



Pharmaceutical Assistance
Contract for the Elderly

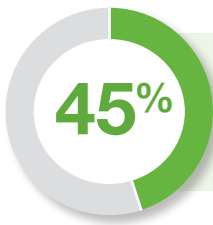


Managing the confusion

Evidence-based strategies to prevent, diagnose, and manage cognitive impairment in older adults



Preventing cognitive decline



Up to 45% of dementia risk can potentially be prevented or modified.¹

Several primary care interventions can reduce dementia risk:

➔ Control blood pressure (BP)

Strict BP control with systolic BP <120 mm Hg reduced the risk of mild cognitive impairment (MCI) or dementia compared to standard BP control of <140 mm Hg.²



➔ Recommend vaccinations

Herpes zoster (shingles) vaccine reduced dementia risk in age-eligible patients versus those who were not immunized.³⁻⁵ Other adult vaccines, like influenza, pertussis, and pneumococcus, may also be associated with a reduced risk of dementia, but the evidence is limited.⁶



➔ Treat hearing loss

Among older patients with hearing loss at high risk of cognitive decline, those counseled by audiologists and given hearing aids had slower cognitive decline at three years than those with no hearing intervention.⁷



➔ Promote overall health

Mediterranean and DASH diets, which focus on consuming healthy fats, fruits, vegetables, beans, legumes, and whole grains, have been associated with slowing cognitive decline in randomized trials.^{8,9}

