Dementia and Alzheimer’s Disease

Brian Unwin, MD, FAAFP

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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.
Learning Objectives

1. Use evidence-based guidelines to screen and evaluate patients who are symptomatic for cognitive decline for dementia.

2. Identify tools and resources available to the care team, caregivers, and patients about strategies to maintain or improve cognitive health.

3. Use evidence-based guidelines to formulate pharmacologic and non-pharmacologic therapies to help slow the progression of Alzheimer's.

4. Counsel patients and their family members on how to cope with neurologic disorders that result in the loss of cognitive functioning, such as Alzheimer's disease.

Associated Sessions

• (PBL) Dementia and Alzheimer's Disease
Neurodegeneration is Common

1:2 women and 1:3 men will develop dementia, stroke, or parkinsonism in their lifetime

Dementia is Common (www.alz.org)

Everyone Has Ownership of DEMENTIA

- Neurology Workforce Data (http://beta.aan.com/globals/axon/assets/9008.pdf)
  - In 2010, mean wait for new patient = 28 days vs. cardiology (15), ortho (16) and FP (20)
  - Maldistribution (11 neurologists/10,000 in Washington, DC vs 1.78/10000 in Wyoming)
  - 2010: 3.6 geriatricians/10,000 (age 75+)
  - 2040: 1.7 geriatricians/10,000 (age 75+)
- Geriatric Psychiatry Workforce Data
  - 2010: 0.9 geriatric psychiatrists/10,000 (age 75+)
  - 2040: 0.4 geriatric psychiatrists/10,000 (age 75+)
AES Question #1:

What would quality dementia care look like?
A. Patients would receive systematic, comprehensive, bio-psychosocial care
B. There would be impactful treatments to prevent and stop disease progression
C. Families would receive the support and services they need
D. There would be easy, definitive diagnostic testing
E. All of the above

We have a quality problem...

• Disclosure of diagnosis <50% of patients
• 50% get education and support
• <20% receive a functional assessment
• Physician action on impaired drivers <15%
• Maybe 47% get End-of-Life counseling

Alz.org
Neurology 88, May 16, 2017
Make Quality Dementia Care Part of Your Scorecard & Bonus Structure


The Tool Kit for You and Your Patients

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 tool kit includes suggested and additional tools and resources.
Link Quality Care to Evidence Based Tools

Family Practice Management
Jan/Feb 2019

How do we reduce our risk of dementia?

Selected WHO Recommendations for reducing risk of Cognitive impairment

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Quality/Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical activity should be recommended for those with normal cognition</td>
<td>Moderate/Strong</td>
</tr>
<tr>
<td>Physical activity should be recommended for those with MCI</td>
<td>Low/Conditional</td>
</tr>
<tr>
<td>Tobacco cessation should be offered</td>
<td>Low/Strong</td>
</tr>
<tr>
<td>Mediterranean-like diet may be recommended</td>
<td>Moderate/Conditional</td>
</tr>
<tr>
<td>Vitamins B and E, polyunsaturated fatty acids and multi-complex supplementation should not be recommended to reduce risk</td>
<td>Moderate/Strong</td>
</tr>
<tr>
<td>Cease harmful drinking</td>
<td>Moderate/Conditional</td>
</tr>
</tbody>
</table>

WHO Recommendations (continued)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Quality/Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive training may be offered</td>
<td>Low/Conditional</td>
</tr>
<tr>
<td>Recommend social activity to reduce risk</td>
<td>Insufficient evidence</td>
</tr>
<tr>
<td>Social participation/supports connected to wellbeing over lifespan</td>
<td>Strong</td>
</tr>
<tr>
<td>Weight reduction in mid-life</td>
<td>Moderate/Conditional</td>
</tr>
<tr>
<td>Manage hypertension</td>
<td>Low-high/Conditional</td>
</tr>
<tr>
<td>Diabetes management to reduce risk of cognitive decline</td>
<td>Very low/Conditional</td>
</tr>
<tr>
<td>Management of dyslipidemia to reduce risk</td>
<td>Low/Conditional</td>
</tr>
</tbody>
</table>
WHO Recommendations (last)

