

## Falls in Older Adults in Western Australia Position Paper

### **Commitment:**

Injury Matters will continue to lead the way in delivering falls prevention activities for older adults living in the Western Australian community and advocating for collective action to reduce the impact of falls.

### **Purpose:**

To increase the target audiences;

- awareness of the incidence of falls in older adults in Western Australia (WA),
- knowledge of effective falls prevention initiatives, and
- knowledge of actions that can be taken to reduce the impact of falls in WA.

**Target audience:** Health professionals, local government workers, policymakers, carers and exercise professionals.

**Date:** November 2022

**Version:** 2

## 1. Background

A fall is defined by the World Health Organization as an incident when an individual inadvertently comes to rest on the ground, floor or other lower level, excluding intentional change in position to rest in furniture, wall or other object.<sup>1</sup>

Older adults are defined in this position paper as people 65 years and older.

Globally falls are the second highest cause of unintentional injury deaths, making it a significant public health problem.<sup>2</sup> In addition to a fatality, a fall can result in injury, long-term disability, psychological consequences and reduce an individual's quality of life.<sup>1</sup>

The frequency and severity of falls increases with age, with approximately one in three people over the age of 65 falling every year.<sup>3</sup> As part of the natural ageing process, older adults can experience changes in their physiological health, which influences their ability to conduct activities of daily living and increases their risk of experiencing a fall. In particular, older adults are at a heightened risk of experiencing a fall due to age-related biological changes, including decreased muscular strength, cardiovascular output, muscle mass, balance and the presence of chronic health conditions.<sup>1</sup>

Despite the frequency and severity of falls increasing with age, healthy lifestyle behaviours, and evidence-based interventions that address the modifiable risk factors for falls can prevent falls in older adults.<sup>4</sup>

## 2. Summary

### **Incidence of falls:**

1. In 2019, 337 Western Australians aged 65 years and over died as the result of a fall, while in 2020, individuals aged 65 years and over were hospitalised 20,325 times and attended the emergency department 13,019 times due to a fall.<sup>5</sup>
2. In 2020, almost 1 in 5 hospitalisations for individuals aged 85+ were due to falls.<sup>5</sup>
3. Due to Western Australia's<sup>6</sup> ageing population, without greater intervention the incidence of falls is likely to grow.
4. Injury Matters acknowledges that there are a range of biological, behavioural, environmental and social factors that increase an older adults risk of having a fall, including; a history of falls, impaired balance, reduced muscle strength, environmental hazards, chronic medical conditions, medication consumption, impaired vision, impaired cognition, poor diet, alcohol consumption, inappropriate footwear and a fear of falling.<sup>7</sup>
5. Some population groups experience a higher incidence of falls-related hospitalisations including; Aboriginal and Torres Strait Islander peoples, regional residents and people living in residential aged care facilities.<sup>5</sup>

### **Falls prevention initiatives:**

6. The implementation of effective falls prevention programs can reduce an older adult's risk of falling, health care costs, the demand for aged care services, and increase older adult's quality of life.
7. Despite an individual's falls risk increasing with age, improved falls prevention awareness, and support to action, protective behaviours are needed across the whole population.<sup>1</sup>
8. Individuals can experience a range of barriers to conducting falls prevention activities including; costs, access to services, the difference in care practice and a belief that the activities are for frail older people and do not apply to them.<sup>8</sup>
9. The potential effectiveness of specific falls prevention interventions is influenced by where the individual resides and therefore this should be considered when selecting a falls prevention intervention.<sup>7,9,10</sup>
10. There is limited evidence regarding the impact of falls prevention interventions that only include an education component on the participant's rate and risk of falling.<sup>11</sup>
11. Capacity building is necessary for increasing health professional's knowledge of how to assess their clients falls-risk, increase their confidence to implement falls-prevention strategies and ultimately reduce their client's risk of having a fall.<sup>1</sup>
12. Due to the multifactorial nature of falls, to reduce the incidence of falls, a multidisciplinary and systemic approach is required.<sup>1</sup>

