

# Interprofessional learning through simulation

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**Falls prevention: *who is responsible?***



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## Foreword

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Australia's health workforce is facing unprecedented challenges. Supply won't meet demand, and the safety and quality of care remain key issues. The national health workforce agency, Health Workforce Australia (HWA), an initiative of the Council of Australian Governments (COAG), has been established to address the challenges of providing a workforce that meets the needs of our community – now and in the future.

Accordingly, ECU has set a priority on meeting these challenges, with a focus on the national health workforce reform agenda set out in the 2008 National Partnership Agreement (NPA) on Hospital and Health Workforce Reform.

In June 2010, ECU was awarded \$4.6M from the Australian Government through a nationally competitive process under the ICTC Program, an initiative which aims to develop interprofessional learning and practice capabilities in the Australian health workforce.

The IpAC Program aims to complement traditional clinical placement activities with high quality interprofessional learning competency development and assessment, so that at the earliest point students gain exposure to best work practices within multidisciplinary teams that have the patient's individual needs as the focus.

Additionally, the IpAC Program has developed interprofessional learning resources and interprofessional health simulation challenges in collaboration with the ECU Health Simulation Centre. The ECU Health Simulation Centre is recognised internationally as a

specialist centre in providing human factors based sequential simulation programs using professional actors. Most simulated learning interactions revolve around a single moment, such as a patient's admission to the emergency department. What we provide at the ECU Health Simulation Centre is a sequential simulated learning event that follows the patient and carer's journey through the healthcare system, for example, from the accident site following a motor vehicle accident, to the emergency department, to a hospital ward, to their home and into the community for GP and allied health follow-up.

Human factors in health care are the non-technical factors that impact on patient care, including communication, teamwork and leadership. Awareness of and attention to the negative aspects of clinical human factors improves patient care.

ECU's involvement in national health workforce reform is all about playing a role that enables the health workforce to better respond to the evolving care needs of the Australian community in accordance with the NPA's agenda. The IpAC Program is an example of how we can work across sectors, nationally and internationally, to determine better ways of addressing the pressing issue of how best to prepare students for the workplace and thus assuring that health systems have safe, high quality health services.

## **Interprofessional Ambulatory Care Program**

ECU's IpAC Program was established with support from the Australian Federal Government through funding from the ICTC Program. The IpAC Program aims to deliver a world-class interprofessional learning environment and community clinic that develops collaborative practice among health professionals and optimises chronic disease self-management for clients.

This is achieved through the provision of clinical placements within the multidisciplinary team at the IpAC Unit, a community clinic that develops communication and collaboration among health professionals and optimises chronic disease self-management for clients.

Additionally, a range of clinical placements are offered at existing health facilities, where trained IpAC Program clinical supervisors provide clinical support and ensure the integration of interprofessional learning into each clinical placement.

The IpAC Unit, in collaboration with the ECU Health Simulation Centre, has developed a range of interprofessional learning through simulation resources. These learning resources are packages consisting of an audiovisual resource and a facilitator's manual, and aim to facilitate interprofessional learning and to support the participants in the development of interprofessional skills.

The interprofessional learning through simulation resources developed by the IpAC Program aim to provide health students and health professionals with the opportunity to learn with, from and about one another by engaging them in interactive live simulation events. These simulations encourage students and professionals to challenge themselves and each other in a safe learning environment.

## **ECU Health Simulation Centre**

ECU houses the only fully functioning Health Simulation Centre of its kind in Western Australia, specifically designed and equipped to address the interprofessional learning needs of the health workforce and implementation of both state and national safety and quality frameworks.

The ECU Health Simulation Centre offers health workforce training and development specialising in clinical skills, human factors, and patient safety training for multidisciplinary health teams. Using a variety of educational techniques, including a broad range of simulation mannequins, professional actors and task trainers, ECU specialises in immersive simulation and observational learning. Supporting the ECU Health Simulation Centre are nursing, medical, paramedic and psychology academic and technical staff whose aim is to cultivate the development of competent and confident health professionals centred on enhancing patient safety.

## **Interprofessional learning**

Interprofessional education occurs when two or more professions learn with, from and about each other in order to improve collaboration and quality of care (Centre for the Advancement of Interprofessional Education, 2002).

