
Clinician's Guide to Telehealth for Older Adults: Dementia Care



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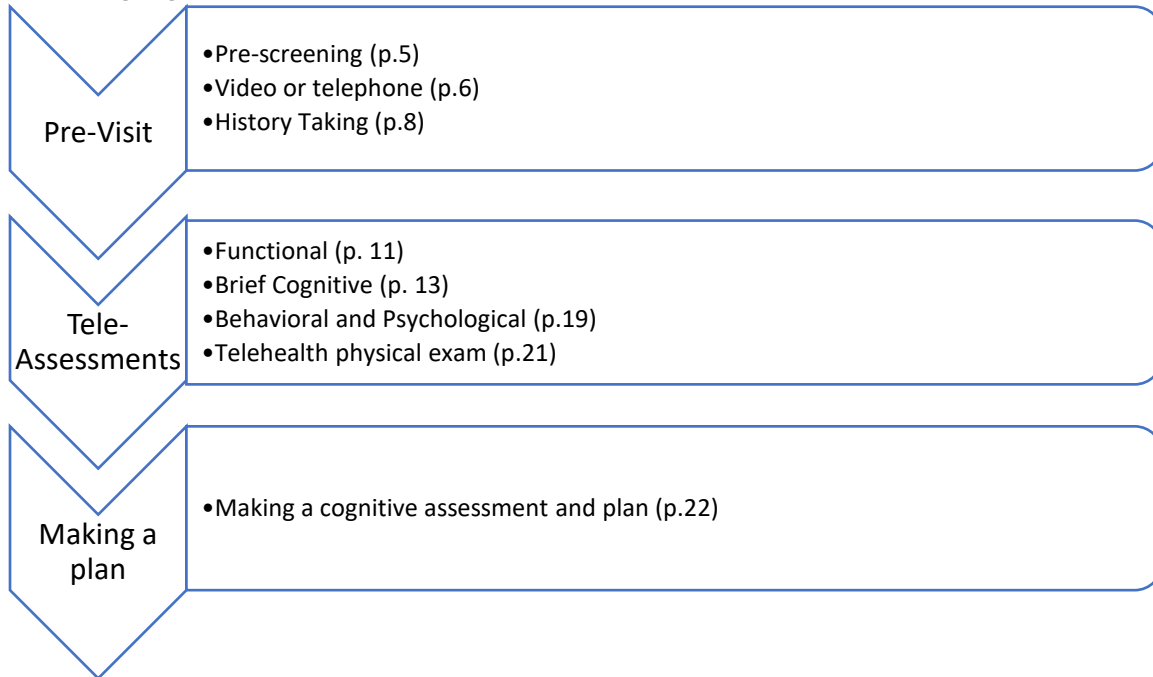
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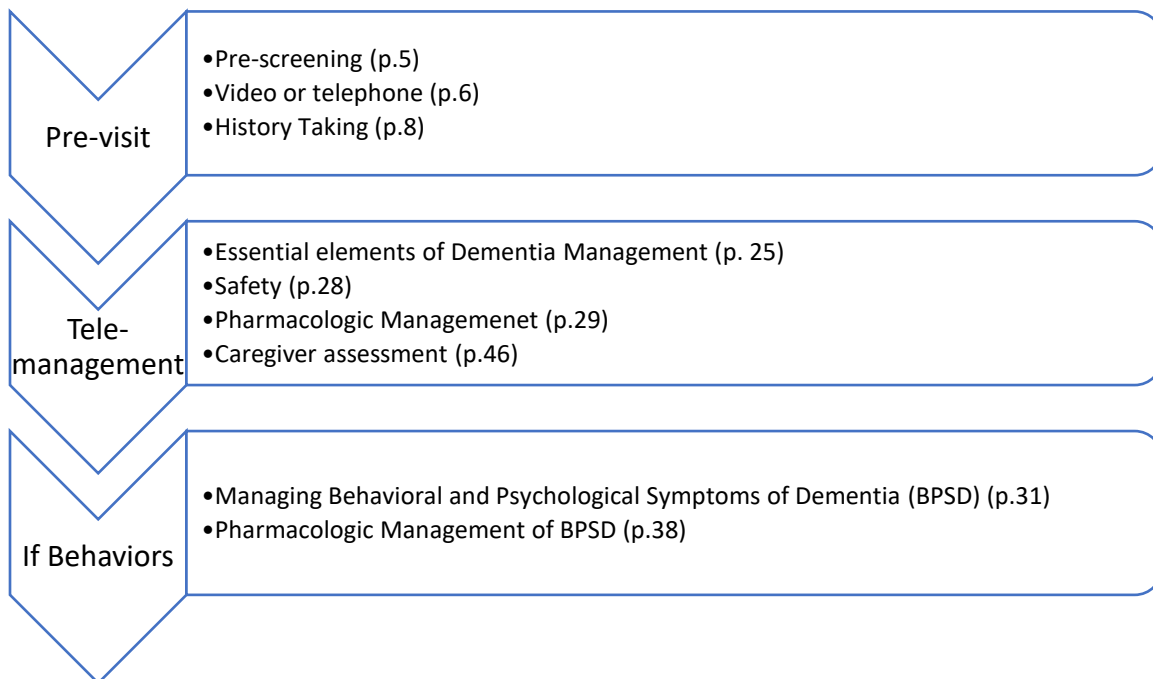
- *Please note Physician includes other Licensed Independent Providers with appropriate training*
- *Please note occupational therapists, or cognitive-communication focused speech language pathologists may also be able to conduct all of the assessments listed as clinical staff, if present on your team.*

Figure 1. Flow of this manual

If assessing cognition in an older adult:



If managing dementia in an older adult:





Background and Intended Audience

Telemedicine allows health care professionals to evaluate, diagnose, and treat patients remotely using telecommunications technology, like telephone or video visits. Older adults with dementia and their caregivers often have difficulty attending in-person medical appointments for many reasons, including commute length or transportation issues, behavioral symptoms or other symptoms related to comorbid conditions, and caregiver limitations. Due to the recent Covid-19 pandemic, many clinicians have had to convert their practices to telemedicine to mitigate exposure. As a result, many older adults with dementia tend to rely heavily on telemedicine for access to their healthcare providers. We see an opportunity to guide and improve care of older patients with dementia in the telemedicine environment. "Tele-dementia" consultation through Geriatrics maximizes access to scarce dementia care expertise and can be utilized within a VA Health Care System or for cross-facility consultation.

This program manual for *Older Adult Tele-Dementia Assessment and Management* is intended to help primary care and geriatrics providers get started and feel more comfortable providing tele-dementia care via video telehealth, telephone, and e-consults.

This guide is meant to cover the basics of dementia assessment and management. We recognize that there are significant limitations to our time and abilities as generalists and geriatricians and that there are many instances when referral to specialists like Neurology, Neuropsychology, or Geriatric Psychiatry (as available) is most appropriate. When in doubt, we recommend referral to these services. For additional, in-depth information about dementia assessment and management, please refer to page 37 where we have listed our references.

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Pre-screening Considerations

To determine the feasibility and appropriateness for the tele-dementia visit, a team member will contact the patient via telephone to complete the following steps:

Step 1: Screen for appropriate sensory and language functioning

- a. Screen for adequate hearing.
- b. Assess for adequate language proficiency.
- c. If intent is to schedule a video visit, ask about any vision issues with reading or seeing a screen.

If no significant sensory or language limitations arise, then proceed to scheduling.

Step 2: Screen for appropriateness of a video visit. If video visit is appropriate, the examiner should explain the equipment requirements of the visit and if the patient is comfortable and familiar with using a computer or tablet to complete this visit.

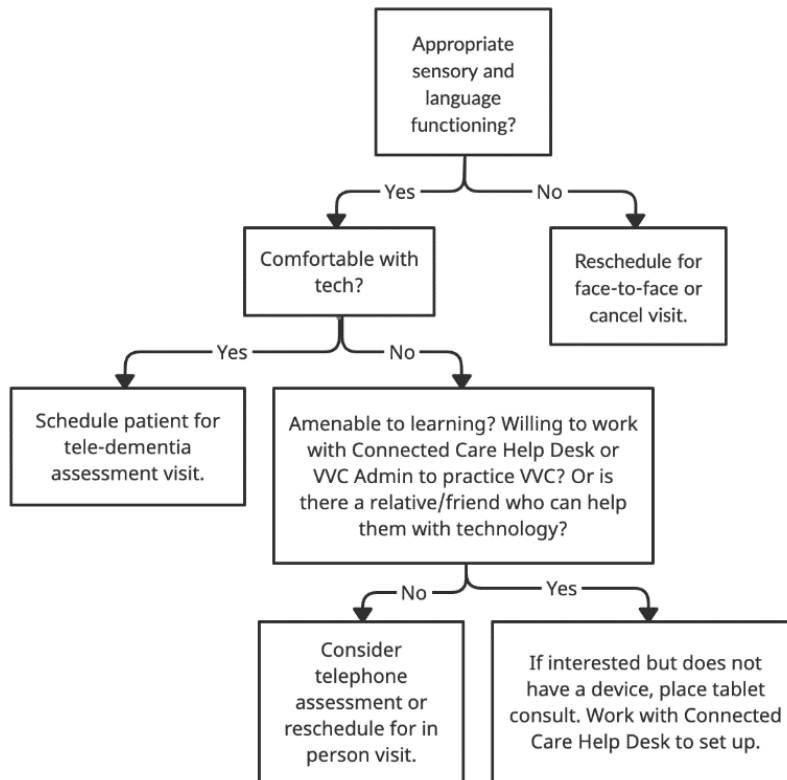
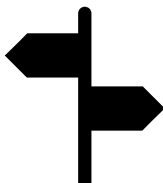


Figure 2. pre-screening considerations for tele-visit.



Deciding Between a Telephone, Video, and Face-to-face visit

Multiple factors need to be considered when making this determination such as patient location, technology access, frailty, transportation issues, and hearing issues.

Some examples and remedies:

- If hearing is a major problem for telephone visits after hearing aids/ Personal Amplification Device* are used, then face-to-face assessment, even if delayed, is likely the best option.
- If the ability to transport a patient is going to cause a long delay, or there is undue effort involved, consider doing a telephone/video visit. A significant amount of clinical history can be obtained this way, and a telephone/video assessment can be helpful in determining whether additional evaluation or specialist assistance is needed.
- If there are significant motor deficits relevant to the dementia workup (i.e. concern for Lewy body dementia) video or face to face visit is preferred.

**Personal Amplification Device (i.e. Pocket talkers) are a type of hearing device that amplify sounds in the environment while reducing background noise. Unlike hearing aids, they are not programmed for a person's individual hearing loss.*



Equipment and Supplies

Staff:

- Phone
- Computer with camera and audio (if remote will also need VPN, CAG)
- Stable internet connection
- Access to the electronic medical record and patient chart
- Email to receive video visit invite emails

Patient and Caregiver:

- Computer or tablet with video and microphone capabilities and connected to internet. (For VA: iOS platform: VA Video Connect (VVC) app to be downloaded). A smartphone can technically be used, but screen sharing to a small screen is particularly challenging for patients to see adequately, so a tablet or computer is strongly recommended.
- External speakers (recommended); Headphones (optional, if patient requests). Headphones are helpful for the patient to hear, but any caregivers present would not be able to hear the discussion.
- Distraction free environment. Encourage patient and caregiver to remain home for the appointment and treat the appointment like an in-clinic appointment. Caregivers are often burdened and may be tempted to multi-task resulting in the patient being in a public rather than private location.
- Paper and pens
- No calendars/device around that would provide orientation answers
- Patient's own hearing aids and vision aids
- List of medications
- Names and contact information of other VA and non-VA providers

Invite caregiver to participate in visit with patient's consent. Additional family members or support systems can participate remotely over telehealth if needed.

If conducting at the VA: VA Video Connect is a multi-user supported platform so the patient or caregiver can forward the VVC invite.



Pre-visit Work

For the patient:

- If a video visit is planned, the patient and/or caregiver should trial the VA Video Connect link on their home equipment to ensure that video and audio are connected and functioning.

For the provider:

- Pre-visit chart review can augment the flow of a visit. The provider can look up past medical history, psychiatric history, military history, work/education, recent labs, imaging, etc. and verify with the patient and caregiver during the visit. This will save the provider time later in the visit for things like cognitive and functional assessments or counseling.



Prior to Starting a Phone or Video Visit:

- Obtain consent from patient and/or informant to proceed with telehealth visit. Specifically include in consent whether any other team members or trainees are planning to be present for the visit. (Note that viewers should be muted and may want to turn off camera to reduce distractions.)
- Verify address and phone number of the patient and anyone else present.
- Request that the patient silence other devices in the room prior to visit.
- Ensure that the patient can adequately hear and communicate.



History Taking

(Whenever possible, try to obtain the following history from an informant as well as the patient.)

TIP: Facilitate effective group communication to ensure the patient is not left out of the discussion, especially if multiple family or clinical team members are present

Are there any dementia warning signs present? Does the patient...

- Repeat their questions and comments?
- Have poor medication adherence?
- Frequently miss appointments?
- Misplace things and can't retrace steps?
- Have difficulty completing familiar tasks?
- Rely more on notes and calendars?
- Forget names of people they should know?
- Miss monthly payments or mismanage budget?

- Have a change in social activities (withdrawal) or change in mood/personality?