### **Physical activity initiatives:**

13. Evidence supports exercise programs that involve more than three hours of exercise per week, include a high challenge to balance (including strength, flexibility, and endurance, use the majority of muscle groups and incorporate progressive weight training) can have improved health outcomes and reduced rates of falls within community-dwelling older adults.<sup>4,12-14</sup> In particular, the Otago Exercise Programme<sup>15</sup>, Lifestyle Integrated Functional Exercise (LiFE) program<sup>16</sup>, and Tai Chi for Arthritis<sup>17</sup> are strength and balance based programs that have been proven to be effective in reducing participants' falls risk.

### **Health and wellbeing initiatives:**

14. Many strategies, including the Australian National Women's Health Strategy 2020-2030<sup>18</sup>, the Australian National Men's Health Strategy 2020-2030<sup>19</sup> and the Western Australia Health Promotion Strategic Framework 2017-2021<sup>20</sup>, recognise the need to implement activities that support older adults to live healthy and independent lives.
15. There is evidence that multifactorial interventions that include an assessment component can reduce participant's rate of falls but not their risk of falling.<sup>21</sup>
16. Consuming medications has the potential to impact on the consumers wellbeing and their falls risk, and therefore all prescriptions should be individualised and frequently reviewed.<sup>22</sup>
17. Evidence supports that cognitive, behavioural and motor function training that is task-specific may reduce an individual's falls-risk.<sup>23</sup>
18. Due to the role of a balanced diet in the maintenance of an individual's; muscle function, cognitive function, bone mass and ability to perform activities of daily living, older adults may benefit from a nutritional assessment to ensure they are consuming the nutrients that they require.<sup>24,25</sup>
19. Due to its potential effect on judgement, coordination, concentration and medication absorption alcohol use is also a contributing factor to an individual's falls risk.<sup>26,27</sup> Older adults in particular can experience greater risks from alcohol use due to age-

related changes in older adults body composition, including a lower volume of body water and a lean body mass.<sup>27</sup> Therefore it is vital that the sector raises awareness of the National Health Medical Research Council (NHMRC) Guidelines to reduce health risks from drinking alcohol.<sup>28</sup>

### **Environmental initiatives:**

20. Research results indicate that interventions that involve a home safety assessment and modifications are effective in reducing the rate of falls and risk of falling, particularly among individuals who are at higher risk of falling.<sup>11</sup>
21. In addition to a safe home environment, evidence supports the need for public spaces to be free from potential hazards and designed to encourage Western Australian's to live healthy and active lifestyles.<sup>7</sup>
22. Due to inappropriate footwear, foot pain and other foot-related problems having the potential to increase an individual's falls risk, it can be beneficial for older adults to be referred to a podiatrist to be screened for these risk factors.<sup>7</sup>
23. To reduce the risk of impaired visual function influencing an individual's falls-risk, regular eye examinations, the use of correctly prescribed glasses and cataract surgery, have the potential to be effective interventions.<sup>29,30</sup>

### **3. Key Policy Statements**

Injury Matters supports the need for the following actions to reduce the prevalence and impact of falls among older people in WA:

1. Support the implementation of the WA Falls Prevention Model of Care.
2. Incorporate falls prevention initiatives into local government public health plans, age-friendly strategies and senior planning guides.
3. Implement strategies that aim to increase older adults' access to affordable evidence-based exercise programs to support older adults conduct three hours of exercise per week.
4. Prior to conducting new exercises, older adults should consult with their doctor and complete a pre-exercise screening to minimise the risk of any adverse events following participation in activities.
5. Develop and implement targeted interventions that support population groups who have an increased risk of experiencing a fall.
6. Ensure individuals who present to a healthcare service due to a falls-related injury are provided with prevention initiatives targeting the underlying cause of the fall, not just treatment for the acute injury.
7. Ongoing networking and partnerships across sectors to prevent the fragmentation across health care and prevention settings.
8. Conduct advocacy activities regarding the importance of General Practitioners and Practice Nurses conducting validated falls risk assessments with their patients and implementing interventions that systematically address all risk factors identified.

