



Primary Care Dementia Practice Toolkit



Screening Tools and Training

Clinical Practice Guides

Billing Code Information

*Care Coordination and Referral
Guides*

Dementia Capable Virginia is an initiative of the
Alzheimer's Disease and Related Disorders Commission and
the **Department for Aging and Rehabilitative Services**

Acknowledgments

The *Virginia Primary Care Dementia Toolkit* has been developed by the Alzheimer’s Disease and Related Disorders Commission (“the Commission”) in order to support the early detection and diagnosis of Virginians experiencing cognitive decline and to improve follow-up care planning and ensure appropriate referrals for patients.

The Commission would like to thank members of the Training Workgroup for their work on the *Toolkit* and associated training materials:

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The *Toolkit* and related materials can be found on the Dementia Capable Virginia page located at <https://vda.virginia.gov/dementiacapableva.htm>. Enquiries about the *Toolkit* can be made to:

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Additional resources for families and patients with cognitive decline are also found here including the Virginia Dementia Road Map, Home Safety Information Toolkit for Dementia, and eighteen Caregiver Tip Sheets addressing specific behavioral and other challenges related to dementia and cognitive impairment.

Welcome to the Primary Care Dementia Practice Toolkit

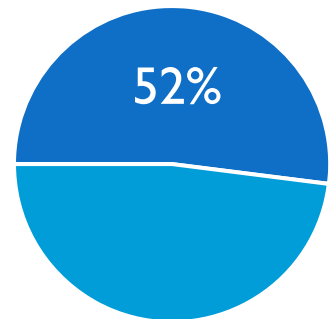
The Primary Care Dementia Practice Toolkit meets an identified need to help primary care practitioners better support their patients living with cognitive decline or dementia as well as their family, supporters, and other caregivers. It is expected to help promote early detection and diagnosis, which are important for allowing patients to make informed decisions about their own futures.

In Virginia in 2020 there were an estimated 150,000 people aged 65 and older living with Alzheimer’s dementia, the most common type of dementia, and this number is expected to rise to around 190,000 over the next four years.¹ Tens of thousands more live with other types of dementia, such as frontotemporal degeneration or Lewy Body dementia, or are under age 65 and living with younger-onset Alzheimer’s. The latest Behavioral Risk Factor Surveillance Survey (BRFSS) found that 9.5% of Virginians over the age of 45 have self-described problems with memory or confusion that are getting worse over time. Only half of these people have shared their concerns with a medical professional.²

Alzheimer’s dementia disproportionately affects Black or African Americans and those of Hispanic origin, with Black or African Americans typically about twice as likely as older White Americans to have Alzheimer’s or other dementias, and older Hispanics about one and a half times as likely as older Whites to have Alzheimer’s or other dementias. Evidence to date suggests that issues such as chronic health conditions, environmental and sociocultural factors rather than genetic differences account for these differences.

For those age 65 and over with Medicare, the Annual Wellness Visit has since 2011 included a required cognitive evaluation. Yet according to the 2021 Alzheimer’s Association Facts and Figures, only 47% of primary care physicians say that screening for cognitive impairment is part of their standard protocol. This is often due to patients either presenting with no symptoms or complaints, or a lack of time. However, establishing baseline

Percent of Virginians with memory problems who have NOT talked to a health care provider about them, 2019



¹ Alzheimer’s Association, 2021 Alzheimer’s Disease Facts and Figures. *Alzheimer’s & Dementia*, 17, 327-406.

² Behavioral Risk Factor Surveillance System, 2019, <https://www.cdc.gov/aging/data/index.htm>.

Dementia Capable Virginia

performance that can be recorded in health records and followed over time can provide valuable insights in the future. And for those experiencing changes, research suggests that most people would like to know what is causing their problems with memory or confusion.

Virginia's Dementia State Plan supports early detection and diagnosis of dementias to allow people to have more control through providing:

- time for patients to plan for their own future
- access to available treatments
- reduced anxiety over symptoms
- opportunity to participate in clinical trials

among other benefits. The State Plan also supports training and education for the workforce, including the primary care workforce, to better meet the needs of all Virginians living with dementia or cognitive decline.

Screening, diagnosis and care should ideally involve four steps:

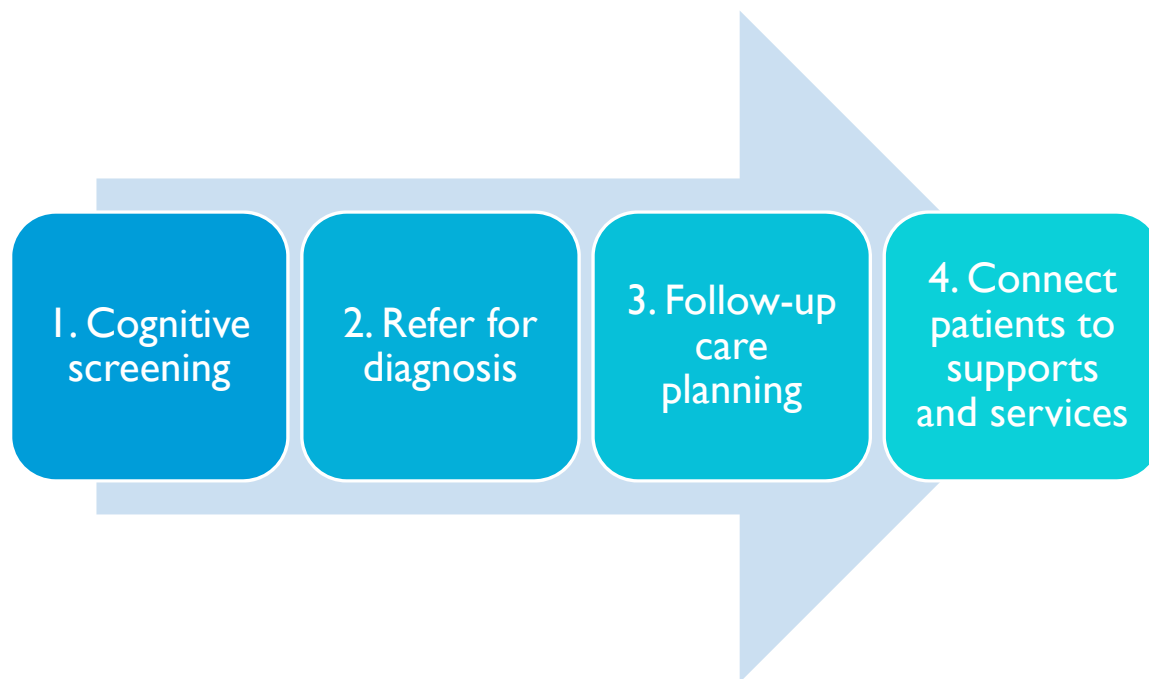


Table of Contents

Acknowledgments	2
How to Use the Toolkit	7
Step 1: Cognitive Screening	9
Clinical Provider Practice Tool	11
Mini-Cog	17
SLUMS Examination	19
AD8 Dementia Screening Interview	21
Step 2: Refer for Diagnosis	23
Memory Assessment Centers Serving Virginians	23
Step 3: Follow-up Care Planning	27
Billing for Dementia Care Planning	28
After a Diagnosis	29
Care Coordination Practice Tool	33
Community Organization Practice Tool	37
Step 4: Connect Patients with Services and Supports	41
General Assistance and Referrals	42
Virginia’s Network of Area Agencies on Aging	42
Organizational Websites	46
Information and Documents	46
Resources for Legal and Advance Care Planning	47
Resources on Other Dementias	47

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How to use the *Toolkit*

Step 1 Cognitive Screening

Clinicians utilize one of the screening tools available in the Toolkit to screen patients at regular intervals, such as during the Medicare Annual Wellness visit. The *Toolkit* includes several validated screening instruments, instructions for their use and links to training videos.



Step 2 Refer for Diagnosis

Primary care physicians are strongly encouraged to refer patients to specialists for diagnosis such as neurologists or memory assessment centers. Treatments and disease trajectories can differ depending on the etiology of the symptoms, so it is important to diagnose the disease (Alzheimer's, frontotemporal degeneration, etc.) rather than the symptoms (dementia). The *Toolkit* includes a link to the network of memory assessment centers serving Virginia.



Step 3 Follow-up Care Planning

Primary care physicians are responsible for follow-up care and care planning for most people living with dementia or cognitive decline in Virginia. Once the patient is diagnosed, primary care physicians can make use of Medicare billing codes for care planning detailed in the *Toolkit*, and use one or more of the Care Practice Guides to inform that process. Care planning includes:



- Medication therapy and management
- Maximize patient abilities
- Care partner/caregiver education and support
- Health, wellness and engagement
- Home and personal safety
- Legal planning
- Advance care planning

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This *Toolkit* provides several tools to aid in screening for cognitive decline, for care planning and post-diagnostic care, and for provision of appropriate referrals to services in the community. Planning for life with dementia is complicated and bewildering for most people, but with these tools, providers can help smooth the road.

The *Toolkit* includes links to brief training videos designed with the busy clinician in mind. These are available on demand for many of the specific screening instrument as well as for more general training in care coordination and planning.

Step 4 Connect Patients with Services and Supports

Primary Care Physicians are a primary source of information for patients and care partners, particularly as they adjust to life with cognitive decline. The Toolkit includes a starter list of key resources in the community for patients and their supporters. **At a minimum**, all patients should be provided with contact information for their local Area Agency on Aging (included at the back of this toolkit or at vda.virginia.gov/aaamap.htm) and the Alzheimer's Association's 24/7 Helpline on 800-272-3900 or the alz.org website.





Step I: Cognitive Screening

Tools and Related Training Materials

- **Clinical Provider Practice Tool**
- **Mini-Cog**
- **SLUMS**
- **AD-8**

Another option is the **Montreal Cognitive Assessment (MOCA)**. Certification is required to access and use this test in clinical settings. More information on mocatest.org.

