Managing Dementia

From Diagnosis to Routine Management

VA

U.S. Department of Veterans Affairs

Veterans Health Administration

PBM Academic Detailing Service

Managing Dementia
From Diagnosis to Routine Management

A VA Clinician's Guide

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Take-home Points

Remain alert to "warning signs" and perform a thorough evaluation if signs are identified. **3**

Rule out other common causes of cognitive impairment before making a diagnosis of dementia. **5**

Cholinesterase inhibitors have long-term risks, such as weight loss, falls, hospitalizations, and worsening depression. **9**

Use medications for dementia only if there is:

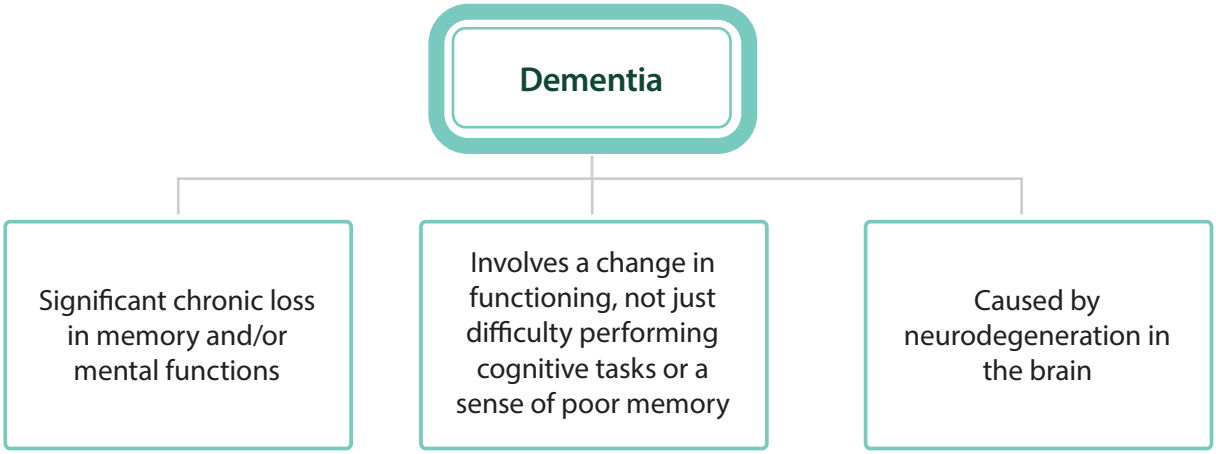
- **A diagnosis**
- **A targeted symptom**
- **Presence of minimal side effects**
- **A way to ensure adherence**

