PACE Pharmaceutical Assistance Contract for the Elderly

Alosa Health
Balanced information for better care

Dealing with cognitive impairment

Prevention, management, and advance care planning

Some interventions can reduce the risk of dementia

These include common primary care practices:[1]

Control blood pressure

Recommend a Mediterranean diet

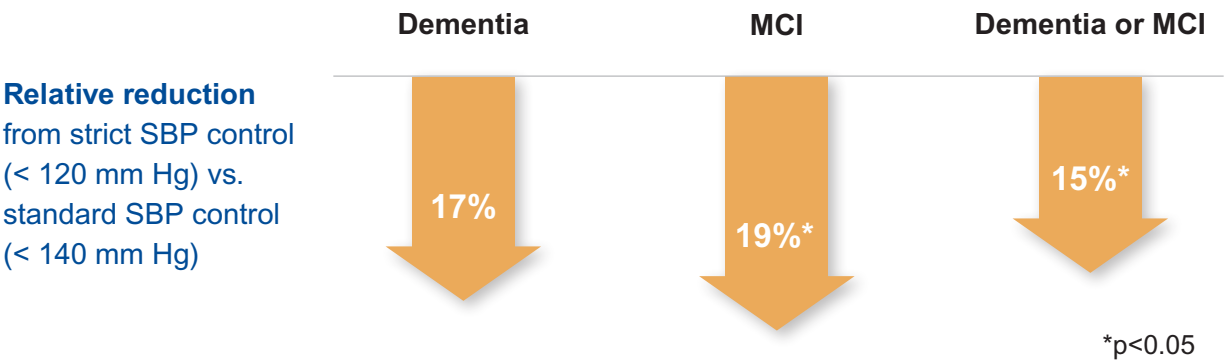
Identify and manage depression

Treat hearing loss

In randomized trials, exercise did not improve cognition, but does benefit overall health.[2-5] 'Cognitive training' does not prevent cognitive decline. Over-the-counter 'memory enhancers' have no evidence of efficacy.[6-7]

Strict BP control led to a reduction in mild cognitive impairment (MCI).

FIGURE 1. After five years of follow-up, the SPRINT-MIND study found strict SBP control reduced the incidence of MCI.[8]



Trial showed that the Mediterranean diet slowed cognitive decline

FIGURE 2. A four-year study randomizing patients to a control diet or Mediterranean diet supplemented with olive oil (1 liter/week) or nuts (30 grams/day) found improvements in global cognition with olive oil.[9]

