

The GSA KAER Toolkit for Primary Care Teams

Karen K. Tracy

Vice President, Strategic Alliances and
Integrated Communications

The Gerontological Society of America

www.geron.org/brainhealth

THE GSA **K A E R** TOOLKIT FOR PRIMARY CARE TEAMS

*Supporting Conversations About Brain Health,
Timely Detection of Cognitive Impairment,
and Accurate Diagnosis of Dementia*



Objectives

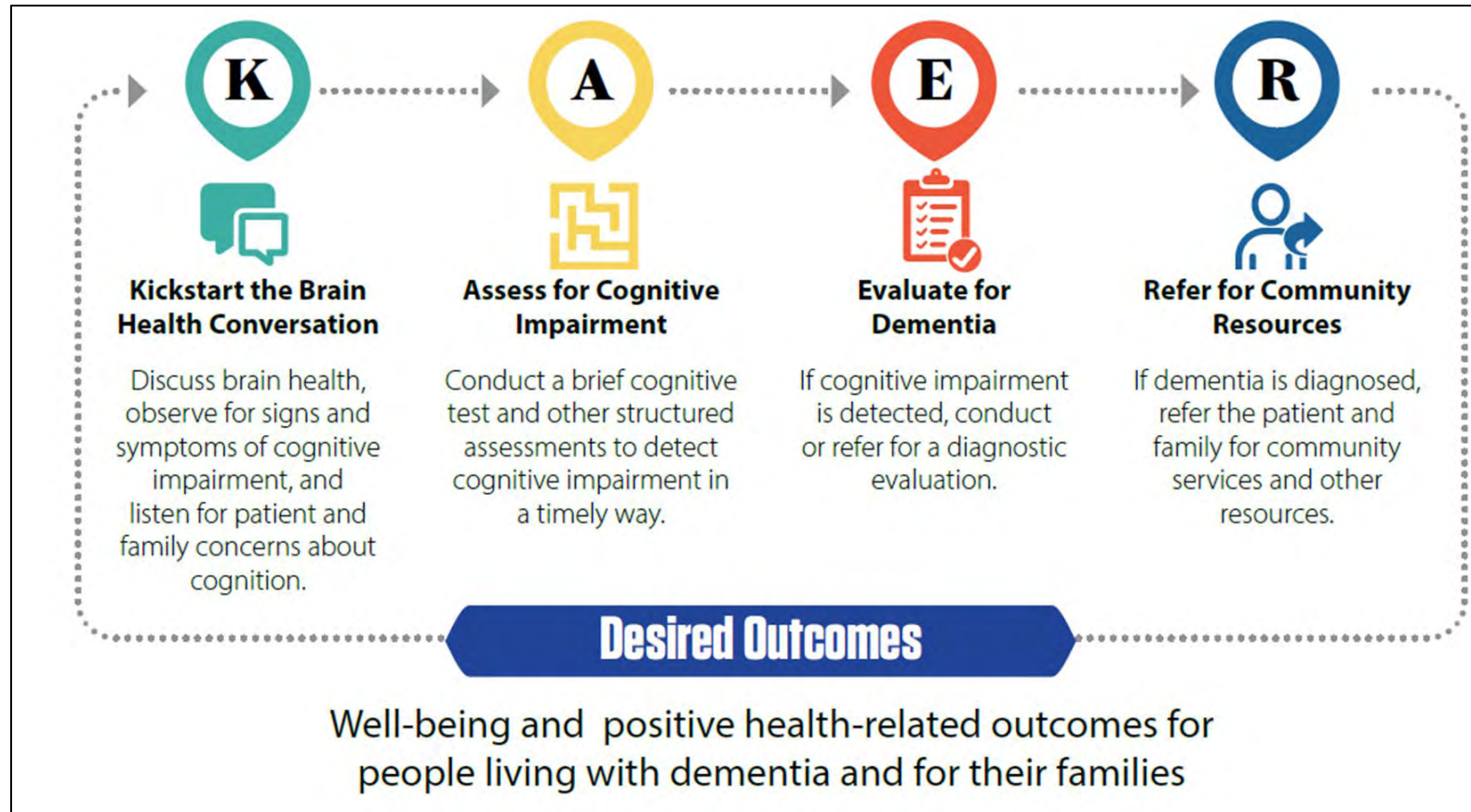
1. Describe the KAER Framework
2. Begin to identify tools and resources that may be implemented to improve the care of older adults with dementia *and their caregivers* – in their own setting

The Gerontological Society of America

- Largest professional society dedicated to advancing innovation on aging across the lifespan
- Multidisciplinary membership (5,500)
- Areas of Focus:
 - Stimulating research on aging
 - Providing person-centered interdisciplinary care of older adults
 - Advocating for policy that advances meaningful lives as we age
 - Educating the next generation of experts in aging
- Alzheimer's disease and related dementias is among the largest area of diverse research of our members

GSA Vision: Meaningful lives for all as we age, and that all individuals will have the opportunity to live healthy and productive lives and be treated with justice, humanity, dignity, and respect.

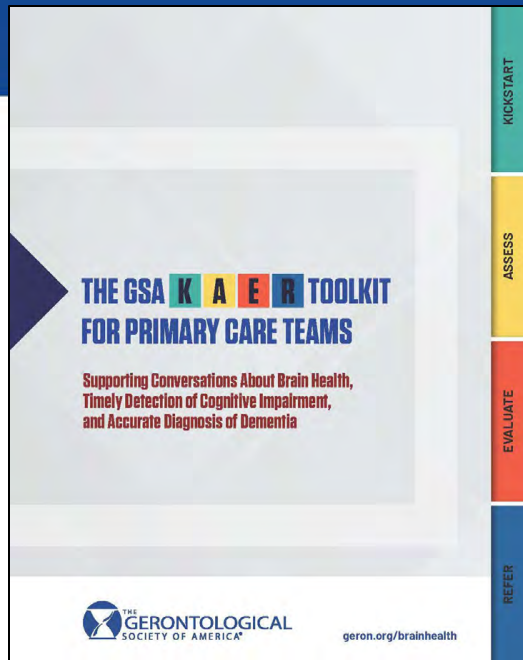
The GSA KAER Toolkit for Brain Health



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GSA KAER Toolkit Key Features



40+ page
electronic format
with navigation
tabs for each step

Key section
takeaways

Section on brain
health and risk
factors for
dementia

Monthly expert
panel input to
inform ongoing
updates and
enhancements

“The best of the
best” tools and
resources

Section on referral
to community
resources and RCTs

Additional
resources as
“spokes” from the
Toolkit

KICKSTART the Brain Health Conversation

Increasing brain health awareness



Working as a team to detect signs and symptoms of cognitive impairment that may require additional evaluation



The graphic features a teal circle with a white 'K' inside, positioned above two overlapping teal speech bubbles. A dotted line extends from the right side of the circle. The entire graphic is enclosed in a black rectangular border.

Kickstart the Brain Health Conversation

Discuss brain health, observe for signs and symptoms of cognitive impairment, and listen for patient and family concerns about cognition.

KICKSTART: Approaches to Implement

- Address any sensory loss and apply effective communication strategies
- Raise the topic of brain health and continue the conversation
- Ask about memory and cognition
- Listen for people's concerns about memory and cognition
- Listen for family concerns about people's memory and cognition
- Observe for signs and symptoms of cognitive impairment
- Add a question about memory or cognition to health risk questionnaires
- Use electronic health records to flag potential indicators

KICKSTART: Tools & Resources

- Hearing Handicap Inventory for the Elderly
- American Community Survey (vision)
- Addressing Sensory Loss Checklist
- GSA Communicating with Older Adults
- Annual Wellness Visit – list of medical history information
- Institute of Medicine – Cognitive Aging
- Alzheimer’s Association – Visit 1 – Cognition and Recommending Follow-up

KICKSTART: Tools & Resources



[Momentum Discussion Podcast:](#)
*Enhancing Early
Detection of Cognitive Impairment*

Table K-2. Resources on Brain Health for Patients

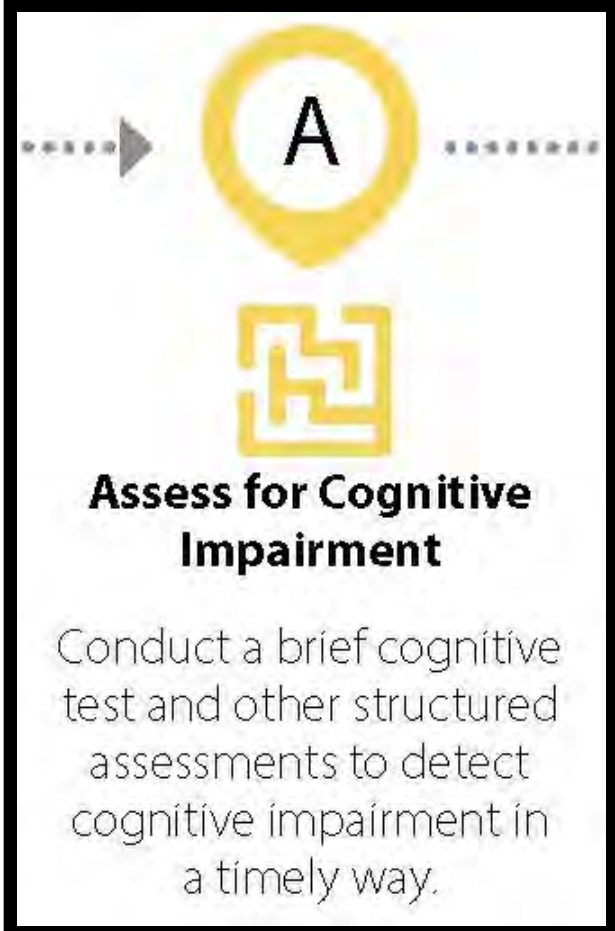
Topic	Resource	Developer
The relationship between brain health and factors such as smoking, alcohol, cholesterol, and blood pressure	<ul style="list-style-type: none"> Brain Health as You Age (printable file) Salud cerebral con el paso de los años (printable file) Talking About Brain Health & Aging (English-only printable file) 	Administration for Community Living
How medications to treat certain conditions may affect brain function	Medicine, Age, and Your Brain (English-only printable file)	Administration for Community Living, National Institutes of Health, Centers for Disease Control and Prevention
The connection between a healthy heart and a healthy brain; lifestyle changes to reduce risk of stroke, heart disease, and dementia in later life	<ul style="list-style-type: none"> Steps to Manage Risk (webpage) High Blood Pressure (webpage) Presión arterial alta (webpage) 	National Institute of Neurological Disorders and Stroke; National Heart, Lung, and Blood Institute
The difference between normal, healthy aging and dementia	The Truth About Aging and Dementia (webpage)	Centers for Disease Control and Prevention
Information on key lifestyle habits for a healthy body and brain, including dietary approaches	10 Ways to Love Your Brain (webpage)	Alzheimer's Association
Physical exercise, food and nutrition, medical health, sleep and relaxation, mental fitness, and social interaction are foundational to brain health	Six Pillars of Brain Health (webpage)	Cleveland Clinic
Actions that individuals, communities, and policymakers can take to promote healthy brain behaviors	How to Sustain Brain Healthy Behaviors: Applying Lessons of Public Health and Science to Drive Change Report (Spanish); Summary; Infographic (Spanish, French, Chinese, and Arabic)	The Global Council on Brain Health

ASSESS for Cognitive Impairment

Detecting cognitive impairment

Determining if further evaluation is needed

Emphasizing whole-team participation



The graphic features a yellow circle with a white 'A' inside, flanked by dotted lines and arrows. Below it is a yellow maze icon. The text 'Assess for Cognitive Impairment' is written in bold, followed by a paragraph: 'Conduct a brief cognitive test and other structured assessments to detect cognitive impairment in a timely way.'

Assess for Cognitive Impairment

Conduct a brief cognitive test and other structured assessments to detect cognitive impairment in a timely way.

ASSESS: Approaches to Implement

1. Use a validated, brief cognitive test to detect cognitive impairment
2. Use a validated, brief questionnaire to obtain perceptions of family members or other knowledgeable informants
3. Use a brief, validated self-report questionnaire to obtain individuals' perceptions of their own cognition
4. Have office staff participate in the primary care team's efforts to detect cognitive impairment in a timely way

ASSESS: Tools & Resources

Table A-1. Brief Cognitive Screening Tests

Name of Test	Distinguishing Features	Number of Items	Time to Administer*	Available in Languages Other Than English
Mini-Cog®	<ul style="list-style-type: none"> • Good sensitivity • Easy to administer and interpret • Does not adjust for education level 	Not applicable; 3-word recall and clock-drawing test	3–5 minutes	Mini-Cog® In Other Languages
Clock Drawing Test	Can be rapidly administered to identify structural impairment	Not applicable	Not applicable	
The Montreal Cognitive Assessment (MoCA) questionnaire	<ul style="list-style-type: none"> • Good sensitivity • Adjusts for education level • Assesses for executive function 	12	10 minutes	MoCA questionnaire in French
The Saint Louis University Mental Status (SLUMS) exam	<ul style="list-style-type: none"> • Good sensitivity • Adjusts for education level • Assesses for executive function 	11	7 minutes	Multi-Language Mental Status Exam
A Short Test of Mental Status (STMS) questionnaire	<ul style="list-style-type: none"> • Good sensitivity and specificity • Does not adjust for education level • Assesses for executive function 	8	5 minutes	

ASSESS: Tools & Resources

Table A-2. Family and Informant Questionnaires for Detecting Signs of Dementia

Name of Questionnaire	Distinguishing Features	Number Questions	Response Categories	Length of Time Addressed	Time to Administer*
The Ascertain Dementia 8-Item Informant Questionnaire (AD8)	<ul style="list-style-type: none"> Reliably differentiates cognitive function among individuals with and without dementia Brief to administer Well-researched 	8	3	Several years	3 minutes
Informant-based Behavioral Pathology in Alzheimer's Disease (BEHAVE-AD) rating scale	Collects information on observable neuropsychiatric symptoms unlike other informant-based tests	25	3	2 weeks	20 minutes
The Short Form of the Informant Questionnaire on Cognitive Decline in the Elderly (Short IQCODE or IQ Code 16) screening tool	<ul style="list-style-type: none"> May not be able to detect mild cognitive impairment and prodromal forms of dementia Information from the IQCODE and the Mini-Mental State Examination can be combined to aid in assessing for dementia 	16	5	10 years	10–15 minutes

ASSESS: Tools & Resources

Table A-3. Features of Tools for Self-Reporting of Cognitive Decline

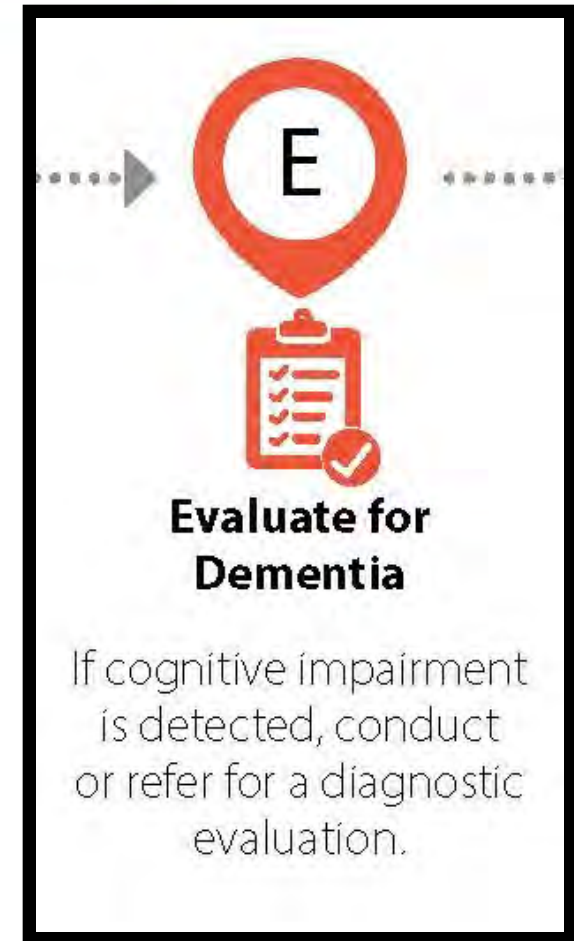
Name of Tool	Key Features	Number of Questions	Response Categories	Length of Time Addressed	Time to Administer*
The Ascertain Dementia 8-Item Informant Questionnaire (AD8)	Sensitive to detecting early cognitive changes associated with many common dementias	8	3	Several years	3 minutes

EVALUATE for Dementia

Ruling out reversible and/or
treatable causes



Conducting or referring for
diagnostic evaluation



EVALUATE: Approaches to Implement

1. Support individuals and family members in understanding the importance of diagnostic evaluation
2. Conduct a diagnostic evaluation or refer to a specialist
3. Identify the cause (or causes) of diagnosed dementia
4. Document the dementia diagnosis and identified causes
5. Disclose the diagnosis and cause (or causes) to the individual in a person-centered way
6. When indicated—and with the appropriate permission—also disclose to the family or trusted friend in a person-centered manner

Figure E-1. Components of a Diagnostic Evaluation for Dementia

Medical History

A medical history can be obtained through a clinical interview with the patient and at least one additional informant. It is important to gather information about the onset, course, and nature of memory and other cognitive impairments and any associated behavioral, medical, or psychological issues, including comorbid medical conditions, alcohol and other substance use, vision and hearing problems, and depression. The primary care team should also ask about recent illnesses, falls, head injury, prescription and over-the-counter medications, unintentional weight loss, and family history of dementia.

Cognitive and Mental Status Testing

Primary care teams may wish to use several assessment tools to evaluate patients for depression, cognition, and function. It is best to conduct cognitive testing using validated assessment instruments that measure multiple cognitive domains. Recommended instruments include the Mini-Cog and the Montreal Cognitive Assessment (MoCA). Please see Table 2-1 under Step 2, Approach 1 for a full list of recommended brief cognitive screening tests.

The Mini-Mental State Examination (MMSE) (Folstein et al., 1975) is a well-accepted and commonly used tool among healthcare professionals. The MMSE is more appropriate for patients with established cognitive impairment and can be used to evaluate the speed of decline over time. Presently, the use of the MMSE is restricted by copyright and can involve fees. Thus, the MMSE is not shown in this toolkit.

Primary care teams may use validated instruments to test for delirium and depression, such as the Confusion Assessment Method (CAM), the Patient Health Questionnaire-9 (PHQ-9), the Geriatric Depression Scale, and the Center for Epidemiologic Studies Depression (CES-D) Scale.

When an individual has been diagnosed with dementia, teams should also assess for dementia-related psychosis presenting as hallucinations or delusions and agitation (e.g., physical or verbal aggression, excessive motor activity). Additionally, when an individual has dementia caused by certain neurological conditions, the team should be alert for and address symptoms of pseudobulbar affect.

Functional Assessment

Functional impairment is usually assessed by asking the older adult and a family member or other informant about the patient's daily functioning and daily functioning. Commonly used instruments include the Katz Index of Independence in Activities of Daily Living (ADL) (asks about bathing, dressing, toileting, transferring, continence, and feeding) (Katz et al., 1970), the Instrumental Activities of Daily Living (IADL) Scale (asks about using the telephone, shopping, food preparation, housekeeping, laundry, transportation, and ability to manage medications and finances) (Lawton & Brody, 1969), and the Functional Activities Questionnaire (FAQ) (asks about writing checks and other financial management activities, working on a hobby, making a cup of coffee or a balanced meal, keeping track of current events, understanding TV, a book, or a magazine, remembering appointments and medications, and driving or using other transportation) (Pfeffer et al., 1982).

A diagnosis of dementia requires impairment in functioning that is sufficient to interfere with performance of daily activities. If the patient has cognitive impairment but not the required level of functional impairment, a diagnosis of dementia cannot be made.

Physical and Neurological Examination

A physical and neurological examination can be conducted to assess walking, gait, balance, coordination, speech and language, vision, hearing, focal weakness, extrapyramidal signs, rigidity, tremor, or slowness of movement (bradykinesia), blood pressure, and heart and other vascular functions that affect blood flow to the brain.

Neuropsychological Testing

Neuropsychological testing is especially helpful in diagnosing mild and very early stage dementia and evaluating atypical presentations. It can

provide comprehensive, objective information about which cognitive functions are affected and establish a baseline for future reevaluations.

Laboratory Tests

Routine laboratory tests are used to rule out treatable causes for cognitive impairment. Suggested tests include the following:

- Complete blood cell count
- Serum B12
- Serum calcium
- Folate
- Glucose
- Serum Electrolytes
- Thyroid function tests
- Liver function tests
- Renal function tests

Neuroimaging

Recommendations for use of neuroimaging in the clinical diagnostic evaluation of dementia vary. Some sources say that structural neuroimaging with a non-contrast computed tomography (CT) or magnetic resonance imaging (MRI) scan should be included. Other sources say that neuroimaging should be limited to particular clinical situations—for example, when the history and/or physical and neurological examinations indicate a possible central nervous system lesion and for patients who have atypical symptoms or sudden onset of dementia symptoms that could indicate a tumor, subdural hematoma, or normal pressure hydrocephalus.

SPECT (single photon emission computed tomography) and FDG-PET (fluorodeoxyglucose positron emission tomography) are not currently recommended for use in routine clinical diagnostic evaluations for dementia. Diagnostic practices vary in different medical settings; however, and these tests may be used in routine clinical dementia evaluations in some settings.

FDG-PET scans are currently approved by CMS for patients who meet specified criteria (Centers for Medicare & Medicaid Services, 2009); they must have a recently established diagnosis of dementia with cognitive decline documented for at least 6 months; meet diagnostic criteria for both Alzheimer's disease and frontotemporal dementia; and have already been evaluated for specific alternative degenerative diseases or causative factors. Medicare also covers FDG-PET in CMS-approved clinical trials that focus on the utility of FDG-PET in the diagnosis or treatment of mild cognitive impairment or early dementia.

Specialist Referral

In the future, beta-amyloid PET and Tau PET imaging might also be incorporated into standard practice. There are ongoing clinical studies to demonstrate their value in increasing the accuracy of the diagnostic process and in improving patient management. Results from a multicenter study of more than 11,000 Medicare beneficiaries suggested that amyloid PET imaging can be impactful in both areas (Rabinovici et al., 2019).

Primary care teams should consider referral to a specialist, such as a neurologist, geriatric psychiatrist, neuropsychologist, geriatrician, nurse practitioner with geropsychiatric experience, or a memory disorders clinic in situations where there is

- diagnostic uncertainty following a standard diagnostic evaluation;
- an atypical presentation;
- onset of symptoms in patients younger than 60 years of age;
- a request for a second opinion by the older adult or a family member; or
- conflict among family members about the diagnosis.

KICKSTART

ASSESS

EVALUATE

REFER

EVALUATE: Tools & Resources

Additional GSA Resources:

- Insights and Implications in Gerontology: Understanding Pseudobulbar Affect (PBA)
- Dementia-Related Psychosis: Strategies to Care
- Agitation in Alzheimer's Disease

EVALUATE: Tools & Resources

Table E-2. Comparison of Conditions and DSM-5 Diagnostic Criteria

Topic	Title	Format
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Table E-3. Resources for Dementia Caused by Alzheimer's Disease

Topic	Title	Format
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Table E-4. Resources on Dementia Caused by Vascular Conditions

Topic	Title	Format
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Table E-5. Resources on Diagnostic Criteria for Lewy Body Dementia

Topic	Title	Format
Lewy Body Dementia Diagnostic Symptoms and 2017 Revised Diagnostic Criteria for Dementia with Lewy Bodies	Lewy Body Dementia Diagnostic Symptoms	2-page checklist
Instructions and validated rating scale to determine whether Lewy bodies are contributing pathology	Lewy Body Composite Risk Score (LBCRS)	Validated scale with 10 yes/no questions

**EVALUATE:
Tools &
Resources**

Table E-6. Resources on How to Disclose a Diagnosis of Dementia

Topic	Title	Format
Video featuring a person-centered approach to disclosing a diagnosis	Delivering an Alzheimer's Disease Diagnosis	8-minute video
Video demonstrating best practices for making disclosure	Disclosing an Alzheimer's Diagnosis	10-minute video
Sample talking points to use with patients	Group Health Cooperative (2012) Dementia and Cognitive Impairment Diagnosis and Treatment Guideline	1-page summary document
Elements of making disclosure in a person-centered way as a process rather than a single event	Disclosing a Diagnosis of Dementia: Recommendations for a Person-Centered Approach	5-page peer-reviewed article

REFER for Community Resources

Referring for community resources



Providing ongoing education, support,
and referrals



Refer for Community Resources

If dementia is diagnosed, refer the patient and family for community services and other resources.

The complex block contains a graphic with a blue location pin icon containing the letter 'R', a person icon with an arrow pointing to the right, and the text 'Refer for Community Resources' in bold. Below this is a paragraph of text: 'If dementia is diagnosed, refer the patient and family for community services and other resources.'

REFER: Approaches to Implement

1. Refer patients with dementia to qualified internal staff to assess dementia-related needs and offer support
2. Refer patients with dementia to qualified community agencies and professionals
3. Conduct regular follow-up with patients and/or their families
4. Provide information about clinical trials and encourage participation

REFER: Tools & Resources

Referral Information – For Use by Primary Care Team

Check all that apply. Highlight the most urgent one as the starting point for a referral.

Issue(s) Triggering Referral	Examples of Types of Professional to Receive Referral
Information and Education	
<input type="checkbox"/> Education of person with dementia or caregiver education	Social worker, nurse, gerontologist
<input type="checkbox"/> Legal and financial planning	Attorney who can help with supported decision making, power of attorney for health care or finances, living wills, advance directives
<input type="checkbox"/> Clinical trials information	Study coordinator
Managing Symptoms of Dementia	
<input type="checkbox"/> Quality of life improvement	Clinical psychologist, gerontologist, occupational therapist, physical therapist, speech therapist, recreation therapist, music therapist
<input type="checkbox"/> Mental health and therapy	Clinical social worker, clinical psychologist
<input type="checkbox"/> Neuropsychiatric symptoms (agitation, depression, hallucinations)	Geriatric psychiatrist, neuropsychologist
Addressing Comorbidities and Other Clinical Needs	
<input type="checkbox"/> Care consultation	Clinical social worker
<input type="checkbox"/> Care or case management	Case manager, care manager
<input type="checkbox"/> Medication management	Nurse, pharmacist
<input type="checkbox"/> Safety (home, driving, guns)	Occupational therapist
<input type="checkbox"/> Functional loss	Speech-language pathologist, occupational therapist
<input type="checkbox"/> Motor loss	Physical therapist, occupational therapist, physiatrist
<input type="checkbox"/> Hearing loss	Audiologist



[Momentum Discussion Podcast:](#)
*An Interdisciplinary Approach
to Community Referrals*





REFER:
Tools &
Resources

- Area Agency on Aging, Aging and Disability Resource Centers
- Best Practice Caregiving
- Silver Sneakers
- NYU Alzheimer's Disease & Related Dementias Family Support Program
- ALZ Direct Connect – Alzheimer's Los Angeles referral program
- Alzheimer's Association
- National Institute on Aging

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Karen Tracy
ktracy@geron.org