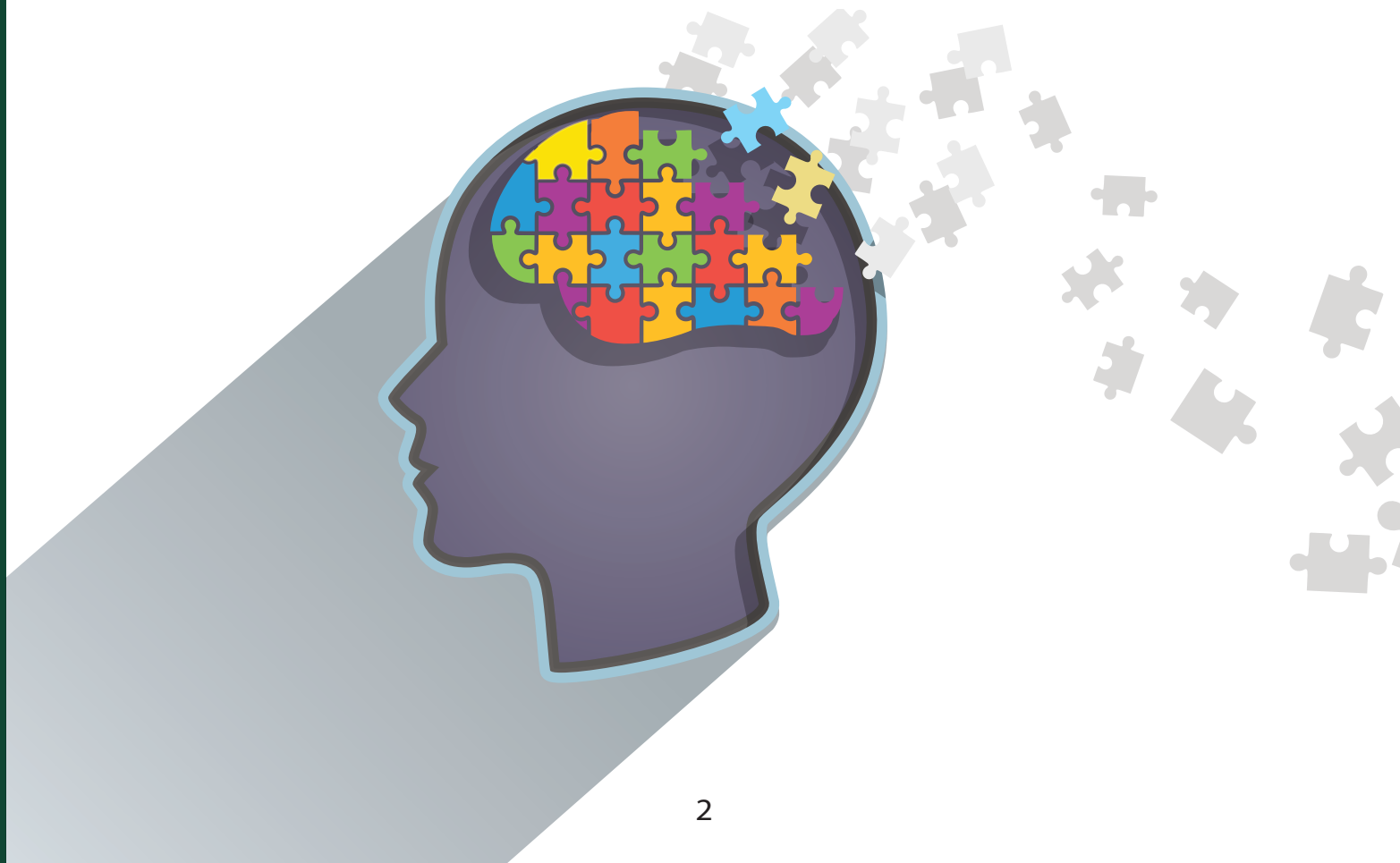
Background

Alzheimer's disease is the sixth leading cause of death in the United States and the most common cause of dementia, affecting an estimated 5.5 million Americans.[1]

Dementia is a syndrome involving impairment in cognitive functioning that interferes with a person's ability to carry out usual activities. It can involve impairments in memory, language, reasoning, judgment, and handling of complex tasks (i.e., executive dysfunction), higher order perceptual/motor functioning, and/or personality, behavior, and/or demeanor.

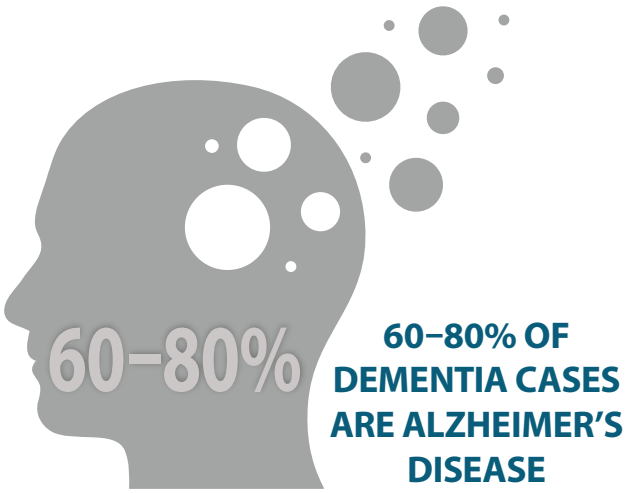
Figure 1. Major Factors that Define Dementia





Dementia

Figure 2. The Majority of Dementia Cases are Alzheimer's Disease[1,2]



It can sometimes be challenging to differentiate normal cognitive aging from other causes of cognitive decline. In general, difficulties have to represent a decline from previous functioning and what would be expected of others of similar backgrounds.