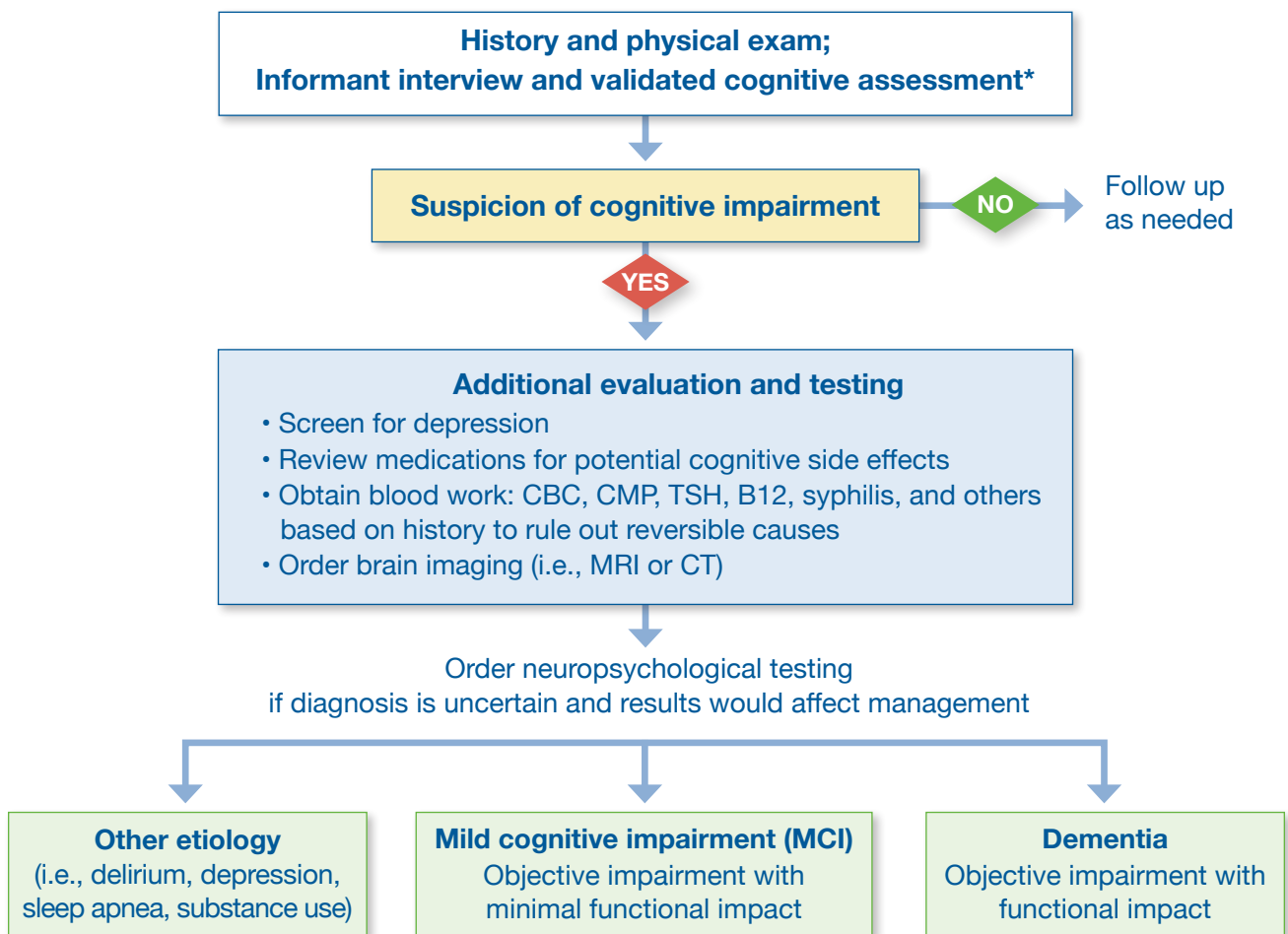


The US POINTER trial, a multifaceted two-year trial of a high-intensity intervention that encouraged physical activity, a healthful diet, social engagement, and cardiovascular health, modestly improved cognition compared to a low-intensity intervention.¹⁰



Defining the cause

FIGURE 1. Evaluating a patient with cognitive concerns or signs of cognitive difficulty¹¹



*Validated assessment tools include the Mini-Cog, Montreal Cognitive Assessment (MoCA), Ascertain Dementia 8 (AD8), or Mini-Mental State Examination (MMSE).

Not all cognitive decline is Alzheimer’s disease

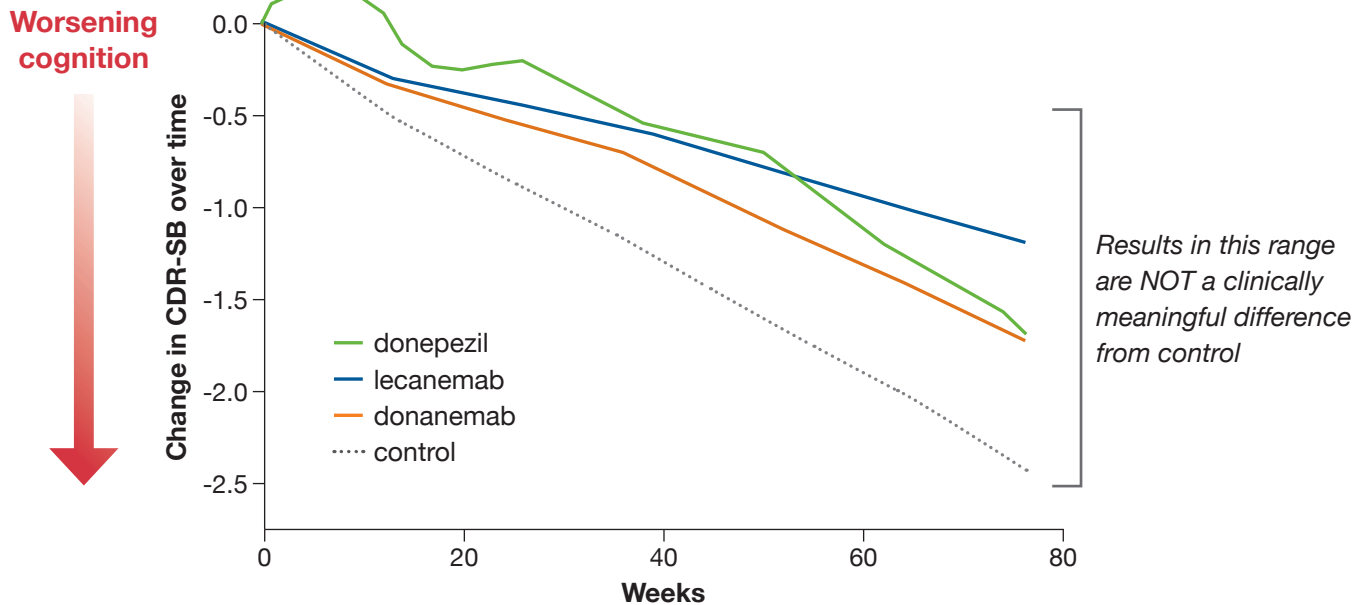
Common causes of cognitive impairment include Alzheimer’s disease, vascular dementia, fronto-temporal dementia, Lewy body disease, and a recently described syndrome, limbic-predominant age-related TDP-43 encephalopathy (LATE).

