies where able.
- Dietary Education - This may include meal preparation and food safety advice.
- Ensuring access to adequate nutrition - Meal assistance programs, social supports, mealtime assistance, facility food service review.
- Oral Nutrition Support including the use of commercial oral nutritional supplements.

MONITORING:

Appropriate follow-up and monitoring should be arranged to identify if individually tailored nutrition plans are effective and/or reviewed as necessary.

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Good practice points: Pharmacy

There is strong evidence that falls risk is increased by medications which act on the central nervous system. As we age our pharmacokinetics and pharmacodynamics become altered, therefore care is needed in considering dosage and potential interactions between medications.

SCREENING:

Studies have provided strong evidence that withdrawal from these medications is an effective way in reducing falls, and overall falls risk.

Medications can cause the following adverse effects that may increase the risk of falls:

- Postural hypotension/dizziness/syncope
- Drowsiness/sedation
- Confusion
- Hypoglycaemia
- Visual disturbances/blurred vision

It is important to be aware of the following medications which can increase risk of falls:

- Antihypertensive
- Anticonvulsant
- Antidepressant
- Antipsychotic
- Antiarrhythmic
- Antidiabetic
- Diuretics
- Narcotics/opioids
- Sedatives/hypnotics

INTERVENTIONS:

- Patients identified at risk of falls should be referred to the pharmacist for a comprehensive medication review and recommendations to minimise risk/s be documented and discussed with the treating team/prescriber.
- Monitor for Vitamin D deficiency. Low Vitamin D can lead to reduction in bone and muscle strength which can lead to higher risk of instability and falls.
- Pharmacists can provide patients with valuable education regarding medication adverse effects that may increase risk of falls.
- Recommend patients see their GP every 6-12 months for a comprehensive HMR (Home Medicine Review) especially if the patient is on more than 4 medications.

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Good practice points: Physiotherapy

Physiotherapy assessment primarily addresses mobility, strength, balance, and co-ordination in relation to falls risks. Treatment of musculoskeletal, neurological conditions and / or pain may also need to be addressed.

ASSESSMENT:

Past medical history:

- Include medications and falls history.
- Does the person have known cognitive impairment or a diagnosis of dementia?
- Consider the impact of this when you plan interventions e.g., is carer support needed/available for home exercise program?

Exercise history:

- Current exercise/physical activity levels including frequency, intensity & duration.
- Type of physical activity – does it incorporate balance and functional exercises?
- Barriers to exercise (i.e., motivation, physical function/pain, support required, fear of falling/safety.

Mobility Assessment:

- Ensure the person is using their usual walking aid.
- Is the walking aid the most appropriate type? Is the height correct?
- Consider indoor and outdoor mobility if the person is ambulant in the community.
- Refer to SESLHDGL/047 - Standardised mobility terminology
- Assess stairs, if applicable.

Physical outcome measures:

- Objective assessments that are easy to administer include:
  - Berg balance scale - Assesses various aspects of balance.
  - Single leg stance – assess balance.
  - 4 stage balance test - Assesses balance.
  - Timed up and go - Assesses ability to stand up, walk & turn – a functional assessment.
  - 10 meter walk test - Assesses walking speed.
  - Sit to stand x 5 -Assesses leg strength.
  - Alternate step test - Assesses co-ordination.
  - Short Physical Performance Battery – Assesses lower limb functioning.

INTERVENTIONS:

Exercise

- Fall prevention exercises should be targeted at the general community as well as community-dwellers with an increased risk of falls. Exercise may be completed at home or in a group.
- Exercise programs are most effective if they aim provide a high or moderate challenge to an individual's balance
- Exercise programs should include balance, functional exercise, or multi-component exercises.

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- The Otago Program is an evidence-based progressive fall prevention exercise program which can be done at home
- Falls prevention and other exercise programs can be found on the Active and Healthy Website
- Individuals should be educated about the importance of ongoing exercise to maintain the falls prevention benefit of exercise

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Good practice points: Podiatry

Podiatry assessment primarily addresses footwear, offloading devices and using mobility supports. Before recommending footwear, or fitting an offloading device, it is important that each patient undergoes a falls risk assessment.

Assessment**:**

INITIAL ASSESSMENT:

- Medical history and medications review.
- FRAT or FROP.
- All of patient's current footwear or offloading modalities in place.
- Polypharmacy.
- Use of mobility aids.
- Patient ability to secure/put on footwear themselves.

DISPENSING OFFLOADING ASSESSMENT:

- Correct size.
- Balance leg length difference.
- Patient able to secure and remove offloading themselves.
- Get up from a chair and mobilise safely without assistance.

INTERVENTIONS:

If footwear/offloading is inappropriate for patient complete education:

- Explaining what is not good about a shoe:
  - Incorrect fit
  - Slippery worn-out soles.
  - Slip on shoes, slides, thongs.
  - No heel counter/stability.
  - Heels.
  - Heavy shoes.
- Demonstrating good features in a shoe:
  - Correct length.
  - Firm heel counter.
  - Low wide heel.
  - Laces or Velcro fastening.
  - Wide and deep toe box.
  - Good tread on sole of shoe.
- Importance of using mobility aids.
- If purchasing new footwear, have them assessed by podiatrist prior to wearing.

