

# (PBL) Dementia and Alzheimer's Disease

Brian Unwin, MD, FAAFP



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The logo for FMX, consisting of the letters 'FMX' in a bold, white, sans-serif font, positioned on the right side of an orange horizontal bar with diagonal white stripes.

## Brian Unwin, MD, FAAFP

Section Chief, Geriatrics and Palliative Medicine, Carilion Clinic, Roanoke, Virginia

Since his retirement from military service in 2013, Dr. Unwin has worked primarily as a nursing home physician and regional geriatrics consultant, with an emphasis on caring for patients who have dementia. He embraces a palliative care philosophy to meet the needs of these patients and their families. With more than 25 years of experience teaching family medicine and geriatrics, he has taught in U.S. Army family medicine residencies; at the Uniformed Services University of the Health Sciences, Bethesda, Maryland; and in programs affiliated with the Virginia Tech Carilion School of Medicine, Roanoke. In 2011, he received the William P. Clements Award for Excellence in Education as the Uniformed Services University's outstanding military educator. He was also awarded the Army Surgeon General's "A" Proficiency Designation for excellence in clinical care. He was chosen to be the U.S. Department of Defense representative to the National Alzheimer's Project Act from 2012-2013. In addition, he was selected as the AAFP's representative to the American Academy of Neurology (AAN) and American Psychiatric Association (APA) Dementia Measure Development Work Group.

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## Learning Objectives

1. Practice applying new knowledge and skills gained from Dementia and Alzheimer's Disease sessions, through collaborative learning with peers and expert faculty.
2. Identify strategies that foster optimal management of dementia &/or Alzheimer's within the context of professional practice.
3. Formulate an action plan to implement practice changes, aimed at improving patient care.

**FMX**

## Associated Sessions

- Dementia and Alzheimer's Disease

**FMX**

## Highlight Specific Recommendations

- Initiate a multi-tiered evaluation
- Investigate possible causes and contributing factors to the Cognitive Behavioral Syndrome (CBS)
- Expedite and refer atypical cases, or cases with important diagnostic uncertainty.
- Obtain information from an informant
- Evaluate changes in cognition, function (IADL and ADL), mood/neuropsychiatric symptoms, and sensory/motor function

## Highlights (continued):

- Use validated tools to assess cognition
- Obtain neuropsychological evaluation when office-based assessment is not sufficiently informative
- The clinician should obtain an MRI as a first tier approach to aid in establishing cause. If contraindicated—head CT
- Dialogue with patient and care partner

# Communicate

- The name, characteristics and severity of the syndrome
- The disease(s) likely causing the CBS
- The stage of the disease
- What can be expected in the future
- Treatment options and expectations
- Potential Safety concerns
- Medical , psychosocial and community resources for education, care planning and coordination and support services

## The Tool Kit for You and Your Patients



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### COGNITIVE CARE KIT

Prevention  
Long-Term Planning  
Index Visit  
Cognitive Evaluation  
Diagnosis and Disclosure  
Management: Mild to Severe  
Management: Late Stage  
Caregiver Resources  
Related Resources  
Acknowledgment and Feedback



The AAFP Cognitive Care Kit provides free access to selected tools and resources to help physicians, family members, and other caregivers care for individuals with, or at risk for, cognitive impairment. This toolkit includes suggested and additional tools and resources.

- **Suggested** resources are those that the AAFP panel of experts have chosen as the most effective, comprehensive, and evidence-based information.
- **Additional** resources provide additional resources and approaches physicians, patients, families, caregivers and support team members may find useful in providing care for patients with cognitive impairment.