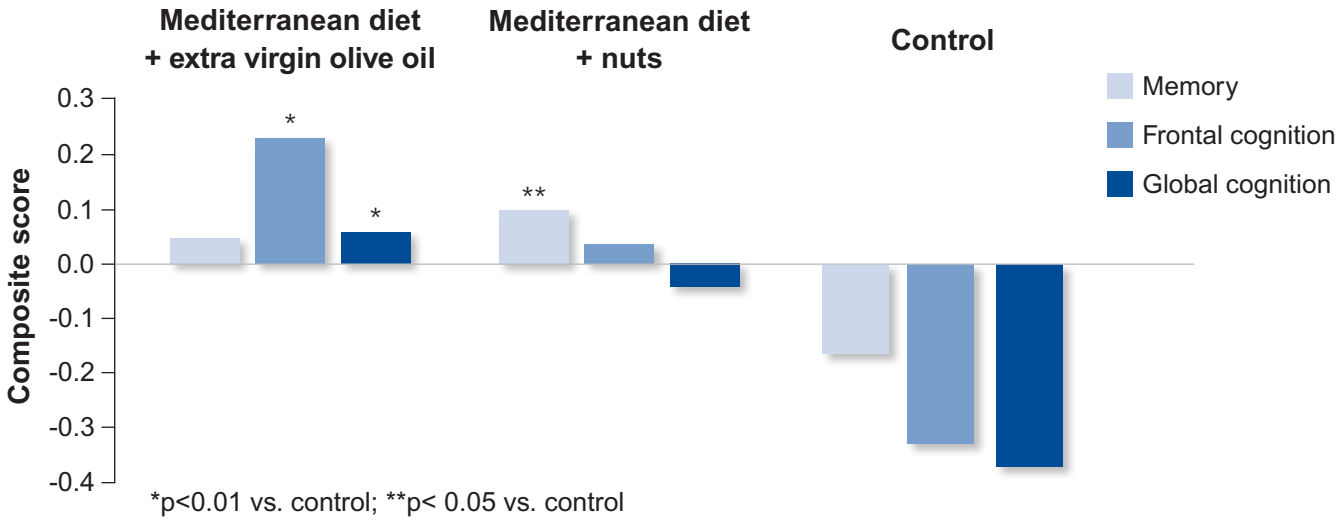
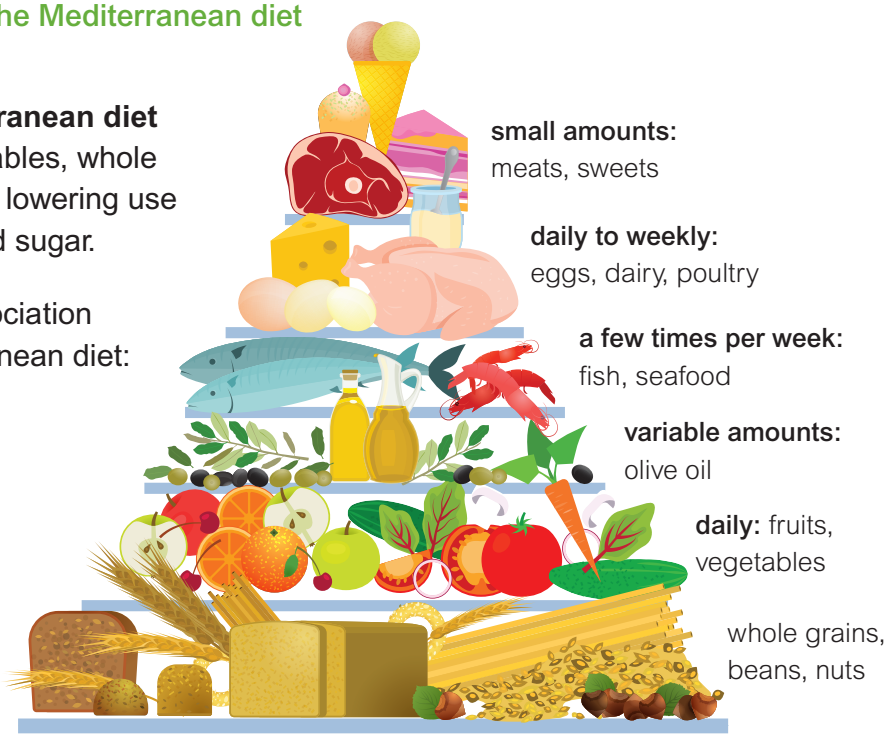


FIGURE 3. Food pyramid for the Mediterranean diet

Healthful diets like the **Mediterranean diet** focus on fresh fruits and vegetables, whole grains, and fish and nuts, while lowering use of red meat, refined grains, and sugar.

Go to the American Heart Association website for a sample Mediterranean diet: **www.bit.ly/AHA_diet**