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Good practice points: Occupational therapy

Assessment should identify falls risk factors, evaluate confidence with daily activities in relation to falls, review risk and protective behaviours, and an assessment of a person's environment. Interventions should target the above predictors of falls, specifically a person's environment, their physical abilities that enable participation in occupations and the psychological relationship with falls.

ASSESSMENTS AND INTERVENTIONS:

Environment:

- A person who is admitted for a fall should undergo an OT-led home hazard assessment, with appropriate intervention (e.g., home assessment, task modification).
- Use of a standardised tool to identify home hazards such as the Westmead Home Safety Assessment or similar such as "Staying Active on your Feet" modified Home Safety Checklist.
- Home safety interventions must target the individual's needs.
- Recommendations must be discussed in partnership with the person, consider their beliefs and behaviours to maximise adherence.
- Equipment prescription and home modifications as required.

Physical ability:

- Balance, strength, and functional activities should be targeted
- Consider a functional exercise program that can be incorporated into daily activities such as the LiFE program.
- A person who has fallen or is at risk of falls should be linked in with community-based exercise groups (particularly programs that focus on balance training).

Psychological:

- A person's fear of falling should be explored with concerns addressed.
- A home based questionnaires such as Falls Efficacy Scale-International (FES-I) and Falls Behavioural Scale (FaB) can be completed by the patient and their carer prior to their OT home assessment, building their capability to identify and monitor falls risk factors.
- Identification of activities that are fear provoking for a patient and having the person perform these activities during the occupational therapy session, has been shown to reduce the fear of falling associated with that activity.

Cognitive impairment:

- Use an evidence-based cognitive screening measure, e.g., MOCA, MMSE or RUDAS (SESLHDGL/092)
- Assess functional cognition.

Vision Impairment

- Assessment of home environment and equipment prescription a required.
- Refer to Guide Dogs Australia or Vision Australia for specialist management of severe visual impairment.

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Good practice points: Orthoptics

Orthoptics primarily involved in the assessment and management of visual impairment related to eye turns (strabismus) that cause double vision (diplopia), eye tracking, nystagmus, visual field defects, and reduced vision due to the need for glasses to correct vision and reduced vision due to ocular pathology. Research has shown identification of any of these conditions in the clinic using can help identify patients who may be a falls risk and techniques can be used to reduce this risk.

ASSESSMENTS:

Medical History include Previous Ocular History (POH)

Sometimes a patient's medical history or POH can provide clues as to links to conditions that can contribute to a visual disability that encompasses blurred vision one or both eyes, tracking eye disorders, eye turns, nystagmus, visual field defects, or double vision, ocular, or orbital pathology.

- Does the client have a falls history? Was this linked to a motor or sensory problem?
- Does the client wear glasses?
- Does the client have any known ocular conditions e.g., age related macula degeneration, cataracts, and glaucoma?
- Does the client have any know auto-immune disease e.g. Graves disease, Myasthenia gravis, Rheumatoid Arthritis, or Sarcoidosis? Are the eyes involved?
- Does the client have a neurological condition affecting eye movement, eye tracking, their visual field or double vision (monocular or binocular)?
- Does the patient have prisms in their glasses?
- Does the patient have temporary prisms?
- Does the patient have a new pair of bifocals or multifocals? (previously always worn single vision lenses)?
- Has the patient ever been prescribed with low vision aids?
- Social history should include daily tasks, hobbies, occupation, information about home environmental hazards or common places visited.

OBSERVATION AND SCREENING:

- Observe client in their environment or clinical environment e.g., how they walk towards you, do they overcome obstacles in their environment or clinic? Are they missing objects on one side of the room? This could be a sign the patient has a visual field defect or visual perceptive problem.
- Observe their head posture. If there is a face turn either right or left? This could be a sign the patient has either double vision, visual field defect, visual perceptive problem, or nystagmus.
- Does the patient have a head tilt? This could be a sign that the patient maybe experiencing double vision or has a vestibular problem affecting their eyes if there is no history of torticollis or c- spin injury/problems/surgery.
- Does the patient have a recent onset of roving or fast movement of the eyes (nystagmus)?
- Perform vision assessment with best corrected vision, glasses "for TV" are used for distance. Patients with multifocal should be encouraged to look through upper segment of glasses.

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- Observe the client whilst checking their vision, are they moving their head to see the letters on the chart? Do they only read one side of the chart? (sign of visual field defect).
- To assess if the patient has diplopia binocular or monocular diplopia ask the patient to close one eye at a time. If diplopia is not present when either eye is closed therefore this is an eye muscle problem therefore cause binocular diplopia.
- Any client with suspect stroke should have a CVF performed.

