

THE ALZHEIMER'S PROJECT



LIVE WELL
SAN DIEGO

PHYSICIAN GUIDELINES
FOR THE SCREENING, EVALUATION,
AND DISEASE MANAGEMENT
OF ALZHEIMER'S DISEASE AND RELATED DEMENTIAS

CREATED BY
THE ALZHEIMER'S PROJECT
CLINICAL ROUNDTABLE
DECEMBER 2016

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ACKNOWLEDGMENTS

The members of the Alzheimer’s Project Clinical Roundtable wish to acknowledge, first and foremost, the members of the San Diego County Board of Supervisors who, in May 2014, unanimously voted to launch the Alzheimer’s Project. The five-year plan’s goals include raising research funds to enhance drug development, implementing standardized guidelines for physicians to diagnose and treat patients, providing support to family and professional caregivers, and increasing the knowledge and understanding of the disease throughout the community. The Alzheimer’s Project is an ambitious and nationally unique effort, and has placed our County at the vanguard of the fight against this global problem. Alzheimer’s

disease and related dementias currently impacts the lives of 150,000 family members who are caring for the region’s approximately 60,000 individuals living with Alzheimer’s and related dementias and is the number three cause of death in our County.

The Clinical Roundtable would not have been able to accomplish the development and adoption of countywide standards of care without the dedication of many clinical practitioners and care community members affiliated with various health systems in San Diego County. We would like to thank the leadership of our respective organizations for their support as we have diverted time and energy to this effort.

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BACKGROUND OF THE ALZHEIMER'S PROJECT AND CLINICAL ROUNDTABLE

THE ALZHEIMER'S PROJECT IS A REGIONAL INITIATIVE ESTABLISHED BY THE SAN DIEGO COUNTY BOARD OF SUPERVISORS TO ADDRESS THE TOLL OF THE DISEASE ON FAMILIES, COMMUNITIES AND OUR HEALTHCARE SYSTEMS

Focus of the Clinical Roundtable

- Development of standards for screening, evaluation and diagnosis of Alzheimer's disease and related dementias.
- Development of guidelines for the management of the behavioral and psychological symptoms and issues experienced by those afflicted.
- Education of primary care practitioners and their staff on standards and guidelines leading to countywide achievement of best practices.
- Identification of resources for physicians and their staff, as well as family caregivers.
- Dissemination of tools for effective communication with patients and their caregivers.

These tools have been created to assist primary care physicians deal with the rising number of individuals experiencing memory loss and dementia, and the associated monumental number of family members and caregivers affected by this profound category of disease.

With the largest proportion of physicians practicing internal and family medicine, compared to a very small number of neurologists, geriatricians and psychiatrists, clearly the majority of screening, evaluation, diagnosis, and treatment of Alzheimer's disease and related dementia will be managed by primary care physicians. The Clinical Roundtable encourages the use of these tools to facilitate more uniform process for clinicians, similar to how other clinical standards of practice have been helpful to improve patient care and outcomes.

The majority of patients living with dementia can be effectively managed by primary care providers. There are a number of cases that may need further evaluation beyond the scope the primary care provider is comfortable, and appropriate referrals are recommended. Further, while these tools and additional training are geared to increase the capacity of primary care providers, should the practitioner not be comfortable with the evaluation, disclosure or disease management of a particular patient, referral to a specialist is recommended.

These guidelines are intended to be a living document that will change as advances are made in the field. It is planned that the Clinical Roundtable will convene for periodic review of research literature and assessment of practice in the community to update these guidelines. Further, practitioners will be asked for their feedback on the algorithms, specific screening and evaluation instruments, and their impression of the impact on their increased capacity due to the guidelines.

SCREENING FOR DEMENTIA

Background

Cognitive impairment and dementia are under-diagnosed in older individuals. This can lead to safety and health consequences, and also delays adequate evaluation and potential treatment.

Screening for cognitive impairment has been recommended as part of the annual Medicare Wellness examination for people aged 65 or over. The value of age-based, non-symptomatic screening in this situation is unproven. Screening when the patient, family members or clinician suspects that there may be cognitive decline is more clinically relevant.

An algorithm for screening

An algorithm for screening was created by clinicians with expertise in Neurology, Geriatric Medicine, Geriatric Psychiatry, Psychiatry and Geriatric Psychology representing different San Diego health care systems. The members reviewed guidelines and studies of different screening tests and questionnaires, as well as screening algorithms proposed by organizations such as the Alzheimer's Association.

The goal was to develop an algorithm of when screening should be considered, and what brief instruments have reasonable evidence for use. Additional goals were to define a brief workup and focused management that should follow a positive screen, and to determine whether there are potentially treatable factors that should be addressed before undertaking or referring the patient for a more detailed evaluation

Intended use

Primary care physicians, nurse practitioners or other clinicians, psychiatrists and geriatric psychiatrists can use the algorithm to carry out a focused screening. The intended use is in older patients where there is suspicion of cognitive decline. This type of screening could potentially be used in other settings, for example in an Emergency Room or preoperatively to rule out other conditions presenting as disorientation or dementia.

Efficacy

The screening instruments selected are the MiniCog, a brief direct test of cognition; and the AD8, a questionnaire for an informant. These may be used separately or together. Studies suggest that a combination of direct cognitive testing and informant assessment is more accurate in detecting cognitive decline than either one alone.

Studies of the MiniCog suggest that it has sensitivity of over 80% and specificity ranging from 60 – 80% to detect dementia. Studies of the AD8 suggest that it has sensitivity and specificity that both exceed 80% to detect dementia. These results compare favorably with other widely used tests such as the Mini-Mental State Examination (MMSE).

Mild cognitive impairment (MCI) or mild neurocognitive disorder (MNCD) refers to a lesser degree of cognitive decline than dementia. These conditions may be caused by many different factors. Brief screening tests or questionnaires are less sensitive for MCI or MNCD than for dementia.

How to utilize the tool

An algorithm for cognitive screening indicates the types of symptoms that may trigger a screen, and the process of using the MiniCog and/or AD8. The MiniCog and AD8 instruments and scoring keys are included in this document, and are available online.

Scoring cut-offs for these instruments are listed. Medical factors, depressive symptoms and a brief panel of laboratory tests should be considered, to determine if there may be treatable factors if a screen is positive.

If a screen is negative, there is a decreased chance that dementia is present but does not rule out MCI. The clinician may decide to pursue a more detailed evaluation anyway, for example if there are issues such as decisions about driving, work or finances. If the screen is negative, the clinician may decide to rescreen the patient during follow-up at six months or one year.

Several RED FLAG symptoms or features are listed, as examples of situations where a more detailed evaluation should be considered, regardless of the results of the screening. A positive screen, with or without an attempt to determine and correct reversible factors, should lead to an evaluation.

Screening Instruments

Mini-Cog

http://www.alz.org/documents_custom/minicog.pdf

Spanish: <http://mini-cog.com/wp-content/uploads/2015/12/Mini-Cog-Spanish.pdf>

Normal range: ≥ 4

Informant/Family Questionnaire

AD8 http://www.alz.org/documents_custom/ad8.pdf

Normal Range: 0 -1

Patient Health Questionnaire for Depression (PHQ-9)

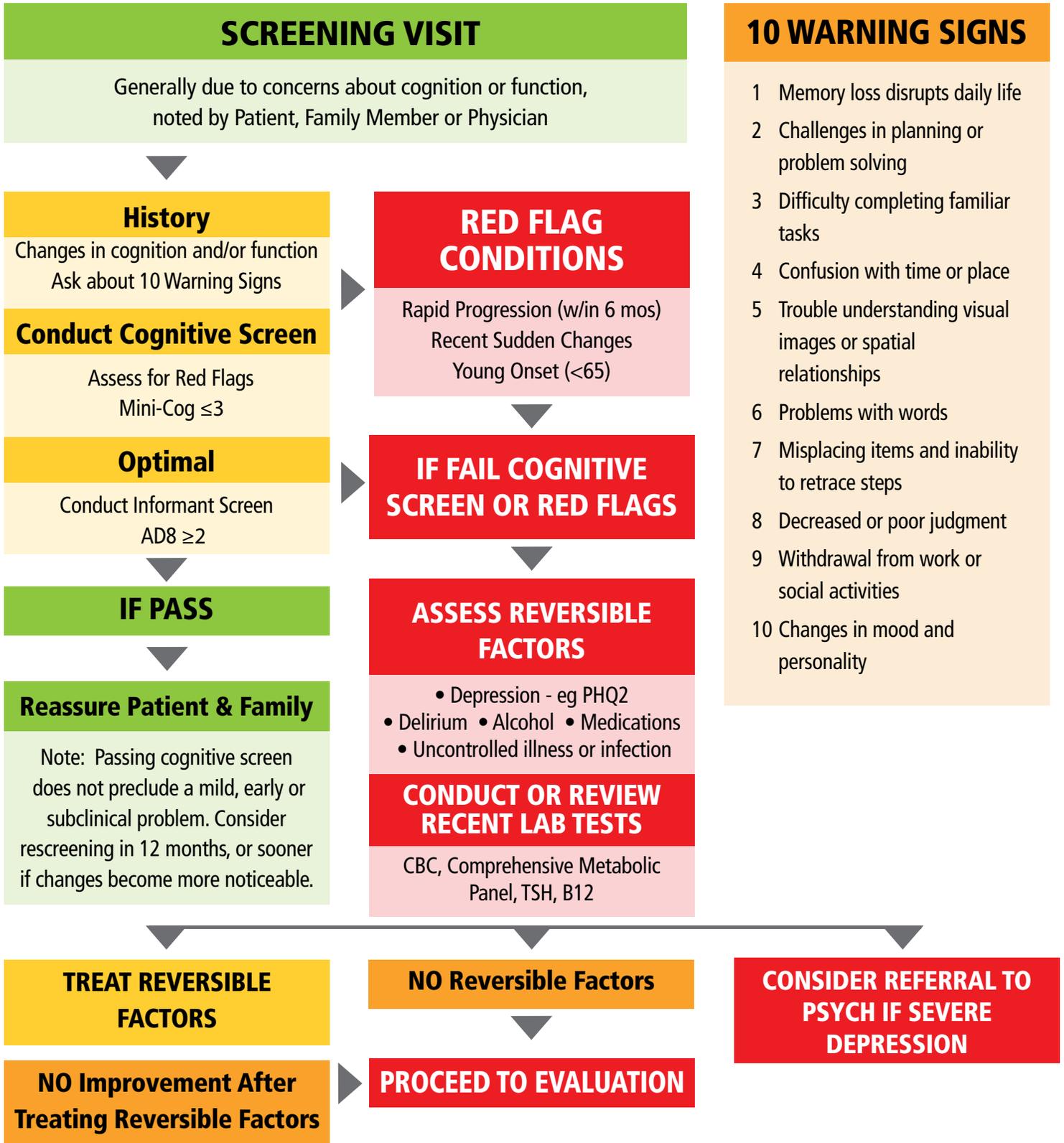
(source) http://www.cqaimh.org/pdf/tool_phq9.pdf

PHQ-2 are the first two questions of the PHQ-9 (see page 51)

ALZHEIMER'S CLINICAL ROUNDTABLE

RECOMMENDED SCREENING ALGORITHM FOR ADULT COGNITIVE IMPAIRMENT

NOTE: Cognitive screening may be a part of a regular annual physical exam.