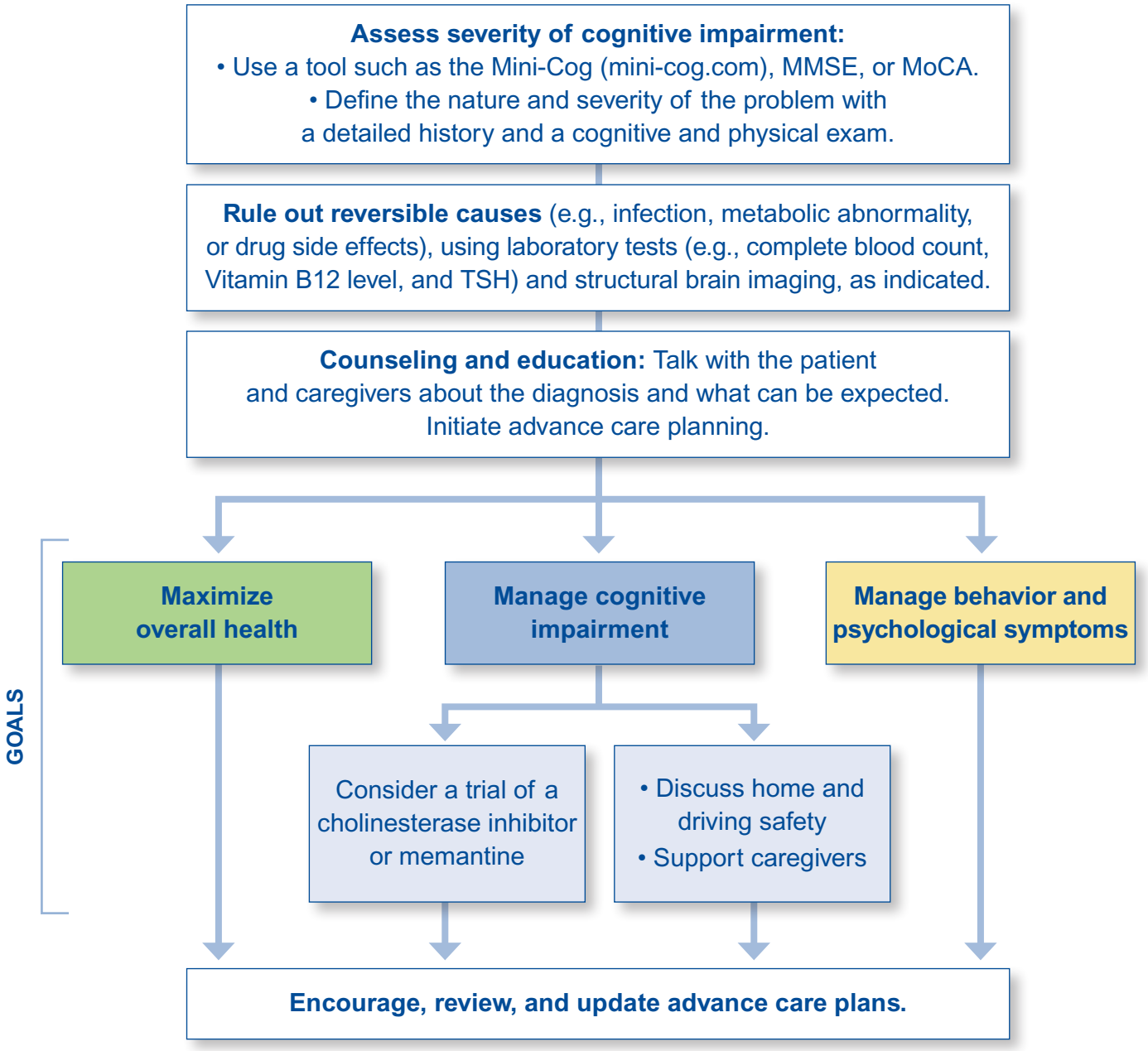
Identify and manage cognitive impairment

Should I screen all older adults for cognitive impairment?

No. The U.S. Preventive Services Task Force cites insufficient evidence to assess the harms and benefits for cognitive impairment screening in asymptomatic older adults.

Testing is recommended for patients with signs or symptoms of cognitive impairment.[10]

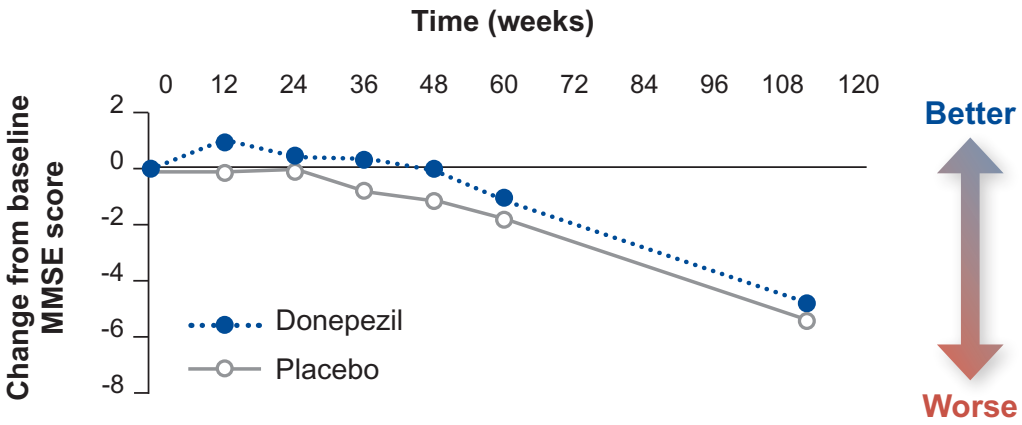
FIGURE 4. A framework for managing patients with Alzheimer's disease and related dementias



Medications play a limited role

Cholinesterase inhibitors and memantine offer benefits that are usually modest and time-limited, but side effects are common.

FIGURE 5. If a response occurs, it will usually occur within three months of starting treatment. Any modest improvements generally diminish after 6-12 months in most patients.[11]



Treatment effect 0.83 (SE 0.18), p<0.0001

When trying a cholinesterase inhibitor or memantine:

1 Start at a low dose and titrate based on patient tolerance.

No one cholinesterase inhibitor is better than another; there is no clear difference between cholinestrase inhibitors and memantine.[12]

Combining donepezil with memantine provides no benefit over each agent alone at one year.[13]

2 Monitor carefully for these common side effects:

cholinesterase inhibitors

- nausea, vomiting, diarrhea
- anorexia
- dizziness
- bradycardia

memantine

- dizziness
- confusion
- headache
- hypertension

3 Reassess at 3-6 months to determine if the risk-benefit relationship warrants continued treatment.

Identify and prioritize the patient's wishes

Documenting the patient's wishes can:

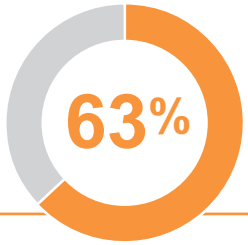
- allow patients to have more control of their care.
- avoid unnecessary or unwanted treatments.