INTERVENTIONS:

- Clients who do not perform well on vision testing should be recommended to have their vision screened by an optometrist. If the vision reduction is significant, they will require a referral to ophthalmology for further medical intervention. Encourage use of technology and increase print size, encourage use of contrasts e.g.: black kettle on white kitchen bench top, white page with black writing, increase size of mobile phone print and use high contrasts, encourage use of overhead lighting whilst reading.
- Any client with binocular diplopia can have one eye occluded until they are reviewed by Orthoptics and Ophthalmology.
- Clients who require occlusion of one eye to overcome diplopia should be educated on the loss of field of vision and encouraged to move their heads to aid with scanning their environment rather than their eyes.
- Clients who complain of a sudden onset of visual field defect, double vision, nystagmus, or sudden reduction of vision painful or painless loss of vision that has not been investigated should be sent to emergency.
- Any client with visual field deficits should be encourages to scan the room with head movement rather than only their eyes.
- Any patients with gaze tracking deficits or visual perceptive disorders should be encouraged to practice to move their eyes first as far as they go then move their heads.
- Any vision aids required for the management of visual field deficits, visual perceptive problems, nystagmus, or double vision should be referred to Orthoptics, any clients who require low vision aids require referral to Vision Australia or Guide Dogs.
- Any clients with visual field defects or known visual perception problems should educate family members to approach patient from seeing side, place food on seeing side, remove obstacles in the environment that would typically be on the non-seeing side e.g. chair in bedroom.
- Any client with new MF or BF should be encouraged to wear the glasses in the home/familiar environment to learn how to use the glasses.
- Clients who have never used MF or BF lenses should be encouraged to discuss with their optometrist the preference and benefits of single vision lenses.
- Any client with eye tracking disorders, eye turns, nystagmus, visual field defects, or double vision should be seen by an Orthoptist.

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Section 7 SESLHD Falls Prevention Programs

A list of community based falls prevention groups throughout the District is available on the Allied Health Falls Resources Mapping SESLHD Falls Prevention Programs. Updates can be made to the mapping spreadsheet by local services.

An example of one falls prevention program offered within SESLHD is Stepping On. Stepping On is a free 7-week, evidence-based program that offers a combination of strength and balance exercises, with education sessions focused on medication, home safety and footwear once a week for 2 hours, with a booster session 2 months post program completion. It has been designed to prevent falls, maintain safety and independence by building participants knowledge, strength, and confidence. Information is available on the SESLHD Internet page, or contact SESLHD-steppingon@health.nsw.gov.au

Clinical Excellence Commission

The CEC Falls Prevention Program aims to reduce the incidence and severity of falls among older people and reduce the social, psychological, and economic impact of falls on individuals, families, and the community. It provides State-wide leadership, co-ordination and collaboration and provides resources and support for the implementation of local health districts and networks falls prevention plans.

The CEC website has a suite of resources for staff (Appendix 1) and patients and carers (Appendix 2).

Staff Education

A summary of HETI courses recommended for AHP to build foundation understanding and knowledge of falls prevention and management has been prepared (Appendix 3).

NSW Falls Prevention and Healthy Ageing Network

In 2020, the NSW Falls Prevention Network became the NSW Fall Prevention and Healthy Ageing Network. Since 1993 the NSW Falls Prevention Network has supported practitioners to share knowledge and promote evidence-based practice to prevent falls and fall-related injury. Stay up to date with news, information, and ideas on falls prevention at NSW Falls Prevention Network.

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Section 8 Conclusion

Falls in hospital remain a large health issue that has a significant personal, financial and health system burden. It is widely acknowledged that the approach to falls prevention should be multi-factorial, however often the focus has been on uni-modal methods. Addressing best clinical practice for each of the risk factors could be layered into clinical practice through multi-modal methods. In addition, risk factor identification and intervention should be a cyclical process, targeting each factor on a continuum until all modifiable risk factors are addressed.

A team approach should be utilised within falls prevention, with all multi-disciplinary team members reinforcing the same message. AHP play a significant role in the assessment and provision of intervention for falls both in hospital and within a community setting. AHP are well placed in the current health climate to enable change management within the health system for falls prevention.

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Section 9 Acknowledgements across SESLHD

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Section 10 References

ABS. 2016. ' Australian Demographic Statistics-3101.0 '. http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Ageing%20Population~14.

ACSQHC. 2009. 'Preventing Falls and Harm From Falls in Older People. ', Australian Commission on Safety and Quality in Healthcare, Accessed 29/06/2018. https://www.safetyandquality.gov.au/our-work/comprehensive-care/related-topics/falls-prevention

AGS, and BGS. 2009. 'Clinical Practice Guideline: Prevention of Falls in Older Persons', The American Geriatrics Society and British Geriatrics Society, Accessed 29/06/2018. http://www.medcats.com/FALLS/frameset.htm.

Ballinger, C., & Brooks, C. (2013). BMJ Improvement Hub. Patientsafety.health.org.uk. Retrieved 26 September 2018, from http://patientsafety.health.org.uk/resources/overview-of-best-practice-falls-prevention-occupational-therapy-perspective.