<table>
<thead>
<tr>
<th>Recommendation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient evidence to recommend use of antidepressants to reduce risk of cognitive decline</td>
</tr>
<tr>
<td>Management of depression should be provided according to WHO guidelines</td>
</tr>
<tr>
<td>Insufficient evidence to recommend use of hearing aids to reduce the risk of cognitive decline</td>
</tr>
<tr>
<td>Screening followed by provision of hearing aids should be offered as recommended in WHO guidelines</td>
</tr>
</tbody>
</table>

Contributing Factors

- Normal Aging
- Depression
- Medications
- Hypothyroidism
- Alcohol and drugs
- Strokes
- B12/Folate deficiency
- Vision/Hearing loss
- Underlying conditions
## Alzheimer’s Disease Risk & Protective Factors

<table>
<thead>
<tr>
<th>Nonmodifiable Risk Factors</th>
<th>Modifiable Risk Factors</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Low education</td>
<td>Social engagement</td>
</tr>
<tr>
<td>Gender</td>
<td>Obesity</td>
<td>Physical activity</td>
</tr>
<tr>
<td>Family History</td>
<td>Diabetes</td>
<td>Cognitive activity</td>
</tr>
<tr>
<td>Genetics</td>
<td>Sleep disorders</td>
<td>Diet</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>Mindfulness</td>
</tr>
<tr>
<td></td>
<td>Cholesterol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TBI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smoking/Alcohol/Drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hearing and Vision</td>
<td></td>
</tr>
</tbody>
</table>

20-40% of attributable risk of AD explained by modifiable risk factors!

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**What do we do when prevention hasn’t worked?**

**When does neurodegeneration become dementia?**

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Mild Cognitive Impairment

- Concern about a change in cognition
- Impairment in one or more cognitive domains for age and educational background (testing): memory, executive, attention, language, visuospatial
- Preserved independence in functional abilities
- No impairment of social and occupational functioning (aka not demented)

Core Clinical Criteria: “All Cause”

- Functional interference
- Decline from previous level of function
- Not explained by delirium or major psychiatric disorder
- Detected by: history (patient AND informant); AND bedside testing
- Cognitive or behavioral impairment in two or more domains: memory, reasoning/judgment, visuospatial, language, changes in personality or behavior
Alzheimer’s Disease

- Core criteria met, and
- Insidious onset (months to years)
- Clear cut history of worsening
- Cognitive deficits
  - Amnestic presentation
  - Non-amnestic presentation
    - Word finding
    - Visual spatial
    - Executive dysfunction
- NOT applied if other neurologic condition (Lewy Body, etc.)

The Spectrum of Cognitive Impairment

<table>
<thead>
<tr>
<th>Normal Aging</th>
<th>Mild Cognitive Impairment</th>
<th>Dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occasional bad decisions</td>
<td>Cognitive change/concern</td>
<td>Interferes with usual activities</td>
</tr>
<tr>
<td>Forgetting an event</td>
<td>Evidence of deficit by cognitive testing</td>
<td>Decline from prior levels of function</td>
</tr>
<tr>
<td>Forgetting the day</td>
<td>Preserved independence in functional abilities</td>
<td>Not due to delirium or major psychiatric disorder</td>
</tr>
<tr>
<td>Occ. word finding problem</td>
<td>Not demented</td>
<td>History from patient <strong>AND</strong> informant <strong>AND</strong> objective assessment</td>
</tr>
<tr>
<td>Losing something, able to re-trace</td>
<td>R/O other phenomenon</td>
<td>Two or more domains of cognitive or behavior</td>
</tr>
</tbody>
</table>