Cognitive History:

- How long have there been memory or other cognitive concerns?
- What type of cognitive concerns are present?
- Memory:
 - Short term versus long term memory impairment?
- Frontal executive:
 - Planning/organization Issues? (i.e. keeping track of future appointments, planning travel)
 - Able to multitask?
- Attention:
 - Trouble focusing on tasks? Easily distracted?
- Language:
 - Word finding difficulties?
 - Speech problems?
 - Mispronouncing words frequently?
 - Challenges with expression of ideas?
 - Difficulties with comprehension or following simple instructions?
- Visual-spatial:
 - Navigation issues?
 - Getting lost in familiar places?
 - If still driving, difficulties parking their car?

Additional important history:

- Motor changes:
 - Any recent falls? If so, what were the circumstances (mechanical or syncopal)?
 - Any gait imbalance?
 - Any assistive devices (cane, walker, wheelchair)?
 - Tremors?
 - Parkinsonian symptoms (rigidity, bradykinesia, etc.)?
 - Difficulty swallowing (coughing, choking, or sensation of food sticking)?
- Sleep:
 - How much sleep is the patient getting at night?
 - Any trouble with falling asleep, staying asleep
 - How many times does the patient wake up every night?
 - Any concern of excessive sleep or frequent naps in daytime?
 - Any REM sleep disturbance features (acting out dreams in sleep)?
 - Any snoring or signs of sleep apnea?
- Mood changes
 - Feeling down, depressed, or hopeless?

- Irritability and anxiety?
- Little interest or pleasure in doing things?
- Hallucinations (auditory or visual) or delusions
 - False beliefs, such as thinking that others are stealing from them, plotting against them, or planning to harm them in some way?
 - Hearing or seeing things that are not there?
- Behavioral changes
 - Disinhibition? Socially inappropriate behavior?
- Suicide ideation?

Pertinent history/Review of Systems

- Difficulties with hearing?
 - Hearing aids?
- Difficulties with vision?
 - Double vision, blurry vision despite glasses ?
- Pain?
- Urinary/bowel Incontinence?
- Weight loss? Or forgetting to eat meals?
- Other Review of Systems per usual care

Past Medical History:

- Cardiac or vascular conditions (heart disease, hypertension, hyperlipidemia, diabetes)?
- Stroke?
- Traumatic brain injuries (with or without loss of consciousness)?
- Seizure?
- HIV?
- Migraines or headaches?
- Sleep Apnea?
- Notable other past medical history?

Past Psychiatric History:

- Substance/EtOH use disorder?
- PTSD?
- Anxiety?
- Depression?
- Bipolar disorder
- Psychiatric hospitalizations?
- Other Psychiatric conditions?

Family History:

- Family history of dementia? (Formal or suspected, type if known, age at onset)

Social History:

- Home living situation and support system (family, friends)?
- Any notable childhood trauma?
- Any known cognitive delay in childhood or ADHD?
- Education?
- Work history? *(in addition to HIV risk factors pertaining to sexual history and injection drug use, certain professions like long range truckers may also warrant HIV testing)*
- Military history (Including job in military)?
- Alcohol and/or illicit substance use (past or present)?
- Any safety issues related to hobbies, work, or home life?
- Driving issues/accidents?
- Financial mismanagement? Subject of scams?
- With whom can medical information be shared?
- Power of attorney for healthcare? For finances?

Allergies: Per usual care.

Medication Reconciliation: (Review prescribed **and** over the counter)

- CNS effecting medication (Pain/Mood/Anxiety/Insomnia/AED)

Chart review:

Current Labs: (including CBC, BMP, HgA1C, Calcium, B12/MMA, TSH, LFTs, +/- HIV, +/-syphilis)

Imaging: Review any neuroimaging if present.

Tele-Assessment



Functional Assessment:

*If there is impairment with either ADLs or IADLs, make sure to ask **whether this is a change in function from baseline capability**. For example, some patients may have never been responsible for finances or domestic chores such as laundry or cleaning, so an absence of independence in these activities may not be considered a functional impairment.*

*Similarly, make sure to inquire about the nature of the impairment. **Is it related to declining cognitive function, limitations in mobility or physical capabilities, or something else?** If the impairment is related to cognition, then it contributes to FAST scale/dementia staging.*

Functional history provided by _____

Please rate each as

(I) Independent: No supervision, direction, or personal assistance

(A) Any assistance needed: Supervision, direction, or personal assistance

(D) Dependent: Total care

Instrumental Activities of Daily Living (IADLs)	(I, A, D)
Medication Management (Includes taking meds as prescribed/refilling meds)	
Appointment Management	
Finances (Who manages? Autopay use? Late payment/fees?)	
Meal Preparation	
Shopping	
Driving/Transportation	
Housekeeping	
Telephone use	
Technology Use (Email/internet, other than phone)	

If uncertainty about any of the above, ask more questions, such as:

- **Medication Management:** Has the patient taken too little or too much medication? What is your organizational system for medications? Who orders refills? How do you order medication refills?
- **Calendar and Appointments:** Who organizes and keeps track of appointments? Do you use calendars or organization tools? Has it always been done this way?
- **Finances:** Have there been any missed or over payments? Are bills scheduled through autopay? Who oversees bank accounts and other financial assets?
- **Planning and Preparing Meals:** What issues are occurring? Were you able to do these tasks independently in the past? Do you have many spoiled or expired foods?
- **Shopping:** Who goes grocery shopping? Do you forget things, or need shopping lists that you did not need in the past?
- **Driving and Transportation:** Do you drive? If not, when and why did you stop driving? If you are still driving, have you had any driving accidents, near-accidents, or tickets? Have you gotten lost in unfamiliar places? How far do you usually drive?

Please rate each as

(I) Independent: No supervision, direction, or personal assistance

(A) Any assistance needed: Supervision, direction, or personal assistance

(D) Dependent: Total care

Activities of Daily Living (ADLs)	(I, A, D)
Bathing	
Dressing	
Personal Hygiene	
Toileting (note urine and stool)	
Continence	
Transferring	

Ambulation (assistive devices?)	
Feeding	

If uncertainty about any of the above, ask more questions, such as:

- **Feeding:** If eating independently, any problems with messy eating, using proper utensils, or bringing food to mouth? Any limitations in types of food able to eat (e.g., simple solids only)?
- **Dressing:** If needing assistance, are they able to select their own clothing, as well as button, and zip items?
- **Toileting:** Incontinent of urine, stool, or both? Occasional incontinence or frequent? Requiring adult incontinence undergarment?

In addition to ADLs and IADLS, it is important to inquire about other areas of functioning, including:

Motor Function

- Recent falls? If so, what were the circumstances (mechanical, syncopal, environmental)?
- Gait imbalance?
- Use of assistive devices (cane, walker, wheelchair)?
- Tremors?
- Parkinsonian symptoms (rigidity, bradykinesia, hypophonia, micrographia etc.)?
- Difficulty swallowing (coughing, choking, or sensation of food sticking)?

Vision and Hearing

- Difficulties hearing? (Hearing aids)
- Difficulties seeing? (Glasses)
- Last hearing/vision exams?



Brief Cognitive Assessments

If any dementia warning signs positive (see section above), or any cognitive concerns from patient, family, or staff, this warrants further examination with a brief cognitive assessment.³

Pre-test Administration

1. Ensure the patient's hearing is adequate for this assessment. Ensure that volume is adequate, uses headphones if desired.
2. Ensure paper, pencil, and any relevant test materials are available (if sent ahead). Mailed test materials should not be opened until instructed to do so.
3. Confirm adequate audio and/or video connection quality. Make sure video visit window is maximized and chat is hidden from view. Remind patient to keep phone silenced.

4. Remind patient about the purpose and process of cognitive assessment and advise them to try their best.

Consider delirium: While taking clinical history and examining patient look for features of delirium. If none suspected, proceed with assessments.

If delirium is suspected from clinical interview (e.g., the patient demonstrates *acute* or *waxing/waning* changes in mental status), the following two-item screen with 93% sensitivity and 30% specificity maybe administered.²⁸

- “What day of the week is it?”
- “List the days of the week backwards”

If one or both items are answered incorrectly, then the two-item screen is positive. If delirium is suspected and screen is positive, please complete a full delirium assessment to evaluate for potential etiologies and triggers or refer the patient to additional in-person clinical care for further assessment and management.

Many patients with dementia may not be able to answer above questions correctly, which likely contributed to the relatively low specificity. Clinical judgment is needed in these situations.

If delirium is not suspected, then you can proceed to the following brief cognitive assessments.



Table 1. Telephone options of brief cognitive assessment:

<i>Test</i>	<i>Administration time</i>	<i>Number of items</i>	<i>Scoring</i>	<i>Notes</i>
<i>AD8</i>	<i>3 min</i>	<i>8</i>	<i>8 points (0-1 normal cognition, 2 or greater cognitive impairment is likely)</i>	<i>Administered to informant, not person with dementia. See test form in appendix</i>
<i>Short portable Mental Status Questionnaire</i>	<i>5 min</i>	<i>10</i>	<i>10 points (3-4 errors mild cognitive impairment, 5-7 errors mod cog impairment, 8+ severe cog impairment)</i>	<i>See test form in appendix</i>
<i>Blessed Orientation</i>	<i>3-5 min</i>	<i>6</i>	<i>28 points (weighted scores totaling greater</i>	<i>See test form in appendix</i>

<i>and Memory Concentration Test</i>			<i>than 10 are generally accepted as an indication of the presence of clinically meaningful cognitive impairment)</i>	
<i>Blind or telephone MOCA (use only if certification completed)</i>	<i>10 min</i>	<i>9</i>	<i>22 points (normal is ≥ 19)</i>	<i>Please download from website if you have completed the certification</i>

This is not an exhaustive list of telephone-compatible cognitive assessments. There are other telephone assessments that can be used at the discretion of the clinician.

Telehealth tip: Ask the caregiver (if present) or patient to put away any calendars or clocks that may be present in their room prior to conducting the assessment.



Video options of brief cognitive assessment:

- Check to see if any brief cognitive assessments were conducted in the past, either in-person or over video (e.g., SLUMS, MOCA, MMSE). It is helpful to conduct the same assessment again for comparison over time if you have the appropriate certification (e.g., MOCA) or have purchased the test form (e.g., MMSE). However, be aware in cognitively normal or mildly impaired individual, the score can be higher with repetitive testing due to practice effect.
- If you do not have the appropriate certifications or have not purchased the forms needed to conduct the same test, we recommend proceeding with an alternative test.
- If no past cognitive assessments have been conducted, consider the amount of time you have available when selecting a cognitive assessment. In general, longer assessments provide additional information as they assess more cognitive domains. See table below.
- Note: Documentation for all tests should indicate non-standard telehealth administration.

Table 2. Video options for brief cognitive assessment

<i>Test</i>	<i>Admini stration time</i>	<i># of items</i>	<i>Scoring</i>	<i>Notes</i>
<i>AD8</i>	<i>3 min</i>	<i>8</i>	<i>8 points (0-1 normal cognition, 2 or greater cognitive impairment is likely)</i>	<i>Can be administered to an informant. See test form in appendix</i>
<i>Short portable Mental Status Questionnaire</i>	<i>5 min</i>	<i>10</i>	<i>10 points (0-2 errors: normal mental functioning 3-4 errors: mild cognitive impairment 5-7 errors: moderate cognitive impairment 8 or more errors: severe cognitive impairment)</i>	<i>See test form in appendix</i>
<i>Mini-Cog</i>	<i>3-5 min</i>	<i>2</i>	<i>5 points (A total score of 3, 4, or 5 indicates lower likelihood of dementia but does not rule out some degree of cognitive impairment)</i>	<i>Has a clock draw component, patient will need a blank piece of paper and writing utensil</i> <i>See test form in appendix</i>
<i>Blessed Orientation and Memory Concentration Test</i>	<i>3-5 min</i>	<i>6</i>	<i>29 points (weighted scores totaling greater than 10 are generally accepted as an indication of the presence of clinically meaningful cognitive impairment)</i>	<i>See test form in appendix</i>
<i>SLUMS</i>	<i>10 min</i>	<i>11</i>	<i>30 points (High school education: 27-30 normal, 21-26 mild neurocognitive disorder, 1-20 dementia; Less than high school education: 25-30 normal, 20-24 mild neurocognitive disorder, 1-19 dementia)</i>	<i>Will need to screen share pictures. Has a clock draw component, patient will need a blank piece of paper and writing utensil.</i> <i>See test form in appendix</i>

<i>MOCA (use only if certification in place)</i>	<i>10 min</i>	<i>13</i>	<i>30 points (normal is ≥ 26)</i>	<i>Will need to screen share first two sections. Has a clock draw component, patient will need a blank piece of paper and writing utensil</i> <i>Please download from website if you have completed the certification</i>
<i>General Practitioner Assessment of Cognition (GPCOG), 2002</i>	<i>5 mins for patient, 5 mins for informant</i>	<i>4 patient items 6 informant items</i>	<i>Max Score=9 for patient exam and 6 for informant interview</i>	<i>The test form utilizes a non-US address that may be difficult for some patients. See test form in appendix</i>

Please note that for any of these brief assessments, you must know how to administer them in person before attempting to administer them in a non-standard setting. If you do not feel comfortable, we recommend completing the AD8, and referring to a specialist (neuropsychology, geriatrics, or neurology) if concerns emerge.

Telehealth Tip: For any assessments involving clock draw, instruct the patient to, “draw a clock that takes up most of the paper.” After they have drawn it, ask them to hold it in front of their face so that it’s in the camera’s field of view. Clinician can take a screenshot to save an image of what patient has drawn.

Telehealth tip: Ask the caregiver (if present) or patient to put away any calendars or clocks.

Telehealth tip: Be aware of what you are screensharing. Generally, it’s better to screenshare a window (e.g. the photo or PowerPoint slide screen clipping of the visual portion of the test) because the other parts of your desktop may contain sensitive information.