Considerations for Practice[3]

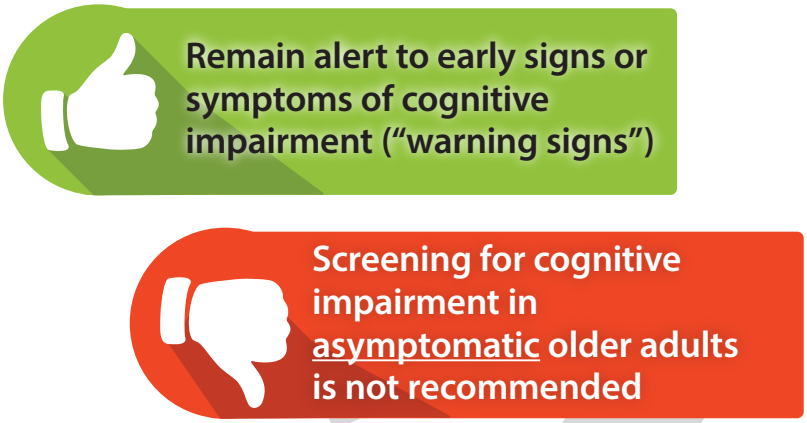
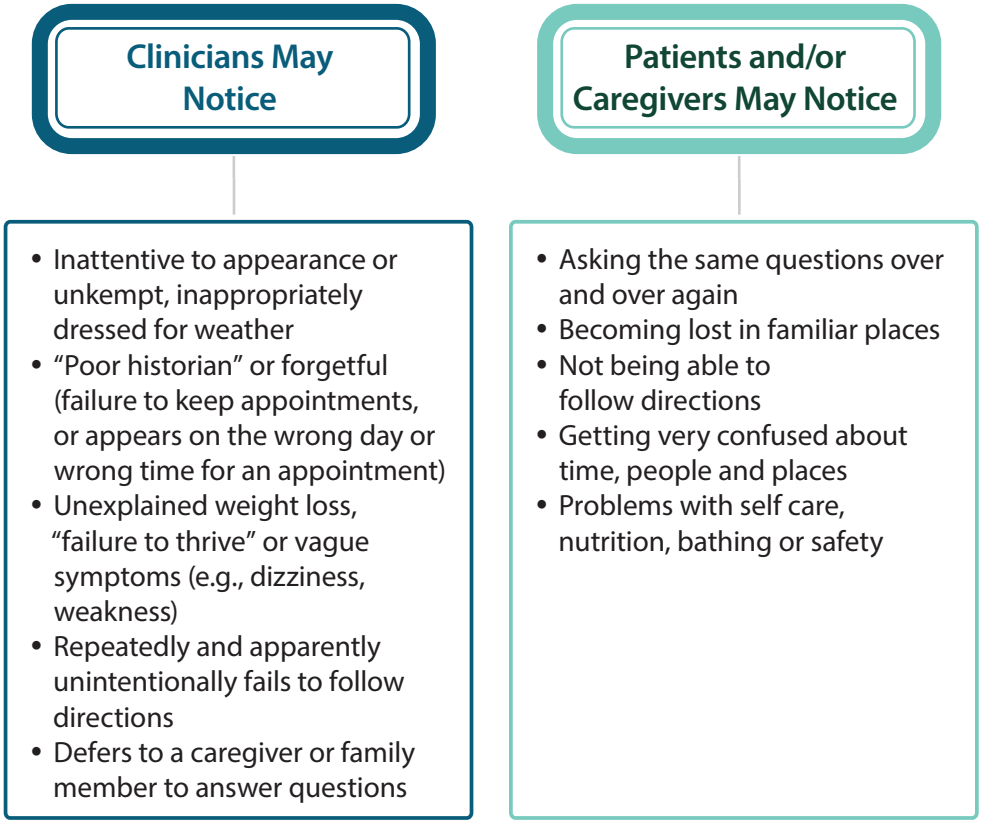


Figure 3. Warning Sign Examples



Remain alert to "warning signs" and perform a thorough evaluation if signs are identified.

