Alzheimer's disease is a progressive neurological disorder that affects the cognition and function of nearly 7 million people in the United States.

**Did you know?**
Alzheimer's disease begins up to 2 decades before clinical symptoms develop. With modern biomarker testing, we can now detect Alzheimer's disease earlier than ever before.

**THE ALZHEIMER’S DISEASE CONTINUUM**
Alzheimer's disease begins with early, asymptomatic neurological changes (preclinical disease) before progressing through mild cognitive impairment (MCI) and dementia.

**Dementia due to Alzheimer’s disease**

- **Preclinical**
  - Asymptomatic
  - Neurological changes

- **MCI**
  - Mild symptoms
  - No interference with daily activities

- **Mild**
  - Symptoms interfere with some daily activities

- **Moderate**
  - Symptoms interfere with several daily activities

- **Severe**
  - Symptoms interfere with most daily activities

With the availability of disease-modifying therapies (DMTs), it is more important than ever that Alzheimer's disease is diagnosed early — before irreversible neurological damage accumulates. Ideally, Alzheimer's disease should be diagnosed at or before the MCI or mild dementia stages.

This tool will help you diagnose and manage Alzheimer's disease beginning at an early stage to help improve the quality of life of your patients and their care partners.
1. Kickstart the conversation.

- Listen for patient and family concerns about memory and cognition.
- Ask questions about memory and cognition using simple, patient-friendly language (e.g., “Have you noticed any changes in your memory or in your thinking that worry you?”).
- Include questions as part of a broader conversation about brain health and normal cognitive changes in aging.

2. Use a brief assessment tool to evaluate cognition.

- Use one of the many clinically-validated screening tools to assess cognition in patients with cognitive concerns and at every Medicare Annual Wellness Visit.
- Note that most assessment tools can reliably be administered by medical assistants and clinical staff.
- Consider using digital tools that screen and/or evaluate performance across cognitive domains.

<table>
<thead>
<tr>
<th>Brief assessments</th>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montreal Cognitive Assessment (MoCA)</td>
<td>~12 min</td>
<td>Assesses for executive function and adjusts for education level</td>
</tr>
<tr>
<td>Mini-Cog</td>
<td>~3-5 min</td>
<td>Easy to use but does not adjust for education level</td>
</tr>
<tr>
<td>Saint Louis University Mental Status (SLUMS)</td>
<td>~7 min</td>
<td>Assesses for executive function and adjusts for education level</td>
</tr>
<tr>
<td>Ascertain Dementia 8-Item Informant Questionnaire (AD8)</td>
<td>~3 min</td>
<td>Informant questionnaire that can differentiate cognition changes from dementia</td>
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</tbody>
</table>

3. Follow up with a full cognitive evaluation.

- For patients who screen positive for cognitive impairment on a brief assessment, and at the request of those who test normally, schedule a follow-up appointment to conduct a full diagnostic evaluation for dementia.
- A full cognitive evaluation may include:
  - Medical history
  - Functional assessment
  - Neuropsychiatric or behavioral symptom evaluation
  - Physical/neurological examination
  - Neuropsychological testing
Laboratory testing (complete blood count, comprehensive metabolic profile, vitamin B12, calcium, folate and thyroid function)

- Neuroimaging
- Alzheimer's disease biomarker testing (i.e., imaging, CSF testing, or plasma testing)
- Additional biomarker testing (e.g., α-synuclein for Lewy body dementia)

4. Evaluate for primary and secondary etiologies of dementia.
   - Consider the presence of validated biomarkers, clinical symptoms, anatomic imaging and comorbidities.
   - Consider the possibility of multiple contributing causes.
   - Document the diagnosis, stage and identified etiologies along with any neuropsychiatric symptoms.

ALZHEIMER’S DISEASE MANAGEMENT

Patient Counseling and Nonpharmacologic Therapies

- Provide education and support for patients and care partners to help them prepare for the future.
  - Set realistic expectations without stigmatizing the diagnosis.
  - Recommend evidence-based education and support programs.
- Evaluate for common comorbidities, functional impairment and behavioral changes.
  - Common comorbidities include insomnia, sleep apnea, cardiovascular disease, affective disorders (anxiety, depression) and endocrine diseases.
- Optimize comorbidity management through treatment or referral.
- Review current prescription medications, over-the-counter medications and supplements.
  - Deprescribe medications that impact cognition (especially anticholinergics).
  - Eliminate redundant medications and consolidate with combination pills when possible.
- Develop a treatment plan that meets the physical, emotional and social needs of patients and their care partners.
  - Consider the need for occupational therapy and/or physical therapy to ensure patient safety in the home and maintain function for as long as possible.
  - Encourage ongoing social interactions.
- Counsel on safety risks.
  - Driving: recommend evaluation if ability is unclear.
  - Wandering: discuss tracking devices or enrolling in emergency response services.
  - Firearms: discuss safety in the home.
  - Medication: review supported adherence through human or technology oversight.
- Schedule regular follow-up visits with patients and care partners.
## Pharmacotherapies

<table>
<thead>
<tr>
<th>Treatment goal</th>
<th>Treatment type</th>
<th>Patient eligibility</th>
<th>Other notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow cognitive and functional decline</td>
<td>Amyloid-β–targeting DMTs</td>
<td>MCI or mild dementia due to Alzheimer's disease with confirmed Aβ pathology</td>
<td>• Risk of amyloid-related imaging abnormalities (ARIA), including serious brain bleeding • Refer eligible and interested patients to specialty care</td>
</tr>
<tr>
<td>Stabilize memory and cognition</td>
<td>Cholinesterase inhibitors</td>
<td>Mild-to-moderate Alzheimer's disease</td>
<td>• Risk of nausea, vomiting and loss of appetite</td>
</tr>
<tr>
<td></td>
<td>Glutamate regulators</td>
<td>Moderate-to-severe Alzheimer's disease</td>
<td>• May be used in combination with cholinesterase inhibitors</td>
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<tr>
<td>Improve sleep disturbances</td>
<td>Orexin receptor antagonist</td>
<td>Insomnia and mild-to-moderate Alzheimer's disease</td>
<td>• Risk of impaired alertness and motor coordination</td>
</tr>
<tr>
<td>Treat agitation related to dementia</td>
<td>Atypical antipsychotics</td>
<td>Dementia due to Alzheimer's disease and continued agitation despite nonpharmacologic interventions</td>
<td>• Not intended for dementia-related psychosis without agitation</td>
</tr>
</tbody>
</table>

### Specialty Referral

Most individuals with MCI and dementia can be diagnosed and managed in the primary care setting.

However, you may want to consider specialty referral for people with dementia who:

- Have an uncertain diagnosis after full cognitive evaluation.
- Have an atypical presentation.
- Develop symptoms younger than 60 years.
- Request a second opinion or referral.
- Have MCI or mild dementia due to Alzheimer's disease and are eligible for and interested in treatment with DMTs or enrollment in clinical trials.
Alzheimer's Association resources for health systems and medical professionals

Alzheimer's Association billing and coding services guide

Gerontological Society of America KAER Toolkit

Benjamin Rose Institute Best Programs for Caregiving

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