Interprofessional learning is the learning arising from interaction between students or members of two or more professions. This may be a product of interprofessional education or happen spontaneously in the workplace or in education settings (Freeth, Hammick, Reeves, Barr, & Koppel, 2005). It has been found that interprofessional education can improve collaborative practice, enhance delivery of services and have a positive impact on patient care (Canadian Interprofessional Health Collaborative, 2008).

The World Health Organization (WHO) has recognised the importance of interprofessional education and collaborative practice in developing a health workforce that is able to meet the complex health challenges facing the world and assist in the achievement of the health-related Millennium Development Goals (World Health Organization, 2010). In developing its framework for action, the WHO have recognised that models of interprofessional collaboration are most effective when they consider the regional issues and priority areas (including areas of unmet need) in the local population (World Health Organization, 2010). In doing so, interprofessional education and collaborative practice can best maximise local health resources, reduce service duplication, advance coordinated and integrated patient care, ensure patient safety and increase health professional's job satisfaction (World Health Organization, 2010).

The end goal of interprofessional education is to create a health workforce with improved levels of teamwork, collaboration, knowledge-sharing and problem-solving, eventually leading to better patient and client outcomes in health settings (Braithwaite et al., 2007).

## **Interprofessional learning through simulation**

Simulation in education refers to the re-creation of an event that is as closely linked to reality as possible. Gaba (2004) defined simulation as a technique, rather than a technology, to replace or amplify real life experiences with guided experiences often immersive in nature to evoke or replicate aspects of the real world, in a fully interactive pattern. Simulation provides a safe learning environment for students to practice, where they are free to make mistakes, correct them and improve the processes of care (Kenaszchuk, MacMillan, van Soeren, & Reeves, 2011). Simulation is the bridge between classroom learning and the real life clinical experience, allowing students to put theory into practice.

Interprofessional learning through simulation combines the principles of interprofessional learning and the use of simulation as an educational methodology. Interprofessional learning through simulation provides students with the opportunity to practice working with other health professionals and allows participants to explore collaborative ways of improving communication aspects of clinical care (Kenaszchuk, et al., 2011).

Many of the interdisciplinary team core competencies, such as problem solving, respect, communication, shared knowledge and skills, patient-centred practice, and the ability to work collaboratively (Canadian Interprofessional Health Collaborative, 2010) can all be developed by interprofessional learning through simulation.

Teamwork and interprofessional practice and learning are being recognised as central to improving client care and outcomes and enhancing client safety (Sargent, 2008). Promoting patient safety through team efforts is one of the five core competencies identified by the Institute of Medicine (2003).

In today's healthcare setting, no one health professional can meet all of the client's needs and therefore a healthcare team approach is required. Interprofessional learning through simulation provides learning opportunities to prepare future healthcare professionals for the collaborative models of healthcare being developed internationally (Baker et al., 2008).

## **How to use this resource package**

This interprofessional learning through simulation resource package has been designed to support the facilitation of interprofessional learning among students and practitioners with an interest in developing their skills and knowledge of interprofessional practice.

The package consists of two components: an audiovisual resource and a supporting manual. In order to optimise the learning opportunities from this package it is recommended that participants are firstly introduced to the concepts of interprofessional learning and human factors in health care.

The audiovisual resource consists of two scenarios, the first demonstrating sub-optimal response by the care team to a client fall, with the second demonstrating a more effective response which validates the families concerns and puts measures in place to ensure the

client is back and functioning as quickly as possible following the fall. The package has been created in a format to enable flexibility in its application depending of the educational setting.

We recommend the following format:

1. Facilitator guided discussion around the concepts of interprofessional learning and human factors in health care.
2. View segments 1 and 2 of the audiovisual resource 'Transfer to a new aged care facility' and 'Following the fall'.
3. Facilitator guided discussion around the scenario specific learning competency areas (samples given within manual).
4. View segment 3 of audiovisual resource 'Defusing the situation'.
5. Facilitator guided discussion, identifying and discussing the changes witnessed and how this resulted in an alternative outcome. In particular discussion relating the causes of these changes to personal (future) practice is essential in improving interprofessional practice.

Opportunities for further reading and exploration of the scenario are provided in the *Further Information* and *References* sections of this resource manual.



## Scenario brief

Pat, an elderly lady in her 80s, moves into a new aged care facility at her son's request so that she can be closer to her family. Pat has been experiencing blurred vision but fails to highlight this when she is admitted to the new facility, as she does not want to bother the busy staff. As a result, Pat experiences a fall within the first week of her admission.