EVALUATION OF COGNITIVE DECLINE AND DEMENTIA

Background

Alzheimer's disease (AD) is the most common cause of dementia in older individuals. Other common causes are vascular cognitive impairment, Dementia with Lewy Bodies (DLB) and Frontotemporal Lobar Degeneration (FTLD). Many other conditions may cause or contribute to dementia, including medically treatable conditions.

Evaluation is more detailed and time-consuming than screening. The clinician performing an evaluation should have a thorough knowledge of diagnosis of cognitive disorders such as Alzheimer's disease and other types of dementia, and should also be comfortable disclosing a diagnosis of Alzheimer's disease or other dementia to patient and family.

There are many guidelines for the evaluation of dementia. Recent guidelines for Alzheimer's disease, Mild Cognitive Impairment (MCI) due to AD, as well as prodromal AD emphasize biomarkers for amyloid and neurodegeneration in addition to clinical evaluation. Because these biomarkers are not yet available for routine clinical use, we have emphasized clinical evaluation.

Diagnostic criteria also exist for vascular dementia, DLB, FTLD, and other disorders.

An accurate diagnosis of cognitive impairment, dementia and its etiology can help to guide the patient and family regarding planning, accessing family and community resources, and appropriate use of symptomatic treatment.

An algorithm for diagnostic evaluation

An algorithm for diagnostic evaluation was created by a group of clinicians with expertise in Neurology, Geriatric Medicine and Psychiatry, representing different San Diego health care systems. The members reviewed guidelines and studies of evaluation, as well as published diagnostic criteria. The goal was to develop an outline of the elements of evaluation of dementia or cognitive loss, to help to guide clinicians and improve the quality of care.

Who should carry out an evaluation?

Physicians, Physician Assistants, Nurse Practitioners or a clinical team can use the algorithm to carry out an evaluation.

The clinician or team should have a strong knowledge base concerning cognition, aging and different types of dementia, and also experience in how to disclose the diagnosis, develop a management plan, and make appropriate use of community resources.

For patients with unusual or uncommon disorders, referral to a subspecialty dementia clinic is advisable. Unusual clinical pictures, including progressive aphasia, progressive visuospatial impairment, apraxia; early movement disorder features, young onset of cognitive impairment (before age 65) and rapidly progressive dementia are often best evaluated in a subspecialty dementia clinic. The presence of a strong family history of dementia may often require assessment by a subspecialty clinic.

The evaluation process

An evaluation typically will consist of at least one detailed visit to obtain the necessary elements of history, examination, cognitive assessment, and to determine appropriate laboratory testing, neuroimaging and other consultation or tests as appropriate.

1. Obtaining collateral history from an informant to document cognitive, functional and behavioral symptoms is strongly recommended whenever possible.

2. Discussion of the results of the evaluation, disclosure of the likely diagnosis, the prognosis, and an outline of treatment options, sources of information and resources is best left for a second visit.
3. Referrals and additional testing as a result of the evaluation require clinical judgment. They may include:
 - Psychiatric assessment,
 - Neuropsychological testing,
 - Additional medical evaluation,
 - Genetic counseling,
 - Neuroimaging testing, e.g., Fluorodeoxyglucose (FDG) PET scan, Amyloid PET scan, Cerebrospinal Fluid (CSF) testing for AD, laboratory testing for rapidly progressive dementia.

When to evaluate

The decision to evaluate could follow a screening assessment. In some situations, for example concerns about mild cognitive impairment, or cognitive problems that could affect work, driving or finances, an evaluation is appropriate.

Efficacy

Clinical guidelines and criteria for Alzheimer's disease (AD) have high sensitivity, in excess of 80-90%, but lower specificity – i.e., they sometimes misdiagnose AD when other etiologies are present.

Biomarkers such as amyloid testing in CSF or amyloid imaging have high specificity, i.e., if they are negative, AD is highly unlikely.

Clinical criteria for other disorders have been less thoroughly evaluated, and were mainly assessed in tertiary referral settings. Sensitivity greater than 80% has been noted for FTD and 70-80% for DLB. Vascular cognitive impairment (VCI) often accompanies AD, and many people with late life dementia show mixed pathology. Vascular risk factors and CT or MRI imaging help to evaluate the likelihood of VCI.

Recommended Evaluation Instruments

Informant surveys may be sent out to caregivers prior to the evaluation appointment.

Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)

(source) http://www.alz.org/documents_custom/shortiqcode_english.pdf

(other languages) <http://crahw.anu.edu.au/risk-assessment-tools/informant-questionnaire-cognitive-decline-elderly>

Quick Dementia Rating Survey (QDRS)

<http://www.dadm.alzdem.com/article/S2352-8729%2815%2900049-4/pdf>

The Montreal Cognitive Assessment (MOCA)

Public domain: www.mocatest.org/

Normal Range: 26 – 30, for people with < HS education, add 1 point to the total score

The MOCA is a cognitive test that briefly assesses executive/visuospatial function, memory, language, attention, calculation and orientation. Cut-off scores have been developed and it has been tested in the diagnosis of AD, DLB and PD-related disorders. Translated versions are available, in many languages, and there are 3 alternative versions in English.

Although the MOCA may be used as a stand-alone test, and has relatively high sensitivity for the diagnosis of dementia, it is less sensitive for MCI or mild dementia. In that setting, additional testing, either office-based if the clinician has appropriate knowledge or skills, or by a neuropsychologist, is strongly recommended.

St. Louis University Mental Status (SLUMS)

Public domain: http://medschool.slu.edu/agingsuccessfully/pdfsurveys/slumsexam_05.pdf

Normal Range: 27 – 30; MCI: 21 – 26; Dementia: 1 - 20

30 point questionnaire that tests for orientation, memory, attention and executive function. Better at detecting mild neurocognitive disorder than MMSE.

Measure/Assess IADLs

<http://consultgeri.org/try-this/dementia/issue-d13.pdf>

DEFINITIONS FOR DIAGNOSIS

Mild Cognitive Impairment

Mild deficit in one (single domain) or more than one (multi-domain) cognitive domains: memory, executive function, visuospatial, language, attention.

Intact instrumental ADLs (IADLs) and basic ADLs does not meet criteria for dementia

Alzheimer's Disease

Most common type of dementia (60–80% of cases)

Gradual onset and progression of memory loss, disorientation, impaired judgment/problem solving, and language.

Behavioral changes may include apathy/depression, and delusions. Social skills are typically preserved.

Dementia with Lewy Body Disease or Parkinson's Dementia

Second most common type of dementia (up to 20% of cases)

Hallmark symptoms include visual hallucinations, REM sleep disorder, parkinsonism, and significant fluctuations in cognition

Fronto-Temporal Dementia

Third most common type of dementia primarily affecting individuals in their 50s and 60s. Defined by EITHER marked changes in behavior/personality OR language variant (difficulty with speech production or loss of understanding of word meaning, which typifies the language variant).

Vascular Dementia

Although relatively rare in pure form (10% of cases),vascular changes often coexist with Alzheimer's disease, and mixed dementia (Alzheimer's plus vascular) or multiple etiology dementia is often found in elderly individuals.

Symptoms often overlap with those of AD; history or physical exam findings may suggest stroke(s).

* The latest DSM-5 manual uses the term "Major Neurocognitive Disorder" for dementia and "Mild Neurocognitive Disorder" for mild cognitive impairment. This tract on Alzheimer's resource uses the more familiar terminology, as the new terms have yet to be universally adopted.

ALZHEIMER'S CLINICAL ROUNDTABLE

RECOMMENDED EVALUATION ALGORITHM

PATIENT REFERRED FOR EVALUATION OF ADULT COGNITIVE IMPAIRMENT

BASED ON RESULTS OF SCREENING PROTOCOL

Evaluation to be conducted by PCP/Neurologist/Psychiatrist as appropriate

DIAGNOSTIC WORKUP

Detailed History: Informant Interview (QDRS, IQCODE, AD8),
Cognition, Function and/or Behavior Changes

Neurological exam

Mental Status Test: MOCA or SLUMS

Depression Screening: Geriatric Depression Scale 7 Item (≥ 8)
PHQ-9 and/or Structured Questions

IF MOCA OR SLUMS NORMAL

Reassure patient.
Consider rescreening 3-6 months

If concern re MCI consider
Neuro-psychological testing

If Persistent Depression

Refer to psychiatrist, other specialists
or treat as appropriate

IF MOCA ≤ 25 or SLUMS ≤ 26 Proceed to Labs & Imaging

- 1 **Labs:** Comprehensive metabolic panel if not already done at screening, or others as appropriate
- 2 **Imaging study:** CT or MRI
- 3 **Neuropsychological testing**
(optional - consider for atypical or mild or early onset cases)

DIAGNOSIS

TYPICAL DEMENTIA SYNDROME

Probable Alzheimer's Disease w/ or w/out cerebral vascular co-morbidity

- 1 Discuss & disclose; counsel patient and family
- 2 Develop Treatment/Management Plan
- 3 Access/provide community resources

ATYPICAL CASES

Parkinsonian features, hallucinations, prominent aphasia, early onset, rapid progression, fluctuations, unexplained visual impairment, severe depression
Referral to neurologist, psychiatrist, or geriatrician recommended

MAKING A DISCLOSURE OF ALZHEIMER'S OR OTHER DEMENTIAS

Disclosure and discussion

Once an evaluation is completed, the practitioner should be prepared to speak with the patient and caregiver or family members as a unit. Often, the disclosure of a diagnosis is the maximum amount of information the patient can handle at the first post-diagnosis appointment, and the provider may want to schedule a longer, follow-up appointment to fully orient the patient and caregivers of important first steps.

Physicians may be reluctant to disclose a specific diagnosis of dementia and to mention Alzheimer's disease; as such a diagnosis may change the physician-patient relationship. Disclosure has been widely studied, and provided that it is done sensitively and with knowledge of the social and family dynamics, it is generally a helpful part of the process. Many families are relieved at obtaining closure regarding a diagnosis and explanation for the problems that they have noted. Disclosure should also include the review, assessment and discussion of medical, personal and social factors that may be impacted by dementia.

Initial discussion and disclosure may cover

- The primary diagnosis.
- Contributing factors to the diagnosis (e.g., medical, neurological or psychiatric factors). Examples include depression, vascular risk factors, sleep disorders, medical comorbidity that may affect the brain, medications that may have cognitive side effects.
- Recommendations regarding questions such as work, driving, managing finances.
- Personal and home safety.

At the time of disclosure, impress upon the caregiver that the patient should not be left alone for the first 72 hours as he/she processes the information. Inform the caregiver how to reach you during this critical period. Acknowledge that the discussion carries with it significant impact as the patient and caregivers attempt to normalize their reaction and link response to expected needs. You may want to explain the stages of the grief process upon receiving a diagnosis of dementia: **Denial, Anger, Bargaining, Depression, Acceptance.**

The most critical topics to cover as soon as possible include:

- Medication options
 - o Primary and proven treatment options; disclose those that are evidence based and sufficiently studied, and explain these as standards of practice.
 - o Less well established; explain the warnings regarding research or lack thereof, the fact that these medications are chemicals whether natural or man-made.
- Driving – physician assessment of the patient's capacity to continue to drive, and when that should be re-evaluated. Physicians have a legal obligation to report patients with diminished capacity. If uncomfortable making this disclosure, this would be an appropriate referral to a specialist.
- Finances and Legal Issues.