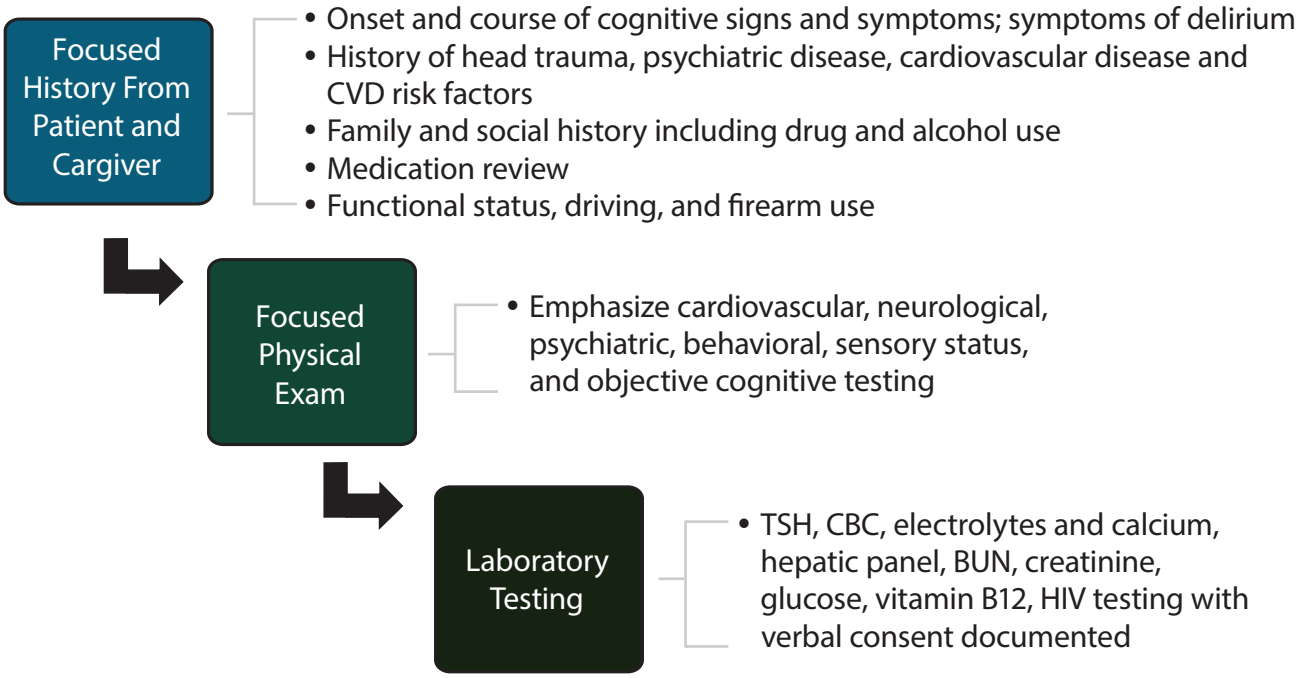
Diagnosing Dementia

A diagnosis of dementia requires all of the following:

- Report/observation of cognitive dysfunction
- Meaningful decline in function
- Objective evidence of cognitive dysfunction on a mental status examination or formal neuropsychological testing

If "**warning signs**" (see above) for dementia are present, healthcare providers should perform or refer the patient to a provider who can perform the following:

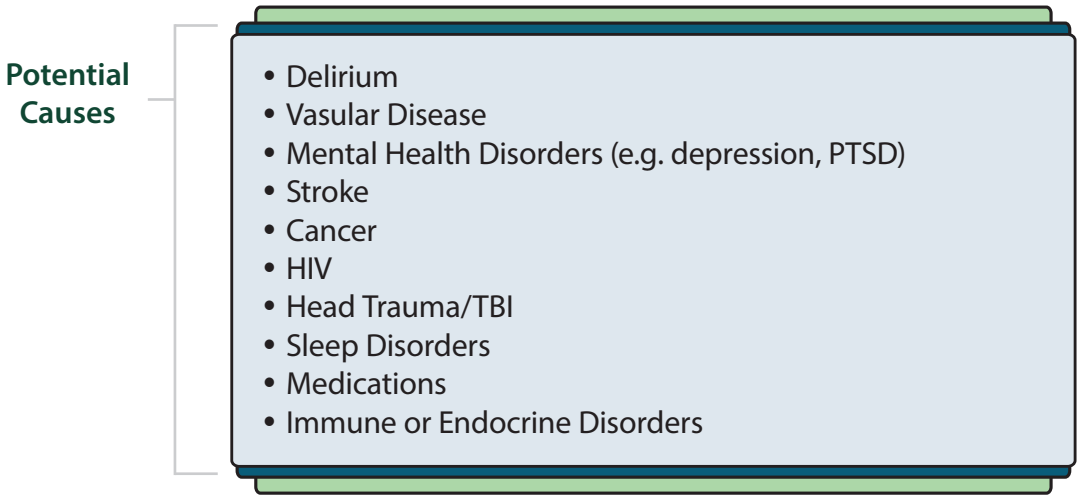
Figure 4. Next Steps When Warning Signs are Present



The selected labs and studies are recommended to establish a clinical diagnosis regarding the cause of dementia and to assess potentially reversible or modifiable factors. BUN = blood urea nitrogen; CBC = complete blood count; CVD = cardiovascular disease; HIV = human immunodeficiency virus; TSH = thyroid stimulating hormone.

It is important to rule out other causes of (and/or contributors to) cognitive impairment.

Figure 5. Other Potential Causes of Cognitive Impairment

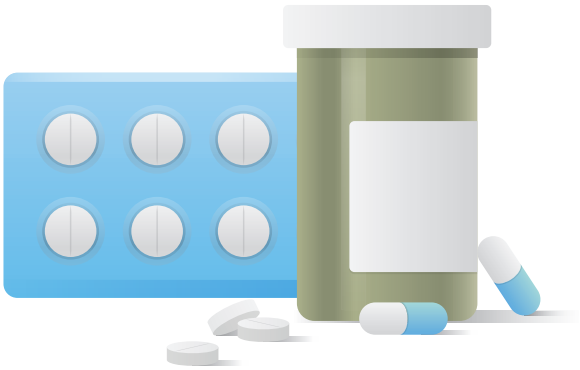


HIV = human immunodeficiency virus; TBI = traumatic brain injury; PTSD = Post-traumatic stress disorder.

Table 1. Common Medication Classes that Impact Cognition*

Medications
Anticholinergics (e.g. amitriptyline)
Antihistamines (e.g. diphenhydramine)
Antipsychotics (e.g. olanzapine)
Benzodiazepines (e.g. lorazepam, alprazolam)
Opioids (e.g. hydrocodone, oxycodone)

*See Quick Reference Guide for more comprehensive list of medications that impact cognition

