

Submission to Department of Health on the draft roadmap for the Dementia, Ageing and Aged Care Mission

Submission by the
Australian Physiotherapy Association

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Executive Summary

The Australian Physiotherapy Association (APA) welcomes this opportunity to make a submission to the Department of Health on the draft roadmap for the Dementia, Ageing and Aged Care Mission.

Physiotherapy can play an important role in delaying the onset of dementia and improving the quality of life of those living with the condition.

There are two bodies of evidence that we must urgently link and translate into practice.

First, research has shown that physical activity is the key to prevention and delaying the onset of many chronic conditions, including dementia, yet there are barriers for older Australians in exercising.

Physiotherapists are experts in prescribing tailored activities and exercises and should be playing a key role in enabling older Australians to exercise.

Secondly, evidence has also demonstrated that physiotherapy can help improve the quality of life and independence of older Australians by reducing falls, frailty and improving cognitive function.

In people living with dementia, physiotherapy has been found to:

- improve motor skills such as gait and balance
- reduce frailty
- reduce the number of falls
- slow functional decline,
- improve cognition, agitation, mood, and
- improve quality of life and wellbeing.

However, despite this evidence physiotherapy is not usually sought early and we know that early intervention is the key to assessing, treating and achieving positive outcomes.

There is a need for more translational research and support to link these compelling sets of studies together and put them into practice among older Australians.

We need to understand:

- the barriers keeping older people from exercising and staving off the onset of chronic conditions, and
- how physiotherapy can improve the quality of life of older Australians and those living with dementia.

Summary of Recommendations

Recommendation 1

Invest in research addressing barriers to physical activity participation.

Recommendation 2

Invest in translational research to ascertain how physiotherapy interventions can reduce behavioural and psychological symptoms of dementia and reduce cognitive decline.

Recommendation 3

Invest in engaging clinician researchers in dementia, ageing and aged care research.

Recommendation 4

Invest in translational research to put emerging research into practice.

Recommendation 5

A stronger emphasis on the roadmap is recommended.

Recommendation 6

Invest in research on health conditions affecting older Australians that includes older and those with cognitive impairment and people living with dementia.

Recommendation 7

Invest in educating the aged care workforce about dementia to better support the translation and implementation of research into practice.

Introduction

Physiotherapy is an evidence-based health profession providing safe and high quality based on the work of a growing cohort of clinician researchers.

Their work is accessible via a number of highly regarded sources.

The Journal of Physiotherapy is the official journal of the Australian Physiotherapy Association publishing significant research with important implications for physiotherapy.

It's Impact Factor (IF) in 2018 (released in mid-2019) increased by 22 per cent on the previous year. The IF, which measures the average number of citations per paper within a given period, is regarded as a reflection of a journal's quality and importance and is a strong influence on where authors submit their papers.

Consequently, the Journal is the No. 1 ranked scientific journal in the rehabilitation category.

Usage of the Journal on Elsevier's ScienceDirect platform is strong, with a 45% increase in full text downloads, to 791,508 in 2019.

The Journal was accessed on ScienceDirect, the world's leading source for scientific, technical and medical research, in at least 115 countries during 2019: 37% of downloads were from Europe, 22% from North America, and 18% from both Asia and Australia/New Zealand.

The APA is a co-founder and ongoing supporter of the Physiotherapy Evidence Database known as PEDro. PEDro is a free database of more than 45,000 randomised trials, systematic reviews and clinical practice guidelines in physiotherapy.

All trials on PEDro are independently assessed for quality and given a PEDro quality rating.

PEDro is produced by the Institute for Musculoskeletal Health, School of Public Health at the University of Sydney and is hosted by Neuroscience Research Australia (NeuRA).

The APA established the charitable trust Physiotherapy Research Foundation (PRF) in 1988 to promote, encourage and support research advancing physiotherapy knowledge and practice.

The PRF provides grants to support innovative physiotherapy research.