Other important topics to cover during the first year include

- Community resources for both the individual and caregivers
- Social resources
- Housing: home modifications, long-term care options
- Treatment of cognitive and behavioral symptoms
- Management of vascular risk factors
- Lifestyle factors such as diet, exercise, sleep, alcohol, etc.
- Discussion of caregiving and of resources
- Prognosis
- Genetic questions (more appropriate for younger onset of dementia)
- Research options, including clinical trials

Five Action Steps Family Caregivers Should Take

- 1) Establish legal responsibility and create legal documents that will be helpful to you and to your loved one.
- 2) Understand the diagnostic process, symptoms, and course of memory loss and dementia.
- 3) Care for yourself; a healthy, rested caregiver is a more effective caregiver.
- 4) Join a support group.
- 5) Plan for the future. Do research and know what lies ahead to plan accordingly

Initial Use of Cognitive Enhancers

After a diagnosis and disclosure of Alzheimer's disease, many patients and caregivers may be looking for ways to deter the development of the disease. Introduction of cholinesterase inhibitors and memantine is recommended for early to mid stage disease, and may slow the progression and effects on activities of daily living. The most common cholinesterase inhibitors are donepezil (Aracept ®), rivastigmine (Exelon ®) available in patch form, and glantamine (Razadyne ®). These medications can be continued as long as no negative side effects occur. GI symptoms may be transient and recede over time.

Memantine (Namenda ®) has been shown in clinical trials to have positive effects on cognition and behavior as both mono therapy and when added to a cholinesterase inhibitor. Some studies suggest that long-term use of the combination of a cholinesterase inhibitor and memantine has benefits on cognition that may be sustained over years. Memantine is generally well tolerated.

MANAGEMENT OF ALZHEIMER'S DISEASE AND RELATED DEMENTIA

Although cognitive impairment is the clinical hallmark of dementia, behavioral and psychological signs and symptoms of dementia (BPSD), which are also known as non-cognitive neuropsychiatric symptoms (NPS), are extremely common and are responsible for the majority of pain and suffering experienced by the individuals living with dementia and those who love and care for them. In addition, BPSD is a primary factor responsible for the medical and other costs associated with caring for individuals living with dementia. BPSD accounts for at least 30% percent of the cost of caring for community dwelling individuals with dementia.

Research has found that BPSD is associated with:

- 1) Reduced quality of life for patients living with dementia,
- 2) Reduced quality of life for family members and caregivers,
- 3) Early nursing home placement,
- 4) Hospital admissions,
- 5) Avoidable morbidity and mortality,
- 6) Caregiver stress and depression,
- 7) Reduced caregiver employment income.

The assessment and treatment of BPSD is not simple. BPSD is the result of the interaction of numerous possible factors that are internal and external to the individual living with dementia, including the brain disease responsible for the dementia and the environment in which the individual with dementia is living.

Recently, a number of groups and organizations have developed and published excellent algorithms, treatment guidelines and other resources to help clinicians and family members accurately diagnose and treat BPSD. The goal of this section is to succinctly summarize previously developed information with references so that the treating provider can easily obtain additional and more detailed information when necessary, and so that the provider knows when to seek consultation from a specialist in this area. Specifically, this guide contains an assessment and treatment algorithm, a number of guidelines for assessing and treating some of the most common forms of BPSD, and a form for caregivers to use when preparing to meet with a clinician in order to obtain help with BPSD.

DICE: Describe, Investigate, Create, Evaluate.

Over the past 15 years a number of publications have included excellent **algorithms for the assessment and treatment** of BPSD and many are included as references in this manuscript. Though the depth and detail of the recommendations vary across these publications, all contain the same basic steps and concepts as the DICE algorithm: accurate description of the behaviors, systematic investigation of their cause(s), use of the safest and most precisely targeted interventions possible, and the need for periodic reassessment to determine if the interventions are working and if they are still needed.

The Alzheimer's Project Clinical Roundtable recommends the use of the DICE algorithm in the assessment and management of behavioral and psychological signs and symptoms of dementia. DICE stands for Describe,

Investigate, Create, and Evaluate. The algorithm diagrams created provide the practitioner with a snapshot for consult usage. This document also contains more detailed information on the use of the treatment options, as well as references and resources.

There are many factors that may make the investigation of the etiology of BPSD and its treatment difficult. While most dementia and associated behavioral symptoms are screened, diagnosed and treated by the primary care provider, it is always advised to refer the patient to a neurologist, psychiatrist or geriatric psychiatrist if the primary care practitioner is unsure or uncomfortable with evaluation or treatment.

DESCRIBE

When an individual living with dementia develops **behavioral symptoms**, the clinician should guard against jumping to the conclusion that the symptoms are exclusively and intrinsically an expected outcome of the dementia illness. A somewhat liberal and yet compassionate and useful perspective is to view problem behavior or behaviors as a form of communication limited, perhaps, by the cognitive losses that are occurring as part of the dementia. This perspective mandates that the clinician assume the stance of a scientist or private investigator and begin to systematically collect information that will ultimately lead to an understanding of the causes and associated best remedies of the behavior(s). This is, in essence, the underlying premise of the DICE approach. Although this approach may consume more time and other resources up front, in the long run the benefits in terms of improved quality of life for all involved and decreased healthcare expenditures, will far surpass these costs.

Common Behavioral Problems

- Food Refusal
- Wandering
- Restlessness
- Sleep disturbances
- Combativeness
- Disinhibition
- Hypersexuality
- Irritability
- Depression
- Psychosis
- ADL refusal
- Social withdrawal
- Medication refusal
- Anxiety
- Agitation
- Aggression

Disease stages and symptoms. In patients living with Alzheimer's dementia, research has demonstrated that certain symptoms are most likely to occur at certain stages of the illness. Knowing this is very helpful because if a symptom like physical aggression occurs early in the course this strongly suggests that the symptom may be related to medical illness or some other psychiatric illness other than the dementia. Appendix 3 contains a table created from data collected and analyzed by Jost, et al. (1996)

INVESTIGATE

Ten Key Points

- 1) New or rapidly worsening behavioral symptoms in a patient with dementia should be considered a sign of an underlying medical illness until proven otherwise.
- 2) The first step in evaluation is to assess whether underlying medical factors may be involved.
- 3) Problem behaviors are often triggered by anticholinergic meds and suboptimal prescribing.
- 4) Obtain a careful history focused on any changes in the patient's medical status and medications.
- 5) There are differences between the psychotic symptoms typically seen in patients with dementia versus the psychosis seen other conditions.
- 6) The concept "psychobehavioral metaphor" may help with selecting a class of medication with the highest probability of being helpful.

- 7) In spite of the recent FDA warnings, in certain situations a risk-to-benefit analysis may still favor the use of antipsychotic medications.
- 8) Other possibly helpful strategies: prazosin (Minipress®) and dextromethorphan-quinidine (Nuedexta®).
- 9) The use of both pharmacological and behavioral strategies leads to the best results.
- 10) Remember that symptoms evolve over the stages of dementia and may decrease or disappear.

Differential Diagnosis of Behavioral Symptoms in a Patient with Dementia

- Suboptimal communication between individual and caregivers
- Toxic environment
- Delirium
- Exacerbation of pre-existing medical illness
- Onset of new medical problem
- Medication toxicity (e.g. polypharmacy or suboptimal prescribing)
- Drug or alcohol intoxication or withdrawal
- Exacerbation of pre-existing psychiatric illness
- Onset of a new psychiatric illness

Medical illnesses are often overlooked in older patients, especially those with psychiatric diagnoses or dementia prominently highlighted in their records!

How to Recognize Delirium

Begin by having a high index of suspicion and then ask:

- Have there been any recent medication changes?
- Does the patient look physically ill or physically uncomfortable?
- Are the patient's vital signs reasonable?
- Are the patient's vital signs around their usual baseline?
- Are the patient's lab values reasonable?
- Has the patient's mental status changed rather suddenly or dramatically?
- Is the patient suddenly behaving in ways that have never been characteristic for the patient?
- Is the patient's level of alertness and/or attention waxing and waning?

Common "Delusions" in Patients with Dementia

- Accusations of infidelity
- Persons or images from TV are real
- Fear of abandonment
- Accusations of theft of one's property
- Claims of impersonation (spouse is imposter)
- Current residence is not one's home
- Misidentification of familiar persons

"Stealth" Anticholinergic Medications

All sorts of medications can cause delirium but be especially vigilant about those with anticholinergic properties.

Factors influencing investigation. There are many factors that may make the investigation of the etiology of BPSD, and its subsequent treatment, difficult. These factors include but are not limited to:

- The limited time that many healthcare systems allot for outpatient clinical appointments.
- The extra time and resources needed to properly examine a patient with BPSD. For example, severe constipation (obstipation) has been identified as a common trigger of BPSD and yet accurately diagnosing constipation in a patient living with dementia is more challenging for a variety of reasons. Often the patient with BPSD is unwilling or unable to cooperate with key components of the evaluation including a digital rectal examination and extra personnel may be needed to assist with the physical examination in order to ensure patient and examiner comfort and safety.
- The difficulty that many patients living with dementia have in providing clear, concise accurate historical information.
- The difficulty that many caregivers, especially family caregivers who are exhausted by the demands of caregiving, have in providing clear, concise, accurate historical information.
- The lack of optimal training experiences of many of the clinicians who are on the frontlines in the assessment and treatment of BPSD.
- An insufficient number of well-trained experts who are prepared to diagnose and treat patients with BPSD.

The use of rating scales to assess the severity of symptoms, to provide documentation to justify the costs of care and to monitor more objectively the impact of interventions is recommended. The rating scales recommended by Tampi et al. have been included in Appendix 4.

The importance of **searching for medical triggers** cannot be overemphasized. Published research including the work by Woo et al., have found that a significant subset of older individuals, including those who may be living with dementia, are experiencing the problem behaviors due to previously undiagnosed (and therefore untreated medical problems) or due to medical problems that have not been optimally treated.

CREATE a Care Management Plan

Disease Management: General Concepts

- Define and document target symptoms
- Identify and optimally treat all medical conditions
- Identify and remove triggers (e.g. pain, noise, boredom, hunger...)
- Use all possibly helpful tools
- Depending on acuity of behavior, use behavioral interventions first
- There is no US FDA-approved treatment for behavioral disturbance associated with dementia
- Combine behavioral and medication interventions
- Use the psychobehavioral metaphor (defined in the algorithm chart on page 25 and in the text on page 26) to select initial class of medication

Behavioral and Environmental Management of BPSD

It is advised to develop behavioral intervention strategies with the family members and caregivers prior to utilization of pharmacological management. The algorithms included in this document offer a variety of treatment suggestions. Caregivers may need education on how to improve suboptimal communication in order to achieve desired behavioral results. Examples of suboptimal communications include:

- Making more than one request at a time
- Speaking too fast or with poor diction
- Not allowing time for the person living with dementia to respond
- Not using more than one sensory modality
- Not maintaining eye contact
- Not assuming a comfortable, relaxed posture
- Not identifying and verbalizing the patient's affect
- Not using simple, direct statements

Redirection helps to improve communications, and helps the patient refocus in order to be calmer, cooperative, content, and safe. Physicians can refer caregivers to the Redirection Tip Sheet in the back of this book.

It is critical for caregivers to create an environment that conveys safety, familiarity, comfort, and friendliness in order to avoid triggering uncontrollable reactions. These include adequate lighting, comfortable temperature, easy and comfortable furniture, calming music, and stimulating activities. See the Resources for Caregivers for additional resources.

Care Refusal

The caregivers should be coached on dealing with difficult behaviors including the refusal of care is occurring. Many factors may be involved in these situations, including anger, stubbornness, uncooperativeness, anxiety, and verbal or physical agitation or aggression. The most common forms of care which are refused are medications, eating, bathing, and clinical appointments.