Training Materials can all be found at this weblink unless otherwise indicated:

<https://DFAmerica.org/training-videos>

General

- Introduction to Cognitive Screening and Administration (22 min)
- Communicating Cognitive Assessment Results (17 min)
- Delivering a Diagnosis (9 min)

Mini-Cog Administration and Scoring (minicog.com)

- Administration/demonstration (2 videos, 4 mins each)
- How to use and score (15 min)

SLUMS Administration and Scoring

- Administration/demonstration (6 min)
- How to use and score (10 min)

MoCA Administration and Scoring (Certification required at mocatest.org)

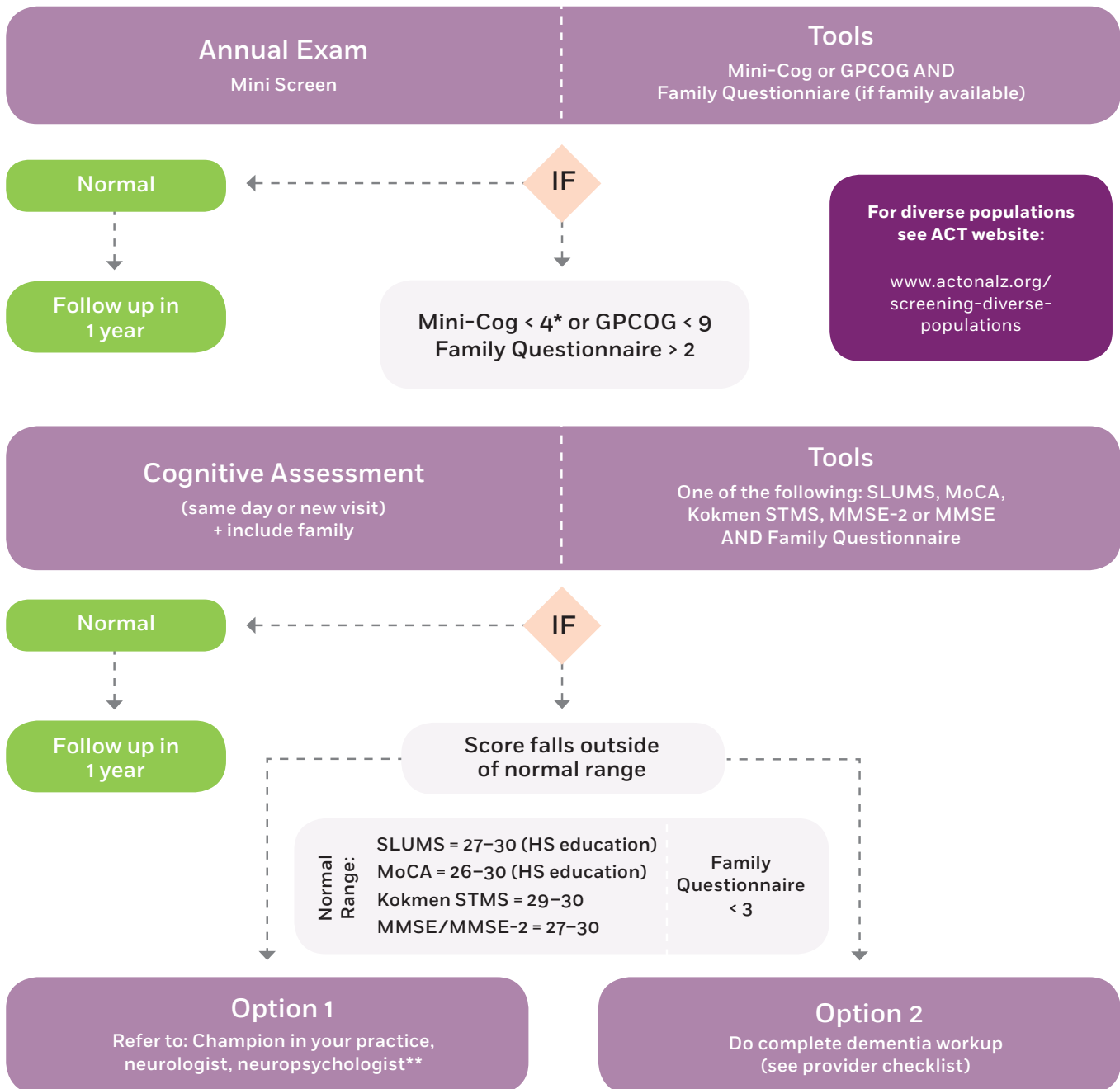
- Administration/demonstration (14 min)
- How to use and score (10 min)

AD-8 Administration and Scoring

- Instructions follow test on p. 17

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Cognitive Impairment Identification



*A cut point of <3 on the Mini-Cog has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.

**Neuropsychological evaluation is typically most helpful for differential diagnosis, determining nature and severity of cognitive functioning, and the development of an appropriate treatment plan. Testing is typically maximally beneficial in the following score ranges:

SLUMS = 18-27
MoCA = 19-27
Kokmen STMS = 19-33
MMSE/MMSE-2 = 18-28

Dementia Work-Up

Follow these diagnostic guidelines in response to patient failure on cognitive screening (e.g., Mini-Cog) or other signs of possible cognitive impairment.

History and Physical

- Person-centered care includes understanding cultural context in which people are living (see www.actonalz.org/culturally-responsive-resources)
- Review onset, course, and nature of memory and cognitive deficits (Alzheimer's Association Family Questionnaire may assist) and any associated behavioral, medical or psychosocial issues
- Assess ADLs and IADLs, including driving and possible medication and financial mismanagement (Functional Activities Questionnaire and/or OT evaluation may assist)
- Conduct structured mental status exam (e.g., MoCA, SLUMS, MMSE)
- Assess mental health (consider depression, anxiety, chemical dependency)
- Perform neurological exam focusing on focal/lateralizing signs, vision, including visual fields, and extraocular movements, hearing, speech, gait, coordination, and evidence of involuntary or impaired movements

Diagnostics

Lab Tests

- Routine: CBC, lytes, BUN, Cr, Ca, LFTs, glucose
- Dementia screening labs: TSH, B12
- Contingent labs (per patient history): RPR or MHA-TP, HIV, heavy metals

Neuroimaging

- CT or MRI when clinically indicated

Neuropsychological Testing

- Indicated in cases of early or mild symptom presentation, for differential diagnosis, determination of nature and severity of cognitive functioning, and/or development of appropriate treatment plan
- Typically maximally beneficial in the following score ranges: MoCA 19-27; SLUMS 18-27; MMSE 18-28

Diagnosis* (Check for relevant CPT® billing codes on p. 24)

Mild Cognitive Impairment

- Mild deficit in one cognitive function: memory, executive, visuospatial, language, attention
- Intact ADLs and IADLs; does not meet criteria for dementia

Alzheimer's Disease

- Most common type of dementia (60–80% of cases)
- Memory loss, confusion, disorientation, dysnomia, impaired judgment/behavior, apathy/depression

Dementia With Lewy Bodies/Parkinson's Dementia

- Second most common type of dementia (up to 30% of cases)
- Hallmark symptoms include visual hallucinations, REM sleep disorder,

parkinsonism, and significant fluctuations in cognition

Frontotemporal Dementia

- Third most common type of dementia primarily affecting individuals in their 50s and 60s
- EITHER marked changes in behavior/personality OR language variant (difficulty with speech production or loss of word meaning)

Vascular Dementia

- Relatively rare in pure form (6-10% of cases)
- Symptoms often overlap with those of AD; frequently there is relative sparing of recognition memory

* The latest DSM-5 manual uses the term "Major Neurocognitive Disorder" for dementia and "Mild Neurocognitive Disorder" for mild cognitive impairment. This ACT on Alzheimer's resource uses the more familiar terminology, as the new terms have yet to be universally adopted.

Follow-Up Diagnostic Visit

- **Include family members, friends, or other care partners**
- Review intervention checklist for Alzheimer's disease and related dementias
- Refer to the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 and **your local Area Agency on Aging 800-552-3402**

Dementia Management

Diagnostic Uncertainty & Behavior Management

Refer to Specialist as Needed

- Neurologist (dementia focus, if possible)
- Neuropsychologist (for full cognitive assessment)
- Geriatric Psychiatrist
- Geriatrician
- Memory Disorders Clinic

Counseling, Education, Support & Planning

Family Meeting

- Refer to social worker or care coordinator

Link to Community Resources

- Refer to the Alzheimer's Association 24/7 Helpline at 1-800-272-3900
- Refer to your local Area Agency on Aging 800-552-3402
- Resources for diverse populations: www.actonalz.org/screening-diverse-populations
- Provide After a Diagnosis¹
- Provide Taking Action Workbook⁶

Stimulation / Activity / Maximizing Function

Daily Mental, Physical and Social Activity

- Provide Living Well Workbook⁵ (includes nonpharm therapies for early to mid stage)
- Adult day services (mid to late stage)
- Sensory aids (hearing aids, pocket talker, glasses)

Safety

Note: Individuals with dementia are vulnerable adults and may be at a higher risk for elder abuse.

Driving

- Counsel on risks
- Refer for driving evaluation²
- Provide At the Crossroads³

Medication Management

- Family oversight or health care professional

Financial / Legal

- Encourage patient to assign durable power of attorney; elder law attorney as needed

Advance Care Planning

Complete Advance Care Plan

- Refer to advance care planning facilitator within system, if available
- Encourage completion of healthcare directive forms⁴

Medications

- Memory: Donepezil, rivastigmine patch, galantamine and memantine (mid-late stage)
- Mood & Behavior: SSRIs or SNRIs
- Avoid/Minimize: Anticholinergics, hypnotics, narcotics, and antipsychotics (not to be used in Lewy Body dementia)

Tools

Mini-Cog

- Public domain: www.mini-cog.com
- Sensitivity for dementia: 76-99%
- Specificity: 89-93%

Montreal Cognitive Assessment (MoCA)

- Public domain: www.mocatest.org/
- Sensitivity: 90% for MCI, 100% for dementia
- Specificity: 87%

St. Louis University Mental Status (SLUMS)

- Public domain: http://medschool.slu.edu/agingsuccessfully/pdfsurveys/slumsexam_05.pdf
- Sensitivity: 92% for MCI, 100% for dementia
- Specificity: 81%

Measure/Assess IADLs

- <http://consultgeri.org/try-this/dementia/issue-d13.pdf>

Family Questionnaire

- www.actonalz.org/pdf/Family-Questionnaire.pdf

Mini-Mental Status Exam (MMSE)

- Copyrighted: www4.parinc.com/Products/Product.aspx?ProductID=MMSE
- Sensitivity: 18% for MCI, 78% for dementia
- Specificity: 100%

Note: The MMSE is not a preferred tool in memory loss assessment. Accumulating evidence shows it is significantly less sensitive than both the MoCA and SLUMS in identifying MCI and early dementia.

Dementia Management Resources

1. After a Diagnosis

www.dfamerica.org/provider-tools/

2. American Occupational Therapy Association

myaota.aota.org/driver_search/index.aspx

3. At the Crossroads: Family Conversations About Alzheimer's Disease, Dementia & Driving

www.thehartford.com/alzheimers

4. National Hospice & Palliative Care Organization

Download state-specific advance directive forms at www.caringinfo.org

5. Living Well Workbook

www.alz.org/mnnd/documents/15_ALZ_Living_Well_Workbook_Web.pdf

6. Taking Action Workbook

www.alz.org/i-have-alz/downloads/lwa_pwd_taking_action_workbook.pdf

References: Provider Checklist

Borson, S., Scanlan, J.M., Chen, P., & Ganguli, M. (2003). The Mini-Cog as a screen for dementia: Validation in a population-based sample. *JAGS*, 51(10), 1451-1454.