## Service Elements of CPT 99483 (alz.org)

Element	Measure
Cognition-focused evaluation, incl pertinent Hx and exam	Mini-Cog, Short MOCA Evaluation – chief complaint, HPI, review of Medical History, type of cognitive impairment, known allergies, current meds, ROS (including hallucinations, gait, falls, tremor, sleep disturbance), neuro exam, functional status, stage of impairment, assessment of depression
Medical decision making of moderate or high severity as defined by E/M guidelines	
Functional Assessment	ADLs, IADLs, Decision Making Capacity Assessment (able, not able or uncertain)
Standard Instrument to stage dementia	Dementia Severity Rating Scale
Medication Reconciliation and review of high-risk medications	
Evaluation for safety	Safety Assessment Guide and Checklist
Identification, assessment and education of Caregivers	Caregiver Profile Checklist
Advance Care Planning	End of Life Check List
Creation of care plans for behavior, community resources	

**RVU 3.44**

“typically, 50 minutes are face-to-face with the patient and/or family or caregiver.”

## Chief Complaint (Patient #1)

- I’m getting forgetful

## History of Present Illness

- 70 year-old male, retired executive x5 years
- Forgetting things (“I had a great memory!”), now having to keep lists and can’t juggle as many things. It’s bugging him...
- No specific inciting event, ongoing slowly for 3-4 years
- No other family member/friend available to report (ug!)

## Neuro-Cognitive Behavioral HPI

- **Cognitive:** “I still know my stuff”
- **Mood:** No major changes in mood (maybe “restless”)
- **Behavior:** frustrated with lapses
- **Function:** no lapses for managing his affairs (executive functions)
- **Neuro injury (motor/sensory function):** no

## Past Medical History

- PMH: healthy (you rarely see him).
- PSH: appendectomy, knee arthroscopy 10+ years ago for MMT
- Meds: none, not even vitamins ("Why do I need vitamins if I eat healthy?")
- Allergies: none
- Family History: "I have great genes. Everybody just gets old. Relatives all 90+"
- Social: Divorced (x6 years), two "great" children, no grandkids ("Yet..."), "Money is good," volunteers (outdoor clubs, Habitat, etc.), travels
- Diet: "I'm all about the Mediterranean diet."
- Immunizations: up to date
- Sex and Drugs: Not currently active sexually (heterosexual), no high risk behaviors, no drugs, 1-3 glasses of wine a night. No DUI, negative CAGE.
- Education: Masters in Electrical Engineering

## Review of Systems

- Nothing
- Except:
  - Late life dating ("Ug")
  - What lies ahead?
  - Restless...feels he retired too early
  - Denies depression
  - Sleeps well
  - Vision good
  - Meaning to get his hearing checked

## Physical Examination

- Height/weight: normal BMI
- Normal Blood Pressure
- Vision: 20/20 OU
- Hearing (decreased finger rub bilaterally)
- Cardio-Pulmonary: normal
- Musculoskeletal: normal
- Detailed Neurologic Exam: negative
- Geriatric Depression Screen: positive for boredom and emptiness
- Cognitive Testing: 29/30 on the MOCA (forgot one of five words)

## Laboratory/Radiology

- Using “memory loss” as the justification for ordering labs (although you don’t feel you really have to):
  - CBC/CMP/Vitamin B12/Folate/TSH: normal
  - HIV/RPR/Hep C (you learn there was infidelity in the prior marriage, and he has had several recent sexual partners): negative
- You ordered an MRI (which is what the new guideline suggests, although you grumble about it when you do): negative
  - “I always wondered what my brain looked like”

Decision Point / Poll Question:  
What's your diagnosis?

Are you satisfied at this point to say this  
is normal aging with your MOCA  
screening test?