### List of characters

- Client
- Client's son
- Clinical Nurse
- Clinical Nurse Manager
- Enrolled nurse/care assistant

## Key learning competencies

The key learning competencies for this scenario are based on the IpAC Program learning objectives as well as the Canadian Interprofessional Health Collaborative (CIHC) Competency Framework (Canadian Interprofessional Health Collaborative, 2010). The specific competency areas for this scenario are:

- Client centred care
- Interprofessional and client centred communication
- Reflective practice

## Client centred care

The interaction between team members and the client demonstrates:

- The sharing of information with clients in a respectful manner.
- Communicating with the client in a way that is transparent, understandable, free of jargon and relates to the client's daily life.
- Listening to the needs of all parties to ensure the most appropriate care is provided.
- The interaction is supportive to the client and his or her needs.
- Facilitation of client decision making.

## Interprofessional and client centred communication

The health care team consists of health professionals, the client and the family. The interaction within the health care team demonstrates:

- Communication is authentic, consistent and demonstrates trust
- Team members demonstrate active listening skills
- Communication ensures a common understanding of decisions made
- Trusting relationships with clients /families and other team members
- Other disciplines' roles are promoted and supported to client/family

## Reflective practice

Reflective practice is crucial in continuous development and re-assessment of skills when working in health care. A reflective practitioner:

- Reflects on feedback and integrates changes into practice.
- Reflects on how own perceptions, attitudes and beliefs impact on practice.
- Identifies knowledge deficits and seeks clarification.
- Ensures procedures for safety and quality assurance are implemented.

## Key discussion points

### Transfer to a new aged care facility & Following the fall

#### Admission

- How would you describe the communication in this scenario?
  - By the client (Pat)?
  - By the son?
  - By the nurse?
  - By the Personal Care Assistant?

What might be contributing to this communication dynamic?

- What might have contributed to Pat being reluctant to mention the urgency of needing an eye check? Is this something that is Pat's responsibility? Her son's? The aged care facility?
- Do you think Pat's admission check was adequate? What could have been done differently?

### **Family meeting**

- How would you describe the response of the Clinical Nurse Manager (CNM) to the fall? Why might this be?
- How does the son respond to the CNM's comments? How do you think he is feeling when he leaves the meeting? Is he satisfied with the outcome?
- How do you think the Enrolled Nurse feels during the formal meeting?
  - How could this have been better handled/facilitated by the CNM?
  - Do you think this would have an impact on staff morale?
- How could the CNM have improved her communication during the family meeting? How could have these changes have improved the final outcome?

## **Key discussion points**

### **Defusing the situation**

- What did you notice had changed in this revised scenario? How did these changes impact on the final outcome?
- How do you think the son felt in this revised scenario? Why? Identify some of the specific improvements made?
- How do you think the healthcare team operated in the revised scenario? What were some of the specific changes that occurred and how did this affect the dynamics in the revised scenario?
- What changes did the Clinical Nurse Manager make to her communication make in the revised scenario? Discuss:
  - Her body language.
  - Her acknowledgement of the son's anger, guilt and anxiety.
  - Her leadership style.
  - Her acceptance of responsibility as manager and protection of her staff.
  - The measures she has put in place to restore the client's (Pat's) functioning.

### **Encourage participants to reflect on their own practice:**

- How can you ensure the lessons in this resource are applied to your own clinical practice?
- What could be barriers for you to apply the interprofessional communication skills highlighted in this resource? How will you overcome these?

## Literature review

Falling is not an inevitable result of ageing but the risk of falling does increase with age (Pountney, 2009). A fall is defined as “an event which results in a person coming to rest inadvertently on the ground or lower level” (Kellog International Working Group on Prevention of Falls by the Elderly, 1987). On average, one in three adults over the age of 65 fall each year (Campbell et al., 1990; Dolinis, Harrison, & Andrews, 1997; Lord, Ward, Williams, & Anstey, 1993; Tinetti, Speechley, & Ginter, 1988) resulting in approximately 25% requiring some form of medical treatment and 8% requiring hospital admission (Stel, Smit, Pluijm, & Lips, 2004). Falls are a major cause of disability and the highest cause of injury-related mortality in people aged over 70 years (Garvey, 2010). Accidental falls in people over the age of 65 accounts for about 1.5% of all health service expenditure in Western Australia (Hendrie, Hall, Arena, & Legge, 2004). It is estimated that only half of those people admitted to hospital following a fall will be alive a year later (Rubenstein, 2006). It may not be possible to prevent falls completely but the frequency of falls can be limited (Gillespie et al., 2009).