One of the key focuses of the APA and, particularly the PRF, is on translating clinical research into practice.

The scope of physiotherapy for older Australians

The physiotherapy profession is a fundamental provider of high quality, safe services for ageing Australians and it is important they are able to access it when and how they need it.

Physiotherapists play a substantial role working with and supporting the older person in maximising their health, wellbeing and quality of life as they age.

A broad range of physiotherapist-led interventions is effective and cost-effective in improving physical ability and function.

Physiotherapy is effective and provides economic value in areas including:

- Maintaining and improving mobility
- Pain management
- Falls prevention and reduction
- Independence in activities of daily living
- Behavioural and psychological symptoms of dementia
- Improved functioning
- Optimising comfort
- Continence, and
- Quality of life and wellbeing

The profession's broad scope also includes the management of fatigue, shortness of breath, exercise tolerance, oedema, deconditioning, frailty, contractures, sleep and rest, skin integrity, and more across the ageing continuum, and including environments such as the RACF and community care setting.

A core element of this scope is assessment of a person's capacity to move, and keep moving.

It is important older people have access to physiotherapy care when and how they need it.

People living with dementia

There are an increasing number of older people living with dementia in the community and residential aged care facilities. Physiotherapists play an integral role in providing quality care services to these individuals.

Currently 52% of individuals living in residential aged care residences have a diagnosis of dementia with many more community members living with the life limiting condition (Harvey L et al, 2016)¹.

Physiotherapists have the skills and knowledge to support and prescribe activities and exercises for individuals living with dementia, considering factors such as fluctuating cognition and mobility.

For example, a physiotherapist may provide a person with dementia with practical tailored approaches to improve motor symptoms such as weakness, gait, balance and functional decline. Importantly, these interventions play a key role in preventing falls among people living with dementia.

Research shows that physiotherapy prescribed exercise delivered to individuals with dementia in residential aged care residences have demonstrated significant improvements in cognition, agitation, mood, mobility and functional ability (Brett L et al, 2016)².

Dementia is an independent risk factor for falls and for serious injury such as head injury or hip fracture from falls. However, research shows people with dementia had longer lengths of stay in hospital (LOS), except for people with dementia with hip fractures. This population had less in-hospital rehabilitation than people without dementia and shorter LOS, an average of seven days (Harvey L et al, 2016)³.

Despite evidence that people living with dementia can benefit from rehabilitation if they already live in residential aged care they are often denied the chance (Kaambwa B et al, 2017)⁴.

Physiotherapists also work closely with those living with dementia to look for root causes of adverse responsive behaviours that may lead to medical restraint, such as pain. We know from that pain is often underdiagnosed and poorly treated in older people living in residential aged care residences, particularly for those people living with dementia⁵.

Investment priorities

The APA views the following areas as key investment priorities to improve the quality of life for people as they age.

Primary prevention research

Physical inactivity is a modifiable risk factor for dementia (Livingston et al 2017)⁶ and the World Health Organisation recommends physical activity interventions for adults with normal cognition and with mild cognitive impairment, to reduce the risk of cognitive decline (WHO guidelines 2019⁷, Alty et al 2020)⁸.

There are barriers and facilitators to participation in physical activity with very few Australians meeting physical activity guidelines. We know particular groups have difficulty meeting activity guidelines, such as children with disability (Shields et al 2012)⁹, people with hip and knee osteoarthritis (Wallis et al 2013)¹⁰, stroke survivors (Lynch et al 2018)¹¹, and older people (Franco et al 2015)¹².

Physiotherapists have a clinical role in promoting physical activity (Kunstler et al 2019)¹³ and could contribute to research addressing barriers to physical activity participation.

Recommendation 1

Invest in research addressing barriers to physical activity participation.

Secondary prevention research

The physical symptoms of dementia are not widely known in the community but are well-documented in research literature. Balance, coordination and gait are affected as dementia progresses (Suttanon et al 2012)¹⁴.