Caregivers should be encouraged to:

- Communicate that the request and refusal is understood
- Remember who the patient was previous to dementia
- Avoid arguments
- Focus on pleasant experiences

Refer the caregiver to resources to assist with these behaviors. See Resource Sheet

Pharmacologic Management of BPSD

Cognitive enhancers and memantine may have a role to play in the treatment of BPSD. They may also contribute to the development of BPSD. If a patient presents with BPSD and is currently taking a cognitive enhancer and/or memantine, efforts should be made to determine if there may be a temporal association between the initiation of treatment and the emergence of BPSD. If a patient with BPSD is not yet taking a cognitive enhancer or memantine, then the addition of a cognitive enhancer or memantine should occur as one of the final steps in symptom management and only after the most pressing behavioral symptoms have been successfully addressed. A cognitive enhancer or memantine should be added sequentially and only after it has been confirmed that the addition of the first medication has not caused problems.

Memantine (Namenda®) has been shown in clinical trials to have effects on cognition and behavior in medium to late stage/moderate to severe Alzheimer's disease, as mono therapy or when added to a cholinesterase inhibitor. These effects are small. There were no benefits over placebo in clinical trials of mild AD. Some studies (not controlled clinical trials) suggest that long-term use of the combination of a cholinesterase inhibitor and memantine has benefits on cognition in people with AD that may be sustained over years. Memantine is generally well-tolerated..

Psychotropic Medication Management. It is important for clinicians involved with the assessment and treatment of BPSD to remember that with only rare exceptions, most types of dementia are progressive neurocognitive illnesses which means that the underlying disease process leads to ever increasing damage to the afflicted individual's brain. This reality sometimes leads to worsening behavioral challenges but sometimes leads to improvement in problem behaviors whenever the brain tissue centrally involved in triggering the behavior is damaged and no longer able to play a causal role in the behavior's occurrence. Once a patient with BPSD has been stable for 3-6 months, if psychotropic medication has been required to manage the behavior, it is then important to initiate a cautious, incremental reduction in psychotropic medication and monitor the patient closely. If the problem behavior(s) does (do) not reappear after several weeks, then another reduction should occur. On the other hand, if at any point a reduction leads to the return of a problem behavior, then the patient should be returned to the dose at which the problem behavior remained in remission.

Pharmacologic Treatment: General Principles

- Start low, go slow and determine lowest effective dose or,
- Start low, increase relatively swiftly and then be prepared for the need to back off in order to determine lowest effective dose,
- Withdraw after an appropriate period and observe for relapse,
- Behavioral symptoms vary according to stage of illness and may remit as the illness progresses,
- Refer to the PDR or comparable reference for information on introducing and titrating medication.

Categories of Medications Which May be Helpful

- Alpha adrenergic blockers
- Antipsychotics
- Antidepressants
- Anxiolytics
- Beta blockers
- Cholinesterase inhibitors
- Dextromethorphan-quinidine
- Hormones
- Memantine
- Mood stabilizers
- Pain medications especially routine acetaminophen

Benzodiazepines

- Short-acting, renally excreted agents are preferred
- Lorazepam (Ativan®)
- Oxazepam (Serax®)

Trazodone (Desyrel®) – there is no good data for the use of this medication based on Cochran Reports

Other Medications That May Prove Helpful

Prazosin (Minipress®)

The noradrenergic system is the brain "adrenalin" system for attention and arousal. Excessive noradrenergic reactivity produces anxiety and agitation, and contributes to agitation in AD.

Dextromethorphan/quinidine

- Dextromethorphan hydrobromide and quinidine sulfate (Nuedexta®) is approved for pseudobulbar affect (PBA) in the US and European Union
- Dextromethorphan is most well-known as a cough suppressant
 - a low low-affinity, uncompetitive NMDA receptor antagonist
 - σ_1 (sigma₁) receptor agonist
 - Serotonin and norepinephrine reuptake inhibitor
 - Neuronal nicotinic $\alpha_3 \beta_4$ receptor antagonist
- Quinidine is a Class 1 antiarrhythmic
 - When combined with dextromethorphan, quinidine works by increasing the amount of dextromethorphan in the body

Avoiding Suboptimal Prescribing and Polypharmacy

For any indication, use the medicine most appropriate for an older patient and avoid:

- Polypharmacy (too many medications) and the prescribing cascade
- Prescribing a medication from an essential category of medication that is not senior friendly
- Prescribing a dose of an essential medication that is larger than needed
- Prescribing a medication to be taken at a time of day that is not optimal (e.g. diuretics at bedtime)
- Not prescribing a needed medication (e.g. a pain medication)
- Long-term use of opiate pain medication in patients other than those with terminal cancer

The Beers Criteria List

One of the two most widely used consensus criteria for safe medication use in older adults (the other is the Canadian criteria)

- PIMs = potentially inappropriate medications
- Composed of 53 medications or medication classes divided into 3 categories:
 - 1) PIMs and classes to avoid in older adults
 - 2) PIMs and classes to avoid in older adults with certain diseases that the drugs can exacerbate
 - 3) Medications to be used with caution in older adults (new)

These criteria included designations of the quality and strength of the evidence

- Quality of evidence is designated as high, moderate or low
- Strength of the recommendation is designated as strong, weak or insufficient
- Medications are organized according to organ system or therapeutic category or drug
- The criteria also included rationale and recommendations
- The 2015 update is not as extensive as the 2012 update, but has 2 additions:
 - Drugs for which dose adjustment is required based on renal function
 - Drug-drug interactions information

The **risks of the interventions** provided and the speed of their implementation should be in direct proportion to the pain and dangerousness of the behaviors. Sometimes, the use of less precise medication interventions is needed initially in order to facilitate the investigation for underlying causes.

Factors to consider in the creation of a care plan include:

Health system traditions, regulations and policies, including:

- Many insurance plans do not yet pay for services that would often help reduce the frequency and intensity of BPSD. For example, adult day healthcare programs that specialize in the care of patients living with dementia are often not affordable for many individuals living with dementia in spite of their proven benefits. These benefits include increasing the quality of life of individuals living with dementia, reducing rates of illness and burn out in family caregivers, reducing the rates of BPSD by providing meaningful and enjoyable activities for patients and the delaying or even prevention of placement in residential care, which is the most expensive method of caring for those living with dementia illnesses.
- The emphasis on keeping the duration of hospitalizations as brief as possible which may sometimes tempt clinicians to make too many changes in care at the same time which, in some instances, makes it difficult to know precisely which intervention was responsible for improvement or, possibly, in worsening of the behaviors. This emphasis may also tempt prescribers to place patients on doses of medication larger than

truly needed in order to reduce problem behaviors sufficiently to permit a patient to be discharged to a lower and less expensive level of care.

- The lack of appropriate healthcare facilities that are designed to care for older patients who have concurrent medical and psychiatric problems that needs to be assessed and treated in tandem. For example, most inpatient psychiatric units are not able to care for patients who may require intravenous therapy, and most medical and surgical inpatient units are not designed to handle disruptive behaviors and so often must resort to cautious and judicious use of physical restraint that often becomes itself a trigger for problem behaviors.

Shortage of Clinicians. Given the huge mismatch between the projected number of individuals who will be afflicted with dementia and the number of clinicians who have completed specialized training programs to prepare them to efficiently and safely diagnose and treat BPSD, most of this work will be undertaken by clinicians who will need resources like this manuscript in order to provide the care that these patients need.

In general, if the application of the information in this document does not result in acceptable clinical outcomes, then consider making a referral to a board-certified geriatric psychiatrist. The names and contact information for these colleagues is included on the website www.ChampionsForHealth.org/Alzheimers.

EVALUATE (Re-Evaluate)

It is important to review whether the interventions employed and implemented by caregivers have been safe and effective. Evaluation should be done within two to three weeks, and modifications made as needed. The practitioners should continue to look for possible underlying causes of behavioral factors. If a variety of interventions are not effective, or if the patient or caregiver is in danger, consider referral to a geriatric neurologist or psychiatrist.

See information on prior pages regarding medication management for patients living with advanced AD.

END OF LIFE PLANNING AND CARE

Alzheimer's Disease is a chronic, progressive, ultimately terminal illness. The time course is generally around 6-10 years from diagnosis to death, but can vary from 3-20 years. Of course, patients may die of other causes or comorbid illnesses during the progression of their dementia. Common causes of death directly related to Alzheimer's disease are aspiration pneumonia and hypovolemic shock related to cessation of eating and drinking. Alzheimer's patients may also develop and die from other infections, including UTIs, community- or facility-acquired pneumonias, and infected pressure ulcers. They may also suffer strokes, myocardial infarction, arrhythmias, pulmonary emboli, and other common geriatric conditions.

Advance care planning is very important for patients with Alzheimer's, and should be undertaken as early as possible after diagnosis—although it is prudent not to bring up that topic simultaneously with sharing the initial diagnosis. Patients who have already formulated advance health care directives (AHCDs) may want to update them, and those who have not completed an AHCD—and who still have decision-making capacity, as with most patients with early Alzheimer's—should be strongly encouraged to execute such a document immediately. While POLST forms are generally recommended for those in the last year or two of life, patients with early dementia who

definitely do not want aggressive interventions like CPR, intubation, defibrillation or enteral feeding tubes may wish to complete these, and their physicians should assist in this process.

It is important to note that CPR is rarely successful in the frail elderly, and that there is good evidence that feeding tubes are an inappropriate intervention in advanced dementia patients. In spite of that, the 2016 Dartmouth Atlas reported that in San Diego County, we are worse than the national average with respect to placing these tubes inappropriately. References to studies can be found via the Choosing Wisely website (AMDA, AAHPM and AGS items at <http://www.choosingwisely.org/?s=feeding+tube>), and a useful patient education pamphlet is available in multiple languages through the Coalition for Compassionate Care of California (<http://coalitionccc.org/tools-resources/decision-guides/>). In addition to the risks of aspiration pneumonia and complications directly related to the tube (such as intra-abdominal abscesses), feeding tubes are associated with higher rates of delirium and pressure ulcers, and have not been demonstrated to prolong life. It is worth discussing tube feeding early on and actively discouraging consideration of a feeding tube in an advanced Alzheimer's patient—despite family concerns about “starvation” and the tendency to associate “food” (nutrition) with nurturing and love. Like all advance care planning discussions, these conversations can be deferred to palliative care specialists, but are meaningful and usually well accepted and appreciated when undertaken by the primary care physician who knows the patient and family best. Thickened liquids and pureed diets, while frequently ordered when dysphagia develops in dementia patient, may not always be appropriate as far as quality of life—risk of aspiration notwithstanding. Consider a palliative medicine referral if there are concerns about these issues.

Another important point to educate patients and families on is the notion of dying from dehydration. At the end of life, patients with dementia and most other illnesses lose interest in food and fluids. It is part of a natural dying process, and dying from dehydration—while it has an unpleasant reputation in the public eye—is actually one of the more benign ways to die. In fact, often no medication for symptom relief (such as opioids or benzodiazepines) is necessary; simple measures like moistening the inside of the mouth often suffice. Once all intake ceases, patients generally die in 7-14 days; these patients are usually on hospice. Reassuring patients and families that this process is natural and appears to be painless can be very helpful and appreciated.