Neurocognitive testing is normal for age

## Highlight Specific Recommendations

- ✓ Initiate a multi-tiered evaluation
- ✓ Investigate possible causes and contributing factors to the Cognitive Behavioral Syndrome (CBS)
  - Expedite and refer atypical cases, or cases with important diagnostic uncertainty.
  - Obtain information from an informant
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## Highlights (continued):

- ✓ Use validated tools to assess cognition
- ✓ Obtain neuropsychological evaluation when office-based assessment is not sufficiently informative
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- ✓ Dialogue with patient and care partner

## Communicate

- The name, characteristics and severity of the syndrome
- The disease(s) likely causing the CBS
- The stage of the disease
- What can be expected in the future
- Treatment options and expectations
- Potential Safety concerns
- Medical , psychosocial and community resources for education, care planning and coordination and support services

# Assessment and Plan

- Normal Aging
  - 'Normal' lapses with preserved function
  - Normal neurocognitive testing for age and educational attainment
  - Perhaps some 'meaning of life' angst
  - Hearing was a little low- agrees to monitor and treat
  - Discussed: volunteering at schools, mentoring, teaching at community college, encouragement of positive lifestyle, adaptive memory techniques
  - Dial-back on his alcohol consumption
  - Keep active physical and COGNITIVE lifestyle ("Use It or Lose It")
  - Education on memory loss and follow up with any worsening
  - Ideally- bring a friend/partner in the future
  - Encouraged him to participate in clinical trials

## Chief Complaint (Patient #2)

- Hospitalization follow-up for 78 yo female

## History of Present Illness

- 78 year-old female, retired homemaker
- Stormy two-week hospitalization for urosepsis complicated by delirium and two week stay in SNF for rehab
- Presents one month after rehab stay with daughter:
  - Per daughter: difficulty with memory (repeating), cooking, and med management (“She’s on so many!”) from past. These issues were present to lesser degree prior to hospital stay
  - Per patient: daughter is being fussy, and things are fine.

## Neuro-Cognitive-Behavioral HPI

- **Cognitive:** As above; but “She knows every Elvis song by heart.”
- **Mood:** “depressed” (per daughter) for a couple of years, worries a lot over last couple of years
- **Behavior:** withdrawn from activities x several years
- **Function:** Car accident (her fault) about a year ago, scammed, difficulty with clutter (“Her house WAS spotless”), sleeping more during the day prior to hospital stay
- **Neuro injury (motor/sensory):** negative for head injury, stroke, etc.

## Past Medical History

- PMH: controlled HTN, controlled HLD, controlled T2DM, no CAD, no ASPVD, no CKD, no CVA
- PSH and Ob/GYN: G1P1 (term uncomplicated vaginal birth)
- Tobacco: no
- ETOH/Drug: "Never!"
- Allergies: none
- Meds: Lisinopril 5mg, Lipitor 10mg, Metformin 500mg bid
- Family History: Siblings with HTN, HLD, T2DM, no early or late onset dementia
- Sex and drugs: 'friendships' with men, not intimate
- Social: Husband died in Vietnam (moved on, but never re-married), daughter, grandchildren, neighbors, church community, clubs. Retired teacher. Money is secure after daughter assumed control
- Education: Bachelors