Borson S, Scanlan JM, Watanabe J et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 2006; 21: 349-355.

Ismail Z, Rajii TK, Shulman KI. Brief cognitive screening instruments: an update. *Int J Geriatr Psychiatry*. Feb 2010; 25(2):111-20.

Larner, AJ. Screening utility of the Montreal Cognitive Assessment (MoCA): in place of – or as well as – the MMSE? *Int Psychogeriatr*. Mar 2012;24(3):391-6.

Lessig M, Scanlan J et al. Time that tells: Critical clock-drawing errors for dementia screening. *Int Psychogeriatr*. 2008 June; 20(3): 459-470.

McCarten J, Anderson P et al. Screening for cognitive impairment in an elderly veteran population: Acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc* 2011; 59: 309-213.

McCarten J, Anderson P et al. Finding dementia in primary care: The results of a clinical demonstration project. *J Am Geriatr Soc* 2012; 60: 210-217.

Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *J Am Geriatr Soc*. Apr 2005;53(4):695-699.

Scanlan J & Borson S. The Mini-Cog: Receiver operating characteristics with the expert and naive raters. *Int J Geriatr Psychiatry* 2001; 16: 216-222.

Tariq SH, Tumosa N, Chibnall JT, et al. Comparison of the Saint Louis University mental status examination and the mini-mental state examination for detecting dementia and mild neurocognitive disorder—a pilot study. *Am J Geriatr Psychiatry*. Nov 2006;14(11):900-10.

Tsoi K, Chan J et al. Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Intern Med*. 2015; E1-E9.

Increasing Disclosure of Dementia Diagnosis

Divergence Between Common Perceptions About Dementia Diagnosis and Published Data

Physicians have cited many barriers to diagnosing dementia, including doubts about the value of diagnosis given limited treatment options, concern over risk of misdiagnosis, and lack of knowledge of local dementia support services.⁷ However, based on published data, perceptions that disclosure of dementia diagnosis is not preferred or causes psychological distress among individuals and family members should be challenged.

A majority of patients want to know if they have Alzheimer's Disease (AD)

A recent 5-country survey⁹ examining public attitudes about AD found that more than 80% of all adults (N=2,678) and 89% of US adults (N=639) responded that if they had memory or confusion symptoms, they would go to a doctor to determine if the cause was AD. This US finding is consistent with previously published reports over the last 2 decades.^{10,11}

“ In gaining knowledge and developing a treatment plan, individuals may realize that they can take an active role in managing the illness, enhancing a sense of self-efficacy where before they might have felt helpless.”

Most family members appreciate the benefits of diagnosis

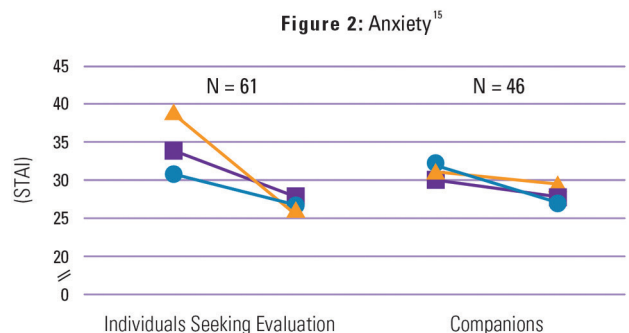
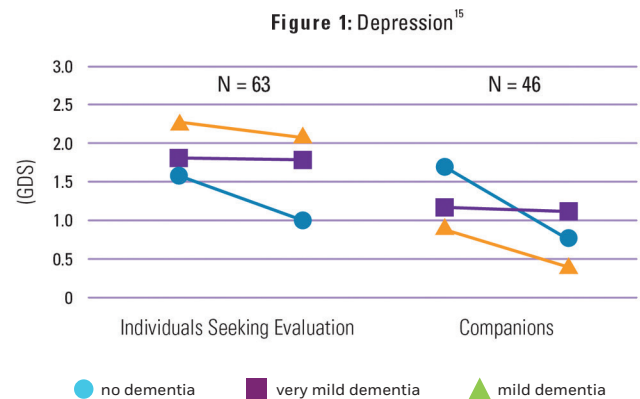
Connell and colleagues surveyed 178 adults who had a family member with AD.

- More than 75% of family members rated the following benefits of diagnosis as being very or extremely important: 1) let family know what was wrong with relative; 2) allowed family to get information about AD; and 3) allowed family to plan for the future.
- Only 6% of all respondents strongly agreed that “it is easier to not know what the diagnosis is.”

Diagnosis does not cause psychological stress in most patients and their families

Physician conjecture that a dementia diagnosis may lead to depression or even suicide has been reported.¹² Empirical findings on the issue are primarily limited to retrospective or review studies in populations with comorbid depression, a well-known risk factor for suicide.^{13,14} To examine psychological stress, Carpenter and colleagues evaluated 90 individuals and their companions before a dementia evaluation and after dementia disclosure using the Geriatric Depression Scale (GDS) and the State-Trait Anxiety Inventory (STAI).¹⁵

- No clinically significant changes were noted in depressive symptoms in either the persons diagnosed with dementia or their companion (Figure 1).
- Anxiety decreased or remained unchanged after diagnostic feedback for most groups (Figure 2).



References: Increasing Disclosure of Dementia Diagnosis

1. Markle GB 4th. Telling the diagnosis of Alzheimer's disease. *N Eng J Med.* 1993;328(10):736.
2. Gordon M, Goldstein D. Alzheimer's disease. To tell or not to tell. *Can Fam Physician.* 2001;47:1803-1806, 1809.
3. Bamford C, Lamont S, Eccles M, et al. Disclosing a diagnosis of dementia: a systematic review. *Int J Geriatr Psychiatry.* 2004;19(2):151-169.
4. Carpenter B, Dave J. Disclosing a dementia diagnosis: a review of opinion and practice, and a proposed research agenda. *Gerontologist.* 2004;44(2):149-158.
5. Elson P. Do older adults presenting with memory complaints wish to be told if later diagnosed with Alzheimer's disease? *Int J Geriatr Psychiatry.* 2006;21(5):419-425.
6. Connell CM, Roberts JS, McLaughlin SJ, Carpenter BD. Black and white adult family members' attitudes toward a dementia diagnosis. *J Am Geriatr Soc.* 2009;57(9):1562-1568.
7. Bradford A, Kunik ME, Schulz P, Williams SP, Singh H. Missed and delayed diagnosis of dementia in primary care: prevalence and contributing factors. *Alzheimer Dis Assoc Disord.* 2009;23(4):306-314.
8. Gibson AK, Anderson KA. Difficult diagnoses: Family caregivers' experiences during and following the diagnostic process for dementia. *Am J Alzheimers Dis Other Dement.* 2011;26(3):212-217.
9. Harvard School of Public Health, Alzheimer's Europe. Value of knowing - Research - Alzheimer Europe. Value of Knowing. Available at: <http://www.alzheimer-europe.org/Research/Value-of-knowing>. Accessed October 13, 2011.
10. Turnbull Q, Wolf AMD, Holroyd S. Attitudes of elderly subjects toward "truth telling" for the diagnosis of Alzheimer's disease. *J Geriatr Psychiatry Neurol.* 2003;16(2):90-93.
11. Holroyd S, Snustad DG, Chalifoux ZL. Attitudes of older adults' on being told the diagnosis of Alzheimer's disease. *J Am Geriatr Soc.* 1996;44(4):400-403.
12. Kissel EC, Carpenter BD. It's all in the details: physician variability in disclosing a dementia diagnosis. *Aging Ment Health.* 2007;11(3):273-280.
13. Draper B, Peisah C, Snowdon J, Brodaty H. Early dementia diagnosis and the risk of suicide and euthanasia. *Alzheimers Dement.* 2010;6(1):75-82.
14. Seyfried LS, Kales HC, Ignacio RV, Conwell Y, Valenstein M. Predictors of suicide in patients with dementia. *Alzheimers Dement.* 2011;7(6):567-573.
15. Carpenter BD, Xiong C, Porensky EK, et al. Reaction to a dementia diagnosis in individuals with Alzheimer's disease and mild cognitive impairment. *J Am Geriatr Soc.* 2008;56(3):405-412.



Step 1: Three Word Registration

Look directly at person and say, “Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now.” If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

The following and other word lists have been used in one or more clinical studies.¹⁻³ For repeated administrations, use of an alternative word list is recommended.

Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Banana	Leader	Village	River	Captain	Daughter
Sunrise	Season	Kitchen	Nation	Garden	Heaven
Chair	Table	Baby	Finger	Picture	Mountain

Step 2: Clock Drawing

Say: “Next, I want you to draw a clock for me. First, put in all of the numbers where they go.” When that is completed, say: “Now, set the hands to 10 past 11.”

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

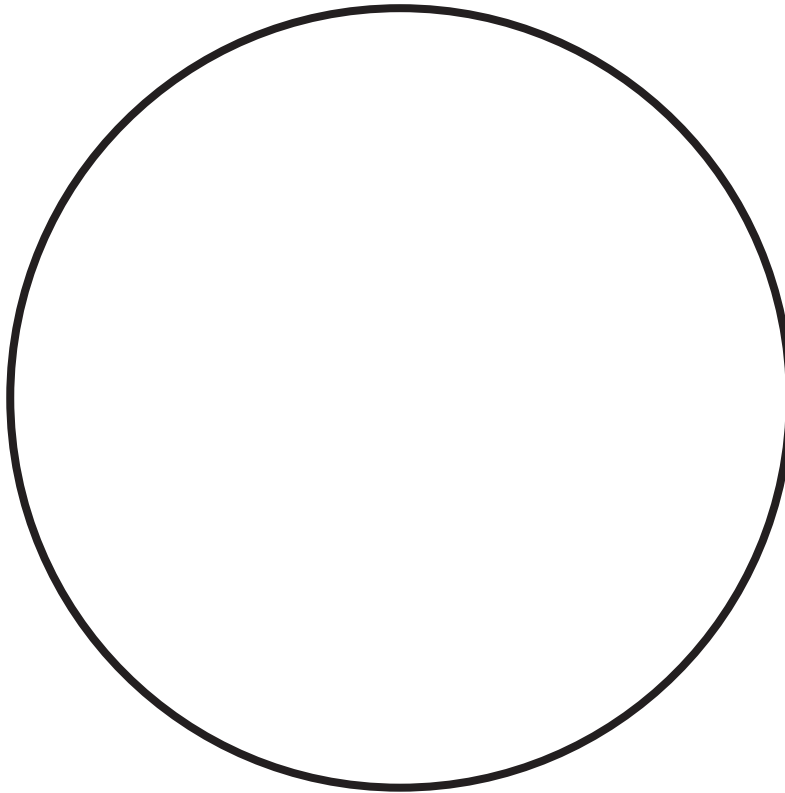
Step 3: Three Word Recall

Ask the person to recall the three words you stated in Step 1. Say: “What were the three words I asked you to remember?” Record the word list version number and the person’s answers below.