Poor prognostic indicators for Alzheimer's patients—and a time that may signal appropriateness for a hospice referral—include significant weight loss (e.g., 10% in 6 months), significant (stage 3-4) pressure ulcer development, dysphagia, recurrent upper UTIs or lower respiratory tract infections, marked functional decline (e.g., becoming bedbound), and becoming nonverbal. But hospice can be consulted early; if hospice feels that the patient has more than a six-month life expectancy, they may defer admission but still provide some palliative care guidance.

Finally, the geriatric mantra of de-prescribing should be initiated early and continued diligently. There is little reason for a patient with moderate or severe dementia to be on a statin drug. Anticholinergics (including common drugs for overactive bladder) promote delirium. Sedatives and antidepressants increase the risk of falls. Running a seated blood pressure of 160/90 is probably safer than 110/60. Consider stopping all non-essential drugs, especially those that require many years to show benefit. Antipsychotics are dangerous and should be used as a last resort for extreme behavioral or psychotic symptoms (such as frightening hallucinations). Benzodiazepines tend to disinhibit behavior, sometimes exaggerating rather than alleviating anxiety or agitation. They should be avoided whenever possible. As to cholinesterase inhibitors and memantine, they have their own side effects (especially nausea, anorexia and bradycardia for the cholinesterase inhibitors) and are certainly not hugely effective in treating dementia in most patients. Patients with advanced AD becomes severe, and when the patient is already institutionalized, strong consideration should be given to discontinuing these drugs.

INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE (IADL)

M.P. Lawton & E.M. Brody

A. Ability to use telephone

- | | |
|---|---|
| 1. Operates telephone on own initiative; looks up and dials numbers, etc. | 1 |
| 2. Dials a few well-known numbers | 1 |
| 3. Answers telephone but does not dial | 1 |
| 4. Does not use telephone at all. | 0 |

B. Shopping

- | | |
|---|---|
| 1. Takes care of all shopping needs independently | 1 |
| 2. Shops independently for small purchases | 0 |
| 3. Needs to be accompanied on any shopping trip. | 0 |
| 4. Completely unable to shop. | 0 |

C. Food Preparation

- | | |
|--|---|
| 1. Plans, prepares and serves adequate meals independently | 1 |
| 2. Prepares adequate meals if supplied with ingredients | 0 |
| 3. Heats, serves and prepares meals or prepares meals but does not maintain adequate diet. | 0 |
| 4. Needs to have meals prepared and served. | 0 |

D. Housekeeping

- | | |
|--|---|
| 1. Maintains house alone or with occasional assistance (e.g. "heavy work domestic help") | 1 |
| 2. Performs light daily tasks such as dish-washing, bed making | 1 |
| 3. Performs light daily tasks but cannot maintain acceptable level of cleanliness. | 1 |
| 4. Needs help with all home maintenance tasks. | 1 |
| 5. Does not participate in any housekeeping tasks. | 0 |

E. Laundry

- | | |
|---|---|
| 1. Does personal laundry completely | 1 |
| 2. Launders small items; rinses stockings, etc. | 1 |
| 3. All laundry must be done by others. | 0 |

F. Mode of Transportation

- | | |
|--|---|
| 1. Travels independently on public transportation or drives own car. | 1 |
| 2. Arranges own travel via taxi, but does not otherwise use public transportation. | 1 |
| 3. Travels on public transportation when accompanied by another. | 1 |
| 4. Travel limited to taxi or automobile with assistance of another. | 0 |
| 5. Does not travel at all. | 0 |

G. Responsibility for own medications

- | | |
|--|---|
| 1. Is responsible for taking medication in correct dosages at correct time. | 1 |
| 2. Takes responsibility if medication is prepared in advance in separate dosage. | 0 |
| 3. Is not capable of dispensing own medication. | 0 |

H. Ability to Handle Finances

- | | |
|---|---|
| 1. Manages financial matters independently (budgets, writes checks, pays rent, bills goes to bank), collects and keeps track of income. | 1 |
| 2. Manages day-to-day purchases, but needs help with banking, major purchases, etc. | 1 |
| 3. Incapable if handling money. | 0 |

Source: Lawton, M.P., and Brody, E.M. "Assessment of older people: Self-maintaining and instrumental activities of daily living." *Gerontologist* 9:179-186, (1969).

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DICE APPROACH TO BEHAVIORAL AND PSYCHOLOGICAL SIGNS AND SYMPTOMS OF DEMENTIA

DESCRIBE

Caregiver describes behavioral factors:

- Social & physical environment
- Patient perspective
- Degree of distress to patient and caregiver

Look for:

- Antecedents
- Context
- Patterns
- Co-occurring events

INVESTIGATE (ASSESS)

Investigate possible causes of behavior:

- Medication side effects
- Pain
- Functional limitations
- Medical conditions
- Psychiatric comorbidity
- Severity of cog impairment
- Degree of executive dysfunction
- Poor sleep
- Sensory changes
- Emotional triggers: ie., fear, abandonment
- Lack of physical activity
- Suboptimal exposure to bright light

CREATE (TREATMENT)

Provider, caregivers, clinical team collaborate to create and implement a treatment plan Address physical problems and medical issues first

Employ behavioral interventions

- Provide caregiver interventions
- Enhance communication

Ensure that the environment is safe

Increase or decrease the amount of stimulation in the environment

If behavioral interventions not effective/partially effective, employ pharmacological management, selecting a class of psychotropic medication based on psychobehavioral "Assume/Assess/Align" model, as below

ASSUME patient does not have dementia

ASSESS psychiatric signs and symptoms

ALIGN symptoms to best fit psychiatric syndrome
eg., major depression, paranoid psychosis, mania, etc.

- Create meaningful activities
- Simplify tasks

EVALUATE (AND RE-EVALUATE)

Evaluate whether "CREATE" interventions implemented by caregiver(s) have been safe/effective

- Make modifications as needed and continue to look for possible underlying causes
- Re-evaluate periodically
- If intervention not effective or if patient or caregiver are in danger, consider referring to neurologist or psychiatrist

ASSESSMENT AND TREATMENT OF DEPRESSION

- Remember that an episode of major depressive disorder in older individuals may not look the same as in younger patients.
- Remember that diagnosing an episode of major depressive disorder through the veil of dementia is difficult and it may be impossible to identify all of the signs and symptoms usually required to make a definite diagnosis. For example a patient with dementia may have such severe aphasia that they are unable to answer questions about self-esteem or anhedonia.
- Consider using the concept, psychobehavioral metaphor, first described by Pierre Tariot, when attempting to discern the most likely common psychiatric syndrome occurring in a patient who is living with dementia. In essence, the concept invites the clinician to ask him or herself, “if I did not know that this patient had dementia, what common psychiatric syndrome or diagnosis would the signs and symptoms this patient has most resemble?” A concept closely related to the psychobehavioral metaphor which has been described by Lawlor and Bhriain (2001) has been called “BPSD clusters.” These clusters include: Depression, Apathy, Aggression, Psychomotor Agitation and Psychosis.

ASSESSMENT & TREATMENT OF AGITATION

- All agitation is not the same and, therefore, should not be treated the same. The algorithm provides examples of agitation that have different triggers and, as a result, have different optimal treatments.
- In spite of the FDA black box warnings, antipsychotics may still be the best pharmacologic treatment option in patients with BPSD, especially in patients whose behavioral symptoms seem to be triggered by delusions or in patients who have a clear history of a psychiatric disorder that included psychotic symptoms and preceded the onset of dementia illness (e.g. a mood disorder with psychotic features or schizophrenia).
- Whenever possible, medication changes should occur one at a time and sufficient time should occur to evaluate the impact of the medication addition prior to another medication change being made.

DICE APPROACH FOR BEHAVIORAL AND PHARMACOLOGIC TREATMENT OF DEPRESSION

DESCRIBE

Symptoms overlap with behavioral symptoms of dementia. Depressed mood may not be evident in older patients with major depression. Consider the following in older patients: anxiety, insomnia, anorexia, irritability, anger/hostility, insecurity, paranoia, etc.

Presenting symptoms: Depressed mood, tearfulness, anxiety, anhedonia, anorexia, weight loss, insomnia, hypersomnia, irritability, pessimism, suicidal ideation, somatic preoccupation, decreased concentration, psychomotor slowing, social isolation, psychosis.

INVESTIGATE (ASSESS)

- **Evaluate** underlying medical causes including medication side effects; work-up significant cognitive impairment/dementia.
- **Do not assume** cognitive impairment is solely due to depression.
- **Evaluate for the following:** social/family support, past psychiatric and substance abuse history, family mental health history.

CREATE (TREATMENT)

Educate - patient and family; provide psychosocial interventions to support both patient and caregivers.

Medication - Antidepressant medication should be started at low dose and increased slowly. Preferred antidepressant in older adults include citalopram, escitalopram

Psychiatric consultation - consider in context of severe depression, failure to thrive, psychosis, suicidal ideation, history of major psychiatric illness (eg. bipolar disorder, schizophrenia, past suicidal attempts, severe agitation, etc.)

EVALUATE (AND RE-EVALUATE)

Gather information - from caregivers and patient; use rating scales to track response to treatment.

Medication response - Evaluate for side effects of medication within 2 weeks and efficacy within 3-4 weeks.

Evaluate for consultation - Worsening symptoms or adverse effects of treatment (worsening cognitive symptoms, increased agitation, worsening insomnia, new suicidal ideation, etc.) should lead to psychiatric consultation.

DICE APPROACH FOR BEHAVIORAL AND PHARMACOLOGIC TREATMENT OF AGITATION & AGGRESSION

DESCRIBE

Verbal Agitation
 • Aggressive vs Non-Aggressive

Physical Agitation
 • Aggressive vs Non-Aggressive

INVESTIGATE (ASSESS)

Agitation Type	Exhibits As	Potential Underlying Cause
Verbal Non-aggressive	Loud Screaming or Moaning, Requests for Help	Depression, Anxiety, Boredom
Verbal Aggressive	Threats, Name Calling	Paranoia
Physical Non-Aggressive	Pacing, Repetitive Pounding	Disinhibition, Boredom, Need for Attention, Companionship
Physical Aggressive	Hitting/Kicking/Pushing	Pain disorder or physical discomfort associated with movement, or constipation

CREATE (TREATMENT)

Address physical problems and/or utilize behavioral modifications. For behavioral specific resources: www.alz.org/care

The 36 Hour Day by Nancy L. Mace & Peter V. Rabins

Ensure environment is safe with appropriate stimulation

If treatment of physical problems and/or behavioral modifications do not control behaviors consider pharmacologic treatment — Examples:

- Irritability/depression - antidepressant
- Fear/paranoia - antipsychotic
- Disinhibition/embarrassment - mood stabilizer
- Movement/pain - analgesic

EVALUATE (AND RE-EVALUATE)

***If patient stable 3-6 months, and psychotropic medication has been required, initiate a cautious incremental reduction and monitor patient closely**

- If symptoms are not fully resolved, look for other underlying causes
- If intervention not effective or if patient or caregiver are in danger, consider referring to neurologist or psychiatrist



DICE APPROACH FOR ASSESSMENT AND TREATMENT OF SLEEP PROBLEMS

DESCRIBE

Sundowning
Daytime Sleeping
Sleep Fragmentation

Initial Insomnia
Middle Insomnia

INVESTIGATE (ASSESS)

Pain
Osteoarthritis
Sleep Apnea or Orthopnea

Boredom
Poor Sleep Hygiene
Suboptimal Prescribing

CREATE (TREATMENT)