Blyth, F. M., Cumming, R., Mitchell, P., & Wang, J. J. (2007). Pain and falls in older people. European journal of pain (London, England), 11(5), 564–571. https://doi.org/10.1016/j.ejpain.2006.08.001

Cameron, I. D., Gillespie, L. D., Robertson, M. C., Murray, G. R., Hill, K. D., Cumming, R. G., & Kerse, N. (2012). Interventions for preventing falls in older people in care facilities and hospitals. The Cochrane database of systematic reviews, 12, CD005465. https://doi.org/10.1002/14651858.CD005465.pub3

Campbell, A. J., Robertson, M. C., La Grow, S. J., Kerse, N. M., Sanderson, G. F., Jacobs, R. J., Sharp, D. M., & Hale, L. A. (2005). Randomised controlled trial of prevention of falls in people aged > or =75 with severe visual impairment: the VIP trial. BMJ (Clinical research ed.), 331(7520), 817. https://doi.org/10.1136/bmj.38601.447731.55

Campbell, A. J., Robertson, M. C., Gardner, M. M., Norton, R. N., & Buchner, D. M. (1999). Psychotropic medication withdrawal and a home-based exercise program to prevent falls: a randomized, controlled trial. Journal of the American Geriatrics Society, 47(7), 850–853. https://doi.org/10.1111/j.1532-5415.1999.tb03843.x

Chase, C. A., Mann, K., Wasek, S., & Arbesman, M. (2012). Systematic review of the effect of home modification and fall prevention programs on falls and the performance of community-dwelling older adults. The American journal of occupational therapy : official publication of the American Occupational Therapy Association, 66(3), 284–291. https://doi.org/10.5014/ajot.2012.005017

Clemson, L., Cumming, R. G., & Heard, R. (2003). The development of an assessment to evaluate behavioral factors associated with falling. The American journal of occupational therapy : official publication of the American Occupational Therapy Association, 57(4), 380–388. https://doi.org/10.5014/ajot.57.4.380

Clemson, L., Singh, M.A.S., Bundy, A., Manollaras, K and D. Black. (2012). Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial BMJ, 345 :e5528 doi:10.1136/bmj.e5528

Clemson, L., & Swann, M. (2008). Stepping On. NSW Health Brochure.

Close, J. C., & Lord, S. R. (2011). Fall assessment in older people. BMJ (Clinical research ed.), 343, d5153. https://doi.org/10.1136/bmj.d5153

COT. (2015). 'Occupational therapy in the prevention and management of falls in adults: Practice guidelines.', College of Occupational Therapist, Retrieved 29 June2018,fromhttps://www.rcot.co.uk/practice-resources/rcot-practice-guidelines/falls.

Cumming, R. G., Thomas, M., Szonyi, G., Salkeld, G., O'Neill, E., Westbury, C., & Frampton, G. (1999). Home visits by an occupational therapist for assessment and modification of environmental hazards: a randomized trial of falls prevention. Journal of the American Geriatrics Society, 47(12), 1397–1402. https://doi.org/10.1111/j.1532-5415.1999.tb01556.x

THIS DOCUMENT IS A GUIDE FOR BEST PRACTICE
This Guideline is intellectual property of South Eastern Sydney Local Health District.
Guideline content cannot be duplicated.

Friedman, S. M., Munoz, B., West, S. K., Rubin, G. S., & Fried, L. P. (2002). Falls and fear of falling: which comes first? A longitudinal prediction model suggests strategies for primary and secondary prevention. Journal of the American Geriatrics Society, 50(8), 1329–1335. https://doi.org/10.1046/j.1532-5415.2002.50352.x

Gale, C. R., Westbury, L. D., Cooper, C., & Dennison, E. M. (2018). Risk factors for incident falls in older men and women: the English longitudinal study of ageing. BMC geriatrics, 18(1), 117. https://doi.org/10.1186/s12877-018-0806-3

Gillespie, L. D., Robertson, M. C., Gillespie, W. J., Sherrington, C., Gates, S., Clemson, L. M., & Lamb, S. E. (2012). Interventions for preventing falls in older people living in the community. The Cochrane database of systematic reviews, 2012(9), CD007146. https://doi.org/10.1002/14651858.CD007146.pub3

Goodwin, V. A., Abbott, R. A., Whear, R., Bethel, A., Ukoumunne, O. C., Thompson-Coon, J., & Stein, K. (2014). Multiple component interventions for preventing falls and fall-related injuries among older people: systematic review and meta-analysis. BMC geriatrics, 14, 15. https://doi.org/10.1186/1471-2318-14-15

Guirguis-Blake, J. M., Y. L. Michael, L. A. Perdue, E. L. Coppola, and T. L. Beil. (2018). 'Interventions to Prevent Falls in Older Adults: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force', *JAMA*, 319: 1705-16.https://www.ncbi.nlm.nih.gov/books/NBK525700/

Haines, T. P., Bennell, K. L., Osborne, R. H., & Hill, K. D. (2006). A new instrument for targeting falls prevention interventions was accurate and clinically applicable in a hospital setting. Journal of clinical epidemiology, 59(2), 168–175.https://doi.org/10.1016/j.jclinepi.2005.07.017

Hill, A. M., McPhail, S. M., Waldron, N., Etherton-Beer, C., Ingram, K., Flicker, L., Bulsara, M., & Haines, T. P. (2015). Fall rates in hospital rehabilitation units after individualised patient and staff education programmes: a pragmatic, stepped-wedge, cluster-randomised controlled trial. Lancet (London, England), 385(9987), 2592–2599. https://doi.org/10.1016/S0140-6736(14)61945-0

Lamb, S. E., Jørstad-Stein, E. C., Hauer, K., Becker, C., & Prevention of Falls Network Europe and Outcomes Consensus Group (2005). Development of a common outcome data set for fall injury prevention trials: the Prevention of Falls Network Europe consensus. Journal of the American Geriatrics Society, 53(9), 1618–1622. https://doi.org/10.1111/j.1532-5415.2005.53455.x