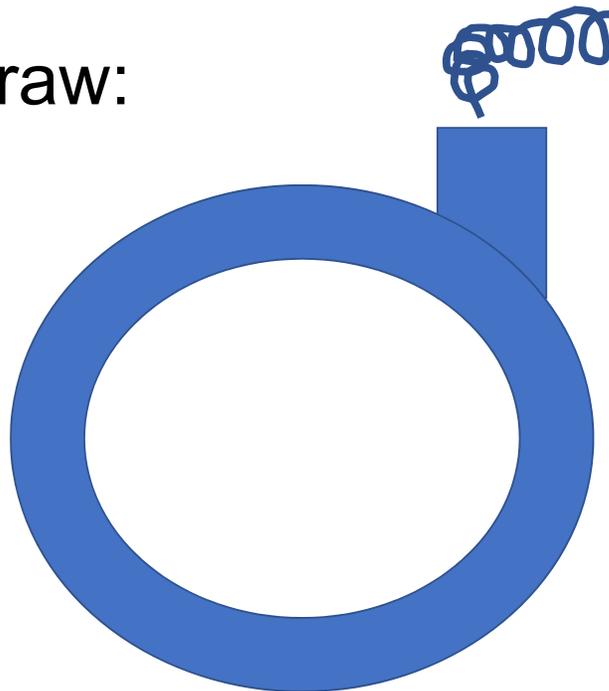
## Review of Systems

- Per patient:
  - No fever, chills, sweats, weight loss or headaches
  - No headaches, vision, hearing, chewing or swallowing difficulties
  - Cardiopulmonary/GI/GU: negative
  - Neuro: denies focal weakness, sensory disturbance, falls
  - Mood, cognition, psych: denies
  - Otherwise negative
- Per daughter:
  - In agreement except multiple 'near misses' with falls and functional lapses
  - Notes that mom frequently calls at night with anxious tone

# Physical Examination

- Height/weight: normal BMI
- General: Impeccably dressed! However, make-up ended at her hat line.
- Normal Blood Pressure
- Vision: 20/100 OU (forgot to bring her glasses), can't read forms without them
- Hearing: normal
- Cardio-Pulmonary: normal
- Musculoskeletal: normal
- Detailed Neurologic Exam: negative for focal deficits
- Geriatric Depression Screen: 0/15
- Cognitive Testing: 15/30 on the MOCA (- memory, concentration, language, visual-spatial, and abstraction)

Her Clock Draw:

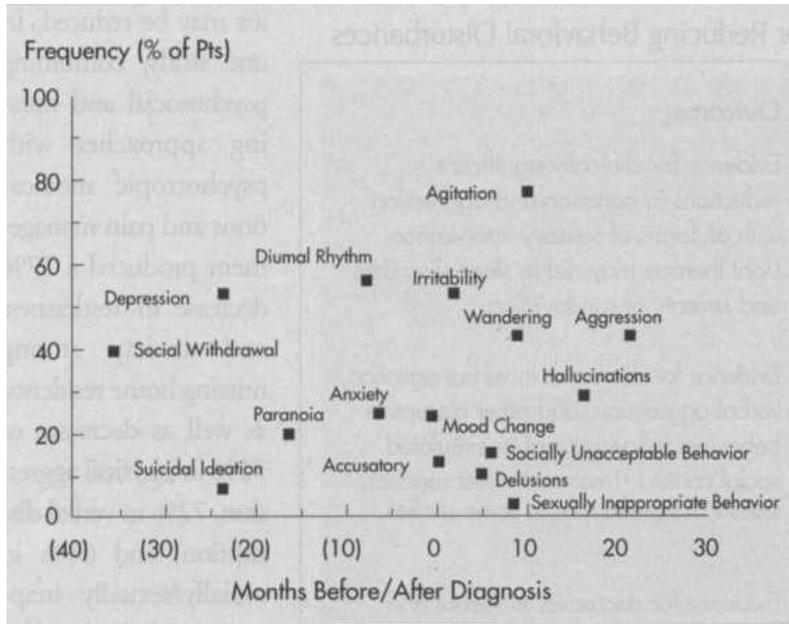


## Laboratory/Radiology

- Using “memory loss” as the justification for ordering labs:
  - CBC/CMP/Vitamin B12/Folate/TSH: normal
  - HIV/RPR/Hep C: negative
- Non-contrast head CT during hospital stay was negative.
- You ordered an MRI because of the unexpected cognitive testing: multiple lacunar infarcts (especially frontal)

Decision Point / Poll Question:  
What's your diagnosis?

# Behavioral Disturbances in Dementia



JAGS. 1996; 44(9):  
1078-1081

## Dementia Screening Tool from the AAFP Cognitive Care Kit

### 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			
<b>TOTAL AD8 SCORE</b>			

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.