Along with changes to visual perception and dual-tasking ability, these physical symptoms of dementia can lead to falls, fractures and hospitalisation (Suttanon et al 2012).

People living with dementia have a high risk of poor outcomes during hospitalisation (Tropea et al 2017)¹⁵, including malnutrition, functional decline, delirium, falls and fractures (Fogg et al 2018)¹⁶. Therefore, managing the physical symptoms of dementia early is crucial. Physical exercise can improve strength, balance, mobility and endurance in people with cognitive impairment and dementia (Lam et al 2018)¹⁷.

Physical exercise can also reduce behavioural and psychological symptoms of dementia and reduce cognitive decline (Law et al 2020)¹⁸.

However, our Australian health system does not currently support early assessment and intervention for people living with dementia.

“...a delay between the appearance of symptoms and diagnosis of dementia is common. It is estimated that 50% of people with early dementia are not diagnosed when presenting to primary care.”¹⁹

(<https://www.racgp.org.au/afp/2016/december/clinical-practice-guidelines-and-principles-of-care-for-people-with-dementia-in-australia>)

Translational research is required to ascertain how physiotherapy interventions could improve these outcomes in a real-world setting.

Recommendation 2

Invest in translational research to ascertain how physiotherapy interventions can reduce behavioural and psychological symptoms of dementia and reduce cognitive decline.

Key areas of focus

Supporting translational research by clinician researchers

The APA supports the engagement of clinician researchers in dementia, ageing and aged care research.

The roadmap mentions investment will span the research pipeline from discovery through to implementation. It is worth noting that basic research is currently well supported by National Health and Medical Research Council schemes such as Investigator grants, Ideas grants and Synergy grants.

Translational research is vital to ensure implementation of emerging research findings in clinical practice.

Recommendation 3

Invest in engaging clinician researchers in dementia, ageing and aged care research.

Recommendation 4

Invest in translational research to put emerging research into practice.

Research investigating reablement and rehabilitation

A rehabilitation approach may be covered in the Priority 1 point 3 of the roadmap - how can we achieve cost-effective care continuity for those living with dementia and carers from the time of diagnosis until death and the post-bereavement phase?

However, rehabilitation for people with dementia is rarely available in Australia. In settings such as residential aged care, a rehabilitative or reablement approach for most residents is also constrained by funding mechanisms.

A stronger focus on rehabilitation and reablement and has been identified as an “opportunity for change” in a recent research paper by the Royal Commission into Aged Care Quality and Safety (Dyer et al 2019)²⁰.

Recommendation 5

A stronger emphasis in the roadmap is recommended.

Acknowledgement of co- and multi-morbidity

*“Dementia is a national health priority in Australia. Most people with dementia are over the age of 65 years, have a number of comorbidities and experience a trajectory of functional decline.”*²¹

Living in optimal health into older age often requires effective management of multiple health conditions. For example, a UK study found that people living with dementia have on average, 4.6 chronic illnesses in addition to their dementia (Guthrie 2012)²².

However, much research excludes people living with dementia, or even older people more generally.

A study on ageism in stroke rehabilitation studies (Gaynor 2014)²³ found that the mean age of participants in stroke trials is lower than the international mean age of stroke, meaning the evidence base for stroke rehabilitation is deficient for older people and research engaging more older people is required. Even in geriatrics research people with cognitive impairment or dementia are often excluded (Taylor 2012)²⁴.

Therefore, there is a need for research addressing a range health conditions such as stroke, persistent pain and musculoskeletal conditions, inclusive of older people and people with cognitive impairment or dementia.

Recommendation 6

Invest in research on health conditions affecting older Australians that includes older and those with cognitive impairment and people living with dementia.

Education and dementia literacy for the health and aged care workforce

Beliefs about therapeutic nihilism with regard to dementia care and treatment for older people are prevalent in the health and aged care workforce (Cations et al 2019²⁵; Sedney 2019²⁶).