Brief Cognitive Assessment Case Examples

CASE 1

An 85-year-old man presents for a telephone visit with worsening memory for the past 6 months. He reports that he recently has been forgetting where he placed things or what he was going to do. He also endorses generalized fatigue and difficulty concentrating on tasks. When asked about mood, he shares that he has felt depressed for the past year.

You administer a Geriatric Depression Scale (GDS) short form over the phone, and he scores 9/15, indicating depression. Rather than pursuing a cognitive assessment, you choose to first treat his depression with referral to mental health services for cognitive behavioral therapy and concomitant SSRI and defer tele-cognitive assessment consideration to a later date after depression treatment has been initiated.

CASE 2

An 89-year-old woman presents for a video visit with worsening memory. She is accompanied by her son. Her son states that she has had progressively worsening memory for the past year and a half. He says she forgets to pay her bills, frequently misses her medical appointments, and even has gotten lost in her own neighborhood for several hours. Her personal hygiene has started to decline, and he often has to encourage her to bathe. He is worried about her safety. The patient, on the other hand, has not noticed any significant changes in her memory. She denies depressed mood. You do not suspect delirium.

She has a past medical history of age-related macular degeneration, osteoporosis, low back pain, arthritis, knee replacement, and gait and balance issues needing a cane. She lives 1.5 hours from the medical center with her son. On exam, you find that she is able to sit up and answer questions, but her son reports that she gets easily tired. Labs are unremarkable and a recent head CT shows generalized atrophy.

You administer a Blessed Orientation and Memory Concentration (BOMC) Test and she scores 15/28, indicating cognitive impairment. Given her clinical trajectory, lack of other identified conditions influencing cognition, and score on the BOMC cognitive assessment, the patient's clinical picture is consistent with dementia. There is insufficient information on brief cognitive assessments to determine etiology. However, given the age and clinical history, Alzheimer disease should be suspected.

CASE 3

A 64-year-old woman presents with concerns about worsening memory and behavioral changes over the past year. She is accompanied by her daughter over telephone who provides much of the history. The daughter reports that the patient is unable to do her own finances or operate her smart phone anymore. Additionally, she notices other changes in the patient's behavior, including hoarding behaviors and social isolation. Her mother used to be very involved in her community but now stays in her home most of the time. When the daughter last came to her home, she was shocked to find the house in disarray. She explains that the patient used to be very tidy, but now her home is filled with old "garbage". The patient refuses to get rid of anything. When the daughter explains her concern to the patient, the patient laughs. These

changes in behavior are very concerning to the daughter: “This person is not my mother.” Labs are normal and brain MRI is unremarkable.

There are many abnormal aspects to this patient’s case. First, the patient is relatively young to be experiencing cognitive decline. Second, she is developing behavioral changes that could be attributed to a psychiatric condition or could point toward a different form of dementia like Frontotemporal Dementia. Overall, this patient’s diagnosis is not clear based on the history obtained. For this reason, the patient should be referred to Neuropsychology and Neurology for further evaluation.



Behavioral and Psychological Symptom Assessment

If the patient is found or suspected to have dementia, you may want to ask about difficult or abnormal behaviors. When reports of behavioral and psychological symptoms arise, first be sure to inquire about pain, sleep, mood, and other observed changes (e.g., weight, swallowing, continence) as these are frequently behavioral triggers. You may also use the Psychiatric Review of Systems (see below) to gather more information:

Table 3. Psychiatric Review of Systems

Depression	<ul style="list-style-type: none"> • Changes to sleep pattern (insomnia or over-sleeping) • Anhedonia or reduced level of interest in activities • Appetite changes (and associated weight loss or gain) • Reduced energy level • Decreased concentration • Feelings of guilt or worthlessness • Hopelessness • Psychomotor slowing (e.g., stillness or slowed movements) • Suicidal thoughts (with or without plan)
Anxiety	<ul style="list-style-type: none"> • Generalized worry • Agitation • Perseveration • Recent or past panic attacks
Mania	<ul style="list-style-type: none"> • Requiring less sleep with preserved energy • Increase in goal-directed activity • Ideas of grandiosity • Impulsivity (engagement in atypical or dangerous behaviors)

	<ul style="list-style-type: none"> • Rapid speech that is difficult to interrupt • Flight of ideas • Distractibility • Irritability
Psychosis	<ul style="list-style-type: none"> • Auditory hallucinations • Visual hallucinations • Illusions (misperceiving one object for another, e.g., thinking a tall plant is a person) • Paranoid delusions • Capgras Syndrome (belief that spouse, family member or friend has been replaced by an identical imposter)
Obsessive-Compulsive	<ul style="list-style-type: none"> • Repetitive and persistent thoughts, images, or urges that are unpleasant and involuntary • Repetitive behaviors (e.g., washing, checking) or mental acts (e.g., counting, repeating words) performed in response to an obsession or rigidly applied rule

Patients suffering from dementia may not be able to identify or vocalize feelings of depression or anxiety. Ask about potential non-verbal signs of these conditions such as repetitive vocalizations, pacing, crying, etc. as potential indications of distress.

Assess for Depression:

Geriatrics depression scale short form

1. Are you basically satisfied with your life?	Yes	No
2. Have you dropped many of your activities and interests?	Yes	No
3. Do you feel that your life is empty?	Yes	No
4. Do you often get bored?	Yes	No
5. Are you in good spirits most of the time?	Yes	No
6. Are you afraid that something bad is going to happen to you?	Yes	No
7. Do you feel happy most of the time?	Yes	No
8. Do you often feel helpless?	Yes	No
9. Do you prefer to stay at home, rather than going out and doing things?	Yes	No
10. Do you feel that you have more problems with memory than most?	Yes	No
11. Do you think it is wonderful to be alive now?	Yes	No
12. Do you feel worthless the way you are now?	Yes	No
13. Do you feel full of energy?	Yes	No
14. Do you feel that your situation is hopeless?	Yes	No
15. Do you think that most people are better off than you are?	Yes	No

Score 1 point for each bolded answer. Scores of 0-4 are considered normal, depending on age, education, and complaints; 5-8 indicate mild depression; 9-11 indicate moderate depression;

and 12-15 indicate severe depression.² If this assessment is positive (score >5), would first discuss treatment for depression before making any conclusions about cognitive assessment.

If score is chronically elevated and is being treated and followed by a mental health professional, then ok to proceed with cognitive assessment.

For patients with moderate to severe dementia, the **Cornell Scale for Depression in Dementia** can be administered to the patient's caregiver.

It is a 19-item tool that takes approximately 30 minutes to complete. It primarily uses direct observation and interviews with the caregiver and patient. Each item is rated from 0 to 2 with a total score of 0 to 38.



Telehealth Physical Exam

Sample Brief Virtual Exam for Video Visit Encounter:

GEN: Well appearing, NAD

HEENT: EOMI, conjunctiva clear, able to hear conversation

Resp: Breathing comfortably on room air

NEURO: Alert and oriented, face symmetric, normal bulk throughout, moves upper extremities appropriately, no postural tremor

GAIT: Normal base, stride length, arm swing

PSYCH: Appropriate grooming and hygiene, attitude cooperative and pleasant, "mood (as stated or observed)," speech spontaneous and fluent, eye contact appropriate, denies auditory or visual hallucination, denies suicidal ideation, no evidence of paranoia or delusions, linear thought process

THOUGHT CONTENT: Vague details, often defers to caregiver to answer questions

Sample Full Virtual Exam for Video Visit Encounter

General: Well-appearing, well-nourished, appropriate grooming and hygiene (vs disheveled/unkept/cachectic/thin), alert, attentive

Attitude: Cooperative, pleasant (vs withdrawn/disengaged).

Orientation: Oriented to person, place, time.

Cognition: Answers the questions asked, can follow commands. Repeats themselves, defers to their family member for answer, [note results to any brief cognitive assessments completed]

Speech and Language: Spontaneous, fluent, normal rate, volume, rhythm and prosody (vs dysarthric, non-sensical, difficult to interrupt, aphasic), no pauses or hesitations in speech, no circumlocutions, paraphasic errors, or neologisms. Naming for common objects were intact.

Memory: Recalled the last 4 terms of past presidents. Recalled the 3 words given 5 mins later

Visuospatial/Calculation: Able to draw a clock/copy a cube. Able to do simple addition (17+18) and calculate coins (quarters in \$3.75)

Thought content: Denies suicidal ideation, plan or intent, denies auditory or visual hallucinations, no evidence of paranoia or delusions. Vague details and often defers to caregiver to answer questions.

Thought processes: Linear and goal-directed (vs tangential/incoherent/concrete).

Mood: [What patient states] , e.g. "good." Denied depression/crying spells, anxiety, or irritabilities. Denied suicidal ideation, hallucination or delusions.

Affect: [Observed] Euthymic/restricted/dysthymic/depressed/labile; mood-congruent/incongruent.

Insight/Judgment: Intact/Limited/Poor.

Cranial nerves: Visual fields were full. Extraocular movements were intact with smooth pursuits. Saccade speed was normal. Facial movement was symmetric. Hearing was grossly intact. Shoulder shrug symmetric.

Motor: Normal bulk throughout. No pronator drift. Finger taps fast and symmetric, no bradykinesia evident. No rest or postural tremor.

Coordination: No dysmetria with finger (camera) to nose. Rapid alternating movements intact.

Gait: Able to stand without assistance. Normal base, stride length, arm swing and turning.

HEENT: Conjunctiva clear, no scleral icterus.

Sample Virtual Exam for Phone Encounter:

PSYCH: Mood good, thought process linear

SPEECH/LANGUAGE: Speech spontaneous and fluent, regular volume, tone, rate, and prosody

HEARING: Able to hear conversation

RESP: Able to speak in full sentences with no shortness of breath

ORIENTATION: Oriented to person, place, and time

MEMORY: Sufficient detail provided or vague, frequently defers to caregiver to answer questions. Recalled the last 4 terms of past presidents. Recalled the 3 words given 5 mins later



Making a Cognitive Assessment and Plan:

- Review data obtained above from history taking, functional and cognitive assessment, focused Tele-physical exam and assessment of behavioral and psychological symptoms

- **Review medications** to see if any could contribute to confusion or behavioral issues (e.g., anticholinergic medications). *Anticholinergic Cognitive Burden Scale and Beer's list are helpful tools to guide medication review. Consider reducing or stopping any of these potentially inappropriate medications if possible.*
- Consider checking following **labs** if not available prior to your assessment: CBC, BMP, Calcium, B12, TSH, LFTs, +/- HIV, +/-syphilis, +/- LFT. Goal is to look for potentially reversible or treatable causes for dementia/cognitive decline.
 - **If B12<300, recommend repletion. If concern for increased pill burden, could confirm true B12 deficiency by checking MMA.** High MMA levels correspond to vitamin B12 deficiency.
- **Head imaging is recommended when considering a diagnosis of Mild Cognitive Impairment or any type of dementia. If head imaging has not been completed in the past year, consider ordering a non-contrast Brain MRI or Head CT (if unable to tolerate MRI)** unless the risks/stress of study exceed potential benefit gained. The purpose of head imaging is to 1) Look for evidence of cerebrovascular disease (which impacts treatment plan and can increase focus on CVA risk factor reduction) and 2) look for regional patterns of atrophy suggestive of different dementia etiologies. 3) searching for other causes of cognitive decline, i.e. mass lesion (tumor), infection (HSV), bleed, autoimmune disease (MS) 4) Other findings, if noted, like microhemorrhages suggesting cerebral amyloid may also cause adjustments in management such as avoiding anticoagulation therapy.
- **Assess and address any untreated depression, anxiety, PTSD, or sleep disorder such as Obstructive Sleep Apnea.**
- Ensure co-morbid medical illnesses are appropriately treated and monitored, including vascular risk factors (HTN, HLD, DM), pain conditions, etc.
- Assess and address vision issues, hearing issues, and any aids that could help level of functioning. Refer to eye clinics, audiology, and therapists as appropriate.
- Observe the surrounding environment during a video telehealth visit. Is it clean and non-cluttered? An unclean home environment may be a sign of self-neglect or caregiver stress/burden.
- **Recognize conditions that need timely action and referral:**
 - **A new neurologic issue or rapid cognitive decline: refer to neurology right away**
 - **Active psychiatric symptoms: recommend addressing this right away and consider referral to mental health**
 - If history revealed baseline cognitive issues (i.e., intellectual disability), or traumatic brain injury with residual cognitive issues, or any other features that make differentiating a neurodegenerative process from other cognitive processes difficult, refer to neuropsychology and neurology for further evaluation.
- Certain individuals could benefit from **in-person evaluation**. These include patients who may have the following circumstances:

- Those who need delirium rule out, work up, and examination for reversible causes of change in behavior or mental status.
 - They could not be evaluated through telemedicine because of significant sensory impairments (severe hearing loss, vision impairment precluding effective tele-visit)
 - Concern for movement disorder (i.e., Parkinson’s disease, Lewy Body Dementia, Corticobasal degeneration, Progressive Supranuclear Palsy...)
 - Or per patient or caregiver preference.
- **If the older adult patient's clinical, cognitive and functional trajectory and presentation is consistent with a neurocognitive disorder AND all reversible processes that could mimic a neurocognitive disorder are considered and addressed (depression, delirium, medications causing confusion, altered thyroid levels/notable electrolyte discrepancies), you may make a working diagnosis of Mild neurocognitive disorder (AKA mild cognitive impairment) or Major neurocognitive disorder (AKA Dementia) based on DSM-5 Criteria (see below). Add further specifiers of etiology, severity and others when known. If you are not certain of the etiology, consider referral to a specialist for further diagnostic evaluation and clarification.**



Please note the new DSM-5 terminology for dementia and mild cognitive impairment:

DSM-5 CRITERIA FOR MILD NEUROCOGNITIVE DISORDER (AKA Mild Cognitive Impairment)

A. Evidence of cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and
2. Impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.
3. The cognitive deficits do not interfere with capacity for independence in everyday activities (i.e., complex instrumental activities of daily living such as paying bills or managing medications are preserved, but greater effort, compensatory strategies, or accommodation may be required).
4. The cognitive deficits do not occur exclusively in the context of a delirium.
5. The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).⁵

DSM-5 CRITERIA FOR MAJOR NEUROCOGNITIVE DISORDER (AKA Dementia)

A. Evidence of cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and
2. Impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.