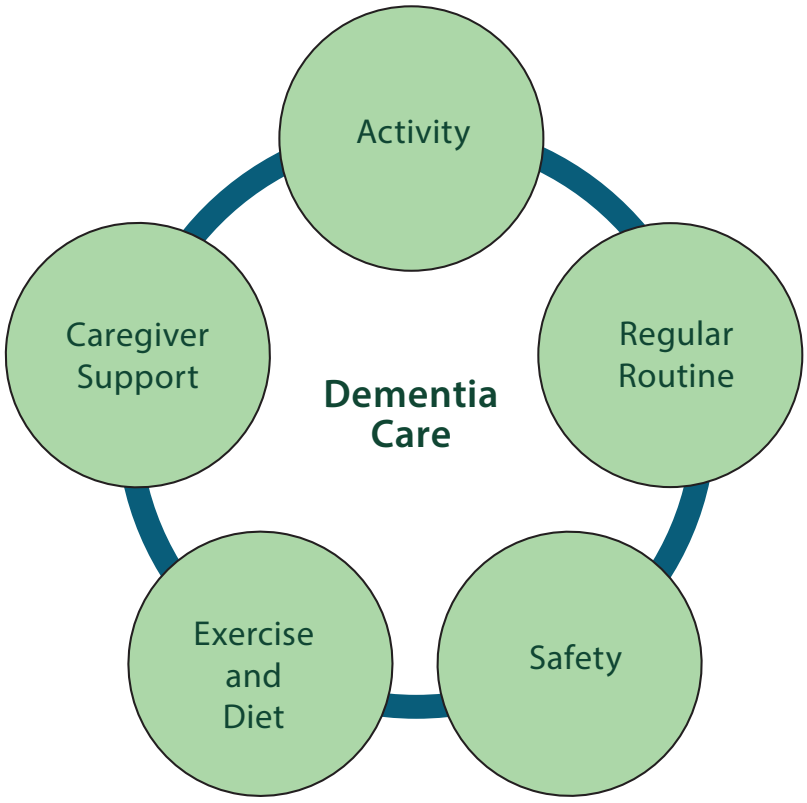


Consider prompt referral to a specialist for neuro-psychological evaluation and/or brain imaging:

- Cognitive, emotional, or behavioral presentation is atypical or otherwise complex
- Rapidly progressive symptoms
- Veteran <60 years of age
- Significant behavioral symptoms, such as agitation, aggression, apathy, disinhibition, impulsivity, inappropriate sexual behavior, resistance to care, repeated vocalizations, sleep-wake cycle changes, wandering
- Significant comorbid psychiatric disorders (particularly late-life depression, anxiety, post-traumatic stress disorder [PTSD], psychosis)
- History of significant head trauma which meets criteria for TBI
- Accompanying movement disorder

Rule out other causes of cognitive impairment before making a diagnosis of dementia.

Figure 6. General Considerations for Good Dementia Care



- Exercise and diet
  - Lifestyle factors that can provide psychological, physical, and cognitive benefits include getting regular exercise, stimulating cognitive activities, engaging in social activities, and eating a healthy diet.
- Regular routine:
  - Establishing a regular routine (e.g. eating, exercise, sleep, chores, hobbies) can reduce the complexity and effort supporting desired behaviors.
- Caregiver support:
  - The effectiveness of long-term care for individuals living with dementia is largely dependent on caregivers. It is important to assess the role and needs of the caregiver and to offer support and referral to other professionals or resources that may help support them.
  - Be vigilant on resources available to the caregiver such as Savvy Caregiver Support program, and REACH.

- Safety and activity:
  - It is important to find the right balance between safety and independence. Some potentially unsafe situations or activities include: cooking without supervision, operating power tools or appliances, keeping fire arms in the house, and driving.

Psychosocial and Environmental Interventions

Psychosocial and environmental interventions to improve, or slow deterioration of cognitive function are at an early stage of development and have limited well-designed trials to support their use.[4,5]

Figure 7. Cognitive Training[4–6]

Cognitive Training	• Moderate strength of evidence • Individual or group training exercises geared to specific cognitive functions, which may include practice and repetition, and computer–assisted learning • Benefit of any form of cognitive training beyond 2 years is less certain • Low risk intervention

Pharmacotherapy for Dementia

Medications for dementia should only be used if there is a diagnosis, a target symptom, presence of minimal side effects, and some way to ensure adherence.