Knowledge of dementia is also poor in our health and aged care workforce. A paper reporting dementia knowledge of 279 Australian nurses and care workers found dementia knowledge deficits that would impact on care (Robinson 2014)²⁷ and new research not yet published has shown similar results for allied health professionals.

If we are to build strong research in dementia, ageing and aged care, we also need to build a knowledge and attitudes platform to support this.

Recommendation 7

Invest in educating the aged care workforce about dementia to better support the translation and implementation of research into practice.

Conclusion

The APA is committed to improving the quality of care provided to older Australians. We would welcome the opportunity to work closely with the Department of Health and the Medical Research Future Fund to identify opportunities and shape research to benefit older Australians and those living with dementia.

Australian Physiotherapy Association

The APA vision is that all Australians will have access to quality physiotherapy, when and where required, to optimise health and wellbeing.

The APA is the peak body representing the interests of Australian physiotherapists and their patients. It is a national organisation with state and territory branches and specialty subgroups. The APA represents more than 28,000 members who conduct more than 23 million consultations each year.

The APA corporate structure is one of a company limited by guarantee. The APA is governed by a Board of Directors elected by representatives of all stakeholder groups within the Association.

References

- 1 The National Centre for Social and Economic Modelling NATSEM (2016) Economic Cost of Dementia in Australia 2016–2056 Harvey L, Mitchell R, Brodaty H, Draper B, Close J (2016) Differing trends in fall-related fracture and non-fracture injuries in older people with and without dementia. *Archives of Gerontology and Geriatrics* 67: 61-67.
- 2 Brett L, Traynor V, Steapley P. Effects of physical exercise on health and well-being of individuals living with a dementia in nursing homes: A systematic review. *Journal of American Medical Directors Association*. 2016;17:104-16.
- 3 Harvey L, Mitchell R, Brodaty H, Draper B, Close J (2016) Differing trends in fall-related fracture and non-fracture injuries in older people with and without dementia. *Archives of Gerontology and Geriatrics* 67: 61-67.
- 4 Kaambwa B, Ratcliffe J, Killington M, Liu E., Cameron I, Kurrle S, Davies O, Crotty M (2017) Is hip fracture rehabilitation for nursing home residents cost-effective? Results from an RCT *Innovation in Ageing* (1)946
- 5 http://www.health.nsw.gov.au/Hospitals/Going_To_hospital/cost-of-care/Pages/default.aspx
- 6 Livingston G, Sommerlad A, Orgeta V, Costafreda SG, Huntley J, Ames D, Ballard C, Banerjee S, Burns A, Cohen-Mansfield J, Cooper C. Dementia prevention, intervention, and care. *The Lancet*. 2017 Dec 16;390(10113):2673-734
- 7 Risk reduction of cognitive decline and dementia: WHO guidelines. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.
- 8 Alty J, Farrow M, Lawler K. Exercise and dementia prevention. *Practical Neurology*. 2020 Jan 21
- 9 Shields N, Synnot AJ, Barr M. Perceived barriers and facilitators to physical activity for children with disability: a systematic review. *British journal of sports medicine*. 2012 Nov 1;46(14):989-97
- 10 Wallis JA, Webster KE, Levinger P, Taylor NF. What proportion of people with hip and knee osteoarthritis meet physical activity guidelines? A systematic review and meta-analysis. *Osteoarthritis and Cartilage*. 2013 Nov 1;21(11):1648-59.
- 11 Lynch EA, Jones TM, Simpson DB, Fini NA, Kuys SS, Borschmann K, Kramer S, Johnson L, Callisaya ML, Mahendran N, Janssen H. Activity monitors for increasing physical activity in adult stroke survivors. *Cochrane Database of Systematic Reviews*. 2018(7).
- 12 Franco MR, Tong A, Howard K, Sherrington C, Ferreira PH, Pinto RZ, Ferreira ML. Older people's perspectives on participation in physical activity: a systematic review and thematic synthesis of qualitative literature. *British journal of sports medicine*. 2015 Oct 1;49(19):1268-76.
- 13 Kunstler B, Fuller R, Pervan S, Merolli M. Australian adults expect physiotherapists to provide physical activity advice: a survey. *Journal of physiotherapy*. 2019 Oct 1;65(4):230-6.
- 14 Suttanon P, Hill KD, Said CM, LoGiudice D, Lautenschlager NT, Dodd KJ. Balance and mobility dysfunction and falls risk in older people with mild to moderate Alzheimer disease. *American journal of physical medicine & rehabilitation*. 2012 Jan 1;91(1):12-23
- 15 Tropea J, LoGiudice D, Liew D, Gorelik A, Brand C. Poorer outcomes and greater healthcare costs for hospitalised older people with dementia and delirium: a retrospective cohort study. *International journal of geriatric psychiatry*. 2017 May;32(5):539-47.
- 16 Fogg C, Griffiths P, Meredith P, Bridges J. Hospital outcomes of older people with cognitive impairment: An integrative review. *International journal of geriatric psychiatry*. 2018 Sep;33(9):1177-97.