POLST form

Encourage and assist patients who wish to place restrictions on care to complete a Pennsylvania Orders for Life-Sustaining Treatment (POLST) form: **www.bit.ly/POLST_form**

Advance care planning (ACP)

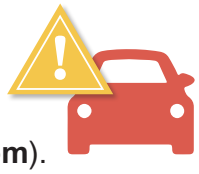
ACP is a continuous, dynamic process of reflection and dialogue between a person with dementia, those close to her or him, and their health care providers concerning the patient's preferences and values in future treatment and care, including end-of-life care.[14]



63% of patients don't have an advance directive in place.[15]

Components of the ACP conversation for patients with dementia[14,16]

1. **Start the conversation early.** Ask the patient to talk about these issues with the people who will be making care decisions as the disease progresses.
2. **Discuss what to expect with the progression of dementia.**
   — Ensure safety for patients on the road and at home. Several organizations provide third party assessments of driving ability (e.g., **seniordriving.aaa.com**).
3. **Ask about the patient's treatment preferences,** including end-of-life care.
4. **Document the ACP in writing.**
   — Encourage the patient to have a living will, health care proxy, medical directives, and power of attorney.
5. **Reassess patient needs and wishes when status changes** (e.g., a transition to a nursing facility).



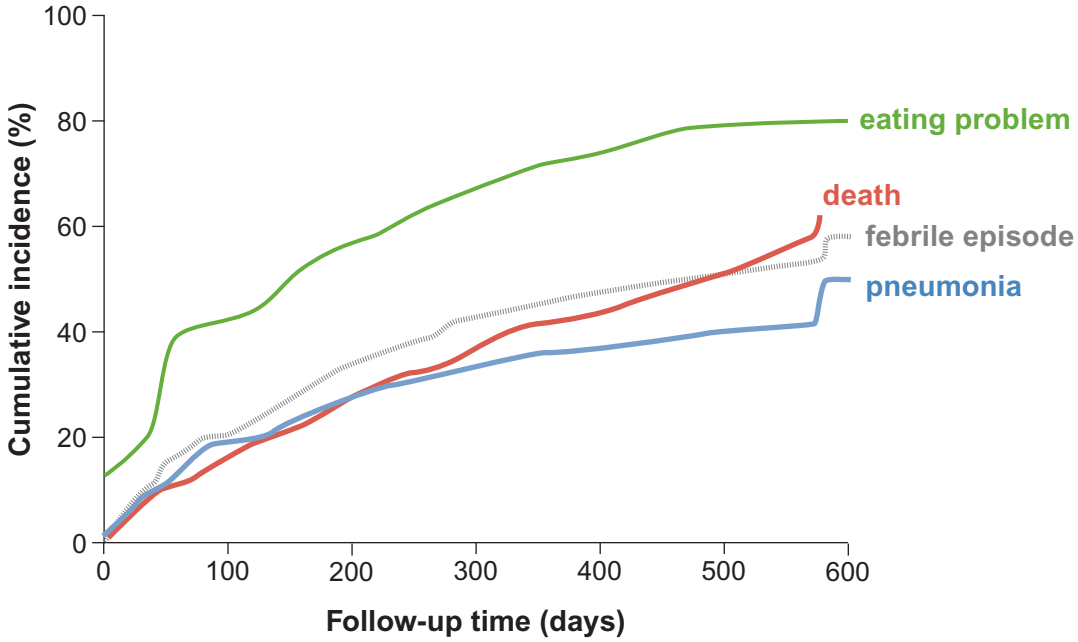
Tools and resources

- **AlosaHealth.org/Dementia**
- **theconversationproject.org**
- **Alzheimer's Association: bit.ly/Alz_plan**

Reassess the goals of care for patients with advanced dementia

Advanced dementia includes profound memory deficits (e.g., inability to recognize family members), minimal verbal abilities, inability to walk independently, inability to perform any activities of daily living, and/or urinary or fecal incontinence.[16]

FIGURE 6. Several common clinical situations are predictable in advanced dementia.[17]



Eating problems

Many professional societies and groups recommend against tube feeding.[18-20] Careful hand feeding for patient enjoyment may be an option for some patients.