### Defining “Severity” or “Stage”

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word finding</td>
<td>Longest stage</td>
<td>Can’t respond to environment</td>
</tr>
<tr>
<td>Work or social challenges</td>
<td>Remembers remote life</td>
<td>ADLs impaired</td>
</tr>
<tr>
<td>Forgetting new material</td>
<td>Loss of IADLs</td>
<td>Difficulty communicating</td>
</tr>
<tr>
<td>Losing valuable objects</td>
<td>Behavior changes</td>
<td>Loss of mobility</td>
</tr>
<tr>
<td>Trouble planning/organizing</td>
<td>Disorientation</td>
<td>Aspiration, infections, skin failure</td>
</tr>
<tr>
<td></td>
<td>Changes in sleep</td>
<td></td>
</tr>
</tbody>
</table>

**Worried Phase** >>> **Working Phase** >>> **Waiting Phase** >>> (Death)

### Differential Diagnosis of Dementias

<table>
<thead>
<tr>
<th>Alzheimer’s Disease</th>
<th>Vascular Dementia</th>
<th>Dementia with Lewy Bodies</th>
<th>Frontaltemporal Lobe Dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort term memory loss, slowly progressive, impaired executive function, behavioral changes, disorientation</td>
<td>Impaired short-term memory, executive dysfunction, associated with CVA, slower decline, verbal memory preserved, impaired reasoning</td>
<td>Hallucinations, parkinsonism, cognitive fluctuation, impaired executive function, memory relatively spared, psychosis and personality changes, REM sleep changes</td>
<td>Progressive personality and behavioral changes that impair social skills, language impairment, memory may be relatively spared</td>
</tr>
</tbody>
</table>
Twenty Clinical Practice Guidelines

- Patient Types and Process (four)
- History of Present Illness (two)
- Office-Based Examination of Patient (four)
- Neuropsychological Evaluation of the Patient (one)
- Laboratory and Imaging Tests (seven)
- Communication of Diagnostic Findings and Recommended Follow Up (two)

Core Recommendations

- Evaluate patients with complaints of cognitive change
- Don’t dismiss as normal aging
- Evaluation includes a “reporter”
- Evaluate contributing factors
- Categorize the cognitive behavioral syndrome
- Communicate the diagnosis and treatment plan
- Perform imaging (MRI preferred)
- Tiered laboratory evaluation

AES #2

I do the following workup on patients that I think may have dementia...
A. Everybody gets a CBC, CMP, B12/folate, TSH unless recently drawn
B. I push advanced imaging (FDG-PET, Amyloid, etc)
C. I usually get a CT or MRI
D. There is usually no reason to draw lab
E. It depends...
Evaluation (HPI)

• Patient history
  • Risk Factors
  • Contributing factors
• Informant History using structured tools
  • Cognition
  • IADLS and ADLs
  • Mood and Behaviors
  • Sensory and Motor Function
• Expedite multi-tiered evaluation for atypical or rapidly progressive symptoms

Examination

• Examine cognition with validated tools
• Examine mood and behavior with validated tools
• Dementia-focused neurologic exam
• Refer to dementia specialist if atypical history of exam findings
What’s ‘atypical’ or rapid?

- Early onset disease (age less than 65)
- Motor symptoms, aphasia, apraxia
- Time course of weeks to months (not months to years)

Do the basics, and refer the patient to a neurologist or dementia care specialist

When to do neuropsychological testing?

- Concerning symptoms but normal ‘bedside’ testing (SLUMS, MOCA, etc.)
- Confounding issues
  - Depression
  - Medications
  - Alcohol abuse
  - Employment issues
  - High educational attainment
  - Intellectual/sensory impairments
Laboratory and Imaging Tests