Key characteristics of LATE:

- resembles Alzheimer’s disease but progresses more slowly
- can occur with other causes of dementia
- marked by hippocampal atrophy without amyloid pathology; no practical biomarkers
- estimated to affect ~1 in 3 adults over age 85
- no proven treatments to date

Current medications do not provide clinically meaningful benefit

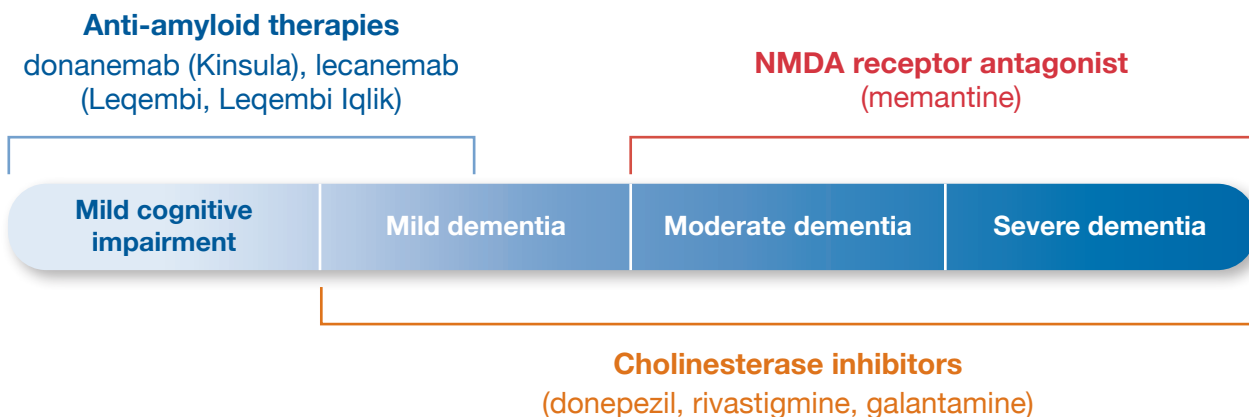
FIGURE 2. The effects of all currently available medications on the Clinical Dementia Rating-Sum of Boxes (CDR-SB) score are similar, and not clinically meaningful.¹³⁻¹⁶



The graph above is a composite approximation of the results of several trials in different populations to roughly suggest the magnitude of benefit seen with these treatments across multiple studies.

The timing and stage of cognitive impairment matter

FIGURE 3. Efficacy varies by stage: anti-amyloid drugs have been studied in early disease; cholinesterase inhibitors and memantine have been studied and approved for later stages.

