provider tools for identifying and managing cognitive impairment
Divergence Between Common Perceptions About Dementia Diagnosis and Published Data

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

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

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

Most family members appreciate the benefits of diagnosis

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

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

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

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

- No clinically significant changes were noted in depressive symptoms in either the persons diagnosed with dementia or their companion (Figure 1).
- Anxiety decreased or remained unchanged after diagnostic feedback for most groups (Figure 2).
Neuropsychological evaluation is typically most helpful for differential diagnosis, determining nature and severity of cognitive functioning, and the development of an appropriate treatment plan. Testing is typically maximally beneficial in the following score ranges:

- **SLUMS**: 18–27
- **MoCA**: 19–27
- **Kokmen STMS**: 19–33
- **MMSE/MMSE-2**: 18–28

### Annual Exam

**Mini Screen**

- **Normal**
  - Follow up in 1 year
- **IF**
  - **Mini-Cog** < 4 or **GPCOG** < 9
    - **OR**
    - Family Questionnaire > 2

### Cognitive Assessment

**Tools**

- **Mini-Cog** or **GPCOG** AND **Family Questionnaire** (if family available)

- **Normal**
  - Follow up in 1 year
- **IF**
  - Score falls outside of normal range
    - Normal Range:
      - **SLUMS**: 27–30 (HS education)
      - **MoCA**: 26–30 (HS education)
      - Kokmen STMS = 29–30
      - MMSE/MMSE-2 = 27–30
    - **Family Questionnaire** < 3

### Option 1

- Do complete dementia workup
  - (see provider checklist)

### Option 2

- Refer to: Champion in your practice, neurologist, neuropsychologist*

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

**History and Physical**
- Review onset, course, and nature of memory and cognitive deficits (Alzheimer’s Association Family Questionnaire may assist) and any associated behavioral, medical or psychosocial issues
- Assess ADLs and IADLs, including driving and possible medication and financial mismanagement
- Conduct structured mental status exam (e.g., MoCA, SLUMS, MMSE)
- Assess mental health (consider depression, anxiety, chemical dependency)
- Perform neurological exam focusing on focal/lateralizing signs, vision, including visual fields, and extraocular movements, hearing, speech, gait, coordination, and evidence of involuntary or impaired movements

**Diagnostics**

1. **Routine lab tests**
   - CBC, lytes, BUN, Cr, Ca, LFTs, Glucose

2. **Neuroimaging**
   - CT or MRI when clinically indicated

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

**Diagnosis**

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

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

- **Dementia with Lewy Bodies/Parkinson’s dementia**
  - Second most common type of dementia (up to 30% of cases)
  - Hallmark symptoms include visual hallucinations, REM sleep disorder, parkinsonism, and significant fluctuations in cognition

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

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

**Family Meeting**

- Include family care partners
- Review intervention checklist for Alzheimer’s disease and related dementias

- Refer to Alzheimer’s Association (800.272.3900/alz.org/mnnd) or Aging & Disability Resource Link (800.451.8693/www.carechoice.nd.gov)
intervention checklist
for alzheimer’s disease and related dementias

Diagnostic Uncertainty & Behavior Management

Refer to specialist as needed
- Neurologist (dementia focus, if possible)
- Geriatric Psychiatrist
- Geriatrician
- Memory Disorders Clinic

Counseling, Education, Support & Planning

Link to community resources
- Alzheimer’s Association
  24/7 Helpline: 800.272.3900
  alz.org/mnnd
- Provide Taking Action Workbook

Aging & Disability Resource Link
  800.451.8693
  www.carechoice.nd.gov

Stimulation/Activity/Maximizing Function

Daily mental, physical, & social activity
- Provide Living Well Workbook
  (for concrete recommendations)
- Adult day services

Sensory aids (hearing aids, pocket talker, glasses, etc.)

Safety

Driving
- Counsel on risks; “At the Crossroads”
  publication; refer for driving test or
  report to DMV as indicated

Medication Management
- Family oversight or public health
  nurse/home care

Financial/Legal
- Encourage patient to assign
  DPOA; elder law attorney
  as needed

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

Advanced Care Planning

Complete advanced care plan
- Refer to advanced care planning facilitator within system
- Encourage completion of healthcare directive forms

Medications

Memory
- Donepezil, rivastigmine patch
  and galantamine
- Memantine (mid-late stage)

Mood & Behavior
- SSRIs or SNRIs

Avoid/Minimize
- Anticholinergics, hypnotics
  and narcotics
- Antipsychotics (not to be used
  in Lewy Body dementia)
Structured Mental Status Exam

1. Montreal Cognitive Assessment (MoCA)
   - Public domain: www.mocatest.org/
   - Sensitivity: 90% for MCI, 100% for dementia
   - Specificity: 87%

2. St. Louis University Mental Status (SLUMS)
   - Public domain: http://medschool.slu.edu/agingsuccessfully/pdfsurveys/slumsexam_05.pdf
   - Sensitivity: 92% for MCI, 100% for dementia
   - Specificity: 81%

3. Mini-Mental Status Exam (MMSE)
   - Copyrighted: www4.parinc.com/Products/Product.aspx?ProductID=MMSE
   - Sensitivity: 18% for MCI, 78% for dementia
   - Specificity: 100%

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

Intervention Checklist

1. Taking Action Workbook
   www.alz.org/mnnd/resources

2. Living Well Workbook
   www.alz.org/mnnd/resources

3. At the Crossroads: Family conversations about Alzheimer’s disease, dementia & driving
   www.thehartford.com/alzheimers


5. Five Wishes
   www.agingwithdignity.org/forms/5wishes.pdf

6. Honoring Choices North Dakota
   www.honoringchoices.org

References

Provider Checklist:


Increasing Disclosure Of Dementia Diagnosis:


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