<table>
<thead>
<tr>
<th>Lab</th>
<th>Imaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier One: CBC, CMP, B12, folate, TSH</td>
<td>MRI now recommended and CT if MRI contraindicated or not available</td>
</tr>
<tr>
<td>Consider: RPR and HIV</td>
<td></td>
</tr>
<tr>
<td>EEG: when Creutzfeldt-Jakob suspected</td>
<td>Dementia specialist could order FDG-PET</td>
</tr>
<tr>
<td>Standard CSF: meningitis, meningeal cancer, encephalitis</td>
<td>Dementia specialist could order Amyloid PET scan</td>
</tr>
<tr>
<td>CSF: Beta-amyloid/tau/p-tau profile</td>
<td></td>
</tr>
<tr>
<td>Genetic counselor with autosomal dominant family history</td>
<td></td>
</tr>
</tbody>
</table>

Communication of Diagnostic Findings and Recommended Follow Up

- Dialogue with patient and care partner
- Communicate findings and severity
- Name the likely condition, severity and characteristics, stage of condition, what to expect in the future
- Treatment options and expectations
- Safety
- Resources for education and support
- Care planning and coordination
AES Question #3

What tools do you need to enhance care to your patients/families with dementia?

A. I need more CME on the topic
B. I need to develop a team
C. I need to develop a better workflow
D. Not my ‘thing’...I will refer
E. Thanks, I’m good—don’t need tools

Service Elements of CPT 99483 (alz.org)

<table>
<thead>
<tr>
<th>Element</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognition-focused evaluation,</td>
<td>Mini-Cog, Short MOCA</td>
</tr>
<tr>
<td>Including pertinent Hx and exam</td>
<td>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</td>
</tr>
<tr>
<td>Medical decision making of moderate or high severity as defined by E/M guidelines</td>
<td></td>
</tr>
<tr>
<td>Functional Assessment</td>
<td>ADLs, IADLs, Decision Making Capacity Assessment (able, not able or uncertain)</td>
</tr>
<tr>
<td>Standard Instrument to stage dementia</td>
<td>Dementia Severity Rating Scale</td>
</tr>
<tr>
<td>Medication Reconciliation and review of high-risk medications</td>
<td></td>
</tr>
<tr>
<td>Evaluation for safety</td>
<td>Safety Assessment Guide and Checklist</td>
</tr>
<tr>
<td>Identification, assessment and education of Caregivers</td>
<td>Caregiver Profile Checklist</td>
</tr>
<tr>
<td>Advance Care Planning</td>
<td>End of Life Check List</td>
</tr>
<tr>
<td>Creation of care plans for behavior, community resources</td>
<td></td>
</tr>
</tbody>
</table>

RVU 3.44

“typically, 50 minutes are face-to-face with the patient and/or family or caregiver.”
Build and Train Your Care Team

• Patient Care Team (alz.org)

• Your Clinical Care Team
  • Clinician(s)
  • Nursing/Staff
  • Social Work
  • Community Resources

Caregiver Resources

• Caring for a Person with AD
• Caregiver Resources and LTC
• Caregiver information Sheet: Agitation
• Communication Using a Therapeutic Response/Emotional Truth
• Tips to Minimize Unwanted Actions in Persons with Dementia
• Elder Rights Protection
• Age Page: Elder Abuse
Related Resources

• Clinical Provider Practice Tool (nice summary)
• Assessment Scales in Dementia (article)
• Dementia Care Management Toolkit (Los Angeles resource)
• Health and Aging (A-Z Topics)
• Comprehensive Geriatric Assessment (UpToDate)

Other Resources

• Staff Education: National Council of Certified Dementia Practitioners (www.nccdp.org)
• Mastering difficult discussions: (www.VitalTalk.org)
• Advanced Care Planning: www.respectingchoices.org
• Alzheimer’s Association: https://alz.org/professionals/healthcare-professionals/care-planning
Dementia Care is palliative Care

Palliative Care and Dementia Care:
Practice Recommendations

• “New” issue is recommendation for imaging
• Get information from a reporter
• Use evidence-based tools to evaluate
• Incorporate quality measures into your practice
• Create a comprehensive care plan for the patient/caregivers
• Use the new CPT 99483 to be compensated for your TEAMWORK

Contact Information

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Questions