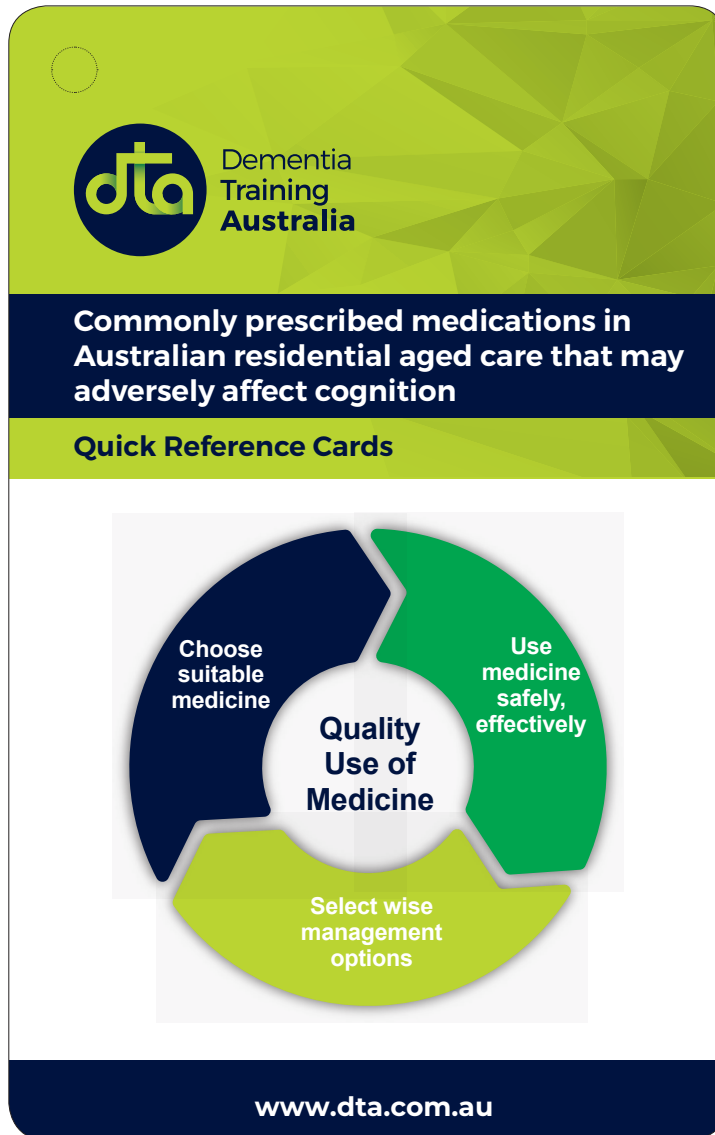


- Single-side print
- Fold page in half and crease along fold line
- Cut along outline
- Be sure to round the corners



Commonly prescribed medications in Australian residential aged care that may adversely affect cognition

Quick Reference Cards

Quality Use of Medicine

- Choose suitable medicine
- Use medicine safely, effectively
- Select wise management options

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FOLD LINE

MEDICATION AND COGNITION

MEDICATION AND COGNITION

How these cards were developed

- 1) Medications that may adversely affect cognition were identified from the literature and expert opinion.
- 2) Data on the prescribing frequency of all medications in Australian residential aged care was sourced.
- 3) Commonly prescribed medications that may adversely affect cognition were identified (Table 1).

How to use these cards

The cards may be used as a reference to provide a **starting point** in identifying medications that may be adversely affecting a person's cognition. They are **NOT** intended to be used to guide prescribing decisions.

Keep these cards close-to-hand, such as attached to the medication trolley or beside a dispensing computer.

Medication and cognition implications

Adverse cognitive effects may occur when any of the medications in Table 1 are taken at any dose.

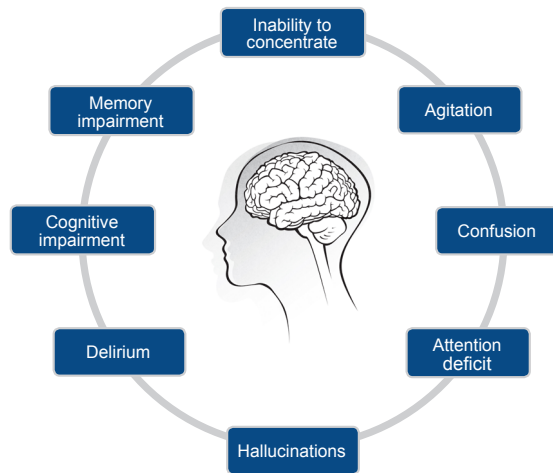
Particularly high-risk circumstances include:

- When a medication from Table 1 is taken at a high dose and/or in combination.
- When any new medication is started, stopped, or the dose is changed.
- When there are medication interactions.
- During times of increased stress, e.g. illness, infection, pain.
- When a person has reduced 'cognitive reserve', e.g. cognitive impairment, frailty.