Keep in Mind that Pharmacotherapy

- Does not alter the underlying pathology of dementia.
- On average confers only modest symptomatic benefits in cognitive performance and functional status.
- Although generally well–tolerated, some medications carry a significant risk of side effects (reviewed below).

Two drug classes are FDA-approved to treat dementia–related cognitive dysfunction.

Table 2. Medications Approved for Dementia[7–16]

	Drug Classes	
	Cholinesterase Inhibitors (e.g. donepezil, galantamine)	**NMDA Antagonist (memantine)**

Recommended Use	• Alzheimer's disease
	  • Mild, moderate or severe
	• Lewy body dementia
	• Parkinson's disease with dementia
	• Mixed Alzheimer's plus vascular dementia
		• Alzheimer's disease
		  • Moderate or severe

The Evidence	• Most studies are short-term (6 months or less) and in community–dwelling patients with mild-moderate Alzheimer's • Clinically marginal effects on cognitive function and global functional status	• Small cognitive benefits memantine in patients with moderate to severe AD dementia, but not mild AD dementia. • Most studies are short-term in moderate to severe AD • No head–to–head trials comparing memantine with cholinesterase inhibitors
Pearls	• Lack of evidence for superiority of one agent over another • Choice of a specific agent should be based on tolerability, side-effect profile, convenience of use, and cost	• Memantine is generally well tolerated with mild side effects that are less common/severe than those with CIs

CIs = cholinesterase inhibitors; NMDA = N-methyl-D-aspartate.

Cholinesterase Inhibitor Use in Dementia[17]

Discuss the option of cholinesterase inhibitor treatment with the patient and/or caregiver, if the Veteran has a diagnosis of the following:

- Mild, moderate, or severe Alzheimer's disease
- Mixed dementia (Alzheimer's plus vascular dementia)

Clinical Pearl

Cholinesterase inhibitors may cause vivid/abnormal dreams, use slower titrations in patients with PTSD

- Lewy body dementia
- Parkinson's disease with dementia

VA exclusion criteria include*: bradycardia (≤50 bpm), syncope, chronic alchoholism, chronic diarrhea, severe hepatic impairment, frontotemporal dementia, Functional Assessment Scale (FAST) Stage 7a-f
*Please see VA criteria for use for more information

Adverse Effects[18–20]

- **Most common**: Gastrointestinal side effects (anorexia, nausea, vomiting, and diarrhea)
- **Less common**: Weight loss, dizziness, depression, hypertension, syncope, bradycardia, QT interval prolongation, arrhythmia, angina pectoris and heart block

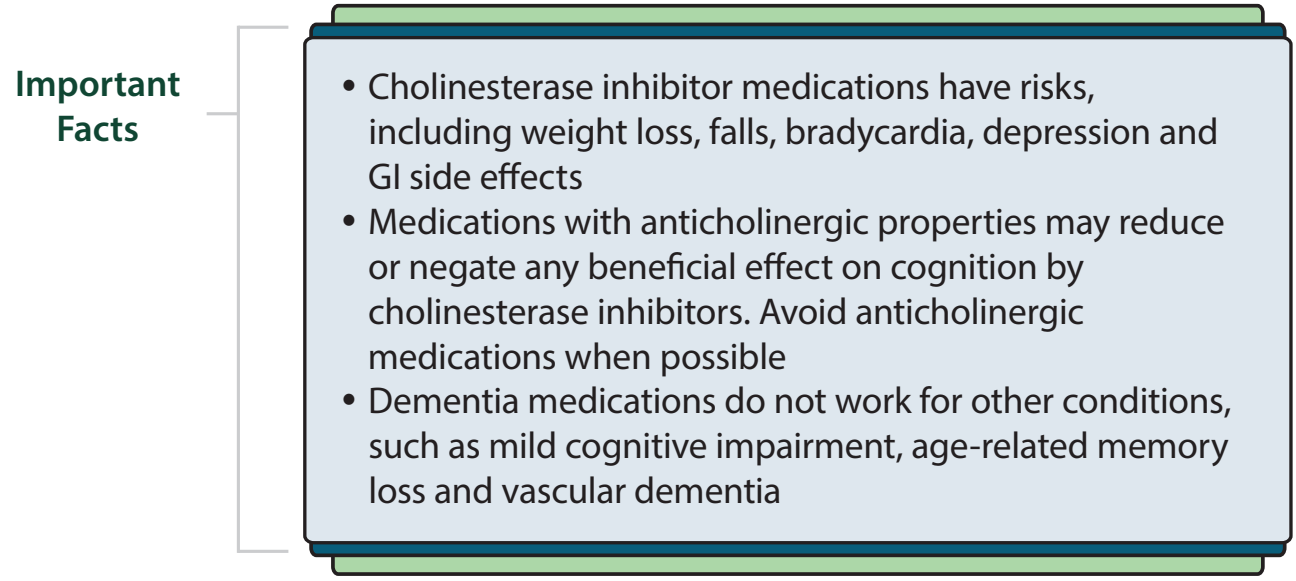
Doses of cholinesterase inhibitors should be started low, and slowly titrated to an effective dose to minimize adverse effects.[21]