Pneumonia

In patients with profound cognitive deficits in a nursing home, the 6-month mortality after pneumonia can be as high as 50%.[17]

Goals of care commonly shift with dementia severity

Goals of care	mild dementia		severe dementia
	life-prolonging		**comfort only**
	e.g., hospitalization for pneumonia	e.g., antibiotics in a residential care setting	e.g., fever-lowering medications

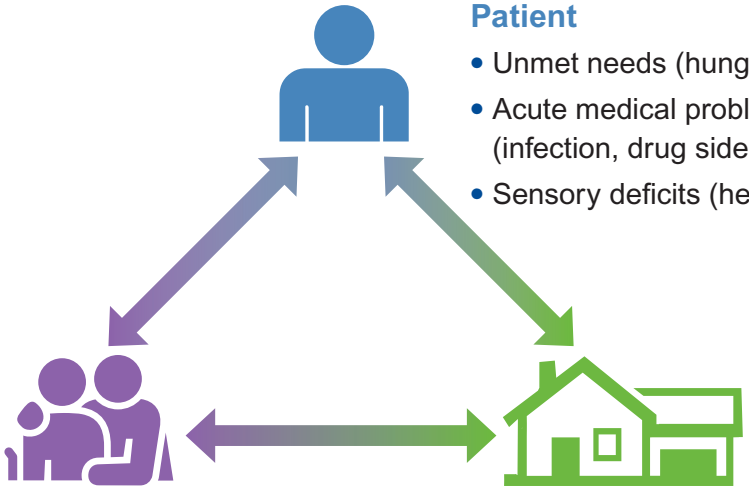
Address the behavioral and psychological symptoms of dementia (BPSD)

Sedating medications should not be a main strategy in these patients.

TABLE 1. The D.I.C.E. (Describe, Investigate, Create, and Evaluate) approach helps manage behavioral problems.[21]

Describe	• Characterize the behavior through discussions with the patient, caregivers, or proxies.
Investigate	• Identify any immediate concerns about safety. • Look for possible underlying causes (see Figure 7).
Create	• Collaborate with caregivers and treatment team to create and implement a treatment plan.
Evaluate	• Assess whether the interventions are effective in addressing the target behavior(s). • If medications are used, evaluate periodically for side effects and symptom persistence.

FIGURE 7. Three points of leverage for applying non-drug interventions[21]



Patient
- Unmet needs (hunger, thirst, pain)
- Acute medical problems (infection, drug side effects)
- Sensory deficits (hearing, vision)

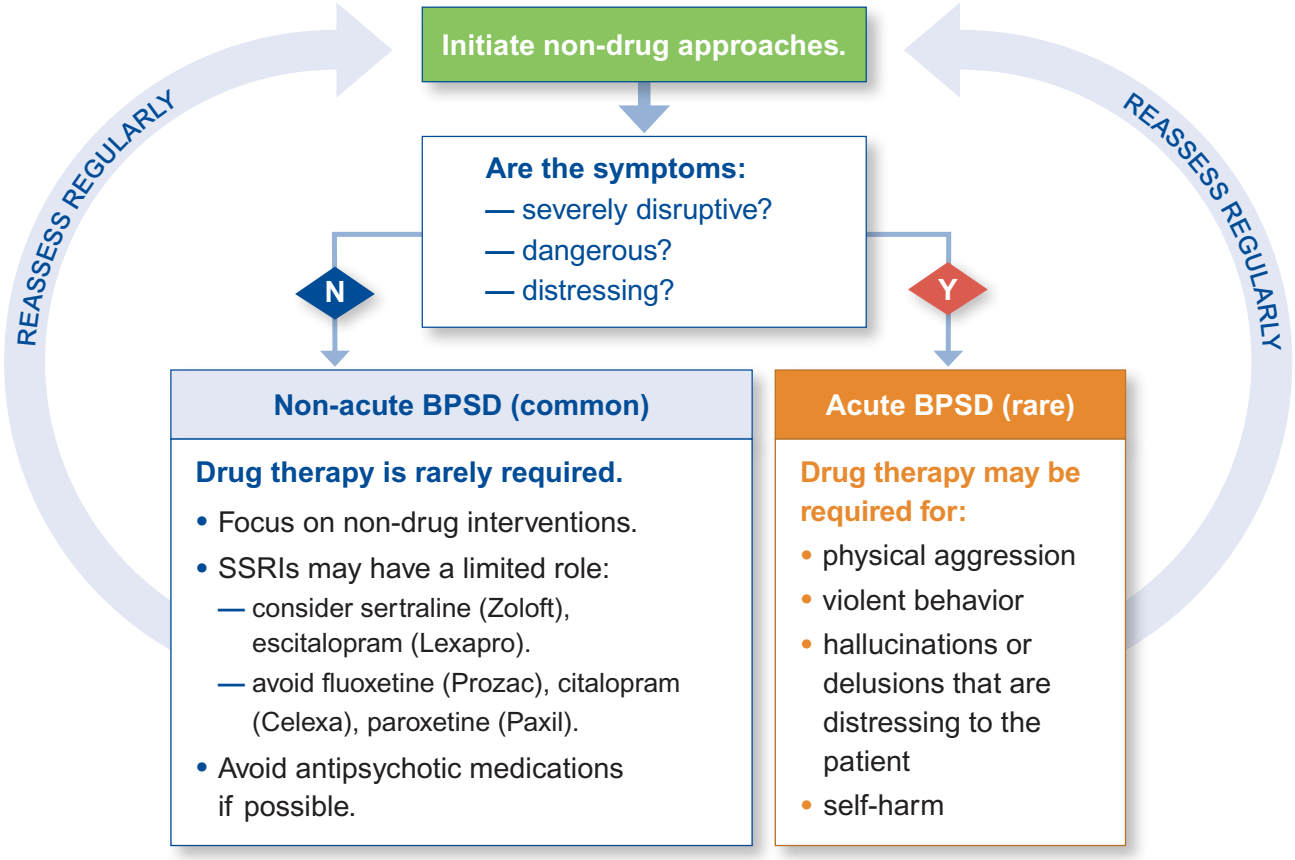
Caregiver
- Caregiver stress, burden, depression
- Lack of education about dementia (behaviors are a result of the disease, not "on purpose")
- Communication issues; mismatch of expectations and dementia severity