FOLD LINE

MEDICATION AND COGNITION

Medicines may cause a number of unintentional effects on a person's cognition e.g. memory, thoughts and behaviour (see below). These effects may become apparent as soon as a new medication is started or a dose is changed, or may occur gradually over a period of time.



! If you have **ANY** concerns regarding possible adverse effects of a resident's medication, request a medication review.

MEDIATION AND COGNITION

MEDICATION AND COGNITION

Cognition may be adversely affected by the **anticholinergic** and/or **sedative** effects of many medications.

In Table 1:

- HIGH RISK medications have the strongest anticholinergic effects, and may be considered as the MOST LIKELY to affect cognition.
- LOWER RISK medications have less anticholinergic effect, and are more likely to affect cognition when used in combination with other medications in Table 1, or at high doses.

Many of the medications listed in Table 1 have sedative effects which may also impair cognition.

Other potential adverse effects of these medications include:

Anticholinergic effects

- Dry mouth
- Urinary retention
- Constipation
- Irregular heart rate
- Blurred vision

Sedative effects

- Feeling sleepier/increased lethargy
- Slurred speech
- Dizziness, unsteadiness

! Both anticholinergic and sedative medications are strongly associated with an increased **risk of falls**.

FOLD LINE

MEDICATION AND COGNITION

Table 1. Selected medications that may adversely affect cognition and are commonly prescribed in Australian residential aged care.

	Anticholinergic effects	
	Higher	Lower
Antipsychotics	<ul style="list-style-type: none"> Chlorpromazine Clozapine Fluphenazine Olanzapine Pericyazine (<i>periciazine</i>) Trifluoperazine 	<ul style="list-style-type: none"> Aripiprazole Asenapine Haloperidol Paliperidone Quetiapine Risperidone Ziprasidone
Antidepressants	<ul style="list-style-type: none"> Amitriptyline Clomipramine Doxepin Dosulepin (<i>dothiepin</i>) Imipramine Nortriptyline 	<ul style="list-style-type: none"> Citalopram Fluoxetine Fluvoxamine Mirtazapine Paroxetine Phenelzine Selegiline Sertraline Venlafaxine
Antihistamines	<ul style="list-style-type: none"> Cyproheptadine Dexchlorpheniramine Promethazine 	<ul style="list-style-type: none"> Alimemazine (<i>trimeprazine</i>) Cetirizine Loratadine

Note: Many of these medications may also have sedative effects.

MEDICATION AND COGNITION

MEDICATION AND COGNITION

Table 1 (continued). Selected medications that adversely affect cognition and are commonly prescribed in Australian residential aged care.

	Anticholinergic effects	
	Higher	Lower
Opioids	<ul style="list-style-type: none"> Tapentadol 	<ul style="list-style-type: none"> Codeine Fentanyl Morphine Oxycodone Tramadol
Bladder antispasmodics	<ul style="list-style-type: none"> Darifenacin Oxybutynin Propantheline Solifenacin Tolterodine 	
Other medicines	<ul style="list-style-type: none"> Atropine Benztropine (<i>benztrapine</i>) Hyoscyamine Trihexyphenidyl (<i>benzhexol</i>) 	<ul style="list-style-type: none"> Benzodiazepines Amantadine Baclofen Carbamazepine Colchicine Entacapone Loperamide Metoclopramide Pramipexole Prochlorperazine Ranitidine Valproate

Note: Many of these medications may also have sedative effects.



Remember, many other less-commonly prescribed medications may also cause similar adverse effects on cognitive function.

FOLD LINE



REFERENCES

These cards are based on:

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This resource may be used by all staff involved with medications in community and residential aged care settings.

This set of cards accompany the DTA Minimising antipsychotic medications for responsive behaviours - Quick Reference Cards.

The information focuses on commonly prescribed medications in Australian residential aged care and their associated degree of adverse cognitive effects, primarily medications with anticholinergic and sedative actions.

The medication list is not exhaustive, and should not be used as the sole reference when supporting a person with a suspected cognitive adverse effect. They are not intended to be used to guide prescribing decisions.

These cards provide general information only and do not claim to reflect all considerations. As with all guidelines, these cards must be used in consideration of each individual patients' circumstances and goals of care.

This resource was originally produced by the Western Australian Dementia Training Study Centre, School of Pharmacy, Curtin University, with expert advice from Louis Anastasas, Dr Nicholas Bretland, Danijela Gnjidic, Alison Ilijovski and Ann Toh. It is now distributed by Dementia Training Australia, funded by the Australian Government.

The assistance of Webstercare® with providing the medication usage data for these cards is acknowledged with gratitude.



ISBN 978-0-9942935-3-4

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