Although older people fall less often than children, the high prevalence of clinical diseases in older people such as osteoporosis, physiological changes such as slower protective reflexes, and the longer time taken to recover from a fall, all result in a significantly higher rate of injury. This increases the risk of further falls due to deconditioning, which may then be exacerbated by a fear of falling, restricting their daily activities (Rubenstein, 2006).

Falls prevention and falls risk assessments have become significant topics in healthcare for the elderly in recent years as they have the potential to reduce serious fall-related injuries, emergency department visits, hospitalisations, nursing home placements and functional decline (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). Risk factors for falls can be either extrinsic (relating to the physical and social environment); or intrinsic (relating to individual health and fitness). Falls are often a result of a combination of these factors (Pountney, 2009). Assessing risk factors for falls without carrying out any direct interventions is not considered worthwhile (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). A large number of risk assessment tools have been developed however these are often poor predictors of falls especially when used outside the area in which they were initially developed (Vassallo, Poynter, Sharma, Kwan, & Allen, 2008).

## Falls in the community

Most evidence for successful falls prevention strategies has come from research into people living in their own homes (Gillespie, et al., 2009). Identified risk factors for falls in the community include:

- history of previous falls;
- medications;
- medical conditions including neurological impairments, cardiac abnormalities and postural hypotension;
- gait, mobility problems and reduced muscle strength;
- visual problems or sensory loss;
- foot impairments and inappropriate footwear;
- reduced muscle strength;
- incontinence; and
- environmental hazards.

*Source: (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011)*

Combined interventions of exercise targeting strength and balance, education and home safety is recommended for personally tailored interventions for at risk individuals (Australian Commission on Safety and Quality in Health Care, 2009b). Cataract surgery, pacemaker insertion and the gradual withdrawal of psychoactive medication have also been found to reduce falls for community-dwelling individuals (Gillespie, et al., 2009). Home safety interventions, such as railings and non-slip mats, are particularly effective in reducing falls for people with severe visual impairment or for those at a higher risk of falling (Gillespie, et al., 2009).

## Falls in hospitals

The evidence supporting successful falls prevention in the community does not necessarily translate to the hospital setting where the population is considerably more unwell or medically unstable and where there is a high prevalence of cognitive impairment (Oliver et al., 2007). Sixty to seventy percent of falls in hospitals occur from the bed or bedside chair, more than 80 percent are unwitnessed and 50 percent occur in patients who fall frequently (Oliver, 2002). Bed rails and other physical interventions such as alarms or restraints may

result in increased rather than decreased falls, and have been shown to be associated with increased mortality (Oliver, 2002).

Falls in hospitals often result in impaired rehabilitation, anxiety and depression and longer hospital stays as well as discharge to long term care. They also cause anxiety and guilt among staff and unhappiness among carers and relatives which may turn into complaints or litigation (Oliver, 2002).

It is recommended that a falls risk screening tool should be completed for older patients as soon as practicable after admission, and it is suggested that this is completed in the emergency department. A falls risk assessment should then be carried out for patients who are identified as being at risk or who have been admitted due to a fall. The assessment should be repeated each time a patient falls (Australian Commission on Safety and Quality in Health Care, 2009c).

Unfortunately risk assessment tools used in hospital settings often overestimate which patients are at risk, thereby unnecessarily limiting the independence and mobility of patients who are at low risk (Evans, Hodgkinson, Lambert, & Wood, 2001). The factors which increase risk in the hospital setting are:

- altered mental status;
- impaired mobility;
- history of falls;
- toileting needs;
- medication; and
- diagnosis.

*Source:* (Evans, et al., 2001)

Stroke patients tend to be at greater risk of falling due to perceptual deficits, behavioural impulsivity, restlessness, general weakness, postural sway and fatigue (Evans, et al., 2001).

Hospital discharge planning should include consideration of a referral to a falls prevention exercise program and an occupational therapy home visit (Australian Commission on Safety and Quality in Health Care, 2009c).