B. The cognitive deficits interfere with independence in everyday activities (i.e., at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications).

C. The cognitive deficits do not occur exclusively in the context of a delirium.

D. The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Specifiers

1. Due to Alzheimer’s disease, frontotemporal lobar degeneration, Lewy body disease, vascular disease, traumatic brain injury, substance/medication use, HIV infection, prion disease, Parkinson’s disease, Huntington’s disease, other medical condition, multiple etiologies, or unspecified.

2. Accompanied by a clinically significant behavioral disturbance (e.g., psychotic symptoms, mood disturbance, agitation, apathy, or other behavioral symptoms)

3. Current severity: Mild: Difficulties with instrumental activities of daily living (e.g., housework, managing money). Moderate: Difficulties with basic activities of daily living (e.g., feeding, dressing). Severe: Fully dependent.

ICD-10 codes related to dementia available in the appendix.

Tele-Dementia Management

Some patients will be coming to you for care with known diagnoses of dementia. The following guide can facilitate the management of dementia through virtual modalities.



Part 1: Essential elements of Dementia Management (using 5Ms framework) and explaining dementia stages to families

Medications

- Minimize and consider stopping any CNS affecting medication. i.e. anticholinergic medications, narcotic... that don’t have clear clinical necessity.
- Consider pharmacologic treatment for dementia (see section on cholinesterase inhibitors page 23).
- Limit psychotropic medication use as appropriate (see page 31 for more detail).

Mentation

- Treat depression if present.
- Address sleep related concerns (sleep apnea, insomnia).
- If present, address Behavioral and Psychological Symptoms of Dementia (BPSD), preferably with non-pharmacologic approaches first.
- Encourage patient to remain socially connected, and treat barriers to this when possible (e.g., hearing).
- If concerns for driving or if diagnosis of dementia, report to state public health department. Please act in accordance with local policy and state laws. State laws vary for reporting requirements.

Mobility

- Based on functional status elicited, provide additional support, supplies, and referrals as needed (e.g., ambulatory aids, incontinence supplies, physical therapy consults).
- Ensure the patient remains as physically active as is safely possible. Physical activity is important for brain health.

Matters most

- Understand person with dementia and caregiver's big picture goals, thoughts around quality of life and make care decisions based on that.
- Keep person with dementia engaged in personally meaningful activities (even if they can't do them as well or the same way they used to).
 - Compensatory cognitive-communication strategies may support continued engagement in these activities – speech-language pathology or occupational therapy consult may be appropriate.
- Assess caregiver stress and support with referrals to VA and community respite and resources.
- Ask about home safety and offer resources for safety management (see page 22).
- Discuss advance care planning.

Multi-complexity

- Ensure co-morbid medical illnesses are appropriately treated and monitored, including vascular risk factors (HTN, HLD, DM), pain conditions, etc.



Explaining Dementia Stages to Families

Clinicians can use the Functional Assessment Staging Tool (FAST) to help families understand a patient’s stage and expected characteristics.⁴⁰ The

stages are anticipated to occur in order in Alzheimer’s dementia as the disease progresses. As the patient’s cognition declines and their behaviors change, it can be helpful for families to relate this decline to stages of childhood development, as shown in the mental age column. However, it’s important to emphasize that although their cognition is declining, their sense of dignity is still intact and it is not appropriate to treat a person with cognitive impairment like a child.

Stage	Stage Name	Characteristic	Expected Untreated AD Duration (months)	Mental Age (years)
1	Normal Aging	No deficits whatsoever	--	Adult
2	Possible Mild Cognitive Impairment	Subjective functional deficit	--	
3	Mild Cognitive Impairment	Objective functional deficit interferes with a person’s most complex tasks	84	12+
4	Mild Dementia	IADLS become affected, such as bill paying, cooking, cleaning, traveling	24	8-12
5	Moderate Dementia	Needs help selecting proper attire	18	5-7
6a	Moderately Severe Dementia	Needs help putting on clothes	4.8	5-7
6b	Moderately Severe Dementia	Needs help bathing	4.8	4
6c	Moderately Severe Dementia	Needs help toileting	4.8	4
6d	Moderately Severe Dementia	Urinary incontinence	3.6	3-4
6e	Moderately Severe Dementia	Fecal incontinence	9.6	2-3
7a	Severe Dementia	Speaks 5-6 words during day	12	1.25
7b	Severe Dementia	Speaks only 1 word clearly	18	1
7c	Severe Dementia	Can no longer walk	12	1
7d	Severe Dementia	Can no longer sit up	12	0.5-0.8
7e	Severe Dementia	Can no longer smile	18	0.2-0.4
7f	Severe Dementia	Can no longer hold up head	12+	0-0.2

40.



Part 2: Resources for Safety Management

Safety management for both inside the home and outside the home (especially if wandering behaviors present) is very important, especially as dementias progress.

Here is a link to a self-paced dementia home safety workbook that you can provide caregivers: [A Guide for Families: Keeping the Person with Memory Loss Safer at Home \(va.gov\)](https://www.va.gov/opa/whatsnew/2018/07/20180720-dementia-home-safety-workbook/)

Useful items:

- Medical ID bracelets
- Guardian Alerts
- Alarmed or locked pillboxes
- Door/window alarms/chimes
- Stop sign alarmed banners
- Cameras
- Motion sensors (Motion sensor light/alarm)
- Bed/chair alarms
- HISA (Home Improvement Structural Alterations) grant
- Ramps, lifts, stair glides

GPS enabled devices (Tags, bracelets, necklaces, phone trackers, shoe inserts)

- Available on private market that can help with wandering (i.e., Apple AirTag)
- For example, Project Lifesaver provides individualized radio frequency bracelets to those at risk of wandering

Gun safety

- Assess for gun safety and offer gun locks regularly. Many caregivers think that their loved one doesn't remember how to access household guns, but this is not a reliable form of gun safety.
- Of note, the VA Suicide Prevention Program provides free gun locks.
- Store/lock ammunition separate from the firearm
- Also, Project Child Safe offers gun safety kits for free.

Consider formal home safety evaluation by Occupational Therapy for significant home safety/fall risk concerns.

Ongoing assessment of abuse/neglect/exploitation as this patient population is at increased risk.

- Is an Adult Protective Services referral indicated?
- Consider providing general assessment and education on scammers and how to avoid this form of financial exploitation. This is especially important if the patient is still answering the phone or using the internet.



Part 3: Pharmacologic Management of Dementia

There are currently 5 FDA-approved drugs for the treatment of dementia: Donepezil, Galantamine, Rivastigmine, Memantine, and Donepezil/Memantine combination. Cumulative evidence shows statistically significant benefits of treatment with cholinesterase Inhibitors (Donepezil, Rivastigmine, Galantamine) and Memantine. Plus, two new medications received FDA Accelerated Approval for Alzheimer’s Disease Treatment

Recently, FDA approved two medications Aducanumab/Aduhelm (6/7/2021) and Lecanemab/Leqembi (1/6/2023) via the Accelerated Approval pathway for the treatment of Alzheimer’s disease [Continued approval for the indication may be contingent upon verification of clinical benefit in confirmatory trial(s)]. Both medications are amyloid beta-directed antibodies. Both medications are indicated for the treatment of Alzheimer’s disease, and treatment with ADUHELM and LEQEMBI should be initiated in patients with mild cognitive impairment or mild dementia stage of disease, the population in which treatment was initiated in clinical trials. There are no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied. Please refer to VA Pharmacy Benefits Management Service for VA position on prescription of Aducanumab/Aduhelm and Lecanemab/Leqembi. Given the complexity in treatment and high risk of complication, these medications should only be used by specialists with additional resources/training.

1. Cholinesterase Inhibitors

All patients with mild or moderate stage Alzheimer’s, Lewy Body, or mixed Alzheimer’s and Vascular Dementias should be considered for a cholinesterase inhibitor.

Contraindications: Bradycardia (without pacemaker), history of syncope, severe liver or kidney disease. If the history of syncope has known cause and was treated with a pacemaker, then this is no longer a contraindication.

Possible side effects: Nausea, vomiting, GI upset, diarrhea, bradycardia, syncope, leg cramps, insomnia, weight loss, anorexia, agitation, excessive drooling

To evaluate response: Benefit (improvement or stabilization) is generally observed in the first 3 months. There is no evidence for when to stop medications. These medications may improve neurocognitive symptoms and delay nursing home placement. About 10-25% of patients show modest global improvement for a few months, and many are felt to have slower cognitive decline rate.

Table 4. Cholinesterase inhibitors

Cholinesterase Inhibitor	Dosing and formulations	Dosing
Donepezil	Tablet: 5, 10, 23mg ODT: 5, 10mg Suspension: 5mg/mL	Start at 5 mg/day PO. Increase to 10 mg/day (recommended effective dose) after 1 month. In some cases of LBD or mod-severe AD may consider increasing to 23mg mg/day.
Galantamine	Tablet: 4, 5, 12 mg Suspension: 4 mg/mL Razadyne ER Capsule: 8, 16, 24mg	Start at 4 mg q12 hours and increase to 8 mg q12 hours after 1 month. Generally minimal effective dosage is 8 or 12 mg q12 hours.
Rivastigmine	Tablet: 1.5, 3, 4.5, 6 mg Suspension: 2mg/mL Patch: 4.6, 9.5, 13.3	Start at 1.5mg q12h. Titrate to 3mg q12 hours (minimum effective dosage), continue to 6mg q12h as tolerated. For patch, start at 4.6 mg/d, increased after 1 month to 9.5 mg/d.

Geriatrics at your fingertips. American Geriatric Society²⁶

Cholinesterase inhibitor FAQs:

Do you use cholinesterase inhibitors in non-Alzheimer’s dementia?

In Lewy Body dementia, there is evidence for use of cholinesterase inhibitors, especially rivastigmine, but any cholinesterase inhibitor can be trialed.

If there is suspicion for mixed dementia, it may be worth trying.

Would avoid in frontotemporal dementia.

Although evidence is lacking, given the high rate of mixed pathology, vascular or unknown types of dementia, many clinicians do trial given limited pharmacologic options.

How do you select a cholinesterase inhibitor?

There are few head-to-head trials and no evidence to show one is better than the other, so medication selection should be chosen based on ease of use, tolerability, adverse effect profile, cost of medication, or formulary preference at your healthcare system.

Do you need to monitor labs or ECGs while treating with cholinesterase inhibitors?

Routine lab testing is not required for any AChE inhibitors.

We recommend pulse rate check at baseline and monthly follow up during titration of the AChE inhibitor. For high-risk patient (by age or cardiac co-morbidities), some clinicians may check EKG before or after initiation of AChEI. Should the patient develop bradycardia, one should investigate the cause before beginning/continuing treatment⁷



2. NMDA Antagonist: Memantine

Patients with moderate or severe stage Alzheimer’s dementia also may benefit from a trial of memantine. This is typically added to a cholinesterase inhibitor. Patients with vascular dementia have shown mild benefit from

memantine. Memantine showed some benefit in maintaining cognitive function, performing activities of daily living, and in behavior and mood but has not been shown to be beneficial as a treatment for agitation behaviors in clinical trial setting, but has been used with anecdotal success. ³²

Potential side effects: headache, dizziness, constipation,

When to stop: Some recommend discontinuing at FAST 7, while others continue indefinitely or until risks outweigh benefits.

To evaluate response: This is difficult to do. Some caregivers may report improvement in behavioral or functional status, but this may not be present.

Table 5. NMDA Antagonist

NMDA Antagonist	Dosing and Formulations	Dosing
Memantine	Tablet: 5, 10 mg Suspension: 2 g/mL	Start at 5 mg/day, increase by 5 mg at weekly intervals to max of 10 mg q12h. If CrCl <30, max of 5 mg q12h

Geriatrics at your fingertips. American Geriatric Society²⁶

Part 4: Management of Behavioral and Psychological Symptoms of Dementia (BPSD)

BPSD are also known as neuropsychiatric symptoms of dementia. These are the signs and symptoms of disturbed perception, thought content, mood, or behavior that frequently occur in patients with dementia.^{8,9}

BPSD are often grouped into clusters:

Table 6. Behavioral and Psychological Symptoms of Dementia clusters

Cluster	Symptom features
Agitation	Walking aimlessly Pacing Trailing Restlessness Repetitive Actions

Aggression	Physical aggression Verbal Aggression Aggressive Resistance
Apathy	Withdrawn Lack of interest Unmotivated
Depression	Sad Tearful Hopeless Anxious/irritable Guilty
Psychosis	Hallucinations Delusions Misidentifications
Disinhibition	Socially and sexually inappropriate behavior

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Behavioral issues in dementia are often manifestations of an underlying unmet need or response to a trigger.

General BPSD Approach

The Describe, Investigate, Create, and Evaluate (**DICE**) model¹⁰ is patient and caregiver centered, applicable in different treatment settings and takes into account medical, non-pharmacologic, and pharmacologic treatments. The DICE model can help you remember the steps in the approach to BPSD.