## Highlight Specific Recommendations

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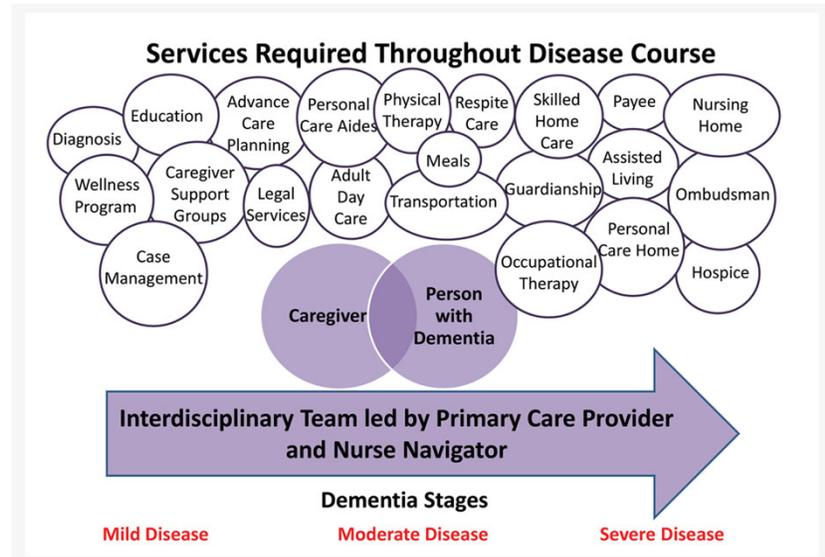
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# Assessment and Plan

- Likely vascular or mixed dementia caused by her underlying risk factors
- Moderate stages of disease due to her functional impairments
- Aggressively manage risk factors and manage environment to slow progression
- Worsening can be expected
- For patient: Safety and Structure
- For daughter: Sanity and Serenity (creating a plan and self-care)
- Safety: medication safety, driving, falls, home management
- Resources (medical, psychosocial and community): depends on where you live
- Care planning: medical, financial and personal

# TWENTY-TWO THINGS YOU CAN DO!!!



Montana Alzheimer's and  
Dementia State Plan:

[http://mtalzplan.org/goals  
-and-recommendations/](http://mtalzplan.org/goals-and-recommendations/)

## Chief Complaint (Patient #3)

- “Follow-up encephalitis”

## History of Present Illness

- 50 year-old male presents with daughter for hospital follow up of encephalitis (Rxd: acyclovir and keppra). Requesting MRI per hospital discharge summary
  - Had fever, altered mental status, left sided weakness—generally resolved
  - Negative head CT and non-specific EEG changes.
  - Told they needed an outpatient MRI.
- Impaired memory, concentration and executive functions since hospitalization.
  - However, he was having problems prior to this with history of complex migraines, frequent paresthesias without headaches, and executive dysfunction
  - Stopped work at age 45 due to mistakes on the job

## Neuro-Cognitive Behavioral HPI

- **Cognitive:** “Forgets everything,” “Fades out”
- **Mood:** depressed, “burden” on his daughter
- **Behavior:** visual hallucinations, nocturia (10+ times/night)
- **Function:** unable to work or perform IADLs
- **Neuro injury (motor/sensory function):** “twitchy” at times, freezing episodes, unsteady, choking spells, dysarthria

## Past Medical History

- PMH: migraines beginning age “late 30s-early 40s.”
  - No hypertension
  - No diabetes
  - No tobacco
  - No hyperlipidemia
  - Not obese (losing weight)
- PSH: ankle fracture from fall (age 42)
- Meds: Keppra for seizure prophylaxis
- NKDA
- Family History: brother and father died from strokes in their 50’s and dementia.
- Social: no tobacco and no drugs

## Physical Examination

- Vitals: normal BP and heart rate
- BMI is normal
- HEENT: slight dysarthria, wet voice
- Cardiopulmonary: normal
- Abdomen and GU: normal and normal rectal exam
- Neurologic
  - Cranial Nerves: intact except as above
  - Motor: weak grip strength right hand, episodic resting and intention tremor
  - Cerebellar: erratic/ataxic gait
  - Sensory: perhaps diminished sensation (attentional problems)
  - Reflexes: non-focal
- Cognition: MOCA 12/30 (patient has associates degree)
- Depression Screen: + PHQ