Word List Version: _____ Person’s Answers: _____

Scoring

Word Recall: _____ (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock Draw: _____ (0 or 2 points)	Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points.
Total Score: _____ (0-5 points)	Total score = Word Recall score + Clock Draw score. A cut point of <3 on the Mini-Cog™ has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.



References

1. Borson S, Scanlan JM, Chen PJ et al. The Mini-Cog as a screen for dementia: Validation in a population-based sample. *J Am Geriatr Soc* 2003;51:1451-1454.
2. Borson S, Scanlan JM, Watanabe J et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 2006;21: 349-355.
3. Lessig M, Scanlan J et al. Time that tells: Critical clock-drawing errors for dementia screening. *Int Psychogeriatr*. 2008 June; 20(3): 459-470.
4. Tsoi K, Chan J et al. Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Intern Med*. 2015; E1-E9.
5. McCarten J, Anderson P et al. Screening for cognitive impairment in an elderly veteran population: Acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc* 2011; 59: 309-213.
6. McCarten J, Anderson P et al. Finding dementia in primary care: The results of a clinical demonstration project. *J Am Geriatr Soc* 2012; 60: 210-217.
7. Scanlan J & Borson S. The Mini-Cog: Receiver operating characteristics with the expert and naive raters. *Int J Geriatr Psychiatry* 2001; 16: 216-222.

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
___/3
___/3
___/5
___/2
___/4
___/2
___/8

1 1. What day of the week is it?

1 2. What is the year?

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.

1 How much did you spend?

2 How much do you have left?

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

7. What were the five objects I asked you to remember? 1 point for each one correct.

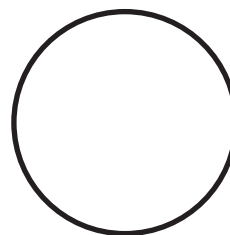
8. I am going to give you a series of numbers and I would like you to give them to me backwards. For example, if I say 42, you would say 24.

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.

2 Hour markers okay

2 Time correct



1 10. Please place an X in the triangle.



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

LESS THAN HIGH SCHOOL EDUCATION

27-30	NORMAL	25-30
21-26	MILD NEUROCOGNITIVE DISORDER	20-24
1-20	DEMENTIA	1-19

CLINICIAN'S SIGNATURE _____

DATE _____

TIME _____

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			

The AD8 Administration and Scoring Guidelines

A spontaneous self-correction is allowed for all responses without counting as an error.

The questions are given to the respondent on a clipboard for self-administration or can be read aloud to the respondent either in person or over the phone. It is preferable to administer the AD8 to an informant, if available. If an informant is not available, the AD8 may be administered to the patient.

When administered to an informant, specifically ask the respondent to rate change in the patient.

When administered to the patient, specifically ask the patient to rate changes in his/her ability for each of the items, **without** attributing causality.

If read aloud to the respondent, it is important for the clinician to carefully read the phrase as worded and give emphasis to note changes due to cognitive problems (not physical problems). There should be a one second delay between individual items.

No timeframe for change is required.

The final score is a sum of the number items marked “Yes, A change”.

Interpretation of the AD8 (Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, *Neurology* 2005;65:559-564)

A screening test in itself is insufficient to diagnose a dementing disorder. The AD8 is, however, quite sensitive to detecting early cognitive changes associated many common dementing illness including Alzheimer disease, vascular dementia, Lewy body dementia and frontotemporal dementia.

Scores in the impaired range (see below) indicate a need for further assessment. Scores in the “normal” range suggest that a dementing disorder is unlikely, but a very early disease process cannot be ruled out. More advanced assessment may be warranted in cases where other objective evidence of impairment exists.

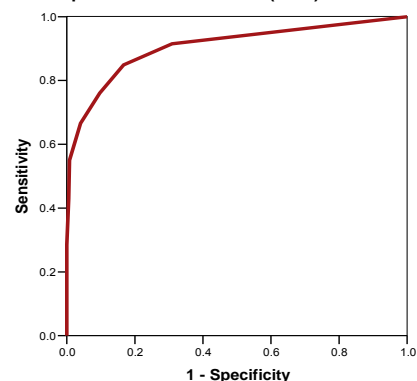
Based on clinical research findings from 995 individuals included in the development and validation samples, the following cut points are provided:

- 0 – 1: Normal cognition
- 2 or greater: Cognitive impairment is likely to be present

Administered to either the informant (preferable) or the patient, the AD8 has the following properties:

- Sensitivity > 84%
- Specificity > 80%
- Positive Predictive Value > 85%
- Negative Predictive Value > 70%
- Area under the Curve: 0.908; 95%CI: 0.888-0.925

Receiver Operator Characteristics (ROC) curve for AD8



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Step 2: Refer for Diagnosis

Memory Assessment Centers Serving Virginians

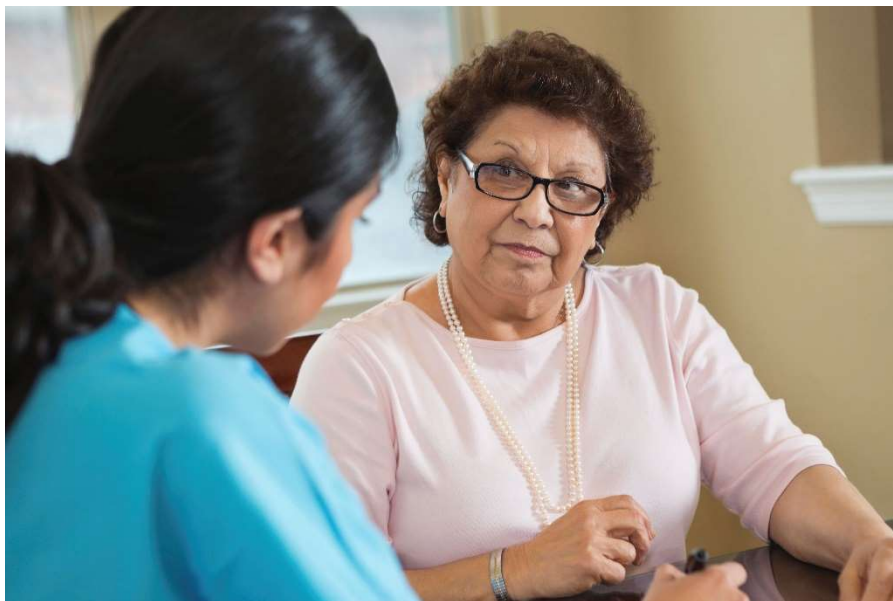
It is considered best practice to refer to a specialist memory clinic for full diagnostic workup if indicated by performance on one of the screening tools provided in Step 1 Cognitive Screening. At times, the nearest memory clinic may be in a neighboring state.

Memory Assessment Center	Telephone/ Fax
CHAPEL HILL, NC	
University of North Carolina Memory Disorders Clinic 194 Finley Golf Course Road Chapel Hill, NC 27517 https://www.med.unc.edu/neurology/divisions/memory-and-cognitive-disorders-1/	919.966.4401 (tel) 984.974.2285 (fax)
CHARLOTTESVILLE	
Memory Disorders Clinic University of Virginia Health System 1221 Lee St Charlottesville, VA 22908 https://uvahealth.com/services/alzheimers-memory-disorders	434.924.2706 (tel) 434.924.9068 (fax)

Memory Assessment Center	Telephone/ Fax
EASTON, MD	
The Samuel & Alexia Bratton Neurocognitive Clinic 545 Cynwood Lane Easton, MD 21601	410.820.5191 (tel) 410.820.4997 (fax)
MORGANTOWN, WV	
Memory Health Clinic Rockefeller Neuroscience Institute 8 Medical Center Drive Morgantown, WV 26505 https://wvumedicine.org/rni/memoryhealthclinic/	304.293.3962 (tel) 304.293.8724 (fax)
NORFOLK	
Glennan Center for Geriatrics and Gerontology Memory Consultation Clinic Eastern Virginia Medical School 825 Fairfax Ave, Suite 201 Norfolk, VA 23507 https://www.evms.edu/patient_care/specialties/glennan_center_for_geriatrics_and_gerontology/	757.446.7040 (tel) 757.446.7049 (fax)
RICHMOND	
VCU Health System 1300 East Marshall St Richmond, VA 23298 https://www.vcuhealth.org/geriatrics	804.828.0281 (tel) 804.828.3983 (fax)
SALEM (for veterans)	
Salem Veterans Administration – Memory Assessment Center 1970 Roanoke Blvd Salem, VA 24153 https://www.va.gov	540.982.2463 (tel) Extension 2930 540.224.1976 (fax)

Memory Assessment Center	Telephone/ Fax
ROANOKE	
<p>Carilion Clinic Center for Healthy Aging 2001 Crystal Spring Rd, Suite 302 Roanoke, VA 24014 https://www.carilionclinic.org/center-healthy-aging</p>	<p>540.981.7653 (tel) 540.981.7469 (fax)</p>
SYKESVILLE, MD	
<p>Senator William and Ellen Proxmire Neurocognitive Clinic 710 Obrecht Road Sykesville, MD 21784 https://srcarecenter.com/community/copper-ridge/</p>	<p>410.552.3211 (tel) 410.795.2807 (fax)</p>
WAKE FOREST, NC	
<p>Kulynych Memory Assessment Clinic Atrium Health Wake Forest Baptist 1 Medical Center Blvd Winston-Salem, NC 27103 https://www.wakehealth.edu/locations/clinics/k/kulynych-memory-assessment-clinic?utm_source=GMB&utm_medium=Organic&utm_campaign=AHWFB</p>	<p>336.713.8250 (tel) 336.716.9253 (physicians referral line)</p>
WASHINGTON, DC	
<p>Georgetown University Memory Disorders Program 3800 Reservoir Rd NW Washington, DC 20057 https://neurology.georgetown.edu/patientcare/memorydisordersprogram/#</p>	<p>202.444.8525 (tel) 877.245.1499 (fax)</p>