Leland, N. E., Elliott, S. J., O'Malley, L., & Murphy, S. L. (2012). Occupational therapy in fall prevention: current evidence and future directions. The American journal of occupational therapy : official publication of the American Occupational Therapy Association, 66(2), 149–160. https://doi.org/10.5014/ajot.2012.002733

Menant, J. C., Schoene, D., Sarofim, M., & Lord, S. R. (2014). Single and dual task tests of gait speed are equivalent in the prediction of falls in older people: a systematic review and meta-analysis. Ageing research reviews, 16, 83–104. https://doi.org/10.1016/j.arr.2014.06.001

Menant, J. C., Wong, A., Sturnieks, D. L., Close, J. C., Delbaere, K., Sachdev, P. S., Brodaty, H., & Lord, S. R. (2013). Pain and anxiety mediate the relationship between dizziness and falls in older people. Journal of the American Geriatrics Society, 61(3), 423–428. https://doi.org/10.1111/jgs.12131

Mendoza, T., Mayne, T., Rublee, D., & Cleeland, C. (2006). Reliability and validity of a modified Brief Pain Inventory short form in patients with osteoarthritis. European journal of pain (London, England), 10(4), 353–361. https://doi.org/10.1016/j.ejpain.2005.06.002

Mitchell, R. J., Close, J., Cameron, I. D., & Lord, S. (2013). Fall-related sub-acute and non-acute care and hospitalised rehabilitation episodes of care: what is the injury burden?. Australian health review : a publication of the Australian Hospital Association, 37(3), 348–355. https://doi.org/10.1071/AH12031

Ng CACM, Fairhall N, Wallbank G, Tiedemann A, Michaleff ZA, Sherrington C. Exercise for falls prevention in community-dwelling older adults: trial and participant characteristics, interventions and bias in clinical trials from a systematic review. BMJ Open Sport Exerc Med. 2019;5(1):e000663.

NICE.(2013). 'National Institute for Health and Care Excellence: Clinical Guidelines.' in, *Falls: Assessment and Prevention of Falls in Older People* (National Institute for Health and Care Excellence (UK). Copyright (c) National Institute for Health and Care Excellence, 2013.: London).

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Oliver, D., Britton, M., Seed, P., Martin, F. C., & Hopper, A. H. (1997). Development and evaluation of evidence based risk assessment tool (STRATIFY) to predict which elderly inpatients will fall: case-control and cohort studies. BMJ (Clinical research ed.), 315(7115), 1049–1053. https://doi.org/10.1136/bmj.315.7115.1049

Peterson EW and Clemson L. 2008. 'Understanding the role of occupational therapy in fall prevention for community-dwelling older adults', *OT Practice*, 13.

Pondal, M., & del Ser, T. (2008). Normative data and determinants for the timed "up and go" test in a population-based sample of elderly individuals without gait disturbances. Journal of geriatric physical therapy (2001), 31(2), 57–63. https://doi.org/10.1519/00139143-200831020-00004

Savvas, S. M., & Gibson, S. J. (2016). Overview of Pain Management in Older Adults. Clinics in geriatric medicine, 32(4), 635–650. https://doi.org/10.1016/j.cger.2016.06.005

Schofield P. (2018). The Assessment of Pain in Older People: UK National Guidelines. Age and ageing, 47(suppl_1), i1–i22. https://doi.org/10.1093/ageing/afx192

Schofield, P. (2017). 'Pain management in older adults', *Medicine*, 45: 41-45.

Sherrington, C., Michaleff, Z. A., Fairhall, N., Paul, S. S., Tiedemann, A., Whitney, J., Cumming, R. G., Herbert, R. D., Close, J., & Lord, S. R. (2017). Exercise to prevent falls in older adults: an updated systematic review and meta-analysis. British journal of sports medicine, 51(24), 1750–1758. https://doi.org/10.1136/bjsports-2016-096547

Sherrington, C., Tiedemann, A., Fairhall, N., J., Hopewell, S., Michaleff, Z., A., Howard, K., Clemson, L., and Lamb, S., E. (2016). "Exercise for preventing falls in older people living in the community." In *Cochrane Database Syst Rev*. John Wiley & Sons, Ltd.

Shumway-Cook, A., Brauer, S., & Woollacott, M. (2000). Predicting the probability for falls in community-dwelling older adults using the Timed Up & Go Test. Physical therapy, 80(9), 896–903.