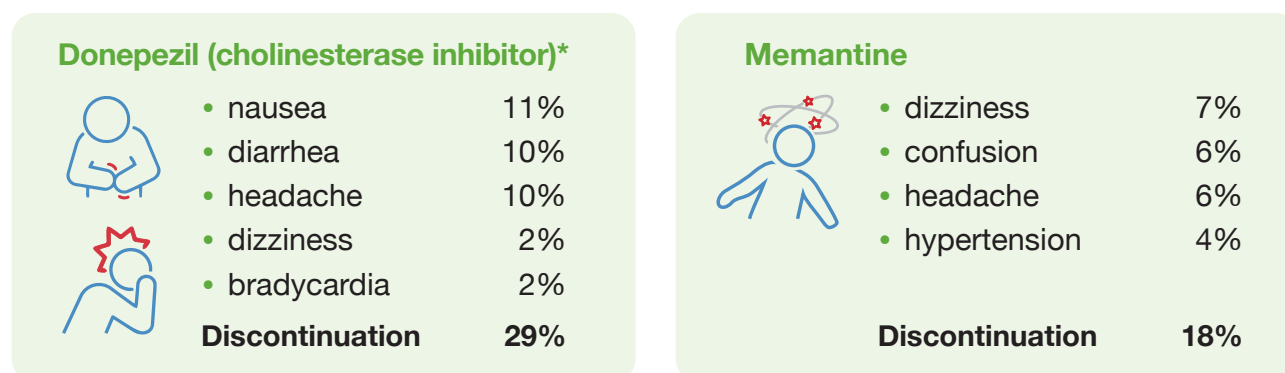


Some researchers believe that anti-amyloid medications may have a narrow window favoring early rather than later use, to confer more clinically meaningful effects.

Available treatments can be burdensome

Lower risk options: cholinesterase inhibitors and memantine

FIGURE 4. These oral medications are simple to prescribe but can cause problematic side effects.^{17,18}



*Other cholinesterase inhibitors (galantamine, rivastigmine) have similar side effects.

Significant risk and burden: anti-amyloid therapies

Donanemab and lecanemab require a baseline PET scan or cerebrospinal fluid (CSF) test, infusions every 2–4 weeks, and MRIs to monitor for brain swelling or bleeding, which may change treatment.

- **Cerebral edema** occurred in almost 1 in 4 patients receiving donanemab, about twice as many as with lecanemab.
- **Cerebral hemorrhage** occurred in about 1 in 5 patients receiving either medication.
- **Contraindicated in patients taking anticoagulants** such as warfarin, apixaban, or heparin.

Infusion-related reactions (e.g., nausea, vomiting, flu-like symptoms) are more common with lecanemab than donanemab (26% and 9%, respectively), often requiring antihistamines, NSAIDs, or steroids.

TABLE 1. Comparison of the anti-amyloid medications

	Donanemab	Lecanemab
Frequency	Every 4 weeks	Every 2 weeks
Infusion duration	30 minutes	60 minutes
Treatment duration	76 weeks, or if/when plaque levels are low on amyloid PET scans	Indefinite After 18 months of IV treatment, patients may switch to a subcutaneous form or continue IV

Is there a role for biomarkers?

PET scans and **CSF tests** are the current standards to determine anti-amyloid therapy eligibility. Blood tests, some marketed directly to patients, are increasingly available.

Blood tests require specialist or laboratory expertise to correctly interpret and evaluate the results. They should not be used in asymptomatic patients or patients without objective cognitive impairment.

TABLE 2. There are only two FDA-approved blood tests for Alzheimer’s disease biomarkers.*

Target	Test	Setting	Notes
Tau	Elecsys pTau 181	Primary care	“Rule out” test to identify if amyloid pathology may be present to determine preliminary candidacy for anti-amyloid therapies. A positive test requires further biomarker testing for confirmation (i.e., PET scan or CSF test).
Amyloid + Tau	Lumipulse G pTau217/β-Amyloid 1-42 Plasma Ratio	Dementia specialist	Intended as an option instead of PET scan or CSF test to detect Alzheimer’s pathology. Early real-world data suggests test may not be as accurate as it was in trials. ¹⁹

Weighing the use of medications



Medications may not be the right choice for everyone

There are still uncertainties about which patients will gain meaningful benefits or have significant side effects from medications for dementia. Clinicians, patients, and families may reasonably choose not to initiate medications immediately or at all.

Review treatment response and ask about side effects

- Ask the patient and caregiver about their perceptions of the benefit of treatment.
- Inquire about medication-related side effects (e.g., diarrhea with donepezil).
- Ensure that continuing medications for cognitive impairment aligns with the goals of care.

If needed, stop medication

- If adverse effects or burden exceed the perceived benefit, reassess therapy. For oral medications, reduce the dose slowly.