Memory Assessment Center	Telephone/ Fax
WASHINGTON, DC	
<p>George Washington Medical Faculty Associates Memory Clinic 22nd & I Sts NW, 3rd Floor Washington, DC 20037 https://gwdocs.com/specialties/memory-clinic/new-patients</p>	<p>202.741.2870 (tel)</p>
WILLIAMSBURG	
<p>Riverside Center for Excellence in Aging and Lifelong Health 460 McLaws Circle, Suite 110 Williamsburg, VA 23185 https://www.riversideonline.com/lifelong-health-and-aging/lifelong-health-and-aging/resources/center-for-excellence-in-aging-and-lifelong-health</p>	<p>757.220.4751 (tel) 757.220.4756 (fax)</p>





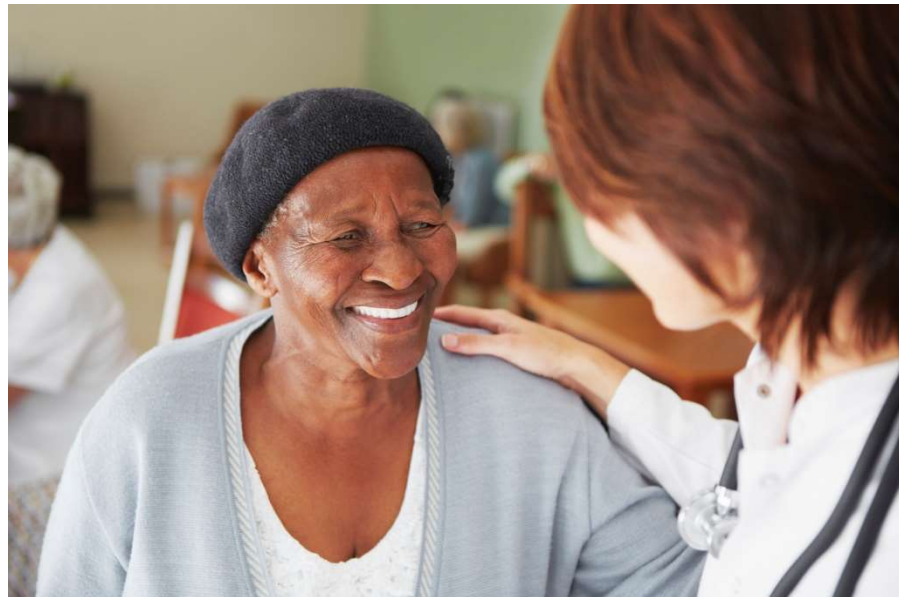
Step 3: Follow-Up Care Planning

Billing for Dementia Care Planning

After a Diagnosis

Care Coordination Practice Tool

Community Organization Practice Tool



Billing for Dementia Care Planning

CPT® code 99783

CPT® code 99783 allows any practitioner eligible to provide evaluation and management service to bill for clinical visits for patients with Alzheimer’s disease or a related disorder that result in a written care plan. There are several required elements to the care planning session:

- An independent historian
- A multidimensional assessment that includes cognition, function and safety
- Evaluation of neuropsychiatric and behavioral symptoms
- Review and reconciliation of medications
- Assessment of the needs of the patient’s caregiver

The Alzheimer’s Association has published *Cognitive Assessment and Care Planning Services: Alzheimer’s Association Expert Task Force Recommendations and Tools for Implementation*. This free guide to CPT® code 99783 includes suggested measures to support the care-planning process, a table of ICD-10-CM diagnostic codes that may be used to support the use of care planning, and a table of codes that cannot be used on the same day of service. This document is available here:

<https://alz.org/media/Documents/cog-impair-assess-care-plan-code.pdf>

Billing for other dementia-related services

The National Alzheimer’s Disease Resource Center (NADRC) of the Administration for Community Living has compiled a *Guide to Billing Codes for Dementia Services* that includes CPT® code 99783 as well as codes to support other clinical services for people living with dementia and their caregivers, including:

- Cognitive Assessment and Care Planning
- Advance Care Planning
- Evaluation and Management (E&M)
- Evaluation, Services and Cognitive Testing for Rehabilitative Medicine
- Health Behavior Assessment and Intervention (HBAI)

This free Guide is available here:

https://pblob1storage.blob.core.windows.net/public/nadrc/docs/Guide_Billing_Codes_Dementia_Services_508_RO_Final_12-29-20.docx



After a Diagnosis

Once you receive a diagnosis of dementia or Alzheimer's disease, it's important to consider what to do next. Start by talking with your physician.



Your Physician Visit

When diagnosed with Alzheimer's or a related dementia, you should expect specific, helpful information from your physician. He or she will:

- Explain the diagnosis and disease process.
ASK: What can I expect in the near future and over time?
- Tell you about possible treatments, so together, you can select what is best for you.
ASK: What are the available treatments that do not involve medications?
- Directly discuss medication options for memory loss, behavior changes, or both.
ASK: What are the risks and benefits? What are the side effects?

- Explain ways to maintain your lifestyle and stay engaged and active.
ASK: What can I do to maintain my health and wellness?
ASK: What activities should I consider?
- Tell you where to get more information about the disease and services in your community.
ASK: Where can I turn locally to learn more about the disease and find services available to me?
- Schedule your next visit and let you know how often he/she wants to see you.
ASK: What can my care partner learn that will be helpful to both of us?

What Should You Know and Do?

Dementia Friendly America offers these action steps and tips to consider soon after diagnosis. Share this information with those in your life who will be alongside you on this journey. Take advantage of the support and resources available so you can live life to the fullest.

After Your Diagnosis

After receiving your diagnosis, start thinking about next steps.

- Learn all you can about the disease and what to expect now and into your future.

Call the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or visit www.alz.org
- Learn what steps to take to maintain your health and wellness. Two practical resources to check out are:

Living Well Workbook

www.alz.org/mnnd/documents/15_ALZ_Living_Well_Workbook_Web.pdf

Taking Action Workbook

www.alz.org/i-have-alz/downloads/lwa_pwd_taking_action_workbook.pdf

- Consider joining a support group with others who are living with the disease.

Call the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or visit www.alz.org for support groups in your community

- Learn how you can continue to live safely in your home.

Visit the Safety Center at www.alz.org/safety

- Learn about safe driving tips.

Visit the Dementia and Driving Resource Center at www.alz.org/driving

- Decide who you want to be part of your support team (see page 3).

What Should Those Who Care About You Do?

Care Partner

A care partner (or caregiver) can be a spouse, friend, partner, adult child, neighbor, faith group member, or anyone who helps care for another person. As a care partner:

Learn all you can.

- Learn about the disease and how it may affect and change your life as well as the life of the person you are helping.
- Learn tips for communicating patiently and supportively with the person who has memory loss.

Take care of you.

- Schedule regular medical check-ups.
- Share the diagnosis with others so they understand the new role you're taking on and can provide support.



Share this information with your care partner

Plan ahead.

- Make legal, financial, and other life plans with the person you're caring for as long as they are able.

Ask for help.

- Let family and friends know what they can do to help you.

Find and use local resources.

- Consider respite care, caregiver education and caregiver consultation services. Contact the Alzheimer's Association, 800-272-3900, your local Area Agency on Aging 800-552-3402, or VirginiaNavigator.org to connect with resources in your community.

Family Members

When someone is diagnosed with Alzheimer's or dementia, it affects everyone in the family. As a family member:

Learn all you can.

- Learn about the disease and educate others in your family.

Find and use community resources.

- Take advantage of community resources such as family support groups and education programs.

Organize a family meeting.

- Talk about the diagnosis and next steps.



Share this information with your care partner

Plan ahead.

- Talk with your family member about his or her financial and legal plans and health care wishes. Two resources are:

Advance Care Planning Resources

www.nhdd.org/public-resources/#where-can-i-get-an-advance-directive

End of Life Decisions

www.alz.org/national/documents/brochure_endoflifedecisions.pdf

Care Coordinator

A care coordinator* may be available to you in your clinic or medical facility. A care coordinator will:

- Help you and your family understand your disease, treatment, and what to expect in the future.
- Coordinate a comprehensive assessment of your current condition, explain the results to you, and develop the right care plan with you and your care partner.
- Help you with medications, recommend ways to maximize your activities, and review home safety – now and in the future.
- Connect you and your care partner with community services and resources.
- Check in with you and your care partner to stay on top of new issues that come up.
- Be your first contact with the clinic or other medical facility handling your care.

**Speak to your physician to learn if you have access to a care coordinator or similar professional at your clinic or medical facility. If one is not available, care consultation services may be available in your community. Contact the Alzheimer's Association at 1-800-272-3900 to connect with a care consultant.*