Stepping On. NSW Health - South Eastern Sydney Local Health District. (2022). Retrieved 3 February 2022, from https://www.seslhd.health.nsw.gov.au/stepping-on

Treacy, D., Schurr, K., Lloyd, B., & Sherrington, C. (2015). Additional standing balance circuit classes during inpatient rehabilitation improved balance outcomes: an assessor-blinded randomised controlled trial. Age and ageing, 44(4), 580–586. https://doi.org/10.1093/ageing/afv019

Tricco, A. C., Thomas, S. M., Veroniki, A. A., Hamid, J. S., Cogo, E., Strifler, L., Khan, P. A., Robson, R., Sibley, K. M., MacDonald, H., Riva, J. J., Thavorn, K., Wilson, C., Holroyd-Leduc, J., Kerr, G. D., Feldman, F., Majumdar, S. R., Jaglal, S. B., Hui, W., & Straus, S. E. (2017). Comparisons of Interventions for Preventing Falls in Older Adults: A Systematic Review and Meta-analysis. JAMA, 318(17), 1687–1699. https://doi.org/10.1001/jama.2017.15006

Watson, W. L., Clapperton, A. J., & Mitchell, R. J. (2011). The cost of fall-related injuries among older people in NSW, 2006-07. New South Wales public health bulletin, 22(3-4), 55–59. https://doi.org/10.1071/NB10002

Yardley, L., Beyer, N., Hauer, K., Kempen, G., Piot-Ziegler, C., & Todd, C. (2005). Development and initial validation of the Falls Efficacy Scale-International (FES-I). Age and ageing, 34(6), 614–619. https://doi.org/10.1093/ageing/afi196

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Section 11 Revision and Approval History

Date	Revision No	Author and Approval
August 2021	DRAFT	Allied Health Falls Prevention and Management Committee
November 2021	DRAFT	Draft for comment period
April 2022	DRAFT	Approved by Executive Sponsor. Endorsed by SESLHD Clinical and Quality Council for approval.
May 2022	1	Formatted and published by SESLHD Policy

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Appendix 1: Clinical Excellence Commission- Resources for staff

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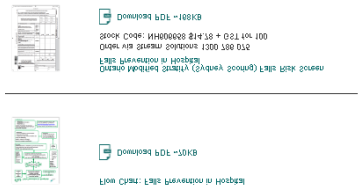
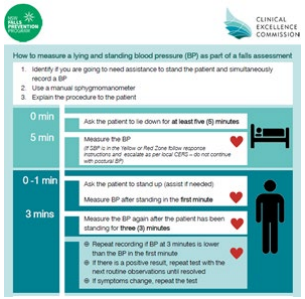
	 Screening and assessment tools for older people		
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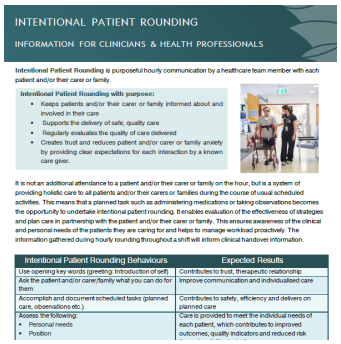			

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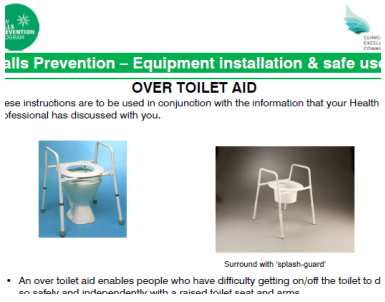
Balance and strength test videos	Home based balance and strength exercises	Equipment installation and safe use guides	Nutrition
			

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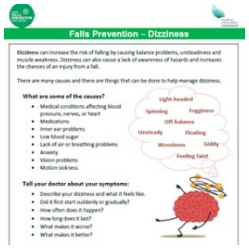
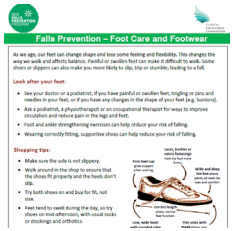
Appendix 2: Clinical Excellence Commission- Resources for patients and carers

Many of these have also been translated into other languages. To access the full range of resources, please visit the CEC website

Staying Active and On Your Feet booklet 	Stay Safe at Home 	Active and Healthy Website 
Dizziness 	Eyesight 	Foot care and safe footwear 
Information for those at risk of a fall	How to get up if you have a fall 	Medications 

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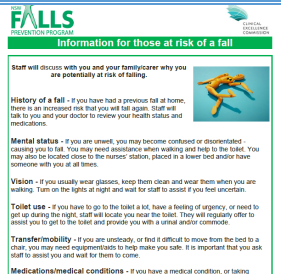

Information for those at risk of a fall

Staff will discuss with you and your family/carer why you are potentially at risk of falling.

History of a fall - If you have had a previous fall at home, there is an increased risk that you will fall again. Staff will talk to you and your doctor to review your health status and medications.

Mental status - If you are unwell, you may become confused or disorientated - causing you to fall. You may need assistance when walking and help to the toilet. You may also be located close to the nurses' station, placed in a lower bed and/or have someone with you at all times.

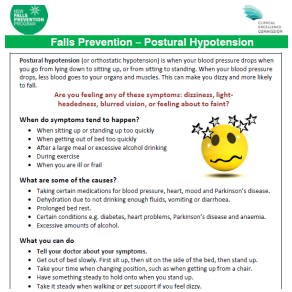
Vision - If you usually wear glasses, keep them clean and wear them when you are walking. Turn on the lights at night and wait for staff to assist if you feel uncertain.

Toilet use - If you have to go to the toilet a lot, have a feeling of urgency, or need to get up during the night, staff will locate you near the toilet. They will regularly offer to assist you to get to the toilet and provide you with a urinal and/or commode.