- Describing the problematic behavior
- Investigating possible causes of the behavior
- Creating a treatment plan
- Evaluating the outcome of this plan

Steps to Evaluate BPSD:

1. Evaluate timeframe that the behaviors have been occurring, and whether there are any corresponding changes in the patient's life (e.g., new over the counter or prescription medication, changes to living situation, births/deaths, etc.) or obvious triggers for the behavior.
2. Rule out a component of delirium with evaluation for underlying medical problems such as:
 - Symptomatic UTI
 - Pneumonia or other respiratory infection
 - Metabolic derangement
 - Constipation

- Urinary retention
- Hypothyroidism
- Anemia
- Severe depression
- Lewy body disease cognitive fluctuation

3. Consider unmet needs that could be manifesting as difficult behaviors such as:

- Pain
- Hunger
- Thirst
- Fatigue
- Toileting needs
- Fear
- Boredom and Restlessness

For those who prefer a standardized assessment, the **Neuropsychiatric inventory questionnaire (NPI-Q)** can also be used to assess and monitor BPSD.

Non-pharmacologic Management of BPSD

Non-pharmacologic interventions should be **first line management for behavioral symptoms in dementia**, given they carry fewer adverse effects than pharmacologic alternatives. Additionally, no amount of medication can eliminate challenging behaviors if behavioral triggers are not addressed.

A-B-C Approach to Behavioral Problem Solving

ANTECEDENT - **BEHAVIOR** - **CONSEQUENCE**
 (who, what, when, where) (specific behavior trying to change) (What happened after the behavior?)

Understanding the ABC Approach:

Step 1: Identify the challenging behavior. This is the B in this model. Be specific.

Step 2: Think about what the antecedent is to this behavior. Could anything have been said or done to provoke the behavior? Communication triggers or antecedents can be difficult to identify. It is helpful to consider the *who, what, when, and where* components of the situation. Keep in mind that the trigger might have been something subtle like saying “no.”

Step 3: Identify the consequence of the behavior. What happened right after? For example, perhaps the caregiver corrected the patient, explained something, or walked away and left the patient alone.

Telehealth tip: *If you keep a screenshot of the ABC approach, this is useful to screenshare with caregivers.*

Table 7. Examples of Triggers

Caregiver Communication Triggers	Physiologic Triggers	Environmental Triggers
<ul style="list-style-type: none"> • Arguing or Correcting • Saying “no” • Asking over-complicated or open-ended questions • Providing over-complicated or unclear directions • Getting upset or frustrated 	<ul style="list-style-type: none"> • Underlying pain and physical discomfort • Hunger • Urinary retention • Urinary incontinence • Constipation • Boredom/restlessness • Unmet needs they can’t express clearly • Underlying conditions and infections (e.g., thyroid disease, metabolic derangements) 	<ul style="list-style-type: none"> • Lack of daily structure • Changes to the environment (new people, new construction, new location) • Uncomfortable conditions (cold temperature, fall risk) • Chaotic environment/ disruptions • Distressing visual or auditory stimuli (e.g., photos of deceased loved ones, movies or pictures recalling prior traumas, loud noises that resemble explosions or gunshots, etc.)

What do I do after identifying the antecedents and consequences?

It’s time to make some changes to improve the behavior. You have two choices to get a different response or behavior from the person with dementia:

1. Change the antecedent
2. Change the consequence

This often means changing the caregiver’s behavior.

For those within the VA, further coaching and education on the use of ABC approach can be provided to caregivers through the REACH VA program available nationally through the Caregiver Support Program. Please refer to your local Caregiver support program for more info.

Brief Case examples of non-pharmacologic management for BPSD:

CASE 4:

An 86 yo M with moderate-severe dementia frequently tries to wander out of his home around 6pm each evening. Each time he tries to leave, his wife stops him and tells him that he should not leave because it isn’t safe. Then she informs him that it is time for dinner, but he refuses to eat, stating that he’s not hungry. This typically leads to an argument which ends with him

running out the door. Then his wife spends the evening looking for him and trying to get him back home safely.

Upon further questioning about what happens preceding this behavior, we find that this man has a caregiver with him until about 5:30pm. When the caregiver leaves and his wife comes home, he takes his coat, hat, and shoes which are right by the door and tries to leave.

Behavior: *Wandering at 6 pm each day*

Consequence: *Wife tries to stop him and says, “No, it’s not safe.”*

Antecedent: *Caregiver leaves, wife comes home, he puts on his coat and shoes*

To change this behavior, we can change the antecedent or change the consequence:

Opportunities for intervention:

Change the antecedent: *Around 5:30 pm, engage Mr. Doe in a pleasurable activity – watching his favorite show, or asking him to help prepare the house for his wife. He could sweep, pair socks, or fold laundry. Please note: whether he does these tasks successfully is not the point of the activity. The point is to keep him occupied so he is not fixated on the coming and going of individuals, which is likely to be a visual trigger for him to come and go as well.*

Change the antecedent visual trigger: *Put his coat, hat, and shoes in the closet, so they are not visually inviting him to leave the house*

Change the consequence: *The word “no” can often be a trigger. Instead of saying no, the wife might respond by saying, “Sure, let me just use the restroom and get some water and then we can go for a walk. Could you come with me?” Then when he is focused on those activities, the wife can change the discussion to dinner. Or the wife could go on a walk with him. Either way, hearing “yes” or “sure” and then engaging in another task is helpful to positively re-direct.*

CASE 5:

An 82 yo M with moderate-severe dementia gets agitated in the evenings around 5pm. His caregiver tells you that he is sundowning. He gets agitated, throws things, and becomes angry. When he does this, the caregiver tries to distract with food or TV, typically without success. The caregiver asks the patient to calm down. They end up yelling at each other and eventually the caregiver gives Mr. Smith space to calm down. The evenings are always distressing for both the patient and the caregiver.

Behavior: *Sundowning at 5pm every day*

Consequence: The caregiver first tries to stop the behavior using distraction. Then the caregiver asks Mr. Smith to calm down. Eventually the caregiver yells. Finally, the caregiver gives the patient space.

Antecedent: Unclear at this time (“It just seems like he’s sundowning.”)

You ask more questions:

Does Mr. Smith have pain? No, he has not mentioned pain.

Has he ever had pain? Yes, he had back and neck pain for decades and used to take opioids. However, after he developed dementia, he gradually stopped reporting the back pain. He is no longer on any medication for pain.

Given that he has had chronic pain for decades, he likely still has some physical discomfort. It is worth exploring this as an antecedent for the behavior.

To change this behavior, we can change the antecedent or change the consequence.

Opportunities for intervention:

Consider antecedents: Try heating pads and medication like Tylenol (non-pharm and pharm together) to address the antecedent of chronic back and neck pain.

Are there other antecedents that could be triggering the patient? Is the environment chaotic? Is it loud?

Is there a different unmet need? Could restlessness or boredom be contributing?

The caregiver’s frustrated yelling response could be further exacerbating this behavior.

Could change the consequence to, “Ok Mr. Smith, it looks like you need something. Let’s try putting a heating pad on your back and listening to some nice music. I’ll get you some water to drink.”

Consider changing the consequence by reacting differently to their behavior. Redirect by engaging the person with reminiscence.

Table 8. Some options for communicating with people with moderate-severe dementia

Instead of...	Consider instead...
Providing multistep tasks (e.g., “Can you go to the garage and get the box with	Providing simple step-by-step instructions Using checklists or lists to convey tasks with multiple steps

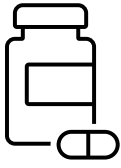
the Christmas items and bring it in here and set up the tree?”)	
Correcting or trying to be right	Not arguing with the person’s reality. They won’t remember what you said—only that they are upset with you
Asking open-ended questions like, “What do you want?”	Asking close-ended questions like, “Would you like juice or milk?”
Getting frustrated	Maintaining a calm demeanor

Communication aids may be beneficial in supporting conversation for persons with dementia, which can promote social engagement and improve quality of life. For some patients, visual aids can be developed to facilitate day-to-day requests (e.g., food, drink, etc.) or sequence multi-step events (e.g., brushing teeth, transfers from bed to wheelchair) to maximize independence. Speech-language pathologists may be able to support the creation of these aids in collaboration with the patient and caregiver.⁴⁴

Other specific tips to fill the day with meaning. These activities can help avoid boredom and restlessness which can trigger difficult behaviors:

- **Tactile interventions:** Folding laundry, “busy box”, busy apron, sorting buttons or nuts and bolts, kinetic sand, playdoh, magnetic tiles to build structures or other building blocks
- **Other sensory practices:** aromatherapy, massage, multi-sensory stimulation, bright light therapy³⁶
- **Purposeful activities:** Using a swiffer to clean the floor, sweeping, folding laundry, setting table, folding papers, writing cards, putting “stamps” (maybe stickers) on envelopes
- **Diversional activities:** Listening to radio, coloring, watching sitcoms, old shows, or sports events
- **Reminiscent activities:** Creating memory books or communication wallets, looking at pictures and telling stories, laughing over a joke or funny event from the past
- **Natural/spiritual activities:** Going outside in nature for fresh air, walking, sitting in sunshine, watching a sunset
- **Creative activities (especially music):** Coloring, drawing, playing or listening to music that connects with the person with dementia. Music therapy (if available)
- **Self-care/connection activities:** Getting nails done, getting hand massage with lotion, getting hair brushed or combed, cuddling with a pet or another person, pet therapy, eating a snack

Telehealth tip: A pleasant events list can be useful to screen share
Sometimes caregivers are so tired, they may not have thought about these activities, so it can be helpful to offer specific suggestions based on the preferences of the patient. **Know your patient with dementia. What is triggering for one person with dementia can be calming for another.**



Part 5: BPSD Pharmacologic Management:

When to Consider Pharmacologic Treatment: If non-pharmacologic interventions have failed to sufficiently address BPSD, pharmacologic intervention may be considered.

General Approach to Medication Management:

1. Reduce anticholinergic medications as able—one study showed reducing these medication burdens by at least 20% significantly reduced severity and frequency of BPSD and reduced caregiver stress.³¹
2. Identify the target symptoms and choose medication most closely related to this to avoid unnecessary antipsychotic use. For example, use antipsychotic for psychosis, SSRI for underlying anxiety or depression, or Tylenol for pain.
3. Follow geriatric principles of "start low, go slow" with SSRIs, especially if targeting anxiety symptoms. Some patients may initially experience exacerbated anxiety before symptoms improve if medications are titrated too quickly.

Table 9. Possible medications to use to pharmacologically manage dementia behaviors

<u>Medication</u>	<u>Off label use?</u>	<u>Notes for consideration</u>	<u>Evidence</u>
Cholinesterase inhibitor	No	See above	See above
Memantine	No	See above	See above
Tylenol (and other pain treatments)	No (treating unmet pain needs that could trigger BPSD)	Often larger doses like 1000mg are more effective for pain control. Do not exceed recommended daily max amounts. Consider other patches, creams, and heating pads for pain control as well.	There is evidence of efficacy of pain treatment reducing dementia behaviors ^{33, 34}
Citalopram, escitalopram, sertraline	Maybe	For patients with high risk for QTC prolongation, ideally would check EKG within a week of starting citalopram or escitalopram.	Sertraline and citalopram were associated with modest improvement of psychosis and agitation compared with placebo ^{11, 12, 45}
Other SSRIs (fluoxetine, vortioxetine)	No (if treating	Avoid paroxetine given anticholinergic properties.	**

	underlying depression)		
Non-SSRI Antidepressants (Mirtazapine, venlafaxine, duloxetine, bupropion)	No (if treating underlying depression)	Avoid tricyclics and MAOIs Be cautious with venlafaxine in non-compliant patients due to risks of discontinuation syndrome	**
Trazodone	Yes	No difference compared to placebo. SSRIs and trazodone appear to be tolerated reasonably well when compared with placebo, and to both typical and atypical antipsychotics. Monitor for orthostasis, especially in those also taking other antihypertensives.	One study of trazodone compared with placebo did not find any significant difference in change in CMAI (agitation index) total scores
Gabapentin	No (if treating underlying pain triggering behaviors); Yes (if treating dementia behaviors)		Preliminary evidence in small case studies and case series shows possible benefit in patients with BPSD in Alzheimer's. Newer preliminary evidence notes low dose gabapentin helpful in Lewy Body Dementia ¹³
Valproic Acid or other mood stabilizers	Yes	VPA has the potential for many side effects and the drug interactions are considerable. If needing to use for dementia behaviors, levels between 40 and	Overall, valproic acid appears to have limited efficacy as monotherapy in many patients with dementia. Insufficient evidence was found to support valproic acid in the

		60 mcg/mL and relatively low doses (i.e., 7-12 mg/kg/d) are associated with improvements in agitation in some patients with dementia. However, similar valproic acid levels produced no significant behavioral improvements in most placebo-controlled studies and led to substantial side effects.	treatment of dementia for cognitive, psychiatric symptoms or disease-modifying ^{14, 15}
Antipsychotics	Yes	See section on antipsychotics below.	See section on antipsychotics below. Need to use sparingly and in situations where there are psychotic symptoms, or situation is dangerous to self or others
Melatonin	No (for sleep aid if sleep deprivation is suspected trigger)		Melatonin may be effective in improving sleep efficacy and prolonging total sleep time in patients with dementia ⁴¹

****Please note all medications are off label for behavioral and psychological symptoms of dementia.***

*****These medications are not well studied in the context of behavioral and psychological symptoms of dementia.***

Please note this is not an exhaustive list but contains some of the most common medications used. Prazosin has a small amount of evidence emerging that it could be beneficial in this indication. Please work with your local psychiatrists if considering this and are unfamiliar with prescribing.

