



# Medicines optimisation

## DEMENTIA CARE

This evidence theme on medicines optimisation is a summary of one of the key topics identified by a scoping review of dementia research.

### Key points

- Medicines optimisation is designed to ensure that medication is safe and beneficial to people living with dementia.
- According to six systematic reviews, the evidence surrounding medicines optimisation was very mixed.
- Some studies report benefits for outcomes such as quality of life, falls, medication use, the use of healthcare services, and mortality. Other studies found little to no effect on these same outcomes.

### What is medicines optimisation?

Medicines optimisation is a person-centred approach designed to ensure that medication is safe and beneficial for the person living with dementia. [1] There are multiple approaches to optimise medication, including:

- Medication reviews (a systematic check done by a GP, pharmacist, or sometimes a psychiatrist)

- Staff education
- The use of clinical decision support technology
- Multidisciplinary case conferences. [1]

### Is medicines optimisation effective?

We found six systematic reviews that assessed the impact of medicines optimisation for people living with dementia. Overall, the evidence surrounding medicines optimisation was very mixed. Some studies report benefits for certain outcomes, but other studies found little to no effect. Currently, it is unclear whether medicines optimisation interventions have any impact on:

- Quality of life [2]
- Falls and safety [2-4]
- Use of psychotropic and/or antipsychotic medication [2-6]

- Healthcare use (e.g., hospital admission, GP and emergency department visits) [2, 3]
- Mortality. [2, 3]

## Evidence limitations

The reviews highlighted concerns about the methods used in some of the studies. This reduces the degree of certainty we might have about the benefits of medicines optimisation. For example,

- Some studies only had a small number of participants. [2, 3]
- Potentially important outcomes were not assessed (e.g., staff and physicians' opinions on medicines optimisation). [1, 5]
- Studies were not always clear about what they did and what they found. [2-5]

## What can an individual do?

- Be familiar with Australian guidelines on medication management for people living with dementia.
- See PalliAGED webpage Withdrawing treatment and deprescribing for practice tips. [www.palliaged.com.au/tabid/4429/Default.aspx](http://www.palliaged.com.au/tabid/4429/Default.aspx)
- Refer or escalate to your line manager any medication-related concerns you may have for a person living with dementia.
- Complete online learning about medication and dementia. See ARIIA Knowledge Hub Resources.

## What can the organisation do?

- Encourage and support staff to undertake regular training and be familiar with current guidelines and tools.
- Invite GPs or pharmacists to undertake regular medication reviews in both residential and home care (funded under Medicare). [7, 8]
- Organise multidisciplinary case conferences to discuss individuals' care needs and goals.

## References

1. Almutairi H, Stafford A, Etherton-Beer C, Flicker L. Optimisation of medications used in residential aged care facilities: A systematic review and meta-analysis of randomised controlled trials. *BMC Geriatrics*. 2020;20(1):236.
2. Shafiee Hanjani L, Long D, Peel NM, Peeters G, Freeman CR, Hubbard RE. Interventions to optimise prescribing in older people with dementia: A systematic review. *Drugs Aging*. 2019;36(3):247-67.
3. Forsetlund L, Eike MC, Gjerberg E, Vist GE. Effect of interventions to reduce potentially inappropriate use of drugs in nursing homes: A systematic review of randomised controlled trials. *BMC Geriatrics*. 2011;11:16.
4. McGrattan M, Ryan C, Barry HE, Hughes CM. Interventions to improve medicines management for people with dementia: A systematic review. *Drugs Aging*. 2017;34(12):907-16.
5. McDerby N, Kosari S, Bail K, Shield A, Peterson G, Naunton M. Pharmacist-led medication reviews in aged care residents with dementia: A systematic review. *Australas J Ageing*. 2020;39(4):e478-e89.
6. Thompson Coon J, Abbott R, Rogers M, Whear R, Pearson S, Lang I, et al. Interventions to reduce inappropriate prescribing of antipsychotic medications in people with dementia resident in care homes: A systematic review. *J Am Med Dir Assoc*. 2014;15(10):706-18.
7. Pharmacy Programs Administrator. Residential Medication Management Review and Quality Use of Medicines [Internet]. 2022 [cited 2023 Jun 30]. Available from: <https://www.ppaonline.com.au/programs/medication-management-programs/residential-medication-management-review-and-quality-use-of-medicines>
8. Healthdirect. Home medicines review [Internet]. n.d. [cited 2023 Jun 30]. Available from: [www.healthdirect.gov.au/home-medicines-review](http://www.healthdirect.gov.au/home-medicines-review)

Cite as: ARIIA Knowledge & Implementation Hub. Medicines optimisation: Dementia care. Evidence Theme. Adelaide, SA: ARIIA; 2022 [updated 2023 Jul].

[www.ariia.org.au](http://www.ariia.org.au)

For more information email [ariia@ariia.org.au](mailto: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.

**ariia** Aged Care Research  
& Industry Innovation  
Australia

 Flinders  
University

 Australian Government  
Department of Health  
and Aged Care