## Falls in nursing homes

Nursing home residents are, on average, older and frailer, are often chronically ill and are more physically dependent than hospital patients. They are more likely to be suffering from conditions such as dementia or gait disturbances. Approximately half of nursing home residents will fall each year (Rubenstein, 2006) and the rate of hip fractures is more than 10 times higher than in the general community (Cameron et al., 2010). Generally nursing home residents are assessed for falls risk when they are admitted as well as on a regular basis thereafter or following a change in status (Wagner, Scott, & Silver, 2011).

There appears to be a lack of validated falls risk assessment tools suitable for nursing homes. As a consequence it is suggested that falls risk assessments should be used as a guide to planning care and interventions rather than a tool for sorting residents into high- and low-risk categories (Wagner, et al., 2011).

The Australian Commission on Safety and Quality in Health Care (ACSQHC) (Australian Commission on Safety and Quality in Health Care, 2009a) recommends falls risk screening and assessment on admission to a facility and then every six months or following a change in functional status. The screening and assessment must be followed up by appropriate interventions related to the specific risks identified even if the resident has been identified as being at low risk of falls overall (Australian Commission on Safety and Quality in Health Care, 2009a). Falls often occur in a resident's first few days in a facility therefore staff need to orientate them to their new surroundings, familiarise them with new equipment and teach them to mobilise and transfer safely in their new environment (Australian Commission on Safety and Quality in Health Care, 2009a).

Exercise programs for nursing home residents have been shown to be particularly effective in reducing falls, in particular when combined with balance exercises. Walking programs appear to have the opposite effect (Sherrington et al., 2008). The ACSQHC (2009a) recommends gait, balance and functional coordination exercise training be delivered and supervised by appropriately trained personnel.

Medications for residents should also be reviewed regularly, particularly psychoactive medications which have been shown to significantly increase the risk of falling (Agishivala & Wu, 2009). Sedatives, cardiac drugs and anti-inflammatory drugs can also increase the risk of falling (Anthony, 2007 cited in; Pountney, 2009).

Prescribed drugs can cause:

- sedative effects;
- balance impairment;
- delayed reactions;
- lowered blood pressure; and
- drug-induced Parkinsonian symptoms.

(Source: Pountney, 2009)

Vitamin D supplementation has been shown to be effective in reducing the rate of falls in nursing care facilities (Cameron, et al., 2010) as deficiency results in both impaired muscle strength and possibly neuromuscular function (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011).

Identification of cognitive impairment should form part of the falls risk assessment and residents presenting with acute changes in their cognitive function should be assessed for delirium and the underlying cause of the changes. Interventions for cognitively impaired residents may need to be modified and supervised (Australian Commission on Safety and Quality in Health Care, 2009a). Injury minimisation is assisted through vitamin D and calcium supplementation (Cameron, et al., 2010). Hip protectors are another factor in injury minimisation, as they have also been shown in some studies to reduce the rate of hip fractures in care home residents (Oliver, et al., 2007).

Nursing home residents considered at high risk of falling should be assessed by an occupational therapist and physiotherapist. Staff should discuss their preferred arrangement of personal belongings, furniture and sleeping arrangements. It should be ensured that their personal belongings and equipment are easy and safe for them to access. Most falls in residential facilities are unwitnessed and occur in the bedside area. Regular observation and checking on the patients can reduce falls but care must be taken not to infringe the residents' privacy (Australian Commission on Safety and Quality in Health Care, 2009a).

## **Fear of falling**

Older people, whether or not they have experienced a fall, may suffer from a fear of falling. This will cause them to reduce the amount of activity they carry out and, in turn, this causes deconditioning, weakness and abnormal gait, which in turn increases the risk of further falls



and may result in a need for residential care (Harding & Gardner, 2009; Rubenstein, 2006). Although it is normal for some anxiety to be present in the days or weeks following a fall, a subsequent change in activity patterns is a cause for concern requiring further investigation and management (Harding & Gardner, 2009).

