

Hip fracture REHABILITATION, REABLEMENT, & RESTORATIVE CARE

This evidence theme is a summary of one of the key topics identified by a scoping review of rehabilitation, reablement, and restorative care research.

Key points

- Conclusive evidence for the effectiveness of rehabilitation, reablement, and restorative care following hip fracture for an aged care population is limited.
- Inequalities exist that exclude older adults living in residential care homes from participating in research and receiving rehabilitation.
- These limitations exist despite the knowledge that intensive rehabilitation (such as daily physiotherapy and occupational therapy) can improve mobility, function, and cognitive outcomes for community-dwelling older adults.

What is a hip fracture?

A hip fracture is a break in the upper part of the thigh (femur). It often occurs in an older population with weakened bones following a fall. The number of hospitalisations for hip fractures is falling in Australia, however, the mortality rate following a hip fracture remains high (23%). [1] Hip fractures can be effectively repaired with surgery; however, the process can often be traumatic. People often require intensive rehabilitation to be able to regain physical function and mobility following hip fracture and repair.



Is rehabilitation effective following a hip fracture?

We found 9 systematic reviews reporting rehabilitation following hip fractures for older adults receiving transition care or residing in residential care facilities. Three reviews focused on rehabilitation following hip fracture for individuals with dementia or cognitive impairment. [2-4] Three reported on the transition from hospital to home with supportive services. [5-7] The remaining three reported on the perspectives of patients and carers following hip fracture, exercise rehabilitation at home supervised by carers or a geriatric team, [8, 9] and the inequalities presented in rehabilitative interventions following hip fracture. [10] Despite evidence that intensive rehabilitation with older adults is useful to improve mobility, function and cognition, Sheehan et al. [10] reported that 50% of studies excluded people living in residential care. This suggests that many older adults living in residential aged care facilities lack access to rehabilitation services following hip fracture.

The reviews identified that:

- It is feasible to provide rehabilitation programs to individuals receiving aged care services with cognitive impairment in post-acute settings. [4]
- Intensive rehabilitation can be beneficial for functional and cognitive outcomes; however, increased efforts should be made to engage older adults with cognitive impairments to participate. [4]
- Rehabilitation in aged care was reported to be beneficial across different settings and countries, despite many studies excluding aged care participants. [3, 4]
- Inequalities in access to rehabilitation for older adults receiving aged care following hip fracture exists, with access denied depending on the individual's residential setting. [10]
- Specific protocols to guide rehabilitation in residential care settings using appropriate and standardised outcome measures would be useful for individuals with dementia requiring rehabilitation following hip fractures. [2]
- Individuals receiving transition care from hospital to home felt 'uninformed.' They reported that they did not feel involved in the care they would receive, nor did they know what to expect. [5]
- The evidence did not support in-home therapy, however the evidence demonstrated low levels of therapeutic validity. [8, 9]
- Following hip fracture, transition care improved the independence of older adults in their own homes, increased health related quality of life and, for many, restored the ability to walk outdoors. [7, 11]

What can an individual do?

Ways for a person to assist rehabilitation following a hip fracture for older adults include:

- Encouraging health care providers to collaborate with patients with hip fracture and their caregivers in decision-making about rehabilitation and recovery goals, discharge planning and safe patient transfer.
- Providing hip fracture patients and their caregivers with standardised information and tools to increase timely, accurate exchange of information during care transitions.
- Encouraging formal discussions about roles and responsibilities in the transitions in care process among patients with hip fracture, caregivers, and health care providers.
- Assessing the needs of patients with hip fracture and caregivers before, during and after a care transition to deliver patient and family-centred care across multiple care settings.

What can the organisation do?

- Provide specific guidelines and protocols for rehabilitation in residential care using appropriate outcome measures. [2]
- Direct research that considers rehabilitation, reablement and restorative care across a range of clinical settings, inclusive of residential and community care, to reduce the inequalities of rehabilitation for hip fracture patients. [10]

References

- Australian Institute of Health and Welfare. Australia's health 2018: The fifteenth biennial health report of the Australian Institute of Health and Welfare. Canberra, ACT: Australian Institute of Health and Welfare; 2018. Report No.: 1032-6138.
- Allen J, Koziak A, Buddingh S, Liang J, Buckingham J, Beaupre LA. Rehabilitation in patients with dementia following hip fracture: A systematic review. Physiother Can. 2012;64(2):190-201.
- Chu CH, Paquin K, Puts M, McGilton KS, Babineau J, van Wyk PM. Community-based hip fracture rehabilitation interventions for older adults with cognitive impairment: A systematic review. JMIR Rehabil Assist Technol. 2016;3(1):e3.
- Resnick B, Beaupre L, McGilton KS, Galik E, Liu W, Neuman MD, et al. Rehabilitation interventions for older individuals with cognitive impairment post-hip fracture: A systematic review. J Am Med Dir Assoc. 2016;17(3):200-5.

Hip fracture



- Abrahamsen C, Norgaard B. Elderly patients' perspectives on treatment, care and rehabilitation after hip fracture: A qualitative systematic review. Int J Orthop Trauma Nurs. 2021;41:100811.
- Asif M, Cadel L, Kuluski K, Everall AC, Guilcher SJT.
 Patient and caregiver experiences on care transitions
 for adults with a hip fracture: A scoping review. Disabil
 Rehabil. 2020;42(24):3549-58.
- Gough C, Baker N, Weber H, Lewis LK, Barr C, Maeder A, et al. Integrating community participation in the transition of older adults from hospital to home: A scoping review. Disabil Rehabil. 2021:1-13.
- 8. Kuijlaars IAR, Sweerts L, Nijhuis-van der Sanden MWG, van Balen R, Staal JB, van Meeteren NLU, et al. Effectiveness of supervised home-based exercise therapy compared to a control intervention on functions, activities, and participation in older patients after hip fracture: A systematic review and meta-analysis. Arch Phys Med Rehabil. 2019;100(1):101-14.e6.
- Nordstrom P, Thorngren KG, Hommel A, Ziden L, Anttila S. Effects of geriatric team rehabilitation after hip fracture: Meta-analysis of randomized controlled trials. J Am Med Dir Assoc. 2018;19(10):840-5.
- Sheehan KJ, Fitzgerald L, Hatherley S, Potter C, Ayis S, Martin FC, et al. Inequity in rehabilitation interventions after hip fracture: a systematic review. Age Ageing. 2019;48(4):489-97.
- 11. Zidén L, Kreuter M, Frändin K. Long-term effects of home rehabilitation after hip fracture: 1-year followup of functioning, balance confidence, and healthrelated quality of life in elderly people. Disabil Rehabil. 2010;32(1):18-32.

Cite as: ARIIA Knowledge & Implementation Hub. Hip fracture: Rehabilitation, reablement, & restorative care. Evidence Theme. Adelaide, SA: ARIIA; 2022 [updated 2023 Aug].

www.ariia.org.au

For more information email ariia@ariia.org.au or call 08 7421 9134

ARIIA - Level 2, Tonsley Hub, South Rd, Tonsley SA 5042

ARIIA was established as an independent, not-for-profit organisation, set up to lead the advancement of the aged care workforce capability by promoting and facilitating innovation and research to improve the quality of aged care for all Australians.