Addressing the behavioral and psychological symptoms of dementia (BPSD)

1 Identify the behavior to be managed

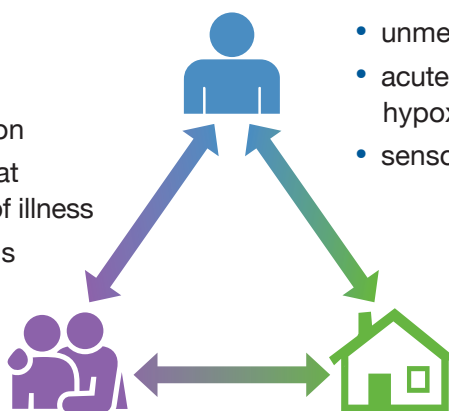
Patients with cognitive impairment often experience one or more of the following—apathy, depression, anxiety, agitation, hallucinations, or delusions—but not all require medication.

2 Explore possible underlying causes for the behavior, and prioritize non-pharmacologic strategies²⁰

Factors impacting behaviors:

Caregiver

- stress, burden, depression
- lack of understanding that behaviors are the result of illness
- mismatch of expectations and dementia severity



Patient

- unmet needs (e.g., hunger, thirst, pain)
- acute medical problems (e.g., infection, hypoxia, drug side effects)
- sensory deficits (hearing, vision)

Environment

- over- or under-stimulation
- unsafe environment
- lack of activity
- lack of structure or routines

3 Consider whether a medication is indicated

- For patients who require a medication, start with sertraline or citalopram for agitation.^{21,22}
- If dangerous or distressing behaviors occur, an antipsychotic may be necessary.

Use cautiously—start low, keep duration short, and prioritize non-pharmacologic options.

Note: Within 12 weeks of use, **antipsychotic medications increase the relative risk of death** in older patients with dementia **by about 50%**.²³

4 Regularly reassess treatment response and need

- Within one month, review treatment response and assess for side effects.
- After 3 to 4 months, consider decreasing the dose or discontinuing treatment.

Prepare for progressive impairment

Advance care planning (ACP) is an ongoing process of reflection and communication among patients, their loved ones, and healthcare professionals to help guide clinical decision-making. The aim is to provide care that aligns with the patient’s values, goals, and preferences.²⁴



Even among people with dementia, 30% of patients had no ACP documentation at the time of their death.²⁵

1. Start the conversation early

Ask the patient to talk about their wishes with people who will be making care decisions when they cannot.



2. Discuss what to expect as dementia progresses

Identify and discuss plans for matters such as transportation when patients are no longer able to safely drive themselves.



3. Ask about the patient’s treatment preferences, including which interventions they would want in end-of-life care.

4. Document the advance care plan in writing

All patients should have an identified health care proxy.

Additional documents include a living will, power of attorney, and medical directive (i.e., Provider Orders for Life-Sustaining Treatment—POLST).



5. Reassess the patient’s needs and wishes when clinical condition or level of care changes

Tools to help get started

Some practical, field-tested tools can help initiate the conversation:

- **PREPAREforyourcare.org**: an interactive ACP documentation tool²⁶
- **“What Matters to Me” Workbook**: one of many tools from The Conversation Project to help clarify care preferences
- **Five Wishes**: questions to help prepare and document patient preferences²⁷



PREPARE for your care website

Caring for patients with dementia

Over 11 million people provide unpaid care to patients with dementia²⁸

FIGURE 5. Caregivers dedicate nearly 30 hours a week, on average, caring for others.²⁹



Ensure caregivers have access to support

Coping classes can reduce distress, anger, and depression, while increasing self-efficacy. Example programs include:

- **Caregiver center:** qrco.de/Alz_caregiving
- **Best programs for caregiving:** bpc.caregiver.org



Family Caregiver Alliance
qrco.de/CaregiverPA

A new program to GUIDE care

Based on studies which found enhanced caregiver outcomes (improved self-efficacy, less burden and reduced depression) with care navigation versus usual care, the Medicare program is testing an innovation model, Guiding an Improved Dementia Experience (GUIDE).^{30,31}

Program eligibility:

- diagnosis of dementia
- enrolled in traditional Medicare A & B
 - not including MA plans* or Program of All-Inclusive Care for Elderly (LIFE Program)
- not enrolled in hospice or residing in a long-term nursing home

Program offers:

- comprehensive assessment
- individualized care planning
- caregiver training and education
- connections to community resources
- 24/7 support

*Patients in Medicare Advantage may have access to similar programs.