Transfer/mobility - If you are unsteady, or find it difficult to move from the bed to a chair, you may need equipment/aids to help make you safe. It is important that you ask staff to assist you and wait for them to come.

Medications/medical conditions - If you have a medical condition, or taking

Postural Hypotension


Falls Prevention – Postural Hypotension

Postural hypotension (or orthostatic hypotension) is when your blood pressure drops when you go from lying down to sitting up, or from sitting to standing. When your blood pressure drops, less blood goes to your organs and muscles. This can make you dizzy and more likely to fall.

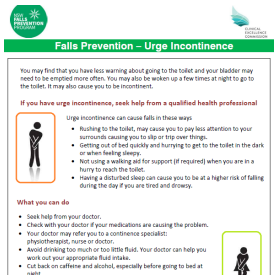
Are you feeling any of these symptoms: dizziness, light-headedness, blurred vision, or feeling about to faint?

When do symptoms tend to happen?
- When sitting up or standing up too quickly
- When getting out of bed too quickly
- After a large meal or excessive alcohol drinking
- During exercise
- When you are ill or frail

What are some of the causes?
- Taking certain medications for blood pressure, heart, mood and Parkinson's disease.
- Dehydration due to not drinking enough fluids, vomiting or diarrhoea.
- Prolonged bed rest.
- Certain conditions e.g. diabetes, heart problems, Parkinson's disease and anaemia.
- Excessive amounts of alcohol.

What you can do
- Tell your doctor about your symptoms.
- Get out of bed slowly. First sit up, then sit on the side of the bed, then stand up.
- Take your time when changing position, such as when getting up from a chair.
- Have something steady to hold onto when you stand up.
- Take it steady when walking or get support if you feel dizzy.

Urge Incontinence


Falls Prevention – Urge Incontinence

You may find that you have less warning about going to the toilet and your bladder may need to be emptied more often. You may also be woken up a few times at night to go to the toilet. It may also cause you to be incontinent.

If you have urge incontinence, seek help from a qualified health professional

Urge incontinence can cause falls in these ways
- Rushing to the toilet, may cause you to pay less attention to your surrounds causing you to slip or trip over things.
- Getting out of bed quickly and hurrying to get to the toilet in the dark or when feeling sleepy.
- Not using a walking aid for support (if required) when you are in a hurry to reach the toilet.
- Having a disturbed sleep can cause you to be at a higher risk of falling during the day if you are tired and drowsy.

What you can do
- Seek help from your doctor.
- Check with your doctor if your medications are causing the problem.
- Your doctor may refer you to a continence specialist: physiotherapist, nurse or doctor.
- Avoid drinking too much or too little fluid. Your doctor can help you work out your appropriate fluid intake.
- Cut back on caffeine and alcohol, especially before going to bed at night

Discharge Information after a Fall


Discharge information after a fall

A fall can be serious and can lead to loss of confidence and independence. As you have had a fall in hospital, here are some pointers for your care at home and to prevent another fall.

What to discuss with your GP at your next appointment:
- exercise that is best for you to reduce falls
- how to improve your mobility
- how to manage chronic health conditions
- your medications (that might lead to a fall)
- bone health
- if you need vitamin D
- any vision problems
- any foot pain or problems

If you experience any of these symptoms soon after your discharge from hospital, please seek prompt medical attention:
- have a headache that gets worse, or will not go away
- feel dizzy or faint
- have blurred vision or slurred speech or saying things that don't make sense
- are feeling nauseated or are vomiting
- feel increasingly sleepy, restless, confused, agitated, a change in behaviour
- have increased pain
- cannot move part of your body, or have increased clumsiness or balance problems

Staying Active booklet

Staying Active and on Your Feet booklet
- Health and lifestyle checklist
- How to get up from a fall
- Exercises to do at home

Falls Prevention in Hospital


Falls Prevention – In hospital

If you fall in hospital, it can lead to injury, resulting in a longer stay. Most people fall near the bed and while getting to the toilet.

What causes people to fall?
- Being unwell and in an unfamiliar place.
- Poor mobility and balance (unsafe when walking).
- Badly fitting footwear and clothing.
- Urgent need to go to the toilet.
- Medications that cause drowsiness/dizziness.

Photo© Queensland Health

Top tips to prevent a fall in hospital:
- Use your call bell. Keep it in easy reach and ring early if you require assistance. Please wait for staff, especially if you have been told you require assistance.
- Sit down to shower and use the rails to get off the chair or the toilet. If you feel unsafe in the bathroom, remain seated, use the call bell and wait for assistance.
- Familiarise yourself with your room and bathroom. Be aware of any hazards (e.g. spills and clutter) and advise staff when you see them.
- Take your time. When getting up from sitting or lying down. Let staff know if you feel unwell or unsteady on your feet. Use stable objects for support.

Moving around safely in hospital


MOVING AROUND SAFELY IN HOSPITAL

INFORMATION FOR PATIENTS, FAMILIES AND CARERS

We want you to be as safe as possible in hospital

During your stay, staff will talk to you about:
- your risk of falling
- how much assistance you need when you are moving around
- ways to prevent falls in hospital.