Antipsychotic Medications

The American Psychiatric Association¹⁶ recommends that antipsychotic medication may be considered if BPSD symptoms are severe, including behaviors that are dangerous to the patient or caregiver (e.g., verbal or physical assault), behaviors that cause significant distress to the patient, or psychotic symptoms (delusions and hallucinations).¹⁷

However, this decision needs to be considered with extreme caution as these medications are associated with increased mortality risk in older adults with dementia. **“BLACK BOX”** warning

about their risk and lack of approval to treat dementia symptom is issued by FDA. Therefore it is strongly recommended a clear documentation of the disclosure to the patient and family before initiation of treatment,

Antipsychotics are typically for short term use with a goal to use for a few weeks only and then trial taper off if possible. Many of the concerning side effects described below are from long-term use. Prescriptions should be reassessed periodically even for those who require long-term use.

Choice of Second-Generation Antipsychotic:

All are off label, but risperidone, olanzapine, and aripiprazole have a little more data to back their use. You will need to discuss with the patient/caregiver the black box warning that elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death (see FAQs below for additional details).

Table 10. Second Generation Antipsychotic Options

Medication	Starting dose	Typical Dosage Range	Indications	Side effect considerations
Risperidone	0.25mg	1-2mg/day*	Agitation, Psychosis, Aggression	Extrapyramidal effects, hyperprolactinemia
Olanzapine	2.5 mg	5- 10 mg/day	Agitation, Overall symptoms, +/- psychosis	Anticholinergic effects, sedation, metabolic effects, weight gain
Quetiapine	25 mg	100-150mg mg/day	Possible for Agitation, Psychosis	Orthostatic hypotension
Aripiprazole	2.5 mg	5 -10mg/day	Psychosis, Agitation, Overall symptoms	Akathisia

These are typical dosing ranges, not max doses. If utilizing higher doses, consider working with Psychiatry.

*Increased symptoms of parkinsonism at 2mg suggest that 1mg may represent optimal dose.

Table 11. **Second-Generation Antipsychotics by Indication:**

Indication	Suggested Medication and Notes
Overall behavioral and psychologic symptoms	Aripiprazole has best evidence, but Olanzapine and Risperidone also show low utility.
Agitation	Risperidone has best evidence, but the other Second Generation Antipsychotics (SGAs) show demonstrable effects.

Psychosis	Only Risperidone is superior to placebo. The other SGAs did not show significant effect.
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19, 42, 43

Of note, evidence for quetiapine was poor in all categories (overall BPSD, psychosis, and agitation).

In the absence of delirium, Haldol should NOT be used as first-line.

Do NOT use long-acting injectable antipsychotics unless it is for another chronic psychotic disorder.¹⁸

Monitoring

Quantitative Measures:

- Neuropsychiatric Inventory Questionnaire (NPI-q)
- Brief Psychiatry Rating Scale (BPRS) which includes agitation and psychosis
- Cohen-Mansfield Agitation Inventory (CMAI) includes agitation but not psychosis

Metabolic Monitoring:

There are no specific recommendations for patients taking antipsychotics with dementia, but standard recommendations include:

- Cardiac monitoring (EKG for prolong QT interval)
- BP, weight, BMI, waist circumference, fasting glucose (or A1C), fasting lipid profile at baseline
- BP and fasting plasma glucose at 12 weeks and annually
- Lipid profile at 12 weeks and every 5 years
- Weight with calculation of BMI monthly for 3 months then quarterly
- Abnormal Involuntary Movement Scale (AIMS) q6 months

Table 12. **Monitoring Adults Taking Antipsychotic Medications**

Symptom to Monitor	Schedule for Monitoring	Additional notes and how to monitor over telehealth
Orthostatic hypotension	BP at initiation, q3 months during titration, then annually	Clozapine, Olanzapine, Pimvanserin, Paliperidone, and Quetiapine highest risk. Will need to inquire about symptoms of orthostatic hypotension.
Akathisia, EPS including Parkinsonism, Tardive dyskinesia	AIMS (Abnormal involuntary movement scale) q6 months	Aripiprazole highest risk for Akathisia.

	Other: Barnes-Akathisia Scale, DISCUS (Dyskinesia Identification System: Condensed User Scale), Modified Simpson-Angus Scale for assessment of Parkinsonian Movement Disorder q6 months	Risperidone and Paliperidone highest risk for extrapyramidal symptoms. AIMS: can be done over video telehealth visit Barnes-Akathisia Scale: can be done over video telehealth visit DISCUS: can be done over video telehealth visit Modified Simpson Angus Scale: can be done over video telehealth visit with caregiver assistance for glabella tap
Falls, gait issues, hip and femur fractures	Baseline, during titration, every 6 months	Risperidone has highest fracture risk. Also note greater gait issues with risperidone and olanzapine.
UTI	Baseline, anytime if new symptoms	UTI risk with Olanzapine, Quetiapine, and Risperidone. Consider if new symptoms reported, or if new delirium reported.
Glucose metabolism (fasting, blood sugar, Hgb A1C) , lipid metabolism	Baseline, at 3 months, then annually	Check labs asynchronously with visit whenever possible.
Tachycardia, Blood pressure	Baseline, during titration, at 3 months, then annual	Ask about home vitals, many patients have BP cuffs at home.

		Tachycardia primarily with Clozapine.
Sexual/ reproductive function	Baseline, during titration, annual	May need to explicitly ask as some patients may feel embarrassed to report these symptoms.
Prolactin (if symptoms of hyperprolactinemia develop)	Regularly	Ask about decreased libido, sexual dysfunction, erectile dysfunction, and/or gynecomastia. In postmenopausal women, vaginal dryness may also be present. If concerning signs, check labs asynchronously.
Sedation	Baseline, each visit	
QTc prolongation	Baseline EKG, consider at dosing changes or with addition of other QT prolonging agents	Caution with QTc>500. Need to check asynchronously from your telehealth visit. If there is already an EKG on file and QTc is normal, need to discuss risks/benefits of traveling to clinic to check this.

Some electronic medical records have built-in Clinical Reminders to alert the provider for specific monitoring parameters like AIMS when a patient has an active prescription for an antipsychotic.^{19,20,21,22}

Antipsychotic FAQs

Have antipsychotics been shown to improve quality of life in dementia?

No. Antipsychotic medications have benefit in specific areas of BPSD such as aggression, paranoia, and other psychotic symptoms. Cognitive and functional abilities as well as quality of life have not been shown to improve.

What other serious side effects are there other than the black box warning about sudden cardiac death?

Meta-analyses³⁰ have found significantly higher incidence of serious adverse cerebrovascular events, including stroke, extrapyramidal side effects, and higher mortality.

Brief case examples of pharmacologic management along with non-pharmacologic management of behavioral and psychological symptoms of dementia

CASE 6:

Mrs. Johnson has a history of moderate-severe dementia, obesity, and diabetes and is presenting with increasing agitation and paranoia in the late afternoons. Her caregivers state that she often wanders around the facility calling out for her deceased husband. She wanders into the rooms of neighboring residents and when she encounters another resident or staff member, she often shouts and becomes combative, accusing them of kidnapping her husband or stealing her things. Most recently, she hit and injured another resident during one of these episodes. The caregivers are understandably alarmed and are requesting pharmacologic assistance in managing her disruptive and sometimes harmful behavior. They are already optimizing non-pharmacologic management. She has no allergies. Her QTc is 425 on last EKG last year during a hospitalization.

Management options: *Since the psychotic symptoms present (delusions) are causing her distress and resulting in behaviors that are unsafe to her and others, antipsychotic treatment is reasonable to consider here if all other unmet needs are considered (i.e., pain, anxiety). You must discuss black box warning and risks/benefits with her power of attorney.*

Given her metabolic syndrome, you consider risperidone, quetiapine, or aripiprazole over olanzapine given olanzapine's known side effect of weight gain. You start risperidone 0.25 mg once a day in the afternoon to help reduce the behaviors. You also reassure Mrs. Johnson that her husband is okay and show her pictures of them together that you find in her room. She tells you stories about him.

The next week you check in and she is still agitated, although caregivers feel that it is overall improved since starting the risperidone. You increase risperidone to 0.5 mg daily.

Long term medication strategy: *Antipsychotics are off label use and not intended for long term use. Even if this treatment works, as soon as the patient's behavior stabilizes, one should attempt gradually weaning the antipsychotic if tolerated.*

CASE 7

Mr. Thomas has a history of moderate-severe dementia and diabetes and is presenting for follow up regarding agitation and anxiety. His caregivers call you for help with "sundowning". They notice that he gets upset, confused, and agitated in the afternoons and evenings starting

around 4pm. They have already maximized non-pharmacologic management after consulting with you and are trying to fill his evenings with meaningful activities, however they cannot get him to engage. He is already on donepezil and memantine.

You ask additional questions:

Q: Does Mr. Doe have any pain?

A: No. Not that he tells us.

Q: Has he ever had any chronic pain?

A: Yes, he used to take opioids many years ago for chronic back and leg pain.

Possible pharmacologic interventions:

He currently has no pain treatment on board.

Schedule 1000mg Tylenol at 3 pm to see if this helps his physical discomfort that may be fueling his “sundowning”.

Two weeks later you hear back that he is doing at least 30% better. The symptoms are improved between 4pm and bedtime, but overnight he becomes upset and paces around. The facility staff are feeling stressed and they're hoping for some pharmacologic support that works quickly.

You consider an SSRI to address mood in case underlying anxiety may be contributing. You also consider gabapentin since he may have peripheral neuropathy and discomfort that may be contributing to this clinical picture. You trial 100mg of gabapentin at night to help with the leg pain and anxiety symptoms.

You find out that he calms down a lot after starting gabapentin and his behaviors improve 50%. Staff at the facility are appreciative.

Part 6: Caregiver assessment

If you wish to formally assess caregiver burden with a standardized interview, the Zarit Burden Interview ^{24, 37} is a caregiver self-report measure to assess caregiver burden. There are multiple versions of this interview tool including 122-item, 12-item, and 4-item versions. The Zarit Burden Interview: Screen (4-item) is a brief tool with a score range from 0 to 16. A score of ≥ 8 indicates high burden. A copy of this tool is in the appendix of this document. Please note that no formal assessment needs to be used. We recommend checking in on how the caregiver feels, whether they are interested in caregiver support resources, and what they perceive to be most stressful.

Caregiver Interventions, Support, and Resources

Please coordinate with social workers in your area and any caregiver support programs to connect with specific resources for your area.

In general, we recommend connecting with:

- Community respite (adult day healthcare centers, respite grants)
- VA Respite options (home health aide, adult day healthcare centers)
- Community organizations with great information and resources (i.e., Alzheimer's association 24/7 hotline 1-800-272-3900 or Family Caregiver Alliance, or others that may be connected to your local Area Agency on Aging)
- VA caregiver support and education (Caregiver Support Program, REACH VA)
- Support and information to hire private duty caregivers
- Support for long term care planning

Questions about decisional capacity and conservatorship

Decisional capacity is not necessarily global. It needs to be considered for every type of decision (e.g., financial, medical, etc.). Many people with mild-moderate dementia will retain decision making capacity for simpler decisions but may struggle with more complex ones.

If a person has a surrogate decision maker whom they trust, in many cases formal conservatorship through the county is not needed. States vary in their definitions and processes for obtaining guardianship and conservatorship. Regardless of state specific definitions, most states require some type of application and legal proceeding to obtain legal authority for conservatorship or guardianship, which may involve a notable cost. These processes are state and often county specific. Please work with your county's probate conservatorship office and specialists at your medical center for additional guidance.

Advance Care Planning

It is important to encourage the person with dementia to formally appoint personal representatives through durable powers of attorney while they are still able to. Practically, it is most important to know the following:

1. Verify who the patient with dementia has selected as their healthcare proxy/medical power of attorney. This person can make decisions once the person with dementia is no longer able to do so.
2. Ensure you have the correct contact info for the medical power of attorney.
3. Note an alternate power of attorney and their contact information also.

The decisional capacity to appoint someone is a much easier decision than making an informed, complex medical decision, so people with dementia often retain the ability to appoint a trusted representative for much of their clinical course. We recommend also completing Life Sustaining Treatment (LST) note and orders when this information around code status is discussed. LST can be done over telehealth visits. State authorized portable orders and advance directive forms can be mailed out to be completed and returned.