Providing care for patients without a caregiver



Over 1 in 4 patients with dementia lives alone.³²

They may not have formal caregivers or may only have caregivers at a distance.

► **Utilize in-home assessments**

This can lower fall risk and may help identify other concerns needing attention.

► **Simplify medication regimens**

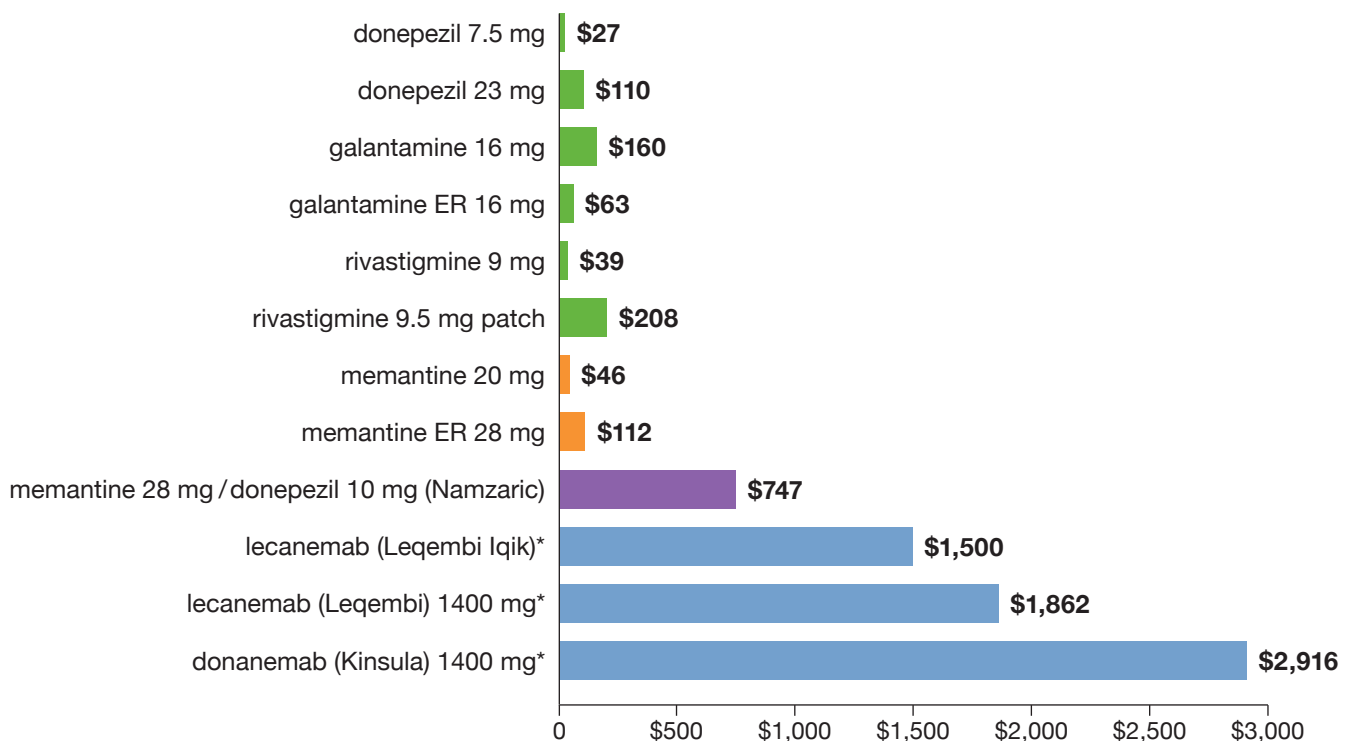
This can include consolidating timing of medications and deprescribing if clinically indicated.

► **Assess self-management skills**

Smart pill dispensers, fall alert bracelets, or other devices can be useful.

Cost of prescription drugs

FIGURE 6. Price of a 30-day supply of medications to manage dementia



*Monthly prices of lecanemab (for a 70 kg patient) and donanemab are based on Medicare average wholesale price Jan 2026. Other pharmacy prices are from goodrx.com, February 2026. Listed doses are based on Defined Daily Doses by the World Health Organization. All doses shown are generics when available, unless otherwise noted. These prices are a guide; patient costs will be subject to copays, rebates, and other incentives. These doses should not be used as a guide for treatment.