Falls in hospital

There are many reasons you may be at risk of falling in hospital:
- Being unwell and in an unfamiliar place
- Poor mobility and balance (unsafe when walking)
- Badly fitting footwear and clothing
- Poor eyesight
- Urgent need to go to the toilet
- Medications that cause drowsiness or dizziness.

Most falls in hospital happen when people are moving around, including:
- Getting out of bed
- Walking, especially to the toilet
- In bathrooms and toilets
- Bending over or reaching for personal items.

Please tell a staff member if:

Tips for getting around safely:
- Check with a staff member if it is safe to move around on your own
- Use your call bell and keep it in easy reach
- Use a walking stick or frame if this has been recommended for you
- Wear supportive, non-slip shoes or slippers
- Get up slowly from sitting or lying down
- Be alert for any spills or obstacles.

Bathroom safety tips:
- A staff member may need to stay with you for your safety.
- Sit down to shower and use the rails to get up off the chair or toilet.
- Remain seated in the bathroom and use the call bell if you need help moving around.

Patients who are confused could fall in hospital


Patients who are confused could fall when in hospital - information for families and carers

People with confusion (memory or thinking problems) have an increased risk of falling when in hospital due to cognitive impairment, physical illness and being in unfamiliar surroundings. A patient's cognitive impairment may be due to dementia and or delirium.

Did you know?
- People with dementia are at increased risk of a fall and developing delirium
- Delirium is common in older patients in hospital, and can lead to a fall

Photo courtesy of Alzheimer's Australia NSW

Dementia is a term for a number of conditions that affect memory, judgement, communication and the ability to carry out everyday activities. Alzheimer's disease is the most common cause of dementia.

Delirium is an acute condition and sudden. Patients may become agitated, disorientated or have changes in level of consciousness. Possible causes include: infection (including urinary tract infection), effects of medications, pain, dehydration, malnutrition, drug/alcohol withdrawal, urinary retention and constipation. Delirium can develop without dementia. Identifying delirium early, treating the cause, managing the symptoms and supportive care is very important to keep your family member safe.

Behavioural changes you may notice include:
- A change in "usual" behaviour
- Changes in sleep habits (awake during the night, sleepy during the day)

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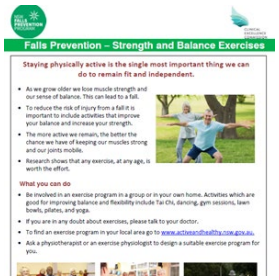
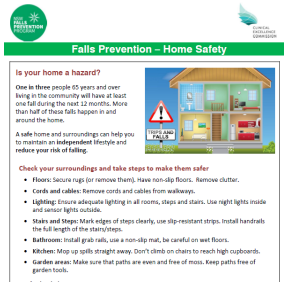
Strength and Balance Exercises	Home Safety	Information following a fall at home
		

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Appendix 3: Staff Education

My Health Learning Pathway: Minimising harm – Falls and Delirium
Delirium Stage 1 (233003664)
✓ Recognise signs and symptoms of delirium ✓ Demonstrates effective questioning techniques from appropriate screening tools ✓ Implement non-pharmacological treatment ✓ Communicate and collaborate with patient, family / carer and multidisciplinary team about management plan including medication
Delirium Care (266621954)
✓ Recognise delirium early and classify delirium as a medical emergency ✓ Identify patients at risk and take early action ✓ Take preventative action and monitor for indicators of hospital-acquired delirium ✓ Implement appropriate care strategies for care of patients with delirium ✓ Develop an ongoing post delirium care plan.
Falls Prevention and Falls Risk Management Strategies for Clinical Staff (40063943)
✓ Define and discuss falls and the significance of falls ✓ Recognise the falls risk screen as a risk management identification process. ✓ Identify and discuss falls risk factors, both patient centred, and environment centred ✓ Recognise the falls risk assessment and management plan as a tool to implement individualised falls prevention strategies ✓ Demonstrate the implementation of intervention strategies in response to identified risks ✓ Recognise that Local Health District (LHD) falls (hospital/acute and subacute) policies/procedures forms the framework for safe and accountable falls prevention and management.
Falls Risk: Screening, Assessment and Management Plans for Adults: Module (40823720)
✓ Apply the Ontario Modified STRATIFY (Sydney Scoring) Falls Risk Screen to identify persons at risk of falling ✓ Complete a Falls Risk Assessment and Management Plan (FRAMP). ✓ Describe how the FRAMP guides planning, implementing, and documenting multidisciplinary intervention strategies. ✓ Identify how the FRAMP guides referral pathways taking into account local referral processes. ✓ Describe how the FRAMP guides effective communication of falls risk and management planning with other staff patient and their family/carer ✓ Identify any barriers that may exist to using these tools and consider ways to overcome barriers.

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Post Fall Management for Clinical Staff (40101665)
✓ Describe the immediate actions required to prevent further harm when a fall has occurred. ✓ Describe the observations required for initial assessment and ongoing monitoring of an adult following a fall. ✓ Identify effective communication strategies to maximise post fall care outcomes. ✓ Complete post fall documentation accurately.
Post Incident Safety Huddles (221824316)
✓ Post Incident Safety Huddles are multidisciplinary review meetings following patients' falls, incidents and near misses. ✓ Safety Huddles aim to develop strategies in consultation with the patient to prevent incidents from happening again.

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