## Interventions

Research has demonstrated that multifactorial interventions by a multi-disciplinary team will reduce both the risk and the rate of falls in nursing homes, hospitals and in the community (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011; Australian Commission on Safety and Quality in Health Care, 2009a, 2009b, 2009c; Cameron, et al., 2010). Reducing the number of medications and withdrawing or reducing psychotropic medications have been shown to reduce the risk of falls (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). Exercise programs including strength training, balance, gait and co-ordination training either in groups or individually can reduce falls risk. Balance training has also been shown to reduce fear of falling. Care needs to be taken to with people who have limited mobility and are not used to physical activity (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). Exercise programs, particularly those that include balance training, have an estimated effect of reducing the rate of falls by 17% (Sherrington, et al., 2008). Cataract surgery has also been shown to have a significant impact on falls risk (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). Changing from multifocal glasses to single lens distance vision glasses for walking and outdoor activities in the community is beneficial for active, community-living older people (Haran et al., 2010).

## Managing falls

When a person has fallen it is essential to get a full report of the circumstances of the fall including frequency of falling, symptoms at the time of the fall as well as the injuries sustained from the fall (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011). It is often helpful to interview any witnesses as the patient may have a poor recollection of the events (Rubenstein, 2006). Several studies have shown that recording the time and place that falls occur in residential settings can help to identify patterns and prompt action to reduce further falls (Pountney, 2009). An internal quality improvement (QI) cycle can help to ensure safe practices (Zenewton, Medina-Mirapeix, & Saturno, 2011).

## Conclusion

As people get older they are more likely to fall and sustain injury. Falls are associated with:

- morbidity;
- mortality;
- poor overall functioning; and
- early admission to residential care facilities.

Recommendations to reduce falls differ between environmental settings but require effective screening to identify those at risk, multifactorial assessment and individualised direct intervention to address the specific risk factors (AGS/BGS Panel on Prevention of Falls in Older Persons, 2011).

## Medical glossary and acronyms

<b>Altered mental status</b>	A change in level of consciousness or the way a person thinks and behaves that may be a sign of disease in the central nervous system.
<b>Anti-inflammatory drugs</b>	Medicines designed to reduce inflammation, including non-steroidal anti-inflammatory drugs and corticosteroids.
<b>Bed rails</b>	Rails fitted to the sides of a bed designed to prevent an individual from getting out, or falling out, of bed.
<b>Behavioural impulsivity</b>	Behaviour that occurs quickly without control, planning or consideration of the consequences.
<b>Cognitive impairment</b>	Impairment in the normal functioning of the brain causing difficulties with thinking, concentration, memory, perception, calculation, formulation of ideas, problem-solving and reasoning.
<b>Deconditioning</b>	The loss of muscle tone and fitness due to chronic disease, immobility, or loss of function.
<b>Fall</b>	An event which results in a person coming to rest inadvertently on the ground or lower level (Kellog International Working Group on Prevention of Falls by the Elderly, 1987).
<b>Falls Risk Assessment</b>	A detailed and systematic process to identify an individual's risk factors for falling.
<b>Falls Risk Screen</b>	A minimum process for identifying those people who are at greatest risk of falling.
<b>Functional co-ordination</b>	Ability to move through complex series' of movements to carry out everyday tasks.

<b>Gait</b>	A person's manner of walking.
<b>Hip protector</b>	A device worn over the greater trochanter of the femur, designed to cushion the hip joint from the impact of a fall thereby preventing a fractured neck or femur.
<b>Impaired mobility</b>	Inability to walk in a normal fashion.
<b>Incontinence</b>	Inability to control excretions from the bladder or bowels.
<b>Interdisciplinary teams</b>	A team that is collaboration-oriented. The team meets regularly to discuss and collaboratively set treatment goals and carry out treatment plans. There is a high level of communication and cooperation among team members (Korner, 2008, p. 2)
<b>Intervention</b>	A therapeutic procedure or treatment strategy designed to cure, alleviate or improve a condition. Interventions for falls can include "treatment" of the environment.
<b>Morbidity</b>	Departure from a state of physical or psychological well-being, resulting from disease, illness, injury, or sickness.
<b>Mortality</b>	Death or rate of deaths in a population.
<b>Multidisciplinary teams</b>	A team that is discipline-oriented. Each professional works in parallel, with clear role definitions, specified asks and hierarchical lines of authority (Korner, 2008, p. 2).
<b>Multifactorial interventions</b>	Where an individual receives multiple interventions, often by professionals from different health disciplines. The combination of the interventions is based on the individual assessment and tailored to the person.