Memantine Use in Dementia[11,22–24]

- The evidence for adding memantine to an acetylcholinesterase inhibitor is mixed; for patients with moderate to severe Alzheimer's disease, it may be considered, however the strength of the recommendation is considered weak
  - For those who cannot tolerate cholinesterase inhibitor therapy, discussion should focus on risks vs. benefits of trialing the use of monotherapy with memantine

VA exclusion criteria include*: a diagnosis other than moderate to severe Alzheimer's disease (AD) or moderate to severe AD plus vascular dementia, receiving dialysis or creatine clearance <5 mL/min, Functional Assessment Scale (FAST) Stage 7a-f
*Please see VA criteria for use for more information

Figure 8. Important Facts to Remember When Using Pharmacotherapy[25,26]



When initiating a trial of a cholinesterase inhibitor or memantine:

1

Start at a low dose and titrate slowly

2

Monitor carefully for side effects

3

Reassess routinely (e.g. every 3–6 months) to determine if the benefits still outweigh the risks of continued treatment

Use medications for dementia only if there is a diagnosis, a targeted symptom, presence of minimal side effects, and a way to ensure adherence

When to Consider Withdrawal of Pharmacotherapy

There is little evidence to inform the decision to either continue or discontinue medication treatment in patients with severe dementia.

- Consider the risks (e.g. side effects experienced) and benefits (e.g. rate of cognitive decline) when considering this decision for individual patients and have a careful discussion of risks and benefits of continued treatment with the patient and their caregivers[13,17]
- Consider discontinuation if functional status deteriorates to the point that there is dependency in all basic activities of daily living or if meaningful social interactions and quality of life benefits are no longer achievable (e.g. Functional Assessment Staging Test (FAST) Stage 7)*

*See Quick Reference Guide for more information on dementia severity/staging instruments available to VHA clinicians.

This summary was written by:

Daina L. Wells, Pharm D., BCPS, BCPP
Sarah J. Popish, Pharm D., BCPP
Julianne Himstreet, Pharm D., BCPS

Evidence review done by:

Alosa Health

We thank our expert reviewers:

April Casselman, Pharm D.
Susan G. Cooley, PhD
Kim Curyto, PhD.
Tracey Holsinger, MD
Terri Hahn Jorgenson, RPH, BCPS
Michele Karel, PhD, ABPP
Laurence Robbins, MD
Donovan Maust, MD, MS
Eleanor S. McConnell, PhD, RN, GCNS-BC
Kavita Palla, Pharm D.
Todd Semla, MS, Pharm D., BCPS, FCCP, AGSF
Steven Thielke, MD
Ilse Wiechers, MD

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Notes

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Notes

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This reference guide was created to be used as a tool for VA providers and is available to use from the Academic Detailing Service SharePoint.

These are general recommendations only; specific clinical decisions should be made by the treating provider based on an individual patient's clinical condition.

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