Key points

- **Promote overall health** to help prevent cognitive decline, focusing on blood pressure control and a Mediterranean or DASH diet.
- **Address treatable causes** of cognitive impairment when possible, such as vitamin deficiencies, thyroid dysfunction, depression, and medication side effects.
- Recognize the **limitations of available treatments**:
 - None of the medications stop or reverse cognitive decline.
 - Risks vary from GI side effects with cholinesterase inhibitors or memantine to cerebral side effects with anti-amyloid therapies.
- **Discuss advance care planning**, encouraging the identification of a health care proxy and reassessing care plans as dementia progresses.
- **Support caregivers with nonpharmacologic strategies** for disruptive behaviors, reserving short-course antipsychotics for dangerous or disturbing symptoms.

[Visit AlosaHealth.org/Dementia](https://www.alosahealth.org/dementia) for links to materials and other resources.

References:

(1) Livingston G, et al. Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. *Lancet*. 2024;404(10452):572-628. (2) Williamson JD, et al. Effect of Intensive vs Standard Blood Pressure Control on Probable Dementia: A Randomized Clinical Trial. *JAMA*. 2019;321(6):553-561. (3) Xie M, et al. The effect of shingles vaccination at different stages of the dementia disease course. *Cell*. 2025;188(25):7049-7064.e20. (4) Pomirchy M, et al. Herpes zoster vaccination and incident dementia in Canada: an analysis of natural experiments. *The Lancet Neurology*. 2026;25(2):170-180. (5) Rayens E, et al. Recombinant zoster vaccine is associated with a reduced risk of dementia. *Nat Commun*. 2026;17(1). (6) Maggi S, et al. Association between vaccinations and risk of dementia: a systematic review and meta-analysis. *Age Ageing*. 2025;54(11). (7) Lin FR, et al. Hearing intervention versus health education control to reduce cognitive decline in older adults with hearing loss in the USA (ACHIEVE): a multicentre, randomised controlled trial. *Lancet*. 2023;402(10404):786-797. (8) Valls-Pedret C, et al. Mediterranean Diet and Age-Related Cognitive Decline: A Randomized Clinical Trial. *JAMA Intern Med*. 2015;175(7):1094-1103. (9) Chen H, et al. Dietary Patterns and Indicators of Cognitive Function. *JAMA Neurology*. 2026. (10) Baker LD, et al. Structured vs Self-Guided Multidomain Lifestyle Interventions for Global Cognitive Function: The US POINTER Randomized Clinical Trial. *JAMA*. 2025;334(8):681-691. (11) Oh ES. Dementia. *Ann Intern Med*. 2024;177(11):ITC161-ITC176. (12) Wolk DA, et al. Clinical criteria for limbic-predominant age-related TDP-43 encephalopathy. *Alzheimers Dement*. 2025;21(1):e14202. (13) Rogers SL, et al. Long-term efficacy and safety of donepezil in the treatment of Alzheimer's disease: final analysis of a US multicentre open-label study. *Eur Neuropsychopharmacol*. 2000;10(3):195-203. (14) Muir RT, et al. Minimal clinically important difference in Alzheimer's disease: Rapid review. *Alzheimers Dement*. 2024;20(5):3352-3363. (15) Sims JR, et al. Donanemab in Early Symptomatic Alzheimer Disease: The TRAILBLAZER-ALZ 2 Randomized Clinical Trial. *JAMA*. 2023;330(6):512-527. (16) van Dyck CH, et al. Lecanemab in Early Alzheimer's Disease. *N Engl J Med*. 2023;388(1):9-21. (17) Isik AT, et al. Cardiovascular Outcomes of Cholinesterase Inhibitors in Individuals with Dementia: A Meta-Analysis and Systematic Review. *J Am Geriatr Soc*. 2018;66(9):1805-1811. (18) Russ TC, Morling JR. Cholinesterase inhibitors for mild cognitive impairment. *Cochrane Database Syst Rev*. 2012; 2012(9):Cd009132. (19) Fagan T. Trouble with Fugirebio's FDA-Cleared Blood Test? Or a Lousy Lot? Dec 6, 2025; <https://www.alzforum.org/news/conference-coverage/trouble-fugirebio-fda-cleared-blood-test-or-lousy-lot>. Accessed Feb 13, 2026. (20) Kales HC, et al. Assessment and management of behavioral and psychological symptoms of dementia. *BMJ*. 2015;350:h369. (21) Porsteinsson AP, et al. Effect of citalopram on agitation in Alzheimer disease: the CitAD randomized clinical trial. *JAMA*. 2014;311(7):682-691. (22) Seitz DP, et al. Antidepressants for agitation and psychosis in dementia. *Cochrane Database Syst Rev*. 2011;2011(2):Cd008191. (23) Schneider LS, et al. Risk of death with atypical antipsychotic drug treatment for dementia: meta-analysis of randomized placebo-controlled trials. *JAMA*. 2005; 294(15):1934-1943. (24) Sudore RL, et al. Defining Advance Care Planning for Adults: A Consensus Definition From a Multidisciplinary Delphi Panel. *J Pain Symptom Manage*. 2017;53(5):821-832.e821. (25) Naasan G, et al. Advance Directive and POLST Documentation in Decedents With Dementia at a Memory Care Center: The Importance of Early Advance Care Planning. *Neurol Clin Pract*. 2022;12(1):14-21. (26) Sudore RL, et al. Engaging Diverse English- and Spanish-Speaking Older Adults in Advance Care Planning: The PREPARE Randomized Clinical Trial. *JAMA Intern Med*. 2018;178(12):1616-1625. (27) Atherton KN. Project Five Wishes: promoting advance directives in primary care. *J Am Assoc Nurse Pract*. 2020;32(10):689-695. (28) 2024 Alzheimer's disease facts and figures. *Alzheimers Dement*. 2024 May;20(5):3708-3821. (29) Caregiving in the US: Research Report. July 2025; <https://www.caregivingintheus.org/>. Accessed Feb 18, 2026. (30) Reuben DB, et al. Health System, Community-Based, or Usual Dementia Care for Persons With Dementia and Caregivers: The D-CARE Randomized Clinical Trial. *JAMA*. 2025;333(11):950-961. (31) Possin KL, et al. Effect of Collaborative Dementia Care via Telephone and Internet on Quality of Life, Caregiver Well-being, and Health Care Use: The Care Ecosystem Randomized Clinical Trial. *JAMA Intern Med*. 2019;179(12):1658-1667. (32) Services CfMM. GUIDE (Guiding an Improved Dementia Experience) Model. Nov 24, 2025; <https://www.cms.gov/priorities/innovation/innovation-models/guide>. Accessed Feb 17, 2026. (33) Okoye SM, et al. Housing characteristics of older adults with cognitive impairment. *Alzheimers Dement*. 2025;21(10):e70841.