<b>Multifocal glasses</b>	Glasses with different lens powers to enable you to see objects at various distances. Includes bifocal, trifocal and varifocal glasses.
<b>Neurological impairments</b>	Disorders related to the central nervous system (brain and spinal cord), including traumatic brain injury, epilepsy, Parkinson's disease, dementia, stroke, tumours, multiple sclerosis, motor neurone disease.
<b>Osteoporosis</b>	A condition in which the bones become brittle and fragile and take longer to heal. This is often the result of hormonal changes in post-menopausal women or a lack of calcium and vitamin D.
<b>Parkinsonian symptoms</b>	Symptoms normally seen in Parkinson's disease but which may have other causes are tremors, bradykinesia (slowness of movement), rigidity, festinating gait (small, shuffling steps).
<b>Perceptual deficits</b>	Difficulties interpreting information received from the senses.
<b>Postural Hypotension</b>	A drop in blood pressure due to a change in position, for example, when moving from lying or sitting to standing.
<b>Postural sway</b>	Involuntary movement that occurs when a person is attempting to stand still.
<b>Psychoactive medications</b>	Medication capable of affecting the mind, behaviour, mood or emotions.
<b>Rehabilitation</b>	Treatments designed to facilitate the recovery from illness, accident, disease or surgery and to return, as near as possible, to previous level of function.
<b>Validated</b>	Tested to ensure that a system meets its requirements

## Further information

### **Aged Care Australia**

1800 200 422

[www.agedcareaustralia.gov.au/](http://www.agedcareaustralia.gov.au/)

The Australian Government Department of Health and Ageing's *Aged Care Australia* provides government and non-government information and services about aged care services. The aim is to assist community members to make informed decisions about aged care options for themselves and their family members.

### **Australia and New Zealand Falls Prevention Society**

[www.anzfallsprevention.org](http://www.anzfallsprevention.org)

Established in 2006 this organisation promotes the multidisciplinary study and implementation of falls prevention in older people.

### **The Australian Commission on Safety and Quality in Health Care**

[www.health.gov.au/internet/safety/publishing.nsf/content/FallsGuidelines](http://www.health.gov.au/internet/safety/publishing.nsf/content/FallsGuidelines)

### **Center for Disease Control and Prevention**

<http://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html>

A clearinghouse for accurate, timely, consistent, and science-based information on a wide variety of disease prevention and health promotion topics for the general public, healthcare providers and public health partners.

### **Fall Prevention Center of Excellence**

<http://www.stopfalls.org/index.shtml>

A Center with a focus is on falls prevention in the state of California. Its mission is to identify best practices in fall prevention and to help communities offer fall prevention programs to older people who are at risk of falling.

### **World Health Organization Violence and Injury Prevention subgroup**

[http://www.who.int/violence\\_injury\\_prevention/other\\_injury/falls/en/](http://www.who.int/violence_injury_prevention/other_injury/falls/en/)

The World Health Organization's Violence and Injury Prevention subgroup includes work on falls prevention. This group developed a report titled: *WHO global report on falls prevention in older age*.

*Falls Prevention Programs are found in most Australian States and Territories:*

**ACT Government Health Directorate**

<http://health.act.gov.au/health-services/rehabilitation-aged-and-community-care/racc-services/community-based/falls-prevention/falls-falls-injury-prevention-program>

**Department of Health and Human Services, Tasmania**

[http://www.dhhs.tas.gov.au/service\\_information/information/preventing\\_falls\\_in\\_the\\_elderly](http://www.dhhs.tas.gov.au/service_information/information/preventing_falls_in_the_elderly)

**NSW Falls Prevention Network**

<http://fallsnetwork.powmri.edu.au/resources/resources.php>

**Stay on Your Feet NSW**

[http://www.health.nsw.gov.au/pubs/2008/030295\\_stay\\_on\\_feet.html](http://www.health.nsw.gov.au/pubs/2008/030295_stay_on_feet.html)

**Stay on Your Feet Queensland**

<http://www.health.qld.gov.au/stayonyourfeet>

**Stay on Your Feet WA**

[www.health.wa.gov.au/stayonyourfeet](http://www.health.wa.gov.au/stayonyourfeet)

**Falls Prevention in SA**

[www.fallssa.com.au/](http://www.fallssa.com.au/)

**Victorian Government Health Information**

[http://www.health.vic.gov.au/agedcare/maintaining/falls\\_dev/](http://www.health.vic.gov.au/agedcare/maintaining/falls_dev/)

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