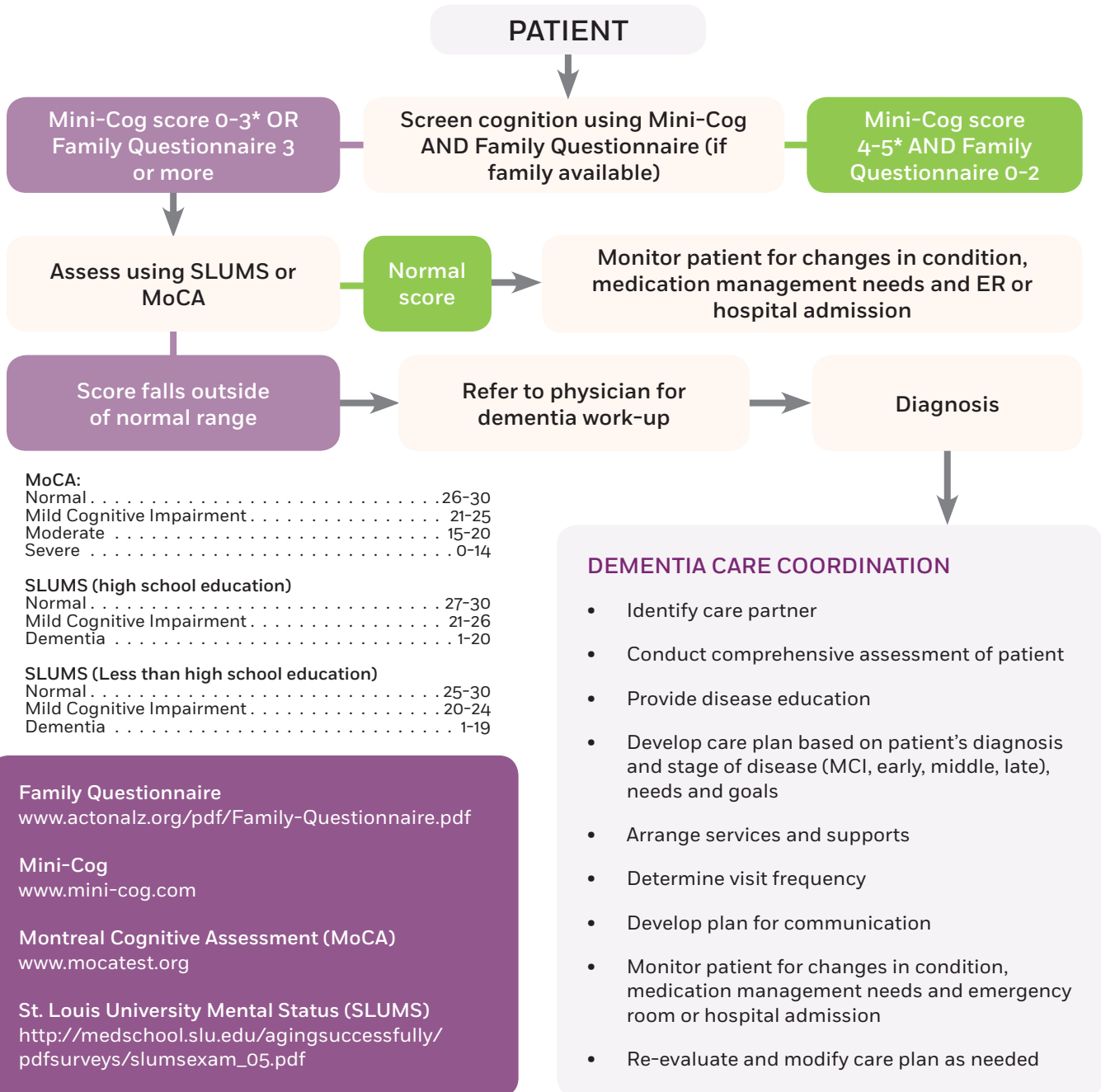
Community Supports

To stay as healthy and independent as possible, it's important to know about and to use local services and resources. Get connected to an expert in your community by contacting the Eldercare Locator at www.eldercare.gov or 1-800-677-1116 to locate and arrange for support, such as indoor and outdoor chore services, home-delivered meals, transportation, and assistance with paying for prescription drugs.

Culturally responsive resources: www.actonalz.org/culturally-responsive-resources

As your journey with dementia or Alzheimer's continues, keep taking steps to make sure your needs and preferences are met and that you and those who care about you get the best support possible...now and into the future.

Cognitive Impairment Identification and Dementia Care Coordination**



*A cut point of <3 on the Mini-Cog has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.

**The latest DSM-5 manual uses the term “Major Neurocognitive Disorder” for dementia and “Mild Neurocognitive Disorder” for mild cognitive impairment. This ACT on Alzheimer’s resource uses the more familiar terminology, as the new terms have yet to be universally adopted.

Dementia Care Plan Checklist

With the patient and care partner, create a person-centered plan to meet identified needs, address barriers and set goals based on the patient's values.

Conduct comprehensive assessment of patient (include care partner).

- Person-centered care includes understanding cultural context in which people are living (www.actonalz.org/cultural-competency-awareness)
- Screening and diagnosis of diverse populations (www.actonalz.org/screening-diverse-populations)

Educate the patient and care partner about diagnosis and disease process.

- Contact Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or visit www.alz.org
- Refer to Taking Action Workbook (www.alz.org/i-have-alz/downloads/lwa_pwd_taking_action_workbook.pdf)
- Culturally responsive resources (www.actonalz.org/culturally-responsive-resources)

Develop care plan based on patient's diagnosis and stage of disease, needs and goals.

Medication Therapy and Management

- Discuss prescribed and over-the-counter medications
- Refer to pharmacist for medication review and to simplify medication regimen
- Work with patient's health care team to create a medication management plan
- Educate patient and care partner on medication management aids (pill organizers, dispensers, alarms)

Patients in middle and late stages will require medication oversight from care partner or health care professional.

Maximize Abilities

- Work with patient's health care team to treat conditions that may worsen symptoms or lead to poor outcomes, including depression and co-existing medical conditions (e.g., diabetes, blood pressure, sleep dysregulation)
- Encourage patient to stop smoking and/or limit alcohol
- Refer to occupational therapy to maximize ability for self care
- Encourage lifestyle changes that may reduce disease symptoms or slow their progression (e.g., establish routines for person with disease and care partner)

Care Partner Education and Support (if patient has a care partner)

- Refer to support groups, respite care, caregiver education and training programs, and caregiver coaching services.
- Call the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or visit www.alz.org
- Contact your local Area Agency on Aging 800-552-3402 and VirginiaNavigator.org
- Contact the Eldercare Locator at www.eldercare.gov or 1-800-677-1116

Health, Wellness and Engagement

- Encourage regular physical activity and healthy eating
- Contact the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 for engagement programs
- Encourage socialization and participation in activities the patient enjoys

See *Living Well Workbook for recommendations* (www.alz.org/mnnd/documents/15_ALZ_Living_Well_Workbook_Web.pdf).

Dementia Care Plan Checklist (cont.)

Home and Personal Safety

- Refer to an occupational therapist and/or physical therapist to address fall risk, sensory/mobility aids and home modifications
- Obtain MedicAlert® + Alzheimer's Association Safe Return® (call 1-800-272-3900 or visit www.alz.org/care/dementia-medic-alert-safe-return.asp)
- Refer to occupational therapy for driving evaluation (http://myaota.aota.org/driver_search/index.aspx)
- Educate patient and care partner about safe driving (see *At the Crossroads* at www.thehartford.com/advance50/publications-on-aging or Dementia and Driving Resource Center at www.alz.org/driving)

Legal Planning

- Refer to an elder law attorney <https://www.vaela.org>
- Encourage patient to assign durable power of attorney and health care directive

Advance Care Planning

- Encourage patient and family to discuss and document preferences for care when patient is not able to make decisions (download state specific advance directive forms at www.caringinfo.org)
- Call the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or visit www.alz.org
- Contact Honoring Choices Virginia <https://honoringchoices-va.org/learn/resources>

In middle and late stages, discuss palliative care and hospice with patient and care partner.

Arrange services and supports.

- Contact your local Area Agency on Aging 800-552-3402 to get connected to aging services such as financial assistance, home delivered meals, transportation, adult day services and long-term care options
- Contact the Alzheimer's Association 24/7 Helpline at 1-800-272-3900 or www.alz.org for information, education and support
- Culturally responsive supports and resources: www.actonalz.org/culturally-responsive-resources
- VirginiaNavigator.org to find supports and services near you

Determine visit frequency and plan for communication.

- Schedule regular check-ins with the patient and care partner (consider monthly face-to-face visits until relationship is established)
- Educate patient and care partner to contact care coordinator for changes in condition, assistance with medication management and emergency room or hospital admission

Re-evaluate and modify care plan as needed.

Mild Cognitive Impairment and Stages of Alzheimer's: Symptoms and Duration of Disease

Alzheimer's symptoms vary. The information below provides a general idea of how abilities change during the course of the disease. Not everyone will experience the same symptoms nor progress at the same rate. Find additional information on the stages of Alzheimer's at: www.alz.org/alzheimers_disease_stages_of_alzheimers.asp

Mild Cognitive Impairment (MCI)

www.mayoclinic.com/health/mild-cognitive-impairment/DS00553

- Mild forgetfulness
- Increasingly overwhelmed by making decisions, planning steps to accomplish a task or interpreting instructions
- Mild difficulty finding way in unfamiliar environments
- Mild impulsivity and/or difficulty with judgment
- Family and friends notice some or all of these symptoms
- IADLs only mildly compromised; ADLs are intact

Alzheimer's Disease Early Stage 2-4 years in duration

- Increased short-term memory loss
- Difficulty keeping track of appointments
- Trouble with time/sequence relationships
- More mental energy needed to process information
- Trouble multi-tasking
- May write reminders, but lose them
- Mild mood and/or personality changes
- Increased preference for familiar things
- IADLs more clearly impaired; ADLs slightly impaired

Alzheimer's Disease Middle Stage 2-10 years in duration

- Significant short-term memory loss; long-term memory begins to decline
- Fluctuating disorientation
- Diminished insight
- Changes in appearance
- Learning new things becomes very difficult
- Restricted interest in activities
- Declining recognition of acquaintances, relatives
- Mood and behavioral changes
- Alterations in sleep and appetite
- Wandering
- Loss of bladder control
- IADLs and ADLs broadly impaired

Alzheimer's Disease Late Stage 1-3 years in duration

- Severe disorientation to time and place
- No short-term memory
- Long-term memory fragments
- Loss of speech
- Difficulty walking
- Loss of bladder/bowel control
- No longer recognizes family members
- Inability to survive without total care

Resources

Borson, S., Scanlan, J.M., Chen, P., & Ganguli, M. (2003). The Mini-Cog as a screen for dementia: Validation in a population-based sample. *JAGS*, 51(10), 1451-1454.

Borson S, Scanlan JM, Watanabe J et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 2006; 21: 349-355.

Ismail Z, Rajii TK, Shulman KI. Brief cognitive screening instruments: an update. *Int J Geriatr Psychiatry*. Feb 2010; 25(2):111-20.

Larner, AJ. Screening utility of the Montreal Cognitive Assessment (MoCA). *Int Psychogeriatr*. Mar 2012;24(3):391-6.

Lessig M, Scanlan J et al. Time that tells: Critical clock-drawing errors for dementia screening. *Int Psychogeriatr*. 2008 June; 20(3): 459-470.

McCarten J, Anderson P et al. Screening for cognitive impairment in an elderly veteran population: Acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc* 2011; 59: 309-213.

McCarten J, Anderson P et al. Finding dementia in primary care: The results of a clinical demonstration project. *J Am Geriatr Soc* 2012; 60: 210-217.

Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *J Am Geriatr Soc*. Apr 2005;53(4):695-699.

Scanlan J & Borson S. The Mini-Cog: Receiver operating characteristics with the expert and naive raters. *Int J Geriatr Psychiatry* 2001; 16: 216-222.

Tariq SH, Tumosa N, Chibnall JT, et al. Comparison of the Saint Louis University mental status examination and the mini-mental state examination for detecting dementia and mild neurocognitive disorder-a pilot study. *Am J Geriatr Psychiatry*. Nov 2006;14(11):900-10.

Tsoi K, Chan J et al. Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Intern Med*. 2015; E1-E9.



Community Organization Practice Tool

Supporting Clients with Memory Concerns

When client has diagnosis:

- Offer care consultation or refer to the Alzheimer's Association 24/7 Helpline for care consultation
- Provide education about diagnosis and disease process

When client has memory concerns, but no diagnosis:

- Conduct screening (see Flow Chart)
- Encourage client to make appointment with primary care physician for memory loss work-up

Identify client's needs using organization's assessment tool.