Environment
- Over- or under-stimulating
- Unsafe environment
- Lack of activity
- Lack of structure or routines

Avoid routine use of risky medications to manage BPSD

The severity of the behavior should guide the management strategy.

FIGURE 8. Managing behavioral problems in older patients with cognitive impairment



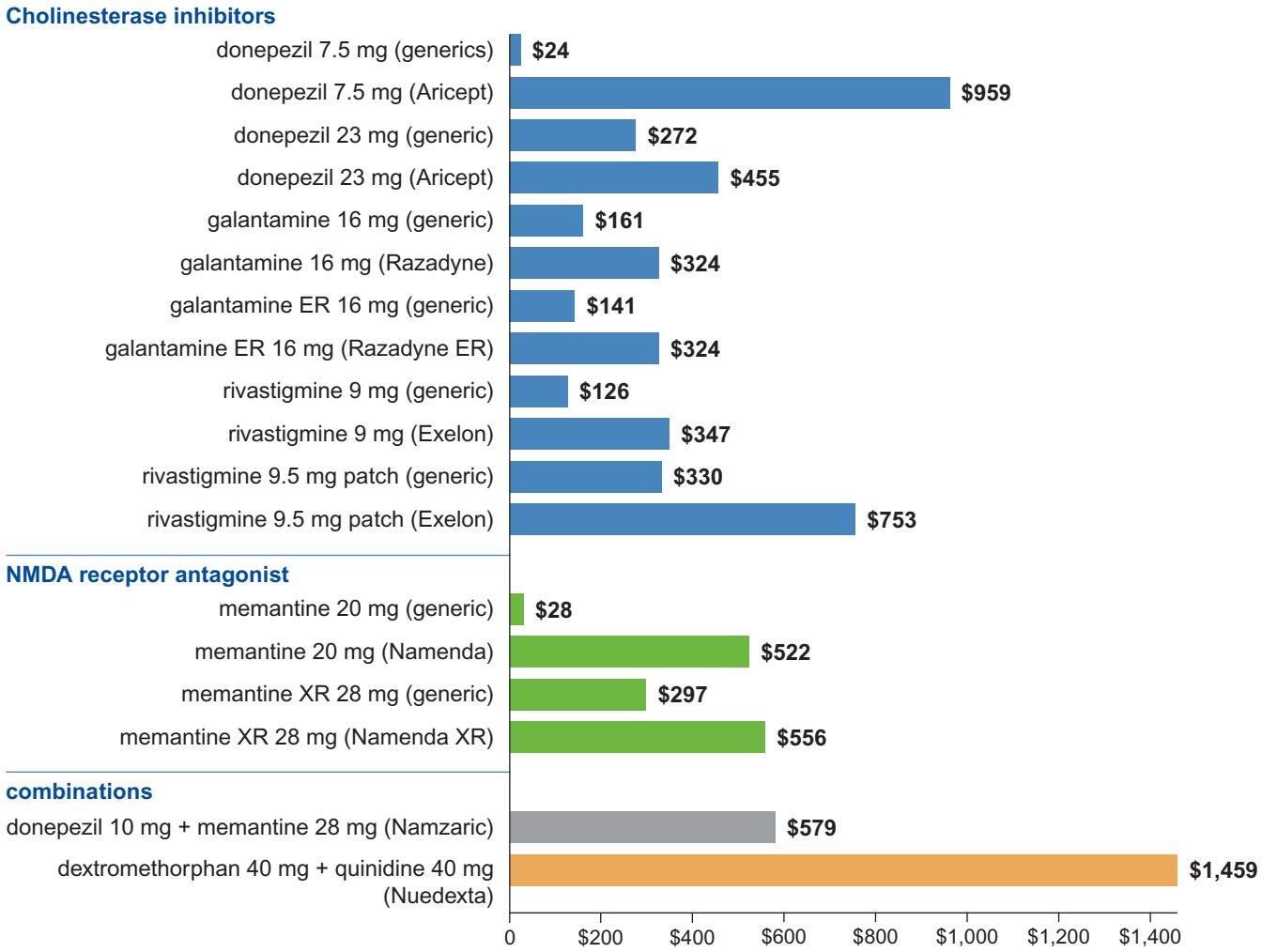
In rare situations when dangerous or distressing behaviors require an antipsychotic medication (APM), initiate with caution:[22,23]