About this publication

These are general recommendations only; specific medical decisions should be made by the treating clinician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at AlosaHealth.org.



This material is provided by **Alosa Health**, a nonprofit organization which accepts no funding from any pharmaceutical company.

This material was produced by Matthew Growdon, MD, MPH, Assistant Professor of Medicine, University of California, San Francisco; Ellie Grossman, MD, MPH, Instructor in Medicine, Harvard Medical School; Alex Chaitoff, MD, MPH, Assistant Professor of Internal Medicine, University of Michigan; Benjamin N. Rome, MD, MPH, Assistant Professor of Medicine, Harvard Medical School; Jerry Avorn, MD, Professor of Medicine, Harvard Medical School; Lori Tishler, MD, MPH, Chief Medical Officer; Paul Fanikos, RPh, MPA/HA, Chief Operating Officer; and Ellen Dancel, PharmD, MPH, Director of Clinical Materials Development, all at Alosa Health. Drs. Avorn and Rome are physicians at Brigham and Women's Hospital in Boston, MA. Dr. Growdon practices at the UCSF Medical Center, Dr. Chaitoff at the Veterans Affairs Ann Arbor Health System, and Dr. Grossman at the Cambridge Health Alliance. None of the authors accept any personal compensation from any drug company.



Pharmaceutical Assistance
Contract for the Elderly