### **4. Injury Matters Commitment**

1. Conduct awareness-raising activities that reinforce that falls are not an inevitable part of ageing.
2. Provide healthy ageing information and resources to older adults to empower everyone to conduct falls prevention behaviours.
3. Work with local governments and peak bodies to deliver activities that encourage positive active ageing.

4. Continue to build the falls prevention capacity of health professionals, via the delivery training events, resources and network groups.
5. Advocate for improved access to local falls prevention initiatives, particularly initiatives developed for population groups that experience a higher incidence of falls-related injuries.
6. Advocate for the development of mandated policies and procedures within General Practice regarding conducting falls prevention assessments with older adults.

## 5. Related Documents

The following documents are required to give effect to this policy;

- [World Health Organization, Global Report on Falls Prevention in Older Age](#)
- [Australia Institute of Health and Welfare, Trends in hospitalisations due to falls in older people 2007-08 to 2016-17](#)
- [Australian Commission on Safety and Quality in HealthCare, Preventing Falls and Harm From Falls in Older People – Best Practice Guidelines for Australian Community Care](#)
- [National Public Health Partnership, The National Falls Prevention for Older People Plan: 2004 Onwards](#)
- [Cochrane Review, Interventions for preventing falls in older people living in the community](#)
- [World guidelines for falls prevention and management for older adults: a global initiative](#)
- [WA Falls Prevention Model of Care](#)

## 6. References

1. World Health Organization. *WHO Global Report on Falls Prevention in Older Age*. (2007).
2. World Health Organization. Falls. <https://www.who.int/news-room/fact-sheets/detail/falls> (2018).
3. Lord, S. R., Ward, J. A., Williams, P. & Anstey, K. J. An epidemiological study of falls in older community-dwelling women: the Randwick falls and fractures study. *Australian and New Zealand Journal of Public Health* **17**, 240–245 (1993).
4. Sherrington, C. *et al.* Evidence on physical activity and falls prevention for people aged 65+ years: systematic review to inform the WHO guidelines on physical activity and sedentary behaviour. *International Journal of Behavioral Nutrition and Physical Activity* **17**, 144 (2020).
5. Sweeney, R. & Menezes, S. *2022 Western Australian Falls Report*. <https://www.injurymatters.org.au/wp-content/uploads/2022/09/2022WAFallsReport.pdf> (2022).
6. Australian Bureau of Statistics. Snapshot of Western Australia. *ABS* <https://www.abs.gov.au/articles/snapshot-wa-2021> (2022).
7. Australian Commission on Safety and Quality in HealthCare. *Preventing Falls and Harm From Falls in Older People. Best Practice Guidelines for Australian Community Care*. (2009).