1. Identify and document the behavior being targeted.
2. Start the APM on a trial basis for a limited duration.
3. Start at the lowest dose and monitor for side effects.
4. Evaluate the efficacy of the drug in addressing the targeted behaviors.
5. Stop the APM after the trial period and re-assess the patient.

Randomized trials show that for every 100 patients with dementia treated with an APM for 10-12 weeks, one will die due to a drug-related side effect.[24]

Costs

FIGURE 9. Price of a 30-day supply of medications to manage dementia



Prices from goodrx.com, March 2020. Listed doses are based on Defined Daily Doses by the World Health Organization and should not be used for dosing in all patients. These prices are a guide; patient costs will be subject to copays, rebates, and other incentives.

Caregiver support

Coping classes can reduce anger and depression and increase self-efficacy.[25] Caregiver resources and support groups:

- **Visit the Caregiver Center at alz.org:** alz.org/help-support/caregiving
- **Contact your local Area Agency on Aging:** aging.pa.gov/local-resources

Visit AlosaHealth.org/Dementia for more resources and a detailed evidence document.

Key points

Implement interventions that may prevent dementia

- Controlling elevated blood pressure can reduce the likelihood of cognitive impairment.
- There is some evidence that adopting a Mediterranean diet can reduce the risk of dementia.
- Exercise will improve overall health, but its effect on preventing dementia is less clear.

Assess and treat dementia symptoms

- In patients with symptoms, look for and address any reversible causes of cognitive impairment.
- Assess for dementia using a tool such as the Mini-Cog.
- Cholinesterase inhibitors and memantine may slightly slow cognitive decline in some patients with dementia, but the effects are modest and time-limited.
- The risk of side effects from cholinesterase inhibitors and memantine limit their use; continuously reassess risk and benefit from these drugs.

Plan for disease progression

- Begin advance care planning conversations early: engage patients and caregivers in completing a living will, medical directives, and other financial and legal safeguards.
- Discuss driving safety, especially as dementia advances.
- Identify triggers for behavioral and psychological symptoms of dementia and work with caregivers to limit exposure to triggers. Reserve antipsychotic medications for dangerous situations.
- Support caregivers to maintain their own health. Encourage self-care.

References:

(1) Livingston G, Sommerlad A, Orgeta V, et al. Dementia prevention, intervention, and care. *Lancet.* 2017;390(10113):2673-2734. **(2)** Ngandu T, Lehtisalo J, Solomon A, et al. A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. *Lancet.* 2015;385(9984):2255-2263. **(3)** Andrieu S, Guyonnet S, Coley N, et al. Effect of long-term omega 3 polyunsaturated fatty acid supplementation with or without multidomain intervention on cognitive function in elderly adults with memory complaints (MAPT): a randomised, placebo-controlled trial. *Lancet Neurol.* 2017;16(5):377-389. **(4)** Moll van Charante EP, Richard E, Eurelings LS, et al. Effectiveness of a 6-year multidomain vascular care intervention to prevent dementia (preDIVA): a cluster-randomised controlled trial. *Lancet.* 2016;388(10046):797-805. **(5)** Sink KM, Espeland MA, Castro CM, et al. Effect of a 24-Month Physical Activity Intervention vs Health Education on Cognitive Outcomes in Sedentary Older Adults: The LIFE Randomized Trial. *JAMA.* 2015;314(8):781-790. **(6)** Butler M, McCreedy E, Nelson VA, et al. Does Cognitive Training Prevent Cognitive Decline?: A Systematic Review. *Ann Intern Med.* 2018;168(1):63-68. **(7)** Butler M, Nelson VA, Davila H, et al. Over-the-Counter Supplement Interventions to Prevent Cognitive Decline, Mild Cognitive Impairment, and Clinical Alzheimer-Type Dementia: A Systematic Review. *Ann Intern Med.* 2018;168(1):52–62. **(8)** SPRINT MIND Investigators for the SPRINT Research Group, Williamson JD, Pajewski NM, et al. Effect of Intensive vs Standard Blood Pressure Control on Probable Dementia: A Randomized Clinical Trial. *JAMA.* 2019;321(6):553–561. **(9)** Valls-Pedret C, Sala-Vila A, Serra-Mir M, et al. Mediterranean Diet and Age-Related Cognitive Decline: A Randomized Clinical Trial. *JAMA Intern Med.* 2015;175(7):1094-1103. **(10)** US Preventive Services Task Force. Screening for Cognitive Impairment in Older Adults: US Preventive Services Task Force Recommendation Statement. *JAMA.* 2020;323(8):757-763. **(11)** Courtney C, Farrell D, Gray R, et al. Long-term donepezil treatment in 565 patients with Alzheimer's disease (AD2000): randomised double-blind trial. *Lancet.* 2004;363(9427):2105-2115. **(12)** Birks JS. Cholinesterase inhibitors for Alzheimer's disease. *Cochrane Database Syst Rev.* 2006 Jan 25;(1):CD005593.**(13)** Howard R, McShane R, Lindesay J, et al. Donepezil and Memantine for Moderate-to-Severe Alzheimer's Disease. *N Engl J Med.* 2012;366(10):893-903. **(14)** Piers R, Albers G, Gilissen J, et al. Advance care planning in dementia: recommendations for healthcare professionals. *BMC Palliat Care.* 2018;17(1):88-88. **(15)** Yadav KN, Gabler NB, Cooney E, et al. Approximately One In Three US Adults Completes Any Type Of Advance Directive For End-Of-Life Care. *Health Aff* (Millwood). 2017;36(7):1244-1251. **(16)** Mitchell SL. CLINICAL PRACTICE. Advanced Dementia. *N Engl J Med.* 2015;372(26):2533-2540. **(17)** Mitchell SL, Teno JM, Kiely DK, et al. The clinical course of advanced dementia. N Engl J Med. 2009;361(16):1529-1538. **(18)** Alzheimer's Association. Feeding issues in advanced dementia. https://www.alz.org/media/Documents/feeding-issues-statement.pdf. Published 2015. Accessed March 10, 2020. **(19)** Fischberg D, Bull J, Casarett D, et al. Five things physicians and patients should question in hospice and palliative medicine. *J Pain Symptom Manage.* 2013;45(3):595-605. **(20)** American Geriatrics Society Ethics C, Clinical P, Models of Care C. American Geriatrics Society feeding tubes in advanced dementia position statement. *J Am Geriatr Soc.* 2014;62(8):1590-1593. **(21)** Kales HC, Gitlin LN, Lyketsos CG. Assessment and management of behavioral and psychological symptoms of dementia. *BMJ.* 2015;350:h369-h369. **(22)** Reus VI, Fochtmann LJ, Eyler AE, et al. The American Psychiatric Association practice guideline on the use of antipsychotics to treat agitation or psychosis in patients with dementia. Arlington, VA: American Psychiatric Association; 2016. **(23)** America Geriatrics Society. Ten things patients and physicians should question. https://www.choosingwisely.org/wp-content/uploads/2015/02/AGS-Choosing-Wisely-List.pdf Accessed March 17, 2020. **(24)** Schneider LS, Dagerman KS, Insel P. Risk of death with atypical antipsychotic drug treatment for dementia: meta-analysis of randomized placebo-controlled trials. *JAMA.* 2005;294(15):1934-1943. **(25)** Coon DW, Thompson L, Steffen A, Sorocco K, Gallagher-Thompson D. Anger and depression management: psychoeducational skill training interventions for women caregivers of a relative with dementia. *Gerontologist.* 2003;43(5):678-689.

About this publication

These are general recommendations only; specific clinical 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.

IDIS Independent Drug Information Service

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Alosa Health

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