Educate on good sleep hygiene practices

Correct any potential medical problems

If strict application of sleep hygiene practices and successful treatment of all medical co-morbidities has not resolved the insomnia problem, consider insomnia as potential symptoms of a psychiatric disorder and apply the psychobehavioral methaphor. If insomnia appears to be related to temporary/situational factors, consider use of very low dose FDA approved medication for insomnia.*

EVALUATE (AND RE-EVALUATE)

***If patient stable 3-6 months, and psychotropic medication has been required, initiate a cautious incremental reduction and monitor patient closely**

- If symptoms are not fully resolved, look for other underlying causes
- If intervention not effective or if patient or caregiver are in danger, consider referring to geriatric neurologist or psychiatrist

DICE APPROACH FOR WANDERING

DESCRIBE

Wandering

May occur in indoor residential or commercial environments as well as outdoor areas with or without secured perimeter

INVESTIGATE (ASSESS)

Look for patterns, time of day/Sundowning

Common triggers include:

- Boredom
- Lack of physical activity
- Searching for familiar/home
- Dietary factors: sugar/caffeine
- Medical factors: pain/constipation
- Psychiatric issues: anxiety/mania

CREATE (TREATMENT)

EMPLOY APPROPRIATE BEHAVIORAL AND SAFETY STRATEGIES. IF BEHAVIORAL INTERVENTIONS DO NOT RESOLVE BEHAVIORS: MEDICATION MAY BE NEEDED

Mania - may need pharmacologic treatment: anti psychotics or mood stabilizers*

EVALUATE (AND RE-EVALUATE)

If wandering persists, look for other underlying causes

- *If patient stable 3-6 months, and psychotropic medication has been required, initiate a cautious incremental reduction and monitor patient closely
- If intervention not effective or if patient or caregiver are in danger, consider referring to neurologist or psychiatrist

RESOURCES AND REFERENCES

The Clinical Roundtable, along with The County of San Diego Aging and Independence Services Agency, has created a listing of resources which practitioners may provide patients and their caregivers. (See back page)

Some useful informational resources include:

Alzheimer's Association <http://alz.org>

Alzheimer's San Diego <http://alzsd.org>

Alzheimer's Disease Education and Referral (ADEAR) <https://www.nia.nih.gov/alzheimers>

Alzheimer's Drug Discovery Foundation (ADDF) information about risk factors. <https://www.alzdiscovery.org>

Clinical trials: clinicaltrials.gov and Alzheimer Association Trial finder

http://www.alz.org/research/clinical_trials/find_clinical_trials_trialmatch.asp

For non-AD disorders:

Lewy Body Dementia Association <http://www.LBDA.org>

Association for Frontotemporal Degeneration (AFTD) <http://www.theaftd.org>

Resources: Screening & Evaluation Instruments

AD8: https://www.alz.org/documents_custom/ad8.pdf

Mini-Cog: http://www.alz.org/documents_custom/minicog.pdf

MOCA In English and other languages: <http://www.MOCAtest.org>

PHQ-9 in English and other languages: <https://www.communitycarenc.org/provider-tools/conditions/depression/f>

SLUMS Examination in English and other languages:

<http://www.elderguru.com/slums-dementia-test-available-in-various-languages/>

Screening in Chinese population

http://sgec.stanford.edu/content/dam/sm/sgec/documents/video/2009-2010_Webinars/2010-01-web.pdf

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Appendix 1: Screening Instruments

Mini-Cog™

Instructions for Administration & Scoring

ID: _____ Date: _____

Step 1: Three Word Registration

Look directly at person and say, "Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now." If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

The following and other word lists have been used in one or more clinical studies.¹⁻³ For repeated administrations, use of an alternative word list is recommended.

Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Banana	Leader	Village	River	Captain	Daughter
Sunrise	Season	Kitchen	Nation	Garden	Heaven
Chair	Table	Baby	Finger	Picture	Mountain

Step 2: Clock Drawing

Say: "Next, I want you to draw a clock for me. First, put in all of the numbers where they go." When that is completed, say: "Now, set the hands to 10 past 11."

Use preprinted circle (see next page) for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

Step 3: Three Word Recall

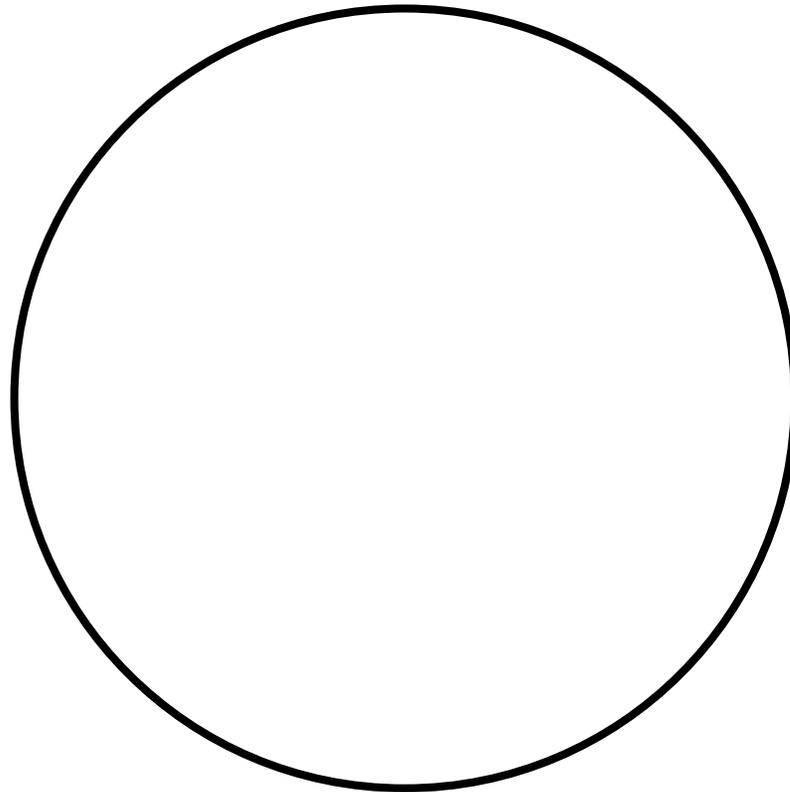
Ask the person to recall the three words you stated in Step 1. Say: "What were the three words I asked you to remember?" Record the word list version number and the person's answers below.

Word List Version: _____ Person's Answers: _____

Scoring

Word Recall: _____ (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock Draw: _____ (0 or 2 points)	Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points.
Total Score: _____ (0-5 points)	Total score = Word Recall score + Clock Draw score. A cut point of <3 on the Mini-Cog™ has been validated for dementia screening, but many individuals with clinically meaningful cognitive impairment will score higher. When greater sensitivity is desired, a cut point of <4 is recommended as it may indicate a need for further evaluation of cognitive status.

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v. 01.19.16



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MINI-COG™ -Spanish

1) OBTENGA LA ATENCIÓN DEL PARTICIPANTE, Y DIGA:

“Le voy a decir tres palabras que quiero que usted recuerde ahora y más tarde. Las palabras son

Manzana Amanecer Silla

Por favor, dígamelas ahora.”

Intento 1 _____

Intento 2 _____

(administre sólo si las 3 palabras no fueron repetidas en el Intento 1. Diga **“Las palabras son Manzana, Amanecer, Silla. Por favor, dígamelas ahora”**)

Intento 3 _____

(administre sólo si las 3 palabras no fueron repetidas en el Intento 2. Diga **“Las palabras son Manzana, Amanecer, Silla. Por favor, dígamelas ahora”**)

(Indique con una marca de verificación [✓] cada palabra que es repetida correctamente. Dele 3 intentos para repetir las palabras al participante. Si es incapaz de repetir las palabras después de 3 intentos, continúe con el siguiente ítem.)

2) Dele al participante la Página 2 de este formulario y un lápiz/lapicero. DIGA LAS SIGUIENTES FRASES EN EL ORDEN CORESPONDIENTE: **“Por favor, dibuje un reloj en este espacio. Comience dibujando un círculo grande.”** (Cuando esto haya sido completado, diga) **“Coloque todos los números en el círculo.”** (Cuando esto haya sido completado, diga) **“Ahora coloque las manecillas del reloj para que marquen las 11 y 10.”** Si el participante no ha terminado de dibujar el reloj en 3 minutos, suspenda este ítem y pídale al participante que le diga las tres palabras que le pidió que recordara antes.

3) DIGA: **“¿Cuáles fueron las tres palabras que le pedí que recordara?”**

_____ (Puntúe 1 por cada una) Puntaje de las Palabras

Puntúe el reloj (según el formulario de Puntaje del Reloj):
 Reloj Normal 2 puntos Puntaje del Reloj
 Reloj Alterado 0 puntos

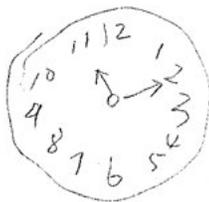
Puntaje Total = Puntaje de Palabras más Puntaje del Reloj

**0, 1, o 2 posible trastorno cognitivo;
 3, 4, o 5 indica que no hay trastorno cognitivo**

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PUNTAJE DEL DIBUJO DEL RELOJ

RELOJ NORMAL



UN RELOJ NORMAL CONTIENE TODOS LOS SIGUIENTES ELEMENTOS:

Todos los números 1-12, cada uno solo una vez, están presentes en el orden y dirección correctas dentro del círculo. Dos manecillas están presentes, una apuntando al 11 y la otra al 2.

CUALQUIER RELOJ AL QUE LE FALTE ALGUNO DE ESTOS ELEMENTO SE CONSIDERA ANORMAL. SI EL PARTICIPANTE SE REÚSA A DIBUJAR EL RELOJ, ENTONCES ÉSTE SE CONSIDERA ANORMAL.

ALGUNOS EJEMPLOS DE RELOJES ANORMALES (EXISTEN MUCHAS OTRAS CLASES)



Agujas Incorrectas



Faltan algunos números

AD8 Dementia Screening Interview

Patient ID#: _____

CS ID#: _____

Date: _____

Remember, "Yes, a change" indicates that there has been a change in the last several years caused by cognitive (thinking and memory) problems.	YES, A change	NO, No change	N/A, Don't know
1. Problems with judgment (e.g., problems making decisions, bad financial decisions, problems with thinking)			
2. Less interest in hobbies/activities			
3. Repeats the same things over and over (questions, stories, or statements)			
4. Trouble learning how to use a tool, appliance, or gadget (e.g., VCR, computer, microwave, remote control)			
5. Forgets correct month or year			
6. Trouble handling complicated financial affairs (e.g., balancing checkbook, income taxes, paying bills)			
7. Trouble remembering appointments			
8. Daily problems with thinking and/or memory			
TOTAL AD8 SCORE			

Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, Neurology 2005;65:559-564

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The AD8 Administration and Scoring Guidelines

A spontaneous self-correction is allowed for all responses without counting as an error.

The questions are given to the respondent on a clipboard for self-administration or can be read aloud to the respondent either in person or over the phone. It is preferable to administer the AD8 to an informant, if available. If an informant is not available, the AD8 may be administered to the patient.

When administered to an informant, specifically ask the respondent to rate change in the patient.

When administered to the patient, specifically ask the patient to rate changes in his/her ability for each of the items, **without** attributing causality.

If read aloud to the respondent, it is important for the clinician to carefully read the phrase as worded and give emphasis to note changes due to cognitive problems (not physical problems). There should be a one second delay between individual items.

No timeframe for change is required.

The final score is a sum of the number items marked “Yes, A change”.