8. Dollard, J., Barton, C., Newbury, J. & Turnbull, D. Older community-dwelling people's comparative optimism about falling: a population-based telephone survey. *Australas J Ageing* **32**, 34–40 (2013).
9. Australian Commission on Safety and Quality in Health Care. *Preventing Falls and Harm From Falls in Older People. Best Practice Guidelines for Australian Hospitals*.  
<https://www.safetyandquality.gov.au/sites/default/files/migrated/Guidelines-HOSP.pdf> (2009).
10. Australian Commission on Safety and Quality in Health Care. *Preventing Falls and Harm From Falls in Older People. Best Practice Guidelines for Australian Residential Aged Care Facilities*. (2009).
11. Gillespie, L. D. *et al.* Interventions for preventing falls in older people living in the community (Review). in *Cochrane Database of Systematic Reviews* (ed. The Cochrane Collaboration) (John Wiley & Sons, Ltd, 2012).  
doi:10.1002/14651858.CD007146.pub3.
12. Sherrington, C. *et al.* Exercise to prevent falls in older adults: an updated systematic review and meta-analysis. *Br J Sports Med* (2016) doi:10.1136/bjsports-2016-096547.
13. Howe, T., Rochester, L., Neil, F., Skelton, D. & Ballinger, C. Exercise for improving balance in older people (Review). *Cochrane Database of Systematic Reviews* **Art. No. CD004963**, (2011).
14. Sherrington, C. *et al.* Exercise for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews* (2019) doi:10.1002/14651858.CD012424.pub2.
15. Robertson, M. C., Campbell, A. J., Gardner, M. M. & Devlin, N. Preventing Injuries in Older People by Preventing Falls: A Meta-Analysis of Individual-Level Data. *Journal of the American Geriatrics Society* **50**, 905–911 (2002).
16. Clemson, L. *et al.* 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**, e4547 (2012).
17. Li, F. *et al.* Tai Chi and Fall Reductions in Older Adults: A Randomized Controlled Trial. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* **60**, 187–194 (2005).
18. Australian Government Department of Health. *National Women's Health Strategy 2020-2030*.  
[https://www1.health.gov.au/internet/main/publishing.nsf/Content/AF504671BA9786E8CA2583D6000AFAE7/\\$File/National%20Womens%20Health%20Strategy%202020-2030.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/AF504671BA9786E8CA2583D6000AFAE7/$File/National%20Womens%20Health%20Strategy%202020-2030.pdf) (2019).
19. Australian Government Department of Health. *National Men's Health Strategy 2020-2030*.  
[https://www1.health.gov.au/internet/main/publishing.nsf/content/86BBADC780E6058CCA257BF000191627/\\$File/19-0320%20National%20Mens%20Health%20Strategy%20Print%20ready%20accessible1.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/content/86BBADC780E6058CCA257BF000191627/$File/19-0320%20National%20Mens%20Health%20Strategy%20Print%20ready%20accessible1.pdf) (2019).
20. Chronic Disease Prevention Directorate. *Western Australian Health Promotion Strategic Framework 2017 - 2021*. (2017).
21. Hopewell, S. *et al.* Multifactorial and multiple component interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews* (2018) doi:10.1002/14651858.CD012221.pub2.

22. Zia, A., Kamaruzzaman, S. B. & Tan, M. P. Polypharmacy and falls in older people: Balancing evidence-based medicine against falls risk. *Postgraduate Medicine* **127**, 330–337 (2015).
23. Segev-Jacobovski, O. *et al.* The interplay between gait, falls and cognition: can cognitive therapy reduce fall risk? *Expert Review of Neurotherapeutics* **11**, 1057–1075 (2014).
24. Hamirudin, A. H., Charlton, K. & Walton, K. Outcomes related to nutrition screening in community living older adults: A systematic literature review. *Archives of Gerontology and Geriatrics* **62**, 9–25 (2016).
25. Mithal, A. *et al.* Impact of nutrition on muscle mass, strength, and performance in older adults. *Osteoporos Int* **24**, 1555–1566 (2013).
26. Department of Health, Western Australia. *Fall Prevention Model of Care*. (2014).
27. Tait, R. J., French, D. J., Burns, R. A., Byles, J. E. & Anstey, K. J. Alcohol, hospital admissions, and falls in older adults: a longitudinal evaluation. *International Psychogeriatrics* **25**, 901–912 (2013).
28. National Health and Medical Research Council. *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*. (2020).
29. Lord, S. R. Visual risk factors for falls in older people. *Age and Ageing* **35**, ii42–ii45 (2006).
30. Vance, E. & Lord, S. *Vision impairment and fall risk in older people*. <http://fallsnetwork.neura.edu.au/wp-content/uploads/2016/03/Vision-and-falls-Summary-1-1.pdf>.

## 6. Acknowledgements

This policy was developed by; Roisin Sweeney (Injury Prevention Coordinator – Research & Evaluation) and Rachel Meade (Injury Prevention Manager).

This policy has been approved and issued by Injury Matters' Chief Executive, Sandy Lukjanowski.