Hospice Criteria for dementia

It can be difficult to determine when a patient with dementia has a 6 month or less prognosis. Qualifying for hospice can provide additional support to the patient's family. In general, a patient needs to have both of the criteria below to qualify for hospice:

FAST stage 7c (see FAST scale above on page 21) **AND**

One or more of the following

- Aspiration pneumonia
- Pyelonephritis
- Septicemia
- Multiple pressure ulcers stage 3-4
- Inability to maintain sufficient calorie and fluid intake for past 6 months (10% weight loss and albumin <2.5gm/dl)

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Appendix

Additional Resources for caregivers:

Compiled list of dementia care resources in one place for caregivers from the VA Geriatrics Research, Education, and Clinical Centers

[Gerischolars/Dementia Resources for Caregivers and Families](#)

Dementia caregiver guide with easy-to-understand content
[Dementia Caregiver Survival Guide \(gerischolars.org\)](http://gerischolars.org)

Reliable dementia related health information from the National Institute on Aging [Dementia | National Institute on Aging \(nih.gov\)](http://dementia.nia.nih.gov)

Caregiver video series and Veterans resources from the VA Office of Rural Health [RESOURCES - Office of Rural Health \(va.gov\)](http://resources.vha.va.gov)

UCLA Caregiver training videos [Caregiver Education | UCLA Alzheimer's and Dementia Care Program - Santa Monica, CA \(uclahealth.org\)](http://uclahealth.org)

VA Caregiver support program [https://www.bing.com/search?q=uva caregiver support program&qs=n&form=QBRE&sp=-1&pg=uva caregiver support program&sc=8-29&sk=&cvid=E2A1DE6E6E914ED1AA775D3101AB7EAB](https://www.bing.com/search?q=uva+caregiver+support+program&qs=n&form=QBRE&sp=-1&pg=uva+caregiver+support+program&sc=8-29&sk=&cvid=E2A1DE6E6E914ED1AA775D3101AB7EAB)

List of potentially inappropriate medications for older adults
[American Geriatrics Society 2019 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults - - 2019 - Journal of the American Geriatrics Society - Wiley Online Library](http://www.jagsonline.com)

Additional VA resources to learn more about non-pharmacologic management

[STAR-VA: Interdisciplinary Behavioral Care for CLC Residents with Dementia STAR-VA and Dementia Training Resources \(sharepoint.com\)](http://sharepoint.com)

Montessori Approaches in Person-Centered Care (MAP-VA): An Effectiveness-Implementation Trial in Community Living Centers [Welcome to MAP-VA! \(sharepoint.com\);](http://sharepoint.com)

AD8 Dementia Screening Interview

Patient ID#: _____

CS ID#: _____

Date: _____

Remember, "Yes, a change" indicates that there has been a change in the last several years caused by cognitive (thinking and memory) problems.	YES, A change	NO, No change	N/A, Don't know
1. Problems with judgment (e.g., problems making decisions, bad financial decisions, problems with thinking)			
2. Less interest in hobbies/activities			
3. Repeats the same things over and over (questions, stories, or statements)			
4. Trouble learning how to use a tool, appliance, or gadget (e.g., VCR, computer, microwave, remote control)			
5. Forgets correct month or year			
6. Trouble handling complicated financial affairs (e.g., balancing checkbook, income taxes, paying bills)			
7. Trouble remembering appointments			
8. Daily problems with thinking and/or memory			
TOTAL AD8 SCORE			


Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, *Neurology* 2005;65:559-564
 Copyright 2005. The AD8 is a copyrighted instrument of the Alzheimer's Disease Research Center, Washington University, St. Louis, Missouri.
 All Rights Reserved.

VAMC SLUMS EXAMINATION

Questions about this assessment tool? E-mail aging@slu.edu

Name _____ Age _____

Is the patient alert? _____ Level of education _____

_ /1	1	1. What day of the week is it?
_ /1	1	2. What is the year?
_ /1	1	3. What state are we in?
		4. Please remember these five objects. I will ask you what they are later. Apple Pen Tie House Car
		5. You have \$100 and you go to the store and buy a dozen apples for \$3 and a tricycle for \$20.
_ /3	1	How much did you spend?
	2	How much do you have left?
_ /3		6. Please name as many animals as you can in one minute.
	0	0-4 animals
	1	5-9 animals
	2	10-14 animals
	3	15+ animals
_ /5		7. What were the five objects I asked you to remember? 1 point for each one correct.
		8. I am going to give you a series of numbers and I would like you to give them to me backwards. For example, if I say 42, you would say 24.
_ /2	0	87
	1	648
	1	8537
		9. This is a clock face. Please put in the hour markers and the time at ten minutes to eleven o'clock.
_ /4	2	Hour markers okay
	2	Time correct
_ /2	1	10. Please place an X in the triangle.
		
_ /8	1	Which of the above figures is largest?
		11. I am going to tell you a story. Please listen carefully because afterwards, I'm going to ask you some questions about it. Jill was a very successful stockbroker. She made a lot of money on the stock market. She then met Jack, a devastatingly handsome man. She married him and had three children. They lived in Chicago. She then stopped work and stayed at home to bring up her children. When they were teenagers, she went back to work. She and Jack lived happily ever after.
	2	What was the female's name?
	2	What work did she do?
	2	When did she go back to work?
	2	What state did she live in?

TOTAL SCORE _____

SCORING			
HIGH SCHOOL EDUCATION	NORMAL	LESS THAN HIGH SCHOOL EDUCATION	
27-30	25-30	
21-26 MILD NEUROCOGNITIVE DISORDER	20-24	
1-20 DEMENTIA	1-19	

CLINICIAN'S SIGNATURE _____

DATE _____

TIME _____

SH Tariq, N Tumosa, JT Chibnall, HM Perry III, and JE Morley. The Saint Louis University Mental Status (SLUMS) Examination for detecting mild cognitive impairment and dementia is more sensitive than the Mini-Mental Status Examination (MMSE) - A pilot study. *Am J Geriatr Psych* 14:900-10, 2006.

GPCOG Screening Test

Step 1: Patient Examination

Unless specified, each question should only be asked once

Name and Address for subsequent recall test

1. "I am going to give you a name and address. After I have said it, I want you to repeat it. Remember this name and address because I am going to ask you to tell it to me again in a few minutes: John Brown, 42 West Street, Kensington." (Allow a maximum of 4 attempts).

Time Orientation

Correct **Incorrect**

2. What is the date? (exact only)

Clock Drawing – use blank page

3. Please mark in all the numbers to indicate the hours of a clock (correct spacing required)
4. Please mark in hands to show 10 minutes past eleven o'clock (11.10)

Information

5. Can you tell me something that happened in the news recently? (Recently = in the last week. If a general answer is given, eg "war", "lot of rain", ask for details. Only specific answer scores).

Recall

6. What was the name and address I asked you to remember

John

Brown

42

West (St)

Kensington

(To get a total score, add the number of items answered correctly)
Total correct (score out of 9)

9

If patient scores 9, no significant cognitive impairment and further testing not necessary.

If patient scores 5-8, more information required. Proceed with Step 2, informant section.

If patient scores 0-4, cognitive impairment is indicated. Conduct standard investigations.

Informant Interview

Date: _____

Informant's name: _____

Informant's relationship to patient, i.e. informant is the patient's: _____

These six questions ask how the patient is compared to when s/he was well, say 5 – 10 years ago

Compared to a few years ago:

- | | Yes | No | Don't Know | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| ▪ Does the patient have more trouble remembering things that have happened recently than s/he used to? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| ▪ Does he or she have more trouble recalling conversations a few days later? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| ▪ When speaking, does the patient have more difficulty in finding the right word or tend to use the wrong words more often? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| ▪ Is the patient less able to manage money and financial affairs (e.g. paying bills, budgeting)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ▪ Is the patient less able to manage his or her medication independently? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ▪ Does the patient need more assistance with transport (either private or public)?
<small>(If the patient has difficulties due only to physical problems, e.g. bad leg, tick 'no')</small> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

(To get a total score, add the number of items answered 'no', 'don't know' or 'N/A')

Total score (out of 6)

If patient scores 0-3, cognitive impairment is indicated. Conduct standard investigations.

© University of New South Wales as represented by the Dementia Collaborative Research Centre – Assessment and Better Care; Brodaty et al, JAGS 2002; 50:530-534

The Short Portable Mental Status Questionnaire (SPMSQ)

QUESTION	RESPONSE	INCORRECT RESPONSES
1. What are the date, month, and year?		
2. What is the day of the week?		
3. What is the name of this place?		
4. What is your phone number?		
5. How old are you?		
6. When were you born?		
7. Who is the current president?		
8. Who was the president before him?		
9. What was your mother's maiden name?		
10. Can you count backward from 20 by 3's?		

Scoring*

NOTE ON SCORING

*One more error is allowed in the scoring if a patient has had a grade school education or less. One less error is allowed if the patient has had education beyond the high school level.

0-2 errors: normal mental functioning

3-4 errors: mild cognitive impairment

5-7 errors: moderate cognitive impairment

8 or more errors: severe cognitive impairment

Source: Pfeiffer, E. (1975). A short portable mental status questionnaire for the assessment of organic brain deficit in elderly patients. *Journal of American Geriatrics Society*. 23, 433-41.

Abnormal Involuntary Movement Scale (AIMS)

Instructions

There are two parallel procedures, the examination procedure, which tells the patient what to do, and the scoring procedure, which tells the clinician how to rate what he or she observes.

Examination Procedure

Either before or after completing the examination procedure, observe the patient unobtrusively at rest (e.g., in the waiting room).

The chair to be used in this examination should be a hard, firm one without arms.

1. Ask the patient whether there is anything in his or her mouth (such as gum or candy) and, if so, to remove it.
2. Ask about the 'current' condition of the patient's teeth. Ask if he or she wears dentures. Ask whether teeth or dentures bother the patient 'now'.
3. Ask whether the patient notices any movements in his or her mouth, face, hands, or feet. If yes, ask the patient to describe them and to indicate to what extent they 'currently' bother the patient or interfere with activities.
4. Have the patient sit in the chair with hands on knees, legs slightly apart, and feet flat on floor. (Look at the entire body for movements while the patient is in this position.)
5. Ask the patient to sit with hands hanging unsupported – if male, between his legs, if female and wearing a dress, hanging over her knees. (Observe hands and other body areas.)
6. Ask the patient to open his or her mouth. (Observe the tongue at rest within the mouth.) Do this twice.
7. Ask the patient to protrude his or her tongue. (Observe abnormalities of tongue movement.) Do this twice.
8. Ask the patient to tap his or her thumb with each finger as rapidly as possible for 10 to 15 seconds, first with right hand, then with left hand. (Observe facial and leg movements.) [activated]
9. Flex and extend the patient's left and right arms, one at a time.
10. Ask the patient to stand up. (Observe the patient in profile. Observe all body areas again, hips included.)
11. Ask the patient to extend both arms out in front, palms down. (Observe trunk, legs, and mouth.) [activated]
12. Have the patient walk a few paces, turn, and walk back to the chair. (Observe hands and gait.) Do this twice. [activated]

Scoring Procedure

Complete the examination procedure before making ratings.

For the movement ratings (the first three categories below), rate the highest severity observed. 0 = none, 1 = minimal (may be extreme normal), 2 = mild, 3 = moderate, and 4 = severe. According to the original AIMS instructions, one point is subtracted if movements are seen only on activation, but not all investigators follow that convention.

Facial and Oral Movements

1. Muscles of facial expression, e.g., movements of forehead, eyebrows, periorbital area, cheeks. Include frowning, blinking, grimacing of upper face.
0 1 2 3 4

2. Lips and perioral area, e.g., puckering, pouting, smacking.
0 1 2 3 4
3. Jaw, e.g., biting, clenching, chewing, mouth opening, lateral movement.
0 1 2 3 4
4. Tongue.
Rate only increase in movement both in and out of mouth, **not** inability to sustain movement.
0 1 2 3 4

Extremity Movements

5. Upper (arms, wrists, hands, fingers). Include movements that are choreic (rapid, objectively purposeless, irregular, spontaneous) or athetoid (slow, irregular, complex, serpentine). Do **not** include tremor (repetitive, regular, rhythmic movements).
0 1 2 3 4
6. Lower (legs, knees, ankles, toes), e.g., lateral knee movement, foot tapping, heel dropping, foot squirming, inversion and eversion of foot.
0 1 2 3 4

Trunk Movements

7. Neck, shoulders, hips, e.g., rocking, twisting, squirming, pelvic gyrations. Include diaphragmatic movements.
0 1 2 3 4

Global Judgments

8. Severity of abnormal movements.
0 1 2 3 4
based on the highest single score on the above items.
9. Incapacitation due to abnormal movements.
0 = none, normal
1 = minimal
2 = mild
3 = moderate
4 = severe
10. Patient's awareness of abnormal movements.
0 = no awareness
1 = aware, no distress
2 = aware, mild distress
3 = aware, moderate distress
4 = aware, severe distress

Dental Status

11. Current problems with teeth and/or dentures.
0 = no
1 = yes
12. Does patient usually wear dentures?
0 = no
1 = yes

Reproduced from Guy W. ECDEU Assessment Manual for Psychopharmacology: Revised (DHEW publication number ADM 76-338). Rockville, MD, US Department of Health, Education and Welfare, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, NIMH Psychopharmacology Research Branch, Division of Extramural Research Programs, 1976: 534-7

Anticholinergic cognitive burden scale

Drugs with ACB Score of 1

Generic Name	Brand Name
Alimemazine	Theralen™
Alverine	Spasmonal™
Alprazolam	Xanax™
Aripiprazole	Ablify™
Asenapine	Saphris™
Atenolol	Tenormin™
Bupropion	Wellbutrin™, Zyban™
Captopril	Capoten™
Cetirizine	Zyrtec™
Chlorthalidone	Diuril™, Hygroton™
Cimetidine	Tagamet™
Clidinium	Librax™
Clorazepate	Tranxene™
Codeine	Contin™
Colchicine	Colcrys™
Desloratadine	Claritin™
Diazepam	Valium™
Digoxin	Lanoxin™
Dipyridamole	Persantine™
Disopyramide	Norpace™
Fentanyl	Duragesic™, Actiq™
Furosemide	Lasix™
Fluvoxamine	Luvox™
Haloperidol	Haldol™
Hydralazine	Apresoline™
Hydrocortisone	Cortef™, Cortaid™
Iloperidone	Fanapt™
Isosorbide	Isordil™, Ismo™
Levocetirizine	Xyzal™
Loperamide	Imodium™, others
Loratadine	Claritin™
Metoprolol	Lopressor™, Toprol™
Morphine	MS Contin™, Avinza™
Nifedipine	Procardia™, Adalat™
Paliperidone	Invega™
Prednisone	Deltasone™, Sterapred™
Quinidine	Quinaglute™
Ranitidine	Zantac™
Risperidone	Risperdal™
Theophylline	Theodur™, Uniphyll™
Trazodone	Desyrel™
Triamterene	Dyrenium™
Venlafaxine	Effexor™
Warfarin	Coumadin™

