



# Stroke

## REHABILITATION, REABLEMENT, & RESTORATIVE CARE

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

### Key points

- A high number of stroke survivors live in residential aged care facilities. They often suffer functional impairments following more severe strokes which prevents them from living independently in their own homes.
- Interventions that focus on the rehabilitation of stroke survivors are vital for optimum care and quality of life, however residing in residential aged care facilities seems to reduce access to stroke rehabilitation.
- Levels of community participation and outdoor activities reduce significantly following stroke; however, supportive transition care services can assist stroke survivors to regain functional independence at home and in their community.
- Despite strong evidence that supports rehabilitation for community-dwelling stroke survivors, rehabilitation specific to individuals living in residential aged care facilities is lacking.

### What is a stroke?

A stroke occurs when the blood supply to the brain is blocked (ischaemic stroke), or when blood vessels bleed into the brain (haemorrhagic stroke). The lack of oxygen to brain tissue causes it to die and leads to functional impairments. [1] Symptoms depend on the area of the brain affected, but they often include paralysis, speech problems, difficulty swallowing, visual issues, and changes in cognition. In 2020, it was estimated that over 445,000 stroke survivors were living in the Australian community, with costs to the economy of \$6.2 billion dollars. [1] Therefore, finding ways to rehabilitate and restore the functional ability of stroke survivors is of high priority to reduce the demand for community and residential aged care services.

## What do we know about rehabilitation care following stroke?

We found four systematic reviews that discussed rehabilitation, reablement, and restorative care for stroke survivors in aged care settings. Of these, only one study focused on stroke rehabilitation in residential care facilities. [2] The other studies reported on the transition of stroke survivors from hospital to home [3, 4] and home care services. [5]

The reviews identified that:

- Rehabilitative services that improve function and prevent secondary strokes are lacking in residential aged care facilities. [2]
- Occupational therapy can be effective to improve independence in self-care tasks, however, further investigation and high-quality evidence are required. [6]
- Swallowing therapy was effective in improving swallowing ability, stimulating weight gain, and reducing choking incidents during meals in residential care facilities. [7]
- Low prevalence of rehabilitation and delays in receiving care in residential care facilities were observed in several countries. Services were often limited in scope, with occupational therapy and speech therapy lacking. [8, 9]
- Stroke survivors aged between 65-74 were more likely to receive speech, occupational, and physiotherapy, when compared to survivors aged over 85 years. [10]
- Telerehabilitation interventions were effective in improving balance in stroke survivors receiving in-home support services. [7]
- Involvement of family carers in the rehabilitation of older adults living at home could improve functional performance, however, the quality of evidence is low. [4]
- Mental practice of functional tasks used with Dutch nursing home residents was not found to be effective for the performance of daily activities in stroke survivors. [11]
- Community participation, particularly activities performed outdoors, was reduced by 45% for stroke survivors with very few individuals returning to pre-stroke levels. [3, 12] This may be due to the focus of restorative care on in-home activities of daily living and safety rather than outdoor mobility.

## What can an individual do?

Ways to assist a stroke survivor in accessing rehabilitation, reablement, and restorative care include:

- Discussing these options with the stroke survivor's medical professionals and family carers prior to hospital discharge

- Encouraging and supporting stroke survivors to carry out everyday tasks as independently as possible and to participate in social activities
- Observing therapy sessions and assisting with prescribed exercises to improve stroke outcomes whenever possible.

## What can the organisation do?

Organisations can support rehabilitation, reablement, and restorative care for stroke survivors by:

- Providing interventions that address the unmet needs of stroke survivors living in a range of settings [2]
- Providing resources, training, and equipment to allow for therapists and nursing staff to deliver effective rehabilitative care [2]
- Including psychological evaluation in transition care services to identify individuals who feel unable to cope returning home from the hospital after a stroke, and subsequently organise appropriate supportive services to prevent hospital readmissions.

## References

1. Australian Institute of Health and Welfare. Australia's health 2020: In brief [Internet]. Canberra: AIHW; 2020 [cited 2022 Jul 1]. Available from: <https://www.aihw.gov.au/reports/australias-health/australias-health-2020-in-brief>
2. Teo K, Slark J. A systematic review of studies investigating the care of stroke survivors in long-term care facilities. *Disabil Rehabil.* 2016;38(8):715-23.
3. 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.
4. van Dijk M, Vreven J, Deschodt M, Verheyden G, Tournoy J, Flamaing J. Can in-hospital or post discharge caregiver involvement increase functional performance of older patients? A systematic review. *BMC Geriatr.* 2020;20(1):362.
5. Silva S, Borges LR, Santiago L, Lucena L, Lindquist AR, Ribeiro T. Motor imagery for gait rehabilitation after stroke. *Cochrane Database Syst Rev.* 2020;9:CD013019.
6. Sackley C, Wade DT, Mant D, Atkinson JC, Yudkin P, Cardoso K, et al. Cluster randomized pilot controlled trial of an occupational therapy intervention for residents with stroke in UK care homes. *Stroke.* 2006;37(9):2336-41.
7. Lin L-C, Wang S-C, Chen SH, Wang T-G, Chen M-Y, Wu S-C. Efficacy of swallowing training for residents following stroke. *J Adv Nurs.* 2003;44(5):469-78.
8. Horgan F, McGee H, Hickey A, Whitford DL, Murphy S, Royston M, et al. From prevention to nursing home care: A comprehensive national audit of stroke care. *Cerebrovasc Dis.* 2011;32(4):385-92.

9. Stolee P, Hillier LM, Webster F, O'Callaghan C. Stroke care in long-term care facilities in southwestern Ontario. *Top Stroke Rehabil.* 2006;13(4):97-108.
10. Quilliam BJ, Lapane KL. Clinical correlates and drug treatment of residents with stroke in long-term care. *Stroke.* 2001;32(6):1385-93.
11. Braun SMP, Beurskens AJP, Kleynen MM, Oudelaar BPT, Schols JMPMD, Wade DTMD. A multicenter randomized controlled trial to compare subacute 'treatment as usual' with and without mental practice among persons with stroke in Dutch nursing homes. *J Am Med Dir Ass.* 2012;13(1):85.e1-.e7.
12. Dijkerman HC, Wood VA, Langton Hewer R. Long-term outcome after discharge from a stroke rehabilitation unit. *J R Coll Physicians Lond.* 1996;30(6):538-46.

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