Interpretation of the AD8 (Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, *Neurology* 2005;65:559-564)

A screening test in itself is insufficient to diagnose a dementing disorder. The AD8 is, however, quite sensitive to detecting early cognitive changes associated many common dementing illness including Alzheimer disease, vascular dementia, Lewy body dementia and frontotemporal dementia.

Scores in the impaired range (see below) indicate a need for further assessment. Scores in the “normal” range suggest that a dementing disorder is unlikely, but a very early disease process cannot be ruled out. More advanced assessment may be warranted in cases where other objective evidence of impairment exists.

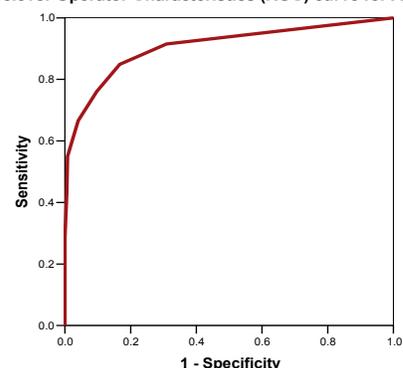
Based on clinical research findings from 995 individuals included in the development and validation samples, the following cut points are provided:

- 0 – 1: Normal cognition
- 2 or greater: Cognitive impairment is likely to be present

Administered to either the informant (preferable) or the patient, the AD8 has the following properties:

- Sensitivity > 84%
- Specificity > 80%
- Positive Predictive Value > 85%
- Negative Predictive Value > 70%
- Area under the Curve: 0.908; 95%CI: 0.888-0.925

Receiver Operator Characteristics (ROC) curve for AD8



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AD8 Dementia Screening Interview

Patient ID#: _____

CS ID#: _____

Date: _____

<p>Recuerde: "sí. Hay cambios." significa que ha habido un cambio en los últimos años debido a problemas cognitivos (pensamiento y memoria).</p>	<p>SÍ. Hay cambios 1 punto</p>	<p>NO. No hay cambios 0 punto</p>	<p>No aplicable. No sé.</p>
<p>1. Problemas de juicio (ejemplo: compra regalos inadecuados, ha sido estafado/a, toma malas decisiones en lo económico)</p>			
<p>2. Menor interés en realizar actividades o sus pasatiempos</p>			
<p>3. Repite las preguntas, historias</p>			
<p>4. Tiene dificultad para aprender a usar instrumentos tecnológicos, electrodomésticos (como el control remoto TV, computador, microondas, video grabadora)</p>			
<p>5. Olvida el mes o año</p>			
<p>6. Tiene dificultad en el manejo de asuntos financieros complejos (pagar las cuentas, llevar la chequera, pago de impuestos)</p>			
<p>7. Tiene dificultad para acordarse de los compromisos (citas al doctor etc.)</p>			
<p>8. Problema persistente de memoria y pensamiento (no ocasional)</p>			
<p>TOTAL AD8 SCORE</p>			

Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, Neurology 2005;65:559-564
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ant interview to detect dementia, Neurology 2005;65:559-564
 Alzheimer's Disease Research Center, Washington University, St. Louis, Missouri.



Appendix 2: Evaluation Instruments

The QDRS, Quick Dementia Rating System

1. Memory and recall _____C

- 0 No obvious memory loss or inconsistent forgetfulness that does not interfere with function in everyday activities
- 0.5 Consistent mild forgetfulness or partial recollection of events that may interfere with performing everyday activities; repeats questions/statements, misplaces items, forgets appointments
- 1 Mild to moderate memory loss; more noticeable for recent events; interferes with performing everyday activities
- 2 Moderate to severe memory loss; only highly learned information remembered; new information rapidly forgotten
- 3 Severe memory loss, almost impossible to recall new information; long-term memory may be affected

2. Orientation _____C

- 0 Fully oriented to person, place, and time nearly all the time
- 0.5 Slight difficulty in keeping track of time; may forget day or date more frequently than in the past
- 1 Mild to moderate difficulty in keeping track of time and sequence of events; forgets month or year; oriented to familiar places but gets confused outside familiar areas; gets lost or wanders
- 2 Moderate to severe difficulty, usually disoriented to time and place (familiar and unfamiliar); frequently dwells in past
- 3 Only oriented to their name, although may recognize family members

3. Decision making and problem-solving abilities _____C

- 0 Solves everyday problems without difficulty; handles personal business and financial matters well; decision-making abilities consistent with past performance
- 0.5 Slight impairment or takes longer to solve problems; trouble with abstract concepts; decisions still sound
- 1 Moderate difficulty with handling problems and making decisions; defers many decisions to others; social judgment and behavior may be slightly impaired; loss of insight
- 2 Severely impaired in handling problems, making only simple personal decisions; social judgment and behavior often impaired; lacks insight
- 3 Unable to make decisions or solve problems; others make nearly all decisions for patient

4. Activities outside the home _____B

- 0 Independent in function at the usual level of performance in profession, shopping, community and religious activities, volunteering, or social groups
- 0.5 Slight impairment in these activities compared with previous performance; slight change in driving skills; still able to handle emergency situations
- 1 Unable to function independently but still may attend and be engaged; appears “normal” to others; notable changes in driving skills; concern about ability to handle emergency situations
- 2 No pretense of independent function outside the home; appears well enough to be taken to activities outside the family home but generally needs to be accompanied
- 3 No independent function or activities; appear too ill to be taken to activities outside the home

5. Function at home and hobby activities _____B

- 0 Chores at home, hobbies and personal interests are well maintained compared with past performance
- 0.5 Slight impairment or less interest in these activities; trouble operating appliances (particularly new purchases)
- 1 Mild but definite impairment in home and hobby function; more difficult chores or tasks abandoned; more complicated hobbies and interests given up
- 2 Only simple chores preserved, very restricted interest in hobbies which are poorly maintained
- 3 No meaningful function in household chores or with prior hobbies

6. Toileting and personal hygiene _____ **B**

- 0 Fully capable of self-care (dressing, grooming, washing, bathing, toileting)
- 0.5 Slight changes in abilities and attention to these activities
- 1 Needs prompting to complete these activities but may still complete independently
- 2 Requires some assistance in dressing, hygiene, keeping of personal items; occasionally incontinent
- 3 Requires significant help with personal care and hygiene; frequent incontinence

7. Behavior and personality changes _____ **B**

- 0 Socially appropriate behavior in public and private; no changes in personality
- 0.5 Questionable or very mild changes in behavior, personality, emotional control, appropriateness of choices
- 1 Mild changes in behavior or personality
- 2 Moderate behavior or personality changes, affects interactions with others; may be avoided by friends, neighbors, or distant relatives
- 3 Severe behavior or personality changes; making interactions with others often unpleasant or avoided

8. Language _____ **C**

- 0 No language difficulty or occasional word searching; reads and writes as in the past
- 0.5 Consistent mild word finding difficulties, using descriptive terms or takes longer to get point across, mild problems with comprehension, decreased conversation; may affect reading and writing
- 1 Moderate word finding difficulty in speech, cannot name objects, marked reduction in work production; reduced comprehension, conversation, writing, and/or reading
- 2 Moderate to severe impairments in speech production or comprehension; has difficulty in communicating thoughts to others; limited ability to read or write
- 3 Severe deficits in language and communication; little to no understandable speech is produced

9. Mood _____ **B**

- 0 No changes in mood, interest, or motivation level
- 0.5 Occasional sadness, depression, anxiety, nervousness, or loss of interest/motivation
- 1 Daily mild issues with sadness, depression, anxiety, nervousness, or loss of interest/motivation
- 2 Moderate issues with sadness, depression, anxiety, nervousness, or loss of interest/motivation
- 3 Severe issues with sadness, depression, anxiety, nervousness, or loss of interest/motivation

10. Attention and concentration _____ **B**

- 0 Normal attention, concentration, and interaction with his or her environment and surroundings
- 0.5 Mild problems with attention, concentration, and interaction with environment and surroundings, may appear drowsy during day
- 1 Moderate problems with attention and concentration, may have staring spells or spend time with eyes closed, increased daytime sleepiness
- 2 Significant portion of the day is spend sleeping, not paying attention to environment, when having a conversation may say things that are illogical or not consistent with topic
- 3 Limited to no ability to pay attention to external environment or surroundings

Cognitive subtotal (questions 1, 2, 3, 8) **Total of C Scores** _____

Behavioral subtotal (questions 4, 5, 6, 7, 9, 10) **Total of B Scores** _____

Total QDRS score _____

A total score of ≥ 2 suggests a problem causing limitations or issues, and may need a detailed workup. Please return this instrument to your physician.

VISUOSPATIAL / EXECUTIVE

Diagram with points: (E) End, (A), (B), (2), (1) Begin, (D), (4), (3), (C), (5)

Copy cube

Draw CLOCK (Ten past eleven)
(3 points)

[]
[]
[]
[]
[]

Contour
Numbers
Hands

___/5

NAMING

[]

[]

[]

___/3

MEMORY Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

	FACE	VELVET	CHURCH	DAISY	RED
1st trial					
2nd trial					

No points

ATTENTION Read list of digits (1 digit/ sec.). Subject has to repeat them in the forward order [] 2 1 8 5 4
Subject has to repeat them in the backward order [] 7 4 2

___/2

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors

[] FBACMNAAJKLBAFAKDEAAAJAMOF AAB

___/1

Serial 7 subtraction starting at 100 [] 93 [] 86 [] 79 [] 72 [] 65

4 or 5 correct subtractions: **3 pts**, 2 or 3 correct: **2 pts**, 1 correct: **1 pt**, 0 correct: **0 pt**

___/3

LANGUAGE Repeat : I only know that John is the one to help today. []
The cat always hid under the couch when dogs were in the room. []

___/2

Fluency / Name maximum number of words in one minute that begin with the letter F [] _____ (N \geq 11 words)

___/1

ABSTRACTION Similarity between e.g. banana - orange = fruit [] train - bicycle [] watch - ruler

___/2

DELAYED RECALL

Has to recall words WITH NO CUE	FACE	VELVET	CHURCH	DAISY	RED	Points for UNCUED recall only
	[]	[]	[]	[]	[]	

___/5

Optional

Category cue					
Multiple choice cue					

ORIENTATION [] Date [] Month [] Year [] Day [] Place [] City

___/6

MONTREAL COGNITIVE ASSESSMENT (MOCA)

(EVALUACIÓN COGNITIVA MONTREAL)

NOMBRE:
Nivel de estudios:
Sexo:

Fecha de nacimiento:
FECHA:

VISUOESPACIAL / EJECUTIVA

Final (E) A B 2
Comienzo (1) D 4 3
C

[] []

Copiar el cubo

Dibujar un reloj (Once y diez) (3 puntos)

[] [] []

Contorno Números Agujas

___/5

IDENTIFICACIÓN

[] [] []

___/3

MEMORIA	Lea la lista de palabras, el paciente debe repetirlas. Haga dos intentos. Recuérdese las 5 minutos más tarde.	ROSTRO	SEDA	IGLESIA	CLAVEL	ROJO	Sin puntos
	1er intento						
	2º intento						

ATENCIÓN Lea la serie de números (1 número/seg.) El paciente debe repetirla. [] 2 1 8 5 4
El paciente debe repetirla a la inversa. [] 7 4 2

___/2

Lea la serie de letras. El paciente debe dar un golpecito con la mano cada vez que se diga la letra A. No se asignan puntos si ≥ 2 errores.