# Laboratory/Radiology

- From hospital
  - Normal CBC and Chemistry
  - Non-contrast Head CT: no hemorrhage
  - EEG: slowing over right hemisphere
  - CSF: essentially normal
  - B12/Folate/TSH/RPR/HIV: negative
  - ECHO: normal
  - EKG: NSR
  - Carotid studies: negative
  - Thrombophilia screen: negative
  - Autoantibody testing: negative

Decision Point / Poll Question:  
What's your diagnosis?

## This patient had CADASIL (Cerebral autosomal dominant arteriopathy with subcortical infarcts)

- Lots of atypical things here
- Consider CADASIL in young patients with migraine, ischemic episodes, early-onset dementia, unfortunate family history
- MRI picks up the subcortical changes
- Identification helps inform family members
- Mutations in Notch 3 gene on chromosome 19
  - 1-2: 100,000 prevalence
  - Autosomal dominant with high penetrance
  - Degeneration of smooth muscle cells in blood vessels

## Highlight Specific Recommendations

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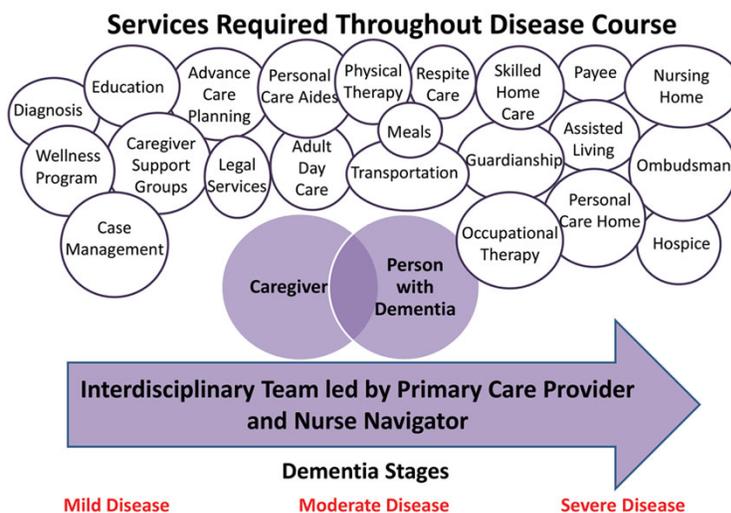
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# Assessment and Plan

- Safety and Structure (Patient)
  - Speech
  - PT/OT
  - Consultants (urology, neurology, psychiatry, rehab)
  - Hip protectors
  - Adult day centers>>>home
- Sanity and Serenity (Daughter)
  - Genetic testing/family planning
  - Built a team
  - Advanced directives
  - Financial planning
  - Support groups
  - Early hospice
  - Clinical trials

## TWENTY-TWO THINGS YOU CAN DO!!!



Montana Alzheimer's and  
Dementia State Plan:

<http://mtalzplan.org/goals-and-recommendations/>

Questions



## Contact Information

- Name: Brian K. Unwin, MD
- Email: [bkunwin@carilionclinic.org](mailto:bkunwin@carilionclinic.org)

# Resources/Supplemental Material

- AAFP Cognitive Care Kit  
<https://www.aafp.org/patient-care/public-health/cognitive-care.html>
- Alzheimer's Association Care Planning Tools:  
<https://alz.org/professionals/healthcare-professionals/care-planning>
- Staff Education: National Council of Certified Dementia Practitioners ([www.nccdp.org](http://www.nccdp.org))
- Mastering difficult discussions: ([www.VitalTalk.org](http://www.VitalTalk.org))
- Advanced Care Planning: [www.respectingchoices.org](http://www.respectingchoices.org)
- Tools for dementia care (Family Practice Management):  
<https://www.aafp.org/news/practice-professional-issues/20190416fpm-dementia.html>