Drugs with ACB Score of 2

Generic Name	Brand Name
Amantadine	Symmetrel™
Belladonna	Multiple
Carbamazepine	Tegretol™
Cyclobenzaprine	Flexeril™
Cyproheptadine	Periactin™
Loxapine	Loxitane™
Meperidine	Demerol™
Methotrimeprazine	Levoprome™
Molindone	Moban™
Nefopam	Nefogesic™
Oxcarbazepine	Trileptal™
Pimozide	Orap™

Drugs with ACB Score of 3

Generic Name	Brand Name
Amitriptyline	Elavil™
Amoxapine	Asendin™
Atropine	Sal-Tropine™
Benzotropine	Cogentin™
Brompheniramine	Dimetapp™
Carbinoxamine	Histex™, Carbihist™
Chlorpheniramine	Chlor-Trimeton™
Chlorpromazine	Thorazine™
Clemastine	Tavist™
Clomipramine	Anafranil™
Clozapine	Clozaril™
Darifenacin	Enablex™
Desipramine	Norpramin™
Dicyclomine	Bentyl™
Dimenhydrinate	Dramamine™, others
Diphenhydramine	Benadryl™, others
Doxepin	Sinequan™
Doxylamine	Unisom™, others
Fesoterodine	Toviaz™
Flavoxate	Urispas™
Hydroxyzine	Atarax™, Vistaril™
Hyoscyamine	Anaspaz™, Levsin™
Imipramine	Tofranil™
Meclizine	Antiver™
Methocarbamol	Robaxin™
Nortriptyline	Pamelor™
Olanzapine	Zyprexa™
Orphenadrine	Norflex™
Oxybutynin	Ditropan™
Paroxetine	Paxil™
Perphenazine	Trilafon™
Promethazine	Phenergan™
Propantheline	Pro-Banthine™
Propiverine	Detronorm™
Quetiapine	Seroquel™
Scopolamine	Transderm Scop™
Solifenacin	Vesicare™
Thioridazine	Mellaril™
Tolterodine	Detrol™
Trifluoperazine	Stelazine™
Trihexyphenidyl	Artane™
Trimipramine	Surmontil™
Tropium	Sanctura™

Categorical Scoring:

- Possible anticholinergics include those listed with a score of 1; Definite anticholinergics include those listed with a score of 2 or 3

Numerical Scoring:

- Add the score contributed to each selected medication in each scoring category
- Add the number of possible or definite Anticholinergic medications

Notes:

- Each definite anticholinergic may increase the risk of cognitive impairment by 46% over 6 years.³
- For each on point increase in the ACB total score, a decline in MMSE score of 0.33 points over 2 years has been suggested.⁴
- Additionally, each one point increase in the ACB total score has been correlated with a 26% increase in the risk of death.⁴

Aging Brain Care

www.agingbraincare.org

<https://corumpharmacy.com/wp-content/uploads/2020/08/Anticholinergic-cognitive-burden-scale.pdf>

Zarit Caregiver Burden Assessment (Screen, 4-items)

Name: _____

Date: _____

The following is a list of statements that reflect how people sometimes feel when taking care of another person. After reading each statement, indicate how often you experience the feelings listed by circling the number that best corresponds to the frequency of these feelings.

	Never	Rarely	Sometimes	Frequently	Nearly Always
1) Do you feel that because of your relative that you don't have enough time for yourself?	0	1	2	3	4
2) Do you feel stressed between caring for your relative and trying to meet other responsibilities (work, home)?	0	1	2	3	4
3) Do you feel strained when you are around your relative?	0	1	2	3	4
4) Do you feel uncertain about what to do about your relative?	0	1	2	3	4

Scoring Instructions: Add Items 1-14 **Total 1-4 (maximum score = 16)** _____

Zarit, S. H., Reever, K. E., Back-Peterson, J. (1980). Relatives of the impaired elderly: correlates of feelings of burden. *The Gerontologist*, 20, 649-655.

Bédard, M., Molloy, D. W., Squire, L., Dubois, S., Lever, J. A., & O'Donnell, M. (2001). The Zarit Burden Interview: a new short version and screening version. *The gerontologist*, 41(5), 652-657.

ICD-10 Codes related to Dementia

ICD10 Code	ICD10 Description
A81.00	CREUTZFELDT-JAKOB DISEASE, UNSPECIFIED
A81.01	VARIANT CREUTZFELDT-JAKOB DISEASE
A81.09	OTHER CREUTZFELDT-JAKOB DISEASE
A81.2	PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY
A81.82	GERSTMANN-STRAUSSLER-SCHEINKER SYNDROME
A81.89	OTHER ATYPICAL VIRUS INFECTIONS OF CENTRAL NERVOUS SYSTEM
A81.9	ATYPICAL VIRUS INFECTION OF CENTRAL NERVOUS SYSTEM, UNSPECIFIED
F01.50	VASCULAR DEMENTIA WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F01.511	VASCULAR DEMENTIA, UNSPECIFIED SEVERITY, WITH AGITATION
F01.518	VASCULAR DEMENTIA, UNSPECIFIED SEVERITY, WITH OTHER BEHAVIORAL DISTURBANCE
F01.52	VASCULAR DEMENTIA, UNSPECIFIED SEVERITY, WITH PSYCHOTIC DISTURBANCE
F01.53	VASCULAR DEMENTIA, UNSPECIFIED SEVERITY, WITH MOOD DISTURBANCE
F01.54	VASCULAR DEMENTIA, UNSPECIFIED SEVERITY, WITH ANXIETY
F01.A0	VASCULAR DEMENTIA, MILD, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F01.A11	VASCULAR DEMENTIA, MILD, WITH AGITATION
F01.A18	VASCULAR DEMENTIA, MILD, WITH OTHER BEHAVIORAL DISTURBANCE
F01.A2	VASCULAR DEMENTIA, MILD, WITH PSYCHOTIC DISTURBANCE
F01.A3	VASCULAR DEMENTIA, MILD, WITH MOOD DISTURBANCE
F01.A4	VASCULAR DEMENTIA, MILD, WITH ANXIETY
F01.B0	VASCULAR DEMENTIA, MODERATE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F01.B11	VASCULAR DEMENTIA, MODERATE, WITH AGITATION
F01.B18	VASCULAR DEMENTIA, MODERATE, WITH OTHER BEHAVIORAL DISTURBANCE
F01.B2	VASCULAR DEMENTIA, MODERATE, WITH PSYCHOTIC DISTURBANCE
F01.B3	VASCULAR DEMENTIA, MODERATE, WITH MOOD DISTURBANCE
F01.B4	VASCULAR DEMENTIA, MODERATE, WITH ANXIETY
F01.C0	VASCULAR DEMENTIA, SEVERE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F01.C11	VASCULAR DEMENTIA, SEVERE, WITH AGITATION
F01.C18	VASCULAR DEMENTIA, SEVERE, WITH OTHER BEHAVIORAL DISTURBANCE
F01.C2	VASCULAR DEMENTIA, SEVERE, WITH PSYCHOTIC DISTURBANCE
F01.C3	VASCULAR DEMENTIA, SEVERE, WITH MOOD DISTURBANCE
F01.C4	VASCULAR DEMENTIA, SEVERE, WITH ANXIETY

F02.80	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F02.811	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, UNSPECIFIED SEVERITY, WITH AGITATION
F02.818	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, UNSPECIFIED SEVERITY, WITH OTHER BEHAVIORAL DISTURBANCE
F02.82	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, UNSPECIFIED SEVERITY, WITH PSYCHOTIC DISTURBANCE
F02.83	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, UNSPECIFIED SEVERITY, WITH MOOD DISTURBANCE
F02.84	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, UNSPECIFIED SEVERITY, WITH ANXIETY
F02.A0	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F02.A11	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITH AGITATION
F02.A18	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITH OTHER BEHAVIORAL DISTURBANCE
F02.A2	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITH PSYCHOTIC DISTURBANCE
F02.A3	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITH MOOD DISTURBANCE
F02.A4	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MILD, WITH ANXIETY
F02.B0	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F02.B11	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITH AGITATION
F02.B18	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITH OTHER BEHAVIORAL DISTURBANCE
F02.B2	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITH PSYCHOTIC DISTURBANCE
F02.B3	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITH MOOD DISTURBANCE
F02.B4	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, MODERATE, WITH ANXIETY
F02.C0	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F02.C11	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITH AGITATION
F02.C18	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITH OTHER BEHAVIORAL DISTURBANCE
F02.C2	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITH PSYCHOTIC DISTURBANCE
F02.C3	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITH MOOD DISTURBANCE
F02.C4	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE, SEVERE, WITH ANXIETY
F03.90	UNSPECIFIED DEMENTIA WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY

F03.911	UNSPECIFIED DEMENTIA, UNSPECIFIED SEVERITY, WITH AGITATION
F03.918	UNSPECIFIED DEMENTIA, UNSPECIFIED SEVERITY, WITH OTHER BEHAVIORAL DISTURBANCE
F03.92	UNSPECIFIED DEMENTIA, UNSPECIFIED SEVERITY, WITH PSYCHOTIC DISTURBANCE
F03.93	UNSPECIFIED DEMENTIA, UNSPECIFIED SEVERITY, WITH MOOD DISTURBANCE
F03.94	UNSPECIFIED DEMENTIA, UNSPECIFIED SEVERITY, WITH ANXIETY
F03.A0	UNSPECIFIED DEMENTIA, MILD, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F03.A11	UNSPECIFIED DEMENTIA, MILD, WITH AGITATION
F03.A18	UNSPECIFIED DEMENTIA, MILD, WITH OTHER BEHAVIORAL DISTURBANCE
F03.A2	UNSPECIFIED DEMENTIA, MILD, WITH PSYCHOTIC DISTURBANCE
F03.A3	UNSPECIFIED DEMENTIA, MILD, WITH MOOD DISTURBANCE
F03.A4	UNSPECIFIED DEMENTIA, MILD, WITH ANXIETY
F03.B0	UNSPECIFIED DEMENTIA, MODERATE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F03.B11	UNSPECIFIED DEMENTIA, MODERATE, WITH AGITATION
F03.B18	UNSPECIFIED DEMENTIA, MODERATE, WITH OTHER BEHAVIORAL DISTURBANCE
F03.B2	UNSPECIFIED DEMENTIA, MODERATE, WITH PSYCHOTIC DISTURBANCE
F03.B3	UNSPECIFIED DEMENTIA, MODERATE, WITH MOOD DISTURBANCE
F03.B4	UNSPECIFIED DEMENTIA, MODERATE, WITH ANXIETY
F03.C0	UNSPECIFIED DEMENTIA, SEVERE, WITHOUT BEHAVIORAL DISTURBANCE, PSYCHOTIC DISTURBANCE, MOOD DISTURBANCE, AND ANXIETY
F03.C11	UNSPECIFIED DEMENTIA, SEVERE, WITH AGITATION
F03.C18	UNSPECIFIED DEMENTIA, SEVERE, WITH OTHER BEHAVIORAL DISTURBANCE
F03.C2	UNSPECIFIED DEMENTIA, SEVERE, WITH PSYCHOTIC DISTURBANCE
F03.C3	UNSPECIFIED DEMENTIA, SEVERE, WITH MOOD DISTURBANCE
F03.C4	UNSPECIFIED DEMENTIA, SEVERE, WITH ANXIETY
F10.27	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PERSISTING DEMENTIA
F10.97	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PERSISTING DEMENTIA
F13.27	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING DEMENTIA
F13.97	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING DEMENTIA
F18.17	INHALANT ABUSE WITH INHALANT-INDUCED DEMENTIA
F18.27	INHALANT DEPENDENCE WITH INHALANT-INDUCED DEMENTIA
F18.97	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED PERSISTING DEMENTIA
F19.17	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA
F19.27	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA

F19.97	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA
G23.1	PROGRESSIVE SUPRANUCLEAR OPHTHALMOPLEGIA [STEELE-RICHARDSON-OLSZEWSKI]
G30.0	ALZHEIMER'S DISEASE WITH EARLY ONSET
G30.1	ALZHEIMER'S DISEASE WITH LATE ONSET
G30.8	OTHER ALZHEIMER'S DISEASE
G30.9	ALZHEIMER'S DISEASE, UNSPECIFIED
G31.01	PICK'S DISEASE
G31.09	OTHER FRONTOTEMPORAL DEMENTIA
G31.83	DEMENTIA WITH LEWY BODIES
G90.3	MULTI-SYSTEM DEGENERATION OF THE AUTONOMIC NERVOUS SYSTEM
F02.80/ B20.	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITHOUT BEHAVIORAL DISTURBANCE/HUMAN IMMUNODEFICIENCY VIRUS [HIV] DISEASE
F02.81/ B20.	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITH BEHAVIORAL DISTURBANCE/HUMAN IMMUNODEFICIENCY VIRUS [HIV] DISEASE
F02.80/ G10	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITHOUT BEHAVIORAL DISTURBANCE/HUNTINGTON'S DISEASE
F02.81/ G10	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITH BEHAVIORAL DISTURBANCE/HUNTINGTON'S DISEASE
F02.80/ G20	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITHOUT BEHAVIORAL DISTURBANCE/PARKINSON'S DISEASE
F02.81/ G20	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITH BEHAVIORAL DISTURBANCE/PARKINSON'S DISEASE
F02.80/ G91.2	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITHOUT BEHAVIORAL DISTURBANCE/IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS
F02.81/ G91.2	DEMENTIA IN OTHER DISEASES CLASSIFIED ELSEWHERE WITH BEHAVIORAL DISTURBANCE/IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS