Dementia and Mild Cognitive Impairment (MCI)

This Clinical Practice Model (CPM) recommends evidence-based guidelines to facilitate evaluation, diagnosis, and treatment of:

- Adults age 65 and older;
- Manifesting symptoms of dementia (major neurocognitive disorder) or MCI;
- Being seen by a PMG primary care provider (PCP)

These recommendations emanate from PHS’ Geriatric Services for Behavioral Medicine team.

Why Focus on Dementia?

The management of medical problems can be more complex in patients with dementia. Patients with dementia tend to have a decreased ability to make decisions, to adhere to treatment plans (including medication compliance), and to report adverse effects of therapy. One in three seniors dies with a diagnosis of some form of dementia.

Alzheimer’s disease (AD) is the most common form of dementia in the elderly, accounting for 60-80% of cases. Over 5 million Americans are living with Alzheimer’s. In 2016, an estimated 37,000 New Mexicans aged 65 and older were living with Alzheimer’s, and as many as 53,000 will have the disease by 2025 (a 43% increase).

While there is no cure for dementia, treatment has been shown to improve quality of life for patients, caregiver assistance, and caregiver mental health, as well as to delay nursing home placement and decrease costs to healthcare systems. Clinicians will need to accurately diagnose and manage the early cognitive manifestations of AD and other dementias, particularly as new pharmacological agents are developed.

Many Americans who seek help for symptoms of cognitive impairment will initiate care with their primary care physician (PCP) rather than a Behavioral Health specialist.

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Clinician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine screening for cognitive impairment and Depression</td>
<td>Primary Support LPN or MA</td>
</tr>
<tr>
<td>Initial assessment</td>
<td>Primary Care Physician/APC</td>
</tr>
<tr>
<td>Expanded (cognitive) assessment</td>
<td>Primary Care Behavioral Health Clinician (BHC)</td>
</tr>
<tr>
<td>Neurological assessment</td>
<td>Neurologist</td>
</tr>
<tr>
<td>Diagnosis for Dementia</td>
<td>Primary Care Physician/APC or BHC</td>
</tr>
<tr>
<td>Design care plan; coordinate care; assess outcomes and utilization; recommend appropriate level of care</td>
<td>Primary Care Social Worker Case Manager</td>
</tr>
<tr>
<td>Polypharmacy consultation</td>
<td>Pharmacist Clinician</td>
</tr>
<tr>
<td>Treatment of Dementia</td>
<td>Primary Care Physician/APC, BHC, and/or Psychiatrist</td>
</tr>
<tr>
<td>Caregiver support</td>
<td>PMG Ambulatory Case Mgt.</td>
</tr>
<tr>
<td>Palliative Care consultation</td>
<td>Palliative Care Provider</td>
</tr>
</tbody>
</table>

This CPM presents a model of care based on scientific evidence available at the time of publication. It is not a prescription for every physician or every patient, nor does it replace clinical judgment. All statements, protocols, and recommendations herein are viewed as transitory and iterative.

Although physicians are encouraged to follow the CPM to help focus on and measure quality, deviations are a means for discovering improvements in patient care and expanding the knowledge base.

If you have questions or concerns regarding this information, contact:

Clinical Leaders
Sofya Rubinchik, MD
srubinchi@phs.org
Shannon Stromberg, MD
sstromber@phs.org
Dion E. Gallant, MD
dgallant@phs.org

This CPM is part of Presbyterian’s Clinical Care Model, a broad, enterprise-wide body of documentation covering PHS’ functions, programs, and care pathways, intended to build organizational acumen, facilitate cross-system collaboration, and accelerate our implementation of clinical initiatives.

Find all of PHS’ Care Model at www.PHSCareModel.org.
Screening & Assessment for Dementia

Primary care visit

MA uses the Mini-Cog to screen all patients age 65 for possible cognitive impairment

MA uses the PHQ-2 plus suicide risk question (#9) to screen all adult patients

See Depression CPM

Clinical presentation

PCP administers Initial Assessment for Dementia (see page 4)

Polypharmacy?

NO

YES

Referral to Pharm Clinician

Pharm Clinician provides Polypharmacy Consultation

Symptoms may be secondary to general medical condition? (see p. 7, 8)

NO

YES

Requires further cognitive evaluation?

NO

YES

Consider warm handoff or referral to primary care BHC

BHC administers Expanded Assessment for Dementia

Patient requires psychotherapy or pharmacological therapy?

• anxious
• depressed
• psychotic
• aberrant behavior
• pre-existing chronic mental illness
• treatment resistant

NO

YES

Referral to PMG Behavioral Health Services

Central nervous system disorder other than Dementia? (suspected or concurrent)

NO

YES

Referral to Neurology

Neurologist administers Neurologic Examination

PCP identifies and treats medical condition causing cognitive impairment

Referral to Specialist, as indicated

Indications for neuropsychological testing?

NO

YES

• Assistance with differential diagnosis needed

Referral to Neuropsychology

Neuropsychologist administers Neuropsychological Testing

Go to DIAGNOSIS & TREATMENT algorithm (page 3)
**Diagnosis & Treatment**

**Stages of cognitive impairment based on functional status**

<table>
<thead>
<tr>
<th>IADL or ADL</th>
<th>Mild Cognitive Impairment</th>
<th>Dementia Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Able to pay bills, balance checkbook independently</td>
<td>Yes, with some difficulty</td>
<td>Requires assistance</td>
<td>Dependent</td>
</tr>
<tr>
<td>• Able to shop for groceries or clothes alone</td>
<td>yes</td>
<td>yes</td>
<td>Dependent</td>
</tr>
<tr>
<td>• Able to bathe, dress self</td>
<td>Yes</td>
<td>Yes</td>
<td>Not able to participate</td>
</tr>
</tbody>
</table>

**Care Pathway Notes:**

1. Instrumental activity of daily living (IADL) or activity of daily living (ADL) are measures of the patient’s functional status. Cognitive impairment staging is done based on the results from assessments completed by the patient and/or a knowledgeable informant (family member, caregiver, or someone else who knows and sees the patient regularly).

2. See **Therapeutic Lifestyle Changes**.

3. Coping strategies for patients experiencing cognitive decline are depicted in the Alzheimer’s Association’s **Tips for Daily Life**.

4. Significant psychosocial stressors/needs may indicate a referral to Case Management regardless of the patient’s diagnosis.

5. **Palliative Care** for patients and caregivers may be helpful: 1) early in the disease process, when the patient is still decisional and can convey their preferences for interventions; and 2) during late stage dementia, to give support for caregivers and Providers in understanding the prognosis and appropriateness for hospice.

6. See **Non-Pharmacologic Interventions**.

7. See **Pharmacologic Therapy**.
Screening and Assessment

Depression Screening
In PMG primary care settings, a patient is first screened with three questions from the PHQ-9. If the patient scores positive, the full PHQ-9 is administered. Diagnosis and treatment for Depression is described in the CPM: Depression in Adults.

Dementia Screening
Every PMG patient age 65 and older is screened annually for dementia using the Mini-Cog.

Clinical Presentation
Most patients with dementia do not present with a complaint of memory loss; more often it is a spouse or other informant who brings the problem to the physician's attention. Self-reported memory loss does not appear to correlate with the subsequent development of dementia, while informant-reported memory loss is a better predictor of the current presence and future development of dementia.

Patients with dementia may have difficulty with one or more of the following:
- Retaining new information (e.g., trouble remembering events)
- Handling complex tasks (e.g., balancing a checkbook)
- Reasoning (e.g., unable to cope with unexpected events)
- Spatial ability and orientation (e.g., getting lost in familiar places)
- Language (e.g., word finding)
- Behavior

Initial Assessment for Dementia
If the patient scores greater than 3 on the Mini-Cog screening, or if the patient presents with symptoms of Dementia, the PCP should conduct an assessment that includes:
- Focused history, including:
  - Drugs that impair cognition (e.g., opioids, anticholinergics, psychotropic medications, and sedative-hypnotics)
  - Sleep
- Physical exam
- Lab Testing:
  - CBC, Serum Electrolytes, and GLUC/BUN/CR
  - LFTs, B12, TSH, UA, RPR, and/or Homocysteine
- Evaluation for causes of dementia due to reversible medical conditions
- Discussion about Advance Care Planning; identify the patient's healthcare decision maker(s)
- Family/Caregiver history (if possible), including:
  - Assess patient's support system
  - Identify primary Caregiver

Neurologic Examination
A referral for neurology consult may be indicated when there is: early onset; atypical or rapid progression; neurologic deficits or Parkinsonism on exam; Dementia in setting of another neurologic disease; or abnormal findings on brain imaging. The purpose of this exam is to identify a neurological disease with behavioral and cognitive impairment, such as Parkinson's Disease, TBI, Neoplastic disorder, demyelinating infection, inflammatory brain disorders, hyperkinetic movement disorders and seizure disorders.

Expanded Assessment for Dementia
The primary care Behavioral Health Clinician (BHC) screens the patient for substance use (including alcohol), and may conduct other cognitive or behavioral assessments, including:
- Anxiety screening (GAD-7)
- Cognitive testing; MoCA or SLUMS
• Depression screening (PHQ-9)
• Functional assessment for ADLs
• Alcohol Use assessment (CAGE, AUDIT-C)
• Substance Use Disorders

In addition, the BHC would review the results of the initial assessment and collaborate with the PCP to determine the appropriate treatment. If significant needs are identified, the PCP and/or BHC can refer to Case Management.

Cognitive Testing

**Mini-Cog**
The Mini-Cog® instrument consists of a clock drawing task (2 points) and a recall of three unrelated words (3 points). A cut point of <3 has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. The advantages of the Mini-Cog include high sensitivity for predicting dementia status, short testing time, ease of administration, and a diagnostic value not limited by the subject's education or language. Mini-Cog® is free and accessible online in multiple languages.

**Montreal Cognitive Assessment (MoCA)**
MoCA is a brief screening test designed to detect cognitive impairment in older adults. A 30-point test that takes approximately 10 minutes to administer, a threshold score of 26 (scores of 25 and below considered abnormal) yields high sensitivity (≥94%) but lower specificity (≤60%). Compared to a test like the MMSE, the MoCA is more sensitive for the detection of mild cognitive impairment, and it includes items that sample a wider range of cognitive domains, including memory, language, attention, visuospatial, and executive functions. MoCA is accessible online and in multiple languages.

**Saint Louis University Mental Status (SLUMS)**
The SLUMS Examination helps providers screen individuals to look for the presence of cognitive deficits and to identify changes in cognition over time. This screening questionnaire consists of 11 brief questions scored on a 30-point scale and takes 7 to 10 minutes to administer. It results in a score that stratifies the patient into one of three categories: normal, Mild Neurocognitive Impairment, or Dementia. Considered to be more sensitive than a test like the MMSE, SLUMS items cover a wide range of functions, including memory, attention, orientation, and overall executive function. The SLUMS Exam is free and accessible online in multiple languages. A flowsheet version of SLUMS is available to PHS Providers in the Epic environment.

Neuropsychological Testing

When the provider needs assistance with differential diagnosis, neuropsychological testing may be warranted. This battery of tests usually involve extensive evaluation of multiple cognitive domains (e.g., attention, orientation, executive function, verbal memory, spatial memory, language, calculations, mental flexibility, and conceptualization). The referral for neuropsychological assessment should address the area of concern and the type of conclusions requested (treatment planning, competency, functional limitations, and/or diagnostic accuracy).

**Reporting Elder Abuse, Neglect, and Exploitation**
Every person is required to report immediately any reasonable suspicion of elder or incapacitated abuse, neglect, and/or exploitation to the New Mexico Aging and Long-Term Services Adult Protective Services Division (APS) at 1-866-654-3219 (toll free statewide) or (505) 476-4912 in Albuquerque. APS remains on call for emergent reports 24 hours a day, 7 days a week.

Diagnosis

**Early Diagnosis**
Early, accurate diagnosis is beneficial for several reasons. Beginning treatment early in the disease process may help preserve daily functioning for some time. In addition, having an early diagnosis helps people with AD and their families: plan for the future; take care of financial and legal matters; address potential safety issues; learn about living arrangements; and develop support networks. Furthermore, an early diagnosis may give people greater opportunities to participate in clinical trials that are testing possible new treatments for Alzheimer’s disease or in other research studies.
Mild Cognitive Impairment (MCI)

While changes (decline) in cognition are often observed in normal aging, increasing evidence suggests that some forms of cognitive impairment are recognizable as an early manifestation of dementia. Mild cognitive impairment is an intermediate state between normal cognition and dementia. It is generally accepted that older adults with MCI are at increased risk of developing dementia due to Alzheimer’s disease.

MCI is diagnosed clinically by the presence of a cognitive decline, either by history or serial evaluations; objective impairment in one or more cognitive domains; however, patients with MCI can perform all activities of daily living without any caregiving assistance. If impairment involves memory, it is known as amnestic MCI (aMCI), and if not, non-amnestic MCI (naMCI).

Cognitive changes are significant enough to be noticed by others and measured by cognitive screening assessments. Typical cognitive problems in MCI may include: greater dependency on reminders and notes; greater difficulties with multitasking; more distractibility; less flexibility; new difficulties with problem-solving and word finding.

MCI is typically a diagnosis of exclusion. If a patient shows measurable but mild impairment on screening tests with no potential causative factors (i.e., medication side effects, infection, nutritional deficiencies, or depression) and no functional impairment, the patient may be diagnosed with MCI rather than mild dementia. According to DSM-5™, the condition of modest cognitive decline from a previous level in one or more cognitive domain without IADLs being compromised is called mild neurocognitive disorder.

Differential Diagnosis of Memory Loss

The diagnosis of dementia must be distinguished from delirium and depression. Moreover, it is generally accepted that older adults with mild cognitive impairment (MCI) are at increased risk of developing dementia due to Alzheimer’s disease (AD).

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Usual Cause</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Memory loss or other cognitive decline without significant functional impairment</td>
<td>Mild cognitive impairment (MCI)</td>
<td>• amnestic MCI: single domain, multiple domains</td>
</tr>
<tr>
<td>o Gradual onset of short-term memory loss and functional impairment in more than one domain: I. Executive function (finances, shopping, cooking, laundry, transportation) II. Basic activities of daily living (feeding, dressing, bathing, toileting, transfers)</td>
<td>Dementia</td>
<td>• Alzheimer’s disease (AD)</td>
</tr>
<tr>
<td>o Acute cognitive impairment with clouded sensorium o Difficulty with attention o Hypersomnolence</td>
<td>Delirium</td>
<td>• hypo- or hyperglycemia</td>
</tr>
<tr>
<td>o Complains of memory loss, decreased concentration, impaired judgment, feels worse in morning, and hopeless</td>
<td>Depression</td>
<td>• hypo- or hypernatremia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• hypoxemia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• anemia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• intermittent cerebral ischemia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• thyrotoxicosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• myxedema</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• alcohol withdrawal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• sepsis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• drugs (especially anticholinergics, benzodiazepines, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• persistent depressive disorder (dysthymic disorder)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• major depressive disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• other depressive disorder</td>
</tr>
</tbody>
</table>
### Symptoms

- Stepwise, sudden deterioration in cognition
- Episodes of confusion, aphasia, slurred speech, and/or focal weakness

### Usual Cause

Cerebrovascular disease

### Examples

- vascular dementia (VaD)
- multi-infarct dementia
- Binswanger dementia (subcortical dementia)

### Etiologies for Dementia

After a diagnosis of the dementia syndrome is made, it is important to determine the etiology because it has implications for treatment. The most common etiologies (i.e., AD and VaD) may be managed effectively in the primary care setting. However, dementia due to PD, DLB, and frontotemporal dementia are less common, and neurology consultation is often helpful in diagnosis and treatment.

### Etiology Summary

<table>
<thead>
<tr>
<th>Etiology</th>
<th>Criteria</th>
<th>ICD 10 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s disease</td>
<td>Gradual onset of symptoms over months to years</td>
<td>G30.9 (unspecified) AND F02.80 or F02.81</td>
</tr>
<tr>
<td>Vascular dementia</td>
<td>Stepwise decline</td>
<td>F01.50 or F01.51</td>
</tr>
<tr>
<td>Mixed dementia</td>
<td>Criteria for multiple dementia syndrome etiologies are met (mixed vascular and Alzheimer’s disease most common)</td>
<td>Code predominant etiology first</td>
</tr>
<tr>
<td>Dementia with Lewy bodies</td>
<td>2 of 3 required:</td>
<td>G31.83 AND F02.80 or F02.81</td>
</tr>
<tr>
<td>Frontotemporal dementia</td>
<td>3 of 6 required:</td>
<td>G31.09 AND F02.80 or F02.81, Consider Z55-65 or 91</td>
</tr>
</tbody>
</table>

### Dementia Caused by General Medical Condition

Depression, alcohol-induced cognitive impairment, normal pressure hydrocephalus, and Vitamin B12 deficiency are among the more common causes of dementia that is secondary to a general medical condition. Others are included below.

### Etiologies of Dementia Secondary to General Medical Condition

<table>
<thead>
<tr>
<th>Psychiatric</th>
<th>Toxic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depressive Disorder</td>
<td>Alcohol induced</td>
</tr>
<tr>
<td>Bipolar Affective Disorder</td>
<td>Chemical poisoning (arsenic, mercury, lead, lithium and other metals; organic compounds and solvents)</td>
</tr>
<tr>
<td>Drug induced (prescription or street)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection and/or fever (in elders, pneumonia, urinary tract infection)</th>
<th>Anoxic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anemia</td>
</tr>
<tr>
<td></td>
<td>Chronic obstructive pulmonary disease</td>
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<tr>
<td></td>
<td>Congestive heart failure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutritional deficiencies (vitamin B12, folic acid, thiamine, niacin)</th>
</tr>
</thead>
</table>
Etiologies of Dementia Secondary to General Medical Condition

<table>
<thead>
<tr>
<th>Metabolic</th>
<th>Central nervous system disorders (Consider referral to Neurology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acute intermittent porphyria</td>
<td>• Cerebral vasculitis</td>
</tr>
<tr>
<td>• Azotemia/renal failure (diuretics, dehydration, obstruction, hypokalemia)</td>
<td>• Human immunodeficiency virus (HIV) and opportunistic infections</td>
</tr>
<tr>
<td>• Cushing's syndrome</td>
<td>• Multiple sclerosis</td>
</tr>
<tr>
<td>• Hepatic encephalopathy</td>
<td>• Neoplasm (primary or metastatic)</td>
</tr>
<tr>
<td>• Hyperparathyroidism</td>
<td>• Normal-pressure hydrocephalus (NPH)</td>
</tr>
<tr>
<td>• Hypoglycemia or hyperglycemia</td>
<td>• Other infections (neurosyphilis, chronic meningitis, brain abscess, progressive multifocal leukoencephalopathy)</td>
</tr>
<tr>
<td>• Hyponatremia (diuretics, excess antidiuretic hormone, salt wasting, water intoxication)</td>
<td>• Traumatic brain injury (subdural hematoma, post concussion syndrome)</td>
</tr>
<tr>
<td>• Hypothyroidism or hyperthyroidism</td>
<td>• Vascular (ischemic or hemorrhagic stroke, ischemic-hypoxic brain lesions)</td>
</tr>
<tr>
<td>• Volume depletion</td>
<td></td>
</tr>
<tr>
<td>• Wilson's disease</td>
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</tbody>
</table>

When to refer?
Timing of referral to a specialist depends upon the results of the PCP's initial assessment. Factors to consider are described below.

Referral to the Primary Care BHC and/or Neuropsychologist may be indicated when there is uncertainty about the diagnosis of an early dementia (e.g., when difficulty arises distinguishing dementia from normal aging, depression, or encephalopathy).

Referral to the Psychiatrist (Behavioral Health Specialty Care) may be indicated when:

- the patient has chronic mental illness with cognitive impairment
- a diagnosis of a non-Alzheimer’s dementia is likely (early and severe behavioral changes, languages problems, hallucinations or parkinsonism)
- there is a diagnosis of dementia secondary to general medical condition with a Psychiatric etiology (see table, page 6)
- there are neuropsychiatric symptoms, including psychosis, agitation, apathy and depression
- pharmacological management of aberrant behavior is indicated
- pharmacological management is concurrent with chronic mental illness (e.g., TBI, residual problems from Delirium, stroke, autoimmune disease with psychosis, etc.)
- there is a young onset (<65-years-old)

Therapeutic Lifestyle Changes

In their 2017 extensive scientific review of strategies to prevent or reduce the risk of dementia and cognitive impairment, a National Academies of Sciences, Engineering, and Medicine (NASEM) committee identified “encouraging although inconclusive” evidence for three specific types of interventions: cognitive training; blood pressure control for people with hypertension; and increased physical activity.

**Cognitive leisure activities and social interaction**, for as long as these are feasible, are recommended. Findings from the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) suggest that cognitive training can delay or slow the age-related cognitive decline that tends to be a normal part of aging. However, the overall evidence is insufficient to determine whether cognitive training can prevent, delay, or slow Alzheimer’s disease or the mild cognitive impairment that often precedes Alzheimer’s.

Hypertension is associated with an increased risk of both vascular dementia and Alzheimer’s disease (AD), and **treatment of hypertension** is recommended to reduce the risk of cerebrovascular disease, among other benefits.

Studies have shown that formal exercise programs may improve physical functioning, or at least slow the progression of functional decline in patients with AD; however, exercise programs do not appear to improve cognitive functioning in adults with dementia. Most people, especially those with early dementia and those with risk factors for dementia, benefit from **maintaining or increasing physical activity and exercise** as long as there are no contraindications.
Furthermore, Mediterranean-style diets that are high in fruits, vegetables, whole grains, beans, nuts, and seeds and include olive oil as an important source of fat have been associated with a variety of health benefits, including reduced cardiovascular risk, which may directly or indirectly reduce dementia risk. High-quality evidence of a preventive effect of dietary interventions on cognitive impairment and dementia remains lacking, however.

**Intervention (Acute)**

Currently, non-pharmacologic interventions are shown to have a greater effect than medications on the quality of life of dementia patients and their caregivers. For this reason, first-line treatment should focus on care planning and management.

**Care Planning**

Fundamental components of care planning for dementia patients include providing education, caregiver support, and non-pharmacologic interventions. As dementia progresses, caregiver stress increases and can impact caregiver health. Early care planning to identify and mobilize resources to preserve caregiver health and to maintain a predictable home environment where the patient will function the best for the longest period of time. The PCP should collaborate with PMG Case Manager to create and manage the individualized care plan for the patient.

### Guide to Care Planning and Management of Dementia

<table>
<thead>
<tr>
<th>Care Plan Area</th>
<th>Care Activity (as appropriate for individual patient)</th>
<th>Provider</th>
<th>Case Manager*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient / Caregiver Education</strong></td>
<td>Provide printed materials. (Case Managers will provide all appropriate resources and/or referrals)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Provide referrals to community resources, as needed</td>
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<tr>
<td></td>
<td>Share the Alzheimer’s Association 24/7 hotline: 1-800-272-3900</td>
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<tr>
<td><strong>Care Plan</strong></td>
<td>Assess patient and caregiver goals</td>
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<tr>
<td></td>
<td>Refer patient to Case Manager for care planning</td>
<td>✓</td>
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<tr>
<td></td>
<td>Provide nutrition (diet) counseling; refer to registered dietician nutritionian as appropriate</td>
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<tr>
<td></td>
<td>Prescribe exercise; refer to Healthplex</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Prescribe medications, if indicated</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Refer to Palliative Care</td>
<td>✓</td>
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<tr>
<td><strong>Advance Care Planning</strong></td>
<td>Check to see if the patient has an advance healthcare directive on file</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td></td>
<td>Refer to Advance Care Planning Team; Homecare as appropriate</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Evaluate for hospice (late stage)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>Refer to outpatient OT (functional assessment, home safety evaluation)</td>
<td>✓</td>
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<tr>
<td></td>
<td>Assess impact of symptoms on skills such as driving</td>
<td>✓</td>
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<td></td>
<td>Involve family in medication management. PCP to refer to Clinic Pharmacist</td>
<td>✓</td>
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<tr>
<td></td>
<td>Identify financial helper / supervisor</td>
<td>✓</td>
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<tr>
<td></td>
<td>Evaluate need for supervision at home</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluate for elder abuse</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Maximize Function</strong></td>
<td>Evaluate vision and hearing (refer as needed)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Caregiver Support</strong></td>
<td>Refer to speech therapist, if indicated</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Address caregiver’s burden</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>At Home</strong></td>
<td>Recommend developing coping strategies</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advise on physical activity</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advise on sleep hygiene</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess / advise on social engagement and intellectual stimulation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advise on establishing a routine</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

*may consult Social Worker as appropriate
Non-Pharmacologic Interventions

Management of neuropsychiatric symptoms of dementia
Behavioral disturbances can profoundly affect patients with dementia as well as their families and caregivers. Recognition and treatment of delusions, hallucinations, depression, agitation, aggression, and sleep disturbances are important aspects of the care of patients with dementia.

Cognitive rehabilitation
Cognitive rehabilitation aims to help patients in the early stages of dementia to maintain memory and higher cognitive function and to devise strategies to compensate for declining function. Studies regarding the efficacy of this approach are limited by the lack of standardized techniques.

Occupational therapy
Individualized therapy sessions can train patients and caregivers in the use of aids, coping behaviors, and other strategies to compensate for those functional deficits that are specifically problematic for the patient. This therapy may improve motor and process skills and activities of daily living.

Nutrition
Decreased sense of smell is common in dementia patients and can manifest itself as poor appetite and weight loss. Caregivers may try compensating by adding ingredients to increase sensory stimulation (e.g., adding low sodium soy sauce or hot salsa, or spices that alter the texture and feel of food in the mouth, such as black pepper, paprika, hot pepper, ginger, mustard, radish, or horseradish).

Pharmacologic Therapy
Currently, there is no cure for dementia, and pharmacologic interventions are used to delay disease progression and treat cognitive symptoms. The decision to begin therapy should be based on evaluation of the patient and the risks and benefits associated with medication use. While the effects of the medications are modest, they have been shown to improve or maintain scores on cognitive tests as well as delay nursing home placement in some patients. They may help with agitation and other behavioral disturbances as well.

Medications approved for the treatment of dementia include:

Cholinesterase inhibitors (donepezil, rivastigmine, or galantamine)
recommended for patients with mild to moderate dementia

The average benefit of cholinesterase inhibitors in patients with dementia is a small improvement in cognition and activities of daily living (ADLs). Not all patients benefit. Although most studies of cholinesterase inhibitors have been in patients with AD, these medications also appear to offer similar or greater benefits for certain non-Alzheimer dementias such as VaD and DLB, and perhaps for dementia or cognitive impairment associated with PD. After a patient has received the maximum tolerated medication dose for eight weeks, evaluate a patient’s symptoms, and stop treatment if there has been no improvement in symptoms. Only continue medication if an improvement has been noted.

NMDA antagonist (memantine)
recommended for patients with moderate to advanced dementia along with a cholinesterase inhibitor; or use memantine alone in patients who do not tolerate or benefit from a cholinesterase inhibitor

Similar to the cholinesterase inhibitors, the efficacy of memantine is modest on cognition and activities of daily living. However, it has demonstrated a benefit on behavioral outcomes including aggression, delusions, and irritability. It appears to have fewer side effects in comparison to the cholinesterase inhibitors. There is also some evidence to suggest that memantine may be disease modifying; therefore, it may be continued even if no clinical improvement is seen after taking the medication for a period of time.

Vitamin E supplementation
(800 - 2000 IU daily) recommended for patients with mild to moderate AD; benefits may be modest and may be offset by combination therapy with memantine
## Pharmacologic Treatment by Dementia Type

<table>
<thead>
<tr>
<th>Alzheimer Disease</th>
<th>Vascular Dementia; Mixed Dementias</th>
<th>Frontotemporal; Lewy Bodies; and Parkinson Disease Dementias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>Moderate/Severe</td>
<td></td>
</tr>
<tr>
<td>• donepezil</td>
<td>• donepezil</td>
<td>• refer to Neurology</td>
</tr>
<tr>
<td></td>
<td>• add memantine</td>
<td>• avoid antipsychotics (in Lewy Bodies and Parkinson)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• cholinesterase inhibitors may be helpful in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>frontotemporal dementia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• memantine is <strong>not</strong> recommended</td>
</tr>
</tbody>
</table>

### Medications to avoid in patients with Dementia

When caring for patients with Dementia, stopping offending medications is often a more effective intervention than starting a new medication, such as a cholinesterase inhibitor, and should always be considered first.

The American Geriatrics Society’s Beers criteria identifies specific medications that may be inappropriate for elderly patients because of an increased risk of adverse events. Many of the medications listed in the Beers criteria cause problems particularly in patients with dementia. For example, anticholinergic and sedative medications are associated with memory impairment, functional decline, hallucinations, and increased risk for falls. **Antipsychotic medications used to manage the behavioral symptoms of dementia are associated with an increase in mortality.**

### Medications

Factors to consider include anticipated side effects and tolerability, a history of prior response in the patient or a family member, patient preference, cost, potential drug interactions, co-occurring psychiatric or general medical conditions, relative efficacy and effectiveness, and half-life.

<table>
<thead>
<tr>
<th>Class</th>
<th>Drug</th>
<th>PHP Formulary</th>
<th>Cost*</th>
<th>Starting Dose</th>
<th>Maintenance Dose</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholinesterase inhibitors</td>
<td>donepezil (Aricept®)</td>
<td>pill or oral disintegrating tablet</td>
<td>Centennial Care: QL Commercial/Metal Level Plans: T1, QL Senior Care/Medicare: T2, QL Note: Donepezil 5 mg and 10 mg tablets and orally disintegrating tablets are covered. Donepezil 23 mg tablets are non-formulary.</td>
<td>$180.00</td>
<td>5mg once a day</td>
<td>10mg per day (increased after 4 to 6 weeks)</td>
</tr>
<tr>
<td>Cholinesterase inhibitors</td>
<td>rivastigmine (Exelon®) patch</td>
<td></td>
<td>Centennial Care: NF Commercial/Metal Level Plans: NF Senior Care/Medicare: T4</td>
<td>$390.00</td>
<td>4.6 mg/24 hours</td>
<td>9.5 mg/24 hours (increased after 4 weeks)</td>
</tr>
<tr>
<td>Cholinesterase inhibitors</td>
<td>rivastigmine (Exelon®) capsule</td>
<td></td>
<td>Centennial Care: NF Commercial/Metal Level Plans: T3 Senior Care/Medicare: T2, QL</td>
<td>$205.00</td>
<td>1.5 mg twice daily</td>
<td>6 mg twice daily (increased in 2 to 4 week intervals by 1.5 mg twice daily increments)</td>
</tr>
<tr>
<td></td>
<td>galantamine (Razadyne®) immediate release tablet or solution</td>
<td></td>
<td>Centennial Care: F Commercial/Metal Level Plans: T1 (tablets), T2 (oral solution) Senior Care/Medicare: T2</td>
<td>$152.00 (tablets) $673.00 (oral solution)</td>
<td>4 mg twice daily</td>
<td>12 mg twice daily (increased in monthly intervals by 4 mg twice daily increments)</td>
</tr>
<tr>
<td></td>
<td>galantamine (Razadyne®) extended release capsule</td>
<td></td>
<td>Centennial Care: F Commercial/Metal Level Plans: T1 Senior Care/Medicare: T2, QL</td>
<td>$152.00</td>
<td>8 mg once daily</td>
<td>24 mg once daily (increased in monthly intervals by 8 mg once daily increments)</td>
</tr>
</tbody>
</table>
**Patient and Caregiver Education and Support**

### Patient Education: Dementia and MCI

#### Patient Goal

- **Understand dementia.**
  - Dementia is a general term used to indicate that a person has developed difficulties with reasoning, judgment, and memory. People who have dementia usually have some memory loss, plus other symptoms including:
    - Confusion
    - Trouble with language (for example, not being able to find the right words for things)
    - Trouble concentrating and reasoning
    - Problems with tasks such as paying bills or balancing a checkbook
    - Getting lost in familiar places
  - As dementia worsens it can:
    - Cause anger or aggression
    - Make people see things that aren’t there or believe things that aren’t true
    - Impair people’s ability to eat, bathe, dress, or do other everyday tasks
    - Cause people to lose bladder and bowel control
  - Dementia can be caused by several different brain disorders. These include:
    - Alzheimer disease
    - vascular dementia
    - dementia with Lewy bodies
    - Parkinson disease dementia
    - frontotemporal dementia
    - mixed dementia (often both Alzheimer disease and vascular dementia)
  - Dementia can also be caused by cumulative damage to the brain, which can occur in people with chronic alcoholism or repeated head injuries.

- **Treatment for dementia depends on the cause. Unfortunately, there aren’t cures for most types of dementia. But doctors can sometimes treat troubling symptoms that come with dementia.**
- **Sometimes memory loss and confusion are caused by medical problems other than dementia that can be treated.**

#### Key Messages for the Patient

- **Take medications as prescribed.**
  - Several medicines called cholinesterase inhibitors are currently available for treating Alzheimer disease.
    - None of these medicines cures Alzheimer disease.
    - When these medicines are effective, the hope is that the patient and their family will have an improved quality of life for a longer period.

- **Keep your appointments.**
  - It may take several months and many visits to adjust your treatment to help you feel as well as possible.
  - Tell your provider if you develop any side effects.
  - Tell your provider if you have any allergies or existing health conditions.
  - Tell your provider about all the prescription and over the counter medications you are taking (including vitamin and dietary supplements).
  - If you have any questions about or problems with your medication between visits, contact your provider as soon as possible.
  - Family members should discuss any concerns regarding aggressive or other abnormal behaviors with a healthcare provider, and arrange for help if necessary.
## Patient Education: Dementia and MCI

<table>
<thead>
<tr>
<th>Patient Goal</th>
<th>Key Messages for the Patient</th>
</tr>
</thead>
</table>
| **Patient:** Live independently for as long as possible. | ● People with early dementia should care for their physical and mental health. This means getting regular checkups, taking medicines if needed, eating a healthy diet, exercising regularly, getting enough sleep, and avoiding activities that may be risky.  
  ● Talk to others through support groups or a counselor or social worker to discuss feelings of anxiety, frustration, anger, loneliness, or depression. All of these feelings are normal, and dealing with these feelings can help you to feel more in control of your wellbeing.  
  ● Occupational therapists, and sometimes speech pathologists, can help to set up your home to minimize confusion and keep you independent for as long as possible.  
  ● Explain the disease to family members so they understand what to expect and how they can help, now and in the future.  
  ● If possible, ask a friend or family member for help to develop plans to deal with these and other issues as dementia progresses. Discuss your preferences regarding important issues, including:  
    ○ Is health insurance available?  
    ○ Where will I live?  
    ○ Who will make healthcare and end of life decisions?  
    ○ Who will pay for care?  
  ● Provide a written advance healthcare directive to your Provider and ensure family members are aware of the directive. |
| Stay safe. |  
  ● People with early dementia should care for their physical and mental health. This means getting regular checkups, taking medicines if needed, eating a healthy diet, exercising regularly, getting enough sleep, and avoiding activities that may be risky.  
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    ○ Where will I live?  
    ○ Who will make healthcare and end of life decisions?  
    ○ Who will pay for care?  
  ● Provide a written advance healthcare directive to your Provider and ensure family members are aware of the directive. |
| Make plans for support as the dementia worsens. |  
  ● People with early dementia should care for their physical and mental health. This means getting regular checkups, taking medicines if needed, eating a healthy diet, exercising regularly, getting enough sleep, and avoiding activities that may be risky.  
  ● Talk to others through support groups or a counselor or social worker to discuss feelings of anxiety, frustration, anger, loneliness, or depression. All of these feelings are normal, and dealing with these feelings can help you to feel more in control of your wellbeing.  
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    ○ Is health insurance available?  
    ○ Where will I live?  
    ○ Who will make healthcare and end of life decisions?  
    ○ Who will pay for care?  
  ● Provide a written advance healthcare directive to your Provider and ensure family members are aware of the directive. |

| Caregiver: Use communication strategies daily routines to care for the person with dementia. |  
  ● 24/7 Helpline: 1-800-272-3900; local main office: (505) 266-4473  
  ● Try to be patient when responding to repetitive questions, behaviors, or statements.  
  ● Speak slowly, present only one idea at a time, and be patient when waiting for responses.  
  ● Try not to argue or confront persons with dementia when they express mistaken ideas or facts. Change the subject or gently remind them of an inaccuracy. Arguing or trying to convince a person of “the truth” is a natural reaction but it can be frustrating to all and can trigger unwanted behavior and feelings.  
  ● Make a daily plan, and prepare to be flexible if needed.  
  ● Use memory aids such as writing out a list of daily activities, phone numbers, and instructions for usual tasks (i.e., the telephone, microwave, etc.).  
  ● Establish calm nighttime routines to manage behavioral problems, which are often worst at night.  
  ● Help the patient perform personal care as they are willing and able.  
  ● Encourage physical activity and exercise. A daily walk can help prevent physical decline and improve behavioral problems.  
  ● Consider respite care. Respite care can provide a needed break for family and can strengthen the family’s ability to provide care in the future. This is offered in the form of in-home care or adult day care. Caregiving can be an all-consuming experience. Be sure to take time for yourself, take care of your own medical problems, and arrange for breaks when you need them. |
| Be sure to tend to your own needs and well-being. |  
  ● 24/7 Helpline: 1-800-272-3900; local main office: (505) 266-4473  
  ● Try to be patient when responding to repetitive questions, behaviors, or statements.  
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## Educational Materials

The Alzheimer’s Association of New Mexico offers a “general information kit” (hard copy packet), as well as educational programs, support groups, one-to-one consultations, a Helpline, referral resources, a respite program, and a book and video library. [www.alz.org/newmexico](http://www.alz.org/newmexico)

Patient-centered coping skills are described in the Alzheimer’s Association’s [Tips for Daily Life](http://www.alz.org/newmexico).
Clinical Definitions

Alzheimer disease (AD)
The most common cause of dementia among people age 65 and older. AD is an age-related, non-reversible brain disorder that develops over a period of years. Initially, people experience memory loss and confusion, which may be mistaken for the kinds of memory changes that are sometimes associated with normal aging. However, the symptoms of AD gradually lead to behavior and personality changes, a decline in cognitive abilities such as decision-making and language skills, and problems recognizing family and friends. AD ultimately leads to a severe loss of mental function.

There are three major hallmarks in the brain that are associated with the disease processes of AD:

- Amyloid plaques, which are made up of fragments of a protein called beta-amyloid peptide mixed with a collection of additional proteins, remnants of neurons, and bits and pieces of other nerve cells.
- Neurofibrillary tangles (NFTs), found inside neurons, are abnormal collections of a protein called tau. Normal tau is required for healthy neurons. However, in AD, tau clumps together. As a result, neurons fail to function normally and eventually die.
- Loss of connections between neurons responsible for memory and learning. Neurons can't survive when they lose their connections to other neurons. As neurons die throughout the brain, the affected regions begin to atrophy, or shrink. By the final stage of AD, damage is widespread and brain tissue has shrunk significantly.

Presently there are no medicines that can slow the progression of AD. However, four FDA-approved medications are used to treat AD symptoms. These drugs help individuals carry out the activities of daily living by maintaining thinking, memory, or speaking skills. Medication therapy can also help with some of the behavioral and personality changes associated with AD.

Creutzfeldt-Jakob disease (CJD)
CJD is a rare, degenerative, fatal brain disorder. Symptoms of CJD include problems with muscular coordination, personality changes including progressive and severe mental impairment, impaired vision that may lead to blindness, and involuntary muscle jerks called myoclonus. People eventually lose the ability to move and speak and enter a coma. The first concern is to rule out treatable forms of dementia such as encephalitis or chronic meningitis. The only way to confirm a diagnosis of CJD is by brain biopsy or autopsy. Typically, onset of symptoms occurs at about age 60. Presently, there is no cure or treatments to control CJD, although studies of a variety of drugs to alleviate symptoms are now in progress.

delirium
Delirium is usually acute or subacute in onset and is associated with a clouding of the sensorium; patients have fluctuations in their level of consciousness and have difficulty maintaining attention and concentration. Delirium and dementia can overlap, making the distinction difficult and sometimes impossible.

dementia
Major neurocognitive disorder. The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5™) defines clinical criteria for major neurocognitive disorder:

- Evidence from the history and clinical assessment indicates significant cognitive impairment in at least one of these six cognitive domains: learning and memory; language; executive function; complex attention; perceptual-motor function; and/or social cognition.
- The impairment must be acquired and represent a significant decline from a previous level of functioning.
- The cognitive deficits must interfere with independence in everyday activities.
- In the case of neurodegenerative dementias such as Alzheimer disease, the disturbances are of insidious onset and are progressive, based on evidence from the history or serial mental-status examinations.
- The disturbances are not occurring exclusively during the course of delirium.
- The disturbances are not better accounted for by another mental disorder (e.g., major depressive disorder, schizophrenia).

While dementia is more common as people grow older (up to half of all people age 85 or older may have some form of dementia), it is not a normal part of aging. Many people live into their 90s and beyond without any signs of dementia. One type of dementia, frontotemporal disorders, is more common in middle-aged than older adults. Alzheimer disease (AD) is the most common form of dementia in the elderly.

Dementia “secondary to general medical condition” are cognitive or behavioral symptoms that can be resolved once the primary medically-related etiology is treated; treatment can result in improvement in cognitive
Dementia with Lewy bodies (DLB)  
DLB is one of the most common types of progressive dementia. The central features of DLB include progressive cognitive decline, “fluctuations” in alertness and attention, visual, long-lasting hallucinations, and parkinsonian motor symptoms, such as slowness of movement, difficulty walking, or rigidity. People may also suffer from depression. The symptoms of DLB are caused by the build-up of Lewy bodies – accumulated bits of alpha-synuclein protein – inside the nuclei of neurons in areas of the brain that control particular aspects of memory and motor control. The similarity of symptoms between DLB and Parkinson disease, and between DLB and Alzheimer’s disease, can often make it difficult for a doctor to make a definitive diagnosis. In addition, Lewy bodies are often also found in the brains of people with Parkinson’s and Alzheimer’s diseases. These findings suggest that either DLB is related to these other causes of dementia or that an individual can have both diseases at the same time. Presently, there is no cure for DLB. Treatments aim to control the cognitive, psychiatric, and motor symptoms of the disorder.

Depression  
Depression (major depressive disorder; clinical depression) is a common but serious mood disorder. The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5™) refers to major depressive disorder as the classic condition in depressive disorders, characterized by episodes of at least 2 weeks duration, including changes in affect and cognition. Single episodes are possible, although in most cases, the disorder is a recurrent one.

Frontotemporal disorders  
Frontotemporal disorders are the result of damage to neurons the frontal and temporal lobes. As neurons die in the frontal and temporal regions, these lobes atrophy. Gradually, this damage causes difficulties in thinking and behaviors normally controlled by these parts of the brain. Symptoms include unusual behaviors, emotional problems, trouble communicating, difficulty with work, or difficulty with walking. Frontotemporal disorders are forms of dementia caused by a family of brain diseases known as frontotemporal lobar degeneration (FTLD). FTLD may cause up to 10 percent of all cases of dementia and is the second most common cause of dementia, after Alzheimer disease, in people younger than age 65. Roughly 60 percent of people with FTLD are 45 to 64 years old. Presently, no cure or treatments are available to slow or stop the progression of frontotemporal disorders.

Mild cognitive impairment (MCI)  
Mild neurocognitive disorder. MCI is a syndrome between the cognitive changes of aging and dementia, also known as “cognitive impairment, no dementia” or CIND. Typically, MCI presents as memory difficulty and objective memory impairment, yet the patient can function in daily life. There are clinical subtypes of MCI that may have value in predicting conversion to a specific type of dementia. Not everyone with MCI will develop Alzheimer’s disease.

Normal pressure hydrocephalus (NPH)  
NPH is an abnormal buildup of cerebrospinal fluid (CSF) in the brain's ventricles, or cavities. It occurs if the normal flow of CSF throughout the brain and spinal cord is blocked in some way. This causes the ventricles to enlarge, putting pressure on the brain. Common in the elderly, it may result from a subarachnoid hemorrhage, head trauma, infection, tumor, or complications of surgery, but NPH may develop even when none of these factors are present. Symptoms of NPH include progressive mental impairment and dementia, problems with walking, and impaired bladder control. The person also may have a general slowing of movements. Because these symptoms are similar to those of other causes such as Alzheimer disease, Parkinson disease, and Creutzfeldt-Jakob disease, the disorder is often misdiagnosed.

Parkinson disease (PD)  
PD belongs to a group of conditions called motor system disorders, which are the result of the loss of dopamine-producing brain cells. The four primary symptoms of PD are tremor, or trembling in hands, arms, legs, jaw, and face; rigidity, or stiffness of the limbs and trunk; bradykinesia, or slowness of movement; and postural instability, or impaired balance and coordination. As these symptoms become more pronounced, patients may have difficulty walking, talking, or completing other simple tasks. Other symptoms may include depression; difficulty in swallowing, chewing, and speaking; urinary problems or constipation; skin problems; and sleep disruptions. Cognitive symptoms of dementia and changes in mood and behavior may arise. PD usually affects people over the age of 60. Presently there is no cure for PD, but a variety of medications provide dramatic relief from the symptoms.

Not all people with PD develop dementia, and it is difficult to predict who will. Being diagnosed with PD late in life is a risk factor for Parkinson disease dementia.
vascular dementia (VaD)

VaD is a heterogeneous syndrome in which the underlying cause is cerebrovascular disease in some form, and its ultimate manifestation is dementia. It is the second most common form of dementia after Alzheimer disease (AD), and it makes up 10-20% of cases in North America and Europe. The presentation of cognitive impairment in VaD may be quite distinct from AD, especially early in the disease course, with prominent deficits in executive dysfunction causing significant disability, even while memory impairment is quite mild and before the patient reaches criteria for dementia.

The National Institute of Neurological Disorders promulgates the use of "vascular cognitive impairment" (VCI) as "cognitive impairment that is caused by or associated with vascular factors". Cognitive deficits associated with vascular disease that don't meet criteria for dementia are labelled "vascular cognitive impairment, no dementia" (vCIND). This is somewhat analogous to mild cognitive impairment (MCI).

Evidence/Resources

- Guideline Watch (October 2014): Practice Guideline for the Treatment of patients with Alzheimer’s Disease and Other Dementias (APA)

Additional References

Related Care Model Topics

- Advance Care Planning
- Complete Care
- Depression in Adults
- Hypertension Management
- Palliative Care
- Patient Centered-Medical Home (PCMH)
- Primary Care Behavioral Health (PCBH)

Other Resources

- Alzheimer’s Association Respite Reimbursement Vouchers [PHS login required]
- Alzheimer’s Statistics for New Mexico 2016
- Alzheimer’s Disease Fact Sheet (NIH)
- Caregiving (NIH)
- Cognitive Impairment Care Planning Toolkit (Alzheimer’s Association)
- Dementia Trends: Implications for an Aging America (PRB) Today’s Research on Aging 2017;36
- Savvy Caregiver program [PHS login required]
- Tips for Daily Life (Alzheimer’s Association)