Provide or arrange supports based on client's needs, diagnosis and stage of disease (if known).

Counseling and Support

- Individual and family counseling
- Person-centered care includes understanding cultural context in which people are living (www.actonalz.org/cultural-competency-awareness)
- Support groups for person with disease

Care Partner Education and Support (if client has a care partner)

- Support groups, respite care, caregiver education and training programs, and caregiver coaching services
- Provide information on maintaining health and well-being (visit www.alz.org/care)
- Provide education on behaviors and stages (visit www.alz.org/care)

Health, Wellness and Engagement

- Engagement programs (call the Alzheimer's Association 24/7 Helpline at 1-800-272-3900)
- Adult day
- Exercise and healthy eating programs

Home and Personal Safety

- Refer to an occupational therapist and/or physical therapist to address fall risk, sensory/mobility aids and home modifications
- Obtain MedicAlert® + Alzheimer's Association Safe Return® (call 1-800-272-3900 or visit www.alz.org/care/dementia-medic-alert-safe-return.asp)
- Refer to occupational therapy for driving evaluation (http://myaota.aota.org/driver_search/index.aspx)

Medication Therapy and Management

- Refer to health care provider to create a medication management plan
- Refer to pharmacist for medication review and to simplify medication regimen
- Educate client and care partner on medication management aids (pill organizers, dispensers, alarms)

Legal Planning

- Refer to an elder law attorney
- Encourage client to assign durable power of attorney and health care directive

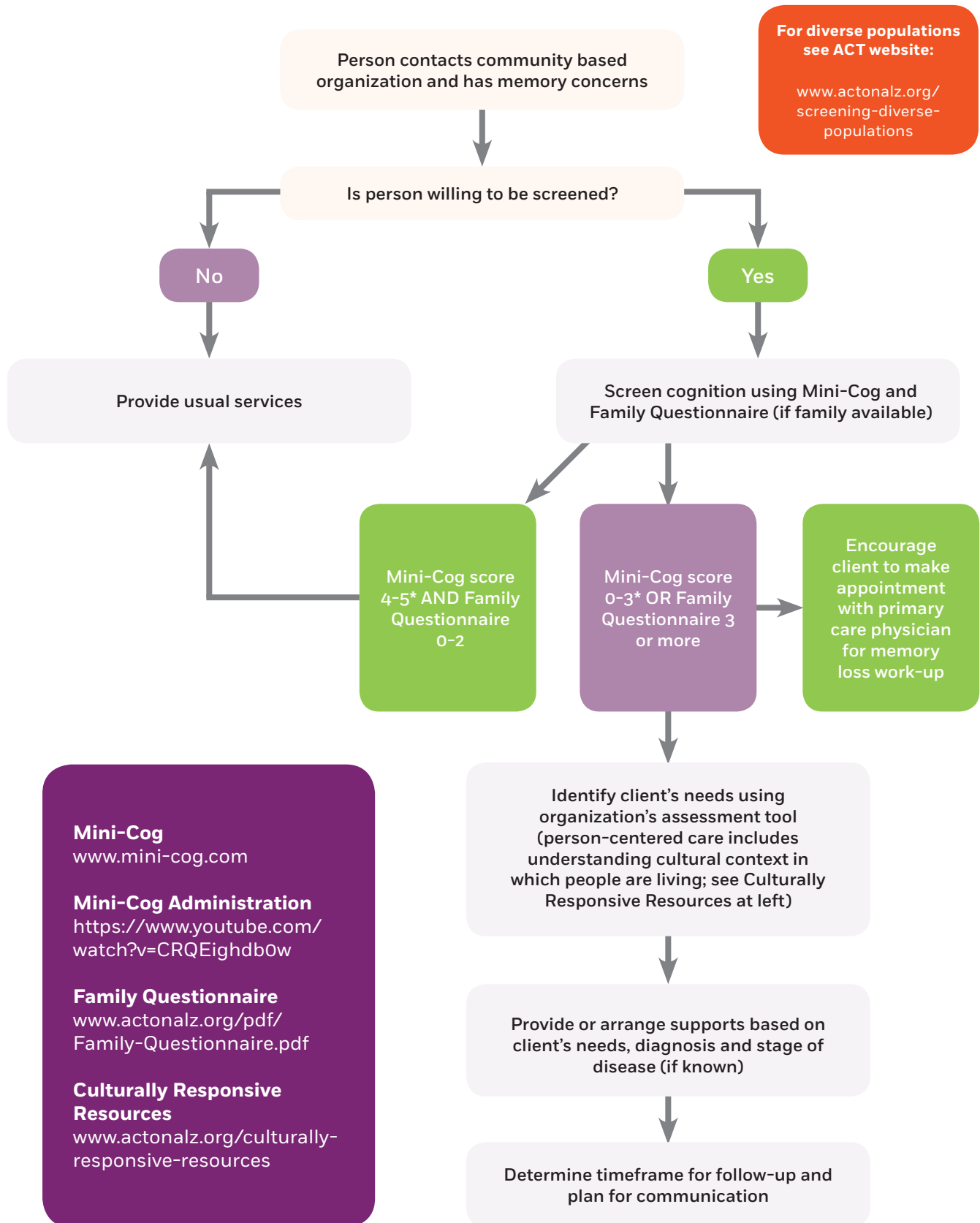
Advance Care Planning

- Encourage client and family to discuss and document preferences for care (download state specific advance directive forms at www.caringinfo.org)

Contact your local Area Agency on Aging 800-552-3402 to get connected to aging services such as financial assistance, home delivered meals, transportation, adult day services and long-term care options.

Determine timeframe for follow-up and plan for communication.

Cognitive Screening Flow Chart



Administration of Screening Tools

Mini-Cog

The Mini-Cog is a five-point cognitive screening tool that incorporates three-word verbal recall and a clock draw. The Mini-Cog requires the person to remember three words. Immediately following the presentation of the words, the person is asked to draw the face of a clock and set the hands at 10 past 11. After they draw the clock, the person is asked to recall the three words. One point is awarded for each word recalled without assistance. The person receives two points if every number on the clock is present and evenly spaced and the hands are positioned at 11 and 2. No points are awarded if either hand is set incorrectly or if numbers are missing, duplicated, or clearly spaced unevenly.

Studies have shown that the word choice may increase the sensitivity of the screening with the most sensitive word combination being “leader, season, table.” In addition, the clock draw is particularly more sensitive when staff use phrasing that is purposely abstract by instructing the person to set the time to “10 past 11” as opposed to saying “eleven ten.” For scoring purposes, the length of the hands does not matter and full credit should be awarded even when the hand pointing to the 2 is shortest (assuming accuracy with number placement).

Mini-Cog Scoring: 4-5* pass; 0-3* fail

*A cut point of <3 on the Mini-Cog has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.

Mini-Cog References

Borson, S., Scanlan, J.M., Chen, P., & Ganguli, M. (2003). The Mini-Cog as a screen for dementia: Validation in a population-based sample. *JAGS*, 51(10), 1451-1454.

Borson S, Scanlan JM, Watanabe J et al. Improving identification of cognitive impairment in primary care. *Int J Geriatr Psychiatry* 2006; 21: 349-355.

Ismail Z, Rajii TK, Shulman KI. Brief cognitive screening instruments: an update. *Int J Geriatr Psychiatry*. Feb 2010; 25(2):111-20.

Larner, AJ. Screening utility of the Montreal Cognitive Assessment (MoCA): *Int Psychogeriatr*. Mar 2012;24(3):391-6.

Lessig M, Scanlan J et al. Time that tells: Critical clock-drawing errors for dementia screening. *Int Psychogeriatr*. 2008 June; 20(3): 459-470.

McCarten J, Anderson P et al. Screening for cognitive impairment in an elderly veteran population: Acceptability and results using different versions of the Mini-Cog. *J Am Geriatr Soc* 2011; 59: 309-213.

McCarten J, Anderson P et al. Finding dementia in primary care: The results of a clinical demonstration project. *J Am Geriatr Soc* 2012; 60: 210-217.

Nasreddine ZS, Phillips NA, Bedirian V, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. *J Am Geriatr Soc*. Apr 2005;53(4):695-699.

Scanlan J & Borson S. The Mini-Cog: Receiver operating characteristics with the expert and naive raters. *Int J Geriatr Psychiatry* 2001; 16: 216-222.

Tariq SH, Tumosa N, Chibnall JT, et al. Comparison of the Saint Louis University mental status examination and the mini-mental state examination for detecting dementia and mild neurocognitive disorder—a pilot study. *Am J Geriatr Psychiatry*. Nov 2006;14(11):900-10.

Tsoi K, Chan J et al. Cognitive tests to detect dementia: A systematic review and meta-analysis. *JAMA Intern Med*. 2015; E1-E9.

Family Questionnaire

If a family member accompanies the person, staff may want to ask for their input. The National Chronic Care Consortium and the Alzheimer’s Association’s Family Questionnaire is a tool that can be used to obtain the family member’s insight on a person’s cognitive functioning. The questionnaire asks six questions of family members who have regular contact with the person.

Family Questionnaire Scoring: Not at all = 0; Sometimes = 1; Frequently = 2
A score 3 or greater suggests the need for additional evaluation.
www.actonalz.org/pdf/Family-Questionnaire.pdf

If the Mini-Cog or Family Questionnaire indicates that the person may have memory loss, refer the client to their primary care physician or a specialist (e.g., neurologist, geriatric psychiatrist, geriatrician) for a complete memory loss work-up.

Mild Cognitive Impairment and Stages of Alzheimer's: Symptoms and Duration of Disease*

Alzheimer's symptoms vary. The information below provides a general idea of how abilities change during the course of the disease. Not everyone will experience the same symptoms nor progress at the same rate.