- 17 Lam FMH , Huang MZ, Liao LR, Chung RCK, Kwok TCY, Pang MYC (2018) Physical exercise improves strength, balance, mobility, and endurance in people with cognitive impairment and dementia: a systematic review. *Journal of Physiotherapy* 64: 4–15
- 18 Chun-Kit Law, Freddy MH Lam, Raymond CK Chung, Marco YC Pang, Physical exercise attenuates cognitive decline and reduces behavioural problems in people with mild cognitive impairment and dementia: a systematic review, *Journal of Physiotherapy*, Volume 66, Issue 1, 2020, Pages 9-18
- 19 <https://www.racgp.org.au/afp/2016/december/clinical-practice-guidelines-and-principles-of-care-for-people-with-dementia-in-australia>
- 20 Dyer SM, Valeri M, Arora N, Ross T, Winsall M, Tilden D, Crotty M (2019). Review of International Systems for Long-Term Care of Older People. Flinders University, Adelaide, Australia.
- 21 <https://www.racgp.org.au/afp/2016/december/clinical-practice-guidelines-and-principles-of-care-for-people-with-dementia-in-australia>
- 22 Guthrie B, Payne K, Alderson P, McMurdo ME, Mercer SW. Adapting clinical guidelines to take account of multimorbidity. *Bmj*. 2012 Oct 4;345:e6341.
- 23 Gaynor EJ, Geoghegan SE, O'Neill D. Ageism in stroke rehabilitation studies. *Age and Ageing*. 2014 Mar 18;43(3):429-31.
- 24 Taylor JS, DeMers SM, Vig EK, Borson S. The disappearing subject: exclusion of people with cognitive impairment and dementia from geriatrics research. *Journal of the American Geriatrics Society*. 2012 Mar;60(3):413-9.
- 25 Cations M, May N, Crotty M, Low LF, Clemson L, Whitehead C, McLoughlin J, Swaffer K, Laver KE. Health professional perspectives on rehabilitation for people with dementia. *The Gerontologist*. 2019 Feb 13.
- 26 Sedney C, Kurowski-Burt A, Smith M, Dekeseredy P, Grey C, Boo S. Therapeutic nihilism of neurological diseases: A comparative qualitative study. *Journal of Clinical Neuroscience*. 2019 Nov 1;69:124-31.
- 27 Robinson A, Eccleston C, Annear M, Elliott KE, Andrews S, Stirling C, Ashby M, Donohue C, Banks S, Toye C, McInerney F. Who knows, who cares? Dementia knowledge among nurses, care workers, and family members of people living with dementia. *Journal of Palliative Care*. 2014 Sep;30(3):158-65.