Mild Cognitive Impairment (MCI)

- Mild forgetfulness
- Increasingly overwhelmed by making decisions, planning steps to accomplish a task or interpreting instructions
- Mild difficulty finding way in unfamiliar environments
- Mild impulsivity and/or difficulty with judgment
- Family and friends notice some or all of these symptoms
- IADLs only mildly compromised; ADLs are intact

Alzheimer's Disease Early Stage 2-4 years in duration

- Increased short-term memory loss
- Difficulty keeping track of appointments
- Trouble with time/sequence relationships
- More mental energy needed to process information
- Trouble multi-tasking
- May write reminders, but lose them
- Mild mood and/or personality changes
- Increased preference for familiar things
- IADLs more clearly impaired; ADLs slightly impaired

Alzheimer's Disease Middle Stage 2-10 years in duration

- Significant short-term memory loss; long-term memory begins to decline
- Fluctuating disorientation
- Diminished insight
- Changes in appearance
- Learning new things becomes very difficult
- Restricted interest in activities
- Declining recognition of acquaintances, relatives
- Mood and behavioral changes
- Alterations in sleep and appetite
- Wandering
- Loss of bladder control
- IADLs and ADLs broadly impaired

Alzheimer's Disease Late Stage 1-3 years in duration

- Severe disorientation to time and place
- No short-term memory
- Long-term memory fragments
- Loss of speech
- Difficulty walking
- Loss of bladder/bowel control
- No longer recognizes family members
- Inability to survive without total care

Resources

Mild Cognitive Impairment (MCI)

www.mayoclinic.com/health/mild-cognitive-impairment/DS00553

Stages of Alzheimer's

www.alz.org/alzheimers_disease_stages_of_alzheimers.asp

*The latest DSM-5 manual uses the term "Major Neurocognitive Disorder" for dementia and "Mild Neurocognitive Disorder" for mild cognitive impairment. This ACT on Alzheimer's resource uses the more familiar terminology, as the new terms have yet to be universally adopted.





Step 4: Connect Patients with Services and Supports

General Assistance and Referrals

Virginia’s Network of Area Agencies on Aging

Organizational Websites

Information and Documents

Resources for Legal and Advance Care Planning

Resources on Other Dementias

GENERAL ASSISTANCE AND REFERRALS

Virginia 2-1-1	211
Department for Aging and Rehabilitative Services (DARS)	1.800.552.3402
DARS Dementia Services	804.662.9154
Alzheimer’s Association 24/7 Helpline	1.800.272.3900
Alzheimer’s and related Dementias Education and Referral Center (ADEAR Center)	1.800.438.4380

VIRGINIA'S NETWORK OF AREA AGENCIES ON AGING

Supporting all individuals age 60 and over, and adults living with a disability

Agency Name/Website	Counties/Cities served	Phone number
Appalachian Agency for Senior Citizens http://www.aasc.org/	Buchanan, Dickenson, Russell, Tazewell	276.964.4915 1.800.656.2272
Arlington Agency on Aging www.arlingtonva.us/aging	Arlington	703.228.1700
Bay Aging http://www.bayaging.org/	Essex, Gloucester, King and Queen, King William, Lancaster, Mathews, Middlesex, Northumberland, Richmond (County), Westmoreland	804.758.2386 toll free: 1.866.758.2386
Central Virginia Alliance for Community Living (CVAAL) https://www.cvaal.org	Amherst, Appomattox, Bedford, Campbell, Lynchburg	434.385.9070
City of Alexandria Aging and Adult Services https://www.alexandriava.gov/Aging	Alexandria	703.746.5999

Virginia Primary Care Dementia Practice Toolkit

Agency Name/Website	Counties/Cities served	Phone number
Crater District Area Agency on Aging http://www.cdaaa.org	Colonial Heights, Dinwiddie, Emporia, Greenville, Hopewell, Petersburg, Prince George, Surry, Sussex	804.732.7020 toll free: 1.888.732.7020
District Three Governmental Cooperative http://www.district-three.org	Bland, Bristol, Carroll, Galax, Grayson, Smyth, Washington, Wythe	276.783.8157 toll free: 1.800.541.0933
Eastern Shore Area Agency on Aging/Community Action Agency https://www.esaaa-caa.net/	Accomack, Northampton	757.442.9652 toll free: 1.800.452.5977
Fairfax Area Department of Family Services https://www.fairfaxcounty.gov/familyservices/older-adults	Fairfax (City/ County), Falls Church	703.324.7948
Healthy Generations Area Agency on Aging http://www.raaa16.org	Caroline, Fredericksburg, King George, Spotsylvania, Stafford	540.371.3375 toll free: 1.800.262.4012
Jefferson Area Board for Aging (JABA) https://www.jabacares.org	Albemarle, Charlottesville, Fluvanna, Greene, Louisa, Nelson	434.817.5222
Lake Country Area Agency on Aging http://www.lcaaa.org/	Brunswick, Halifax, Mecklenburg	434.447.7661 toll free: 1.800.252.4464

Dementia Capable Virginia

Agency Name/Website	Counties/Cities served	Phone number
LOA—Local Office on Aging http://www.loaa.org/	Alleghany, Botetourt, Covington, Craig, Roanoke (City/County), Salem	540.345.0451
Loudoun County Area Agency on Aging https://www.loudoun.gov/1104/Area-Agency-on-Aging	Loudoun	703.777.0257
Mountain Empire Older Citizens http://www.meoc.org/	Lee, Norton, Scott, Wise	276.523.4202 toll free: 1.800.252.6362
New River Valley Agency on Aging www.nrvaoa.org	Floyd, Giles, Montgomery, Pulaski, Radford	540.980.7720 1.866.260.4417
Peninsula Agency on Aging http://www.paainc.org/	Hampton, James City, Newport News, Poquoson, Williamsburg, York	757.873.0541
Piedmont Senior Resources Area Agency on Aging https://www.psraaa.org	Amelia, Buckingham, Charlotte, Cumberland, Lunenburg, Nottoway, Prince Edward	434.767.5588 toll free: 1.800.995.6918
Prince William Area Agency on Aging https://www.pwcgov.org/government/dept/aaa/Pages/default.aspx	Manassas, Manassas Park, Prince William	703.792.6374

Virginia Primary Care Dementia Practice Toolkit

Agency Name/Website	Counties/Cities served	Phone number
Rappahannock-Rapidan Community Services https://www.rrcsb.org/	Culpeper, Fauquier, Madison, Orange, Rappahannock	540.825.3100
Senior Connections (The Capital Area Agency on Aging) http://www.seniorconnections-va.org	Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, Richmond (City)	804.343.3000 toll free: 1.800.989.2286
Senior Services of Southeastern Virginia http://www.ssseva.org/	Chesapeake, Franklin, Isle of Wight, Norfolk, Portsmouth, Southampton, Suffolk, Virginia Beach	757.461.9481
Shenandoah Area Agency on Aging http://www.shenandoahaaa.com	Clarke, Frederick, Page, Shenandoah, Warren, Winchester	540.635.7141 toll free: 1.800.883.4122
Southern Area Agency on Aging http://www.southernaaa.org/	Danville, Franklin, Henry, Martinsville, Patrick, Pittsylvania	276.632.6442 toll free: 1.800.468.4571
Valley Program for Aging Services http://valleyprogramforagingservices.org	Augusta, Bath, Buena Vista, Harrisonburg, Highland, Lexington, Rockbridge, Rockingham, Staunton, Waynesboro	540.949.7141 toll free: 1.800.868.8727

ORGANIZATIONAL WEBSITES

- Alzheimer’s Association: www.alz.org or 800-272-3900
- National Institutes of Health: www.alzheimers.gov
- Area Agency on Aging: www.vda.virginia.gov/aaamap.htm or 800-552-3402
- Eldercare Locator (US Administration on Aging): www.eldercare.gov or 800-677-1116
- Virginia Association for Hospices & Palliative Care: www.virginiahospices.org

INFORMATION AND DOCUMENTS

- Dementia Capable Virginia vda.virginia.gov/dementiacapableva.htm
 - Virginia Dementia Road Map: A Guide for People Impacted By Dementia
 - Safety Concerns for People with Dementia—An Info Kit
 - Caregiver Tip Sheets: 18 tip sheets in English and Spanish addressing specific challenges of dementia caregiving
- At the Crossroads: Family Conversations about Alzheimer’s, Dementia and Driving and other resources on dementia and driving: www.thehartford.com/resources/mature-market-excellence/dementia-driving
- Caring for a Person with Alzheimer’s Disease: Your Easy-to-Use Guide from the National Institute on Aging and other dementia-related publications in English and Spanish: order.nia.nih.gov
- Communication: Tips for Successful Communication During All Stages of Alzheimer’s Disease: www.alz.org/national/documents/brochure_communication.pdf
- Dementia and Driving Issues: www.alz.org/care/alzheimers-dementia-and-driving.asp
- Home Safety for People with Alzheimer’s Disease: www.nia.nih.gov/alzheimers/publication/home-safety-people-alzheimers-disease/introduction
- Living Well with MCI or Early Dementia: www.actonalz.org/pdf/Living-Well.pdf
- Living with Alzheimer’s—Taking Action Workbook: www.alz.org/getmedia/dage2ce1-d73c-437a-be7c-d5761afd06e9/taking-action-workbook
- MedicAlert+Safe Return: www.alz.org/help-support/caregiving/safety/medicalert-with-24-7-wandering-support or 800-432-5378

RESOURCES FOR LEGAL AND ADVANCE CARE PLANNING

- Conversation Starter Kit For Families and Loved Ones of People with Alzheimer’s Disease or Other Forms of Dementia—To help people with dementia have conversations with their family members about how they want to live at the end of their lives—about the care they want, and the care they don’t want. It is designed to be used in the early stages of dementia.
www.theconversationproject.org/wp-content/uploads/2016/05/TCP_StarterKit_Alzheimers.pdf
- Virginia Advance Directives—Offers information on advance directives related to mental health and other conditions such as dementia, forms and resources:
www.virginiaadvancedirectives.org
- Honoring Choices Virginia—Offers information, tools and resources for various end-of-life choices: www.honoringchoices-va.org
- Virginia Legal Aid—Offers free information and resources for Powers of Attorney, Advance Directives and other elder law topics: www.valegalaid.org/issues/elder-law
- Virginia Poverty Law Center—Offers a senior legal helpline and links to referral services:
vplc.org/learn/resources/
- Senior Legal Helpline: 844-802-5910

RESOURCES ON OTHER DEMENTIAS

- Alzheimer’s Disease and Related Dementias, National Institute on Aging and the Alzheimer’s and related Dementias Education and Referral Center (ADEAR): www.nia.nih.gov/health/alzheimers or 800-438-4380
- The Association for Frontotemporal Degeneration: www.theaftd.org
- Frontotemporal Disorders: Information for Patients, Families and Caregivers:
catalog.ninds.nih.gov/ninds/product/Frontotemporal-Disorders-Information-for-Patients-Families-and-Caregivers/19-AG-6361
- Lewy Body Dementia Association: www.lbda.org
- Lewy Body Dementia—Information for Patients, Families and Caregivers:
catalog.ninds.nih.gov/ninds/product/Lewy-Body-Dementia-Information-for-Patients-Families-and-Professionals/18-AG-7907
- Vascular contributions to cognitive impairment and dementia:
www.nia.nih.gov/health/vascular-contributions-cognitive-impairment-and-dementia

**For more information or provider resources, visit
vda.virginia.gov/dementiacapableva.htm**