[] FBACMNAAJKLBAFAKDEAAAJAMOFAB

___/1

Restar de 7 en 7 empezando desde 100. [] 93 [] 86 [] 79 [] 72 [] 65

4 o 5 sustracciones correctas: **3 puntos**, 2 o 3 correctas: **2 puntos**, 1 correcta: **1 punto**, 0 correctas: **0 puntos**.

___/3

LENGUAJE Repetir: El gato se esconde bajo el sofá cuando los perros entran en la sala. [] Espero que él le entregue el mensaje una vez que ella se lo pida. []

___/2

Fluidez del lenguaje. Decir el mayor número posible de palabras que comiencen por la letra "P" en 1 min. [] _____ (N \geq 11 palabras)

___/1

ABSTRACCIÓN Similitud entre p. ej. manzana-naranja = fruta [] tren-bicicleta [] reloj-regla

___/2

RECUERDO DIFERIDO	Debe acordarse de las palabras SIN PISTAS	ROSTRO	SEDA	IGLESIA	CLAVEL	ROJO	Puntos por recuerdos SIN PISTAS únicamente
		[]	[]	[]	[]	[]	
Optativo	Pista de categoría						
	Pista elección múltiple						

___/5

ORIENTACIÓN [] Día del mes (fecha) [] Mes [] Año [] Día de la semana [] Lugar [] Localidad

___/6

VAMC SLUMS Examination

Questions about this assessment tool? E-mail aging@slu.edu.

Name _____ Age _____
Is patient alert? _____ Level of education _____

____/1
____/1
____/1
____/3
____/3
____/5
____/2
____/4
____/2
____/8

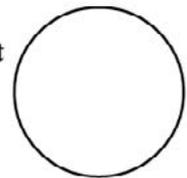
1. What day of the week is it?
2. What is the year?
3. What state are we in?
4. Please remember these five objects. I will ask you what they are later.
Apple Pen Tie House Car
5. You have \$100 and you go to the store and buy a dozen apples for \$3 and a tricycle for \$20.
 - 1 How much did you spend?
 - 2 How much do you have left?
6. Please name as many animals as you can in one minute.
 - 1 0-4 animals 2 5-9 animals 3 10-14 animals 4 15+ animals
7. What were the five objects I asked you to remember? 1 point for each one correct.
8. I am going to give you a series of numbers and I would like you to give them to me backwards.
For example, if I say 42, you would say 24.
 - 1 87 2 649 3 8537
9. This is a clock face. Please put in the hour markers and the time at ten minutes to eleven o'clock.
 - 2 Hour markers okay
 - 2 Time correct
10. Please place an X in the triangle.

X

X

X

 - 1 Which of the above figures is largest?
11. I am going to tell you a story. Please listen carefully because afterwards, I'm going to ask you some questions about it.
Jill was a very successful stockbroker. She made a lot of money on the stock market. She then met Jack, a devastatingly handsome man. She married him and had three children. They lived in Chicago. She then stopped work and stayed at home to bring up her children. When they were teenagers, she went back to work. She and Jack lived happily ever after.
 - 2 What was the female's name?
 - 2 When did she go back to work?
 - 2 What work did she do?
 - 2 What state did she live in?



TOTAL SCORE _____
Department of Veterans Affairs

SAINT LOUIS UNIVERSITY

SCORING			
HIGH SCHOOL EDUCATION		LESS THAN HIGH SCHOOL EDUCATION	
27-30	Normal	25-30	
21-26	MNCN*	20-24	
1-20	Dementia	1-19	

* Mild Neurocognitive Disorder

SH Tariq, N Tumosa, JT Chibnall, HM Perry III, and JE Morley. The Saint Louis University Mental Status (SLUMS) Examination for Detecting Mild Cognitive Impairment and Dementia is more sensitive than the Mini-Mental Status Examination (MMSE) - A pilot study. Am J Geriatr Psychiatry 14:900-910, 2006.



SAINT LOUIS UNIVERSITY

VAMC SLUMS Examination

Name: ID: Age: Educ: Alert? Date Given:

1. Qué día de la semana es hoy?

2. En qué año estamos?

3. En qué estado estamos?

4. Por favor, recuerde los cinco objetos que le voy a nombrar. Mas tarde, le preguntaré nuevamente por ellos.

- Manzana Lapiz Corbata Perro Casa

5. Usted tiene ciento dolares, y en la tienda compra una docena de manzanas por tres dolares y una bicicleta por veinte dolares.

1. Cuánto dinero gastó?

2. Cuánto dinero le queda?

6. Por favor en un minuto nombre todos los animales que pueda.

- 0-4 animals 5-9 animals 10-14 animals 15+ animals

7. Cuáles fueron los 5 objetos que le dije que recordara?

- Manzana Lapiz Corbata Perro Casa

8. Voy a decirle una serie de números. Me gustaría que usted me los dijera al revés. Por ejemplo, si yo digo 42, usted debe decir 24.

- 87 649 8537

9. Este círculo representa un reloj. Por favor escriba los números de las horas y las manecillas señalando las once menos diez.

- Hour markers correct? Time correct?



10a. Por favor, señale el triángulo con una equis.

10b.Cuál de estas figuras es la mas grande?

11. Voy a contarle una historia. Por favor, escuche cuidadosamente, porque al terminar le voy a hacer unas preguntas sobre esta historia.

María era una abogada muy exitosa y ganaba mucho dinero en la compañía donde trabajaba. Ella conoció a Carlos, un hombre muy apuesto, y, al cabo del tiempo, se casaron, tuvieron 3 hijos y vivían en Chicago. Ella dejo de trabajar para criar a sus hijos, y cuando estos fueron adolescentes ella volvió al trabajo. Ella y Carlos vivieron felices por siempre.

- Cuál era el nombre de la mujer? Cuando volvió a trabaja? Que profesión tenía ella? En que estado vivía?

Total Score

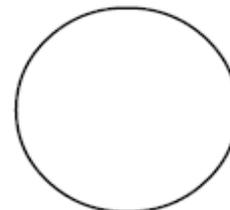


Table with columns: HS Educ, Normal, No HS Educ, MNC Dementia



Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) Short Form

Compared with 10 years ago how is this person at:

1. Remembering things about family and friends e.g. occupations, birthdays, addresses?	1 2 3 4 5
2. Remembering things that have happened recently?	1 2 3 4 5
3. Recalling conversations a few days later?	1 2 3 4 5
4. Remembering his/her address and telephone number?	1 2 3 4 5
5. Remembering what day and month it is?	1 2 3 4 5
6. Remembering where things are usually kept?	1 2 3 4 5
7. Remembering where to find things which have been put in a different place from usual?	1 2 3 4 5
8. Knowing how to work familiar machines around the house?	1 2 3 4 5
9. Learning to use a new gadget or machine around the house?	1 2 3 4 5
10. Learning new things in general?	1 2 3 4 5
11. Following a story in a book or on TV?	1 2 3 4 5
12. Making decisions on everyday matters?	1 2 3 4 5
13. Handling money for shopping?	1 2 3 4 5
14. Handling financial matters e.g. the pension, dealing with the bank?	1 2 3 4 5
15. Handling other everyday arithmetic problems e.g. knowing how much food to buy, knowing how long between visits from family or friends?	1 2 3 4 5
16. Using his/her intelligence to understand what's going on and to reason things through?	1 2 3 4 5
Total Score	

To score the IQCODE, add up the score for each question and divide by the number of questions. For the short IQCODE, divide by 16. The result is a score that ranges from 1 to 5. A score of 3 means that the subject is rated on average as 'no change'. A score of 4 means an average of 'a bit worse'. A score of 5 an average of 'much worse'. For the short IQCODE, a cutting point of 3.31/3.38 achieves a balance of sensitivity and specificity.



Nombre

Fecha

Unidad/Centro

Nº Historia

CRIBADO DE DEMENCIAS - TEST DEL INFORMADOR -

Población diana: Población informante clave de una persona con sospecha de deterioro cognitivo. Se trata de un test **autoadministrado**.

Instrucciones para el informante clave:

Recuerde, por favor, cómo era su familiar hace 5 ó 10 años y compare cómo es él en este momento. Conteste si ha habido algún cambio a lo largo de este tiempo en la capacidad de su familiar para cada uno de los aspectos que le preguntamos. Puntúe con los siguientes criterios:

	Ha mejorado mucho	Ha mejorado un poco	Casi sin cambios	Ha empeorado un poco	Ha empeorado mucho
ITEMS	1	2	3	4	5
Capacidad para reconocer las caras de sus personas más íntimas (parientes, amigos)					
Capacidad para recordar los nombres de estas mismas personas					
Recordar las cosas de esas personas (dónde viven, de qué viven, cuándo es su cumpleaños)					
Recordar cosas que han ocurrido recientemente, en los últimos 2 o 3 meses (noticias, cosas suyas o de sus familiares)					
Recordar lo que habló en una conversación unos días antes					
Olvidar lo que se ha dicho unos minutos antes, pararse a la mitad de una frase y no saber lo que iba a decir, repetir lo que ha dicho antes					
Recordar su propia dirección o número de teléfono					
Recordar la fecha en que vive					
Conocer el sitio exacto de los armarios de su casa y dónde se guardan las cosas					
Saber dónde se pone una cosa que se ha encontrado descolocada					
Adaptarse a la situación cuando su rutina diaria se ve alterada (ir de visita, en alguna celebración, de vacaciones)					
Saber manejar los aparatos de la casa (teléfono, coche, lavadora, máquina de afeitar, etc.)					
Capacidad para aprender a manejar un aparato nuevo (lavadora, tocadiscos, radio, secador de pelo, etc.)					



ITEMS	Ha mejorado mucho	Ha mejorado un poco	Casi sin cambios	Ha empeorado un poco	Ha empeorado mucho
	1	2	3	4	5
Recordar las cosas que han sucedido recientemente (en general)					
Aprender cosas nuevas (en general)					
Capacidad para recordar cosas que ocurrieron o que aprendió cuando era joven					
Comprender el significado de palabras poco corrientes (del periódico, televisión, conversación)					
Entender artículos de periódicos o revistas en las que está interesado					
Seguir una historia del libro, la prensa, el cine, la radio o la televisión					
Redactar cartas a parientes o amigos o cartas de negocios					
Recordar gentes y hechos históricos del pasado (guerra civil, república, etc.)					
Tomar decisiones tanto en cuestiones cotidianas (qué traje ponerse, qué comida preparar) como en asuntos a más largo plazo (dónde ir de vacaciones o invertir el dinero)					
Manejar asuntos financieros (cobrar la pensión, pagar la renta o los impuestos, tratar con el banco)					
Manejar dinero para la compra (cuánto dinero dar, calcular el cambio)					
Manejar otros problemas aritméticos cotidianos (tiempo entre visitas de parientes, cuánta comida comprar y preparar, especialmente si hay invitados)					
¿Cree que su inteligencia (en general) ha cambiado en algo durante los últimos 10 años?					
PUNTUACIÓN TOTAL					

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems?
(use “√” to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or helpless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns + +

(Healthcare professional: For interpretation of TOTAL, TOTAL:
please refer to accompanying scoring card).

10. If you checked off <i>any problems</i> , how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

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PHQ-9 Patient Depression Questionnaire

For initial diagnosis:

1. Patient completes PHQ-9 Quick Depression Assessment.
2. If there are at least 4 ✓s in the shaded section (including Questions #1 and #2), consider a depressive disorder. Add score to determine severity.

Consider Major Depressive Disorder

- if there are at least 5 ✓s in the shaded section (one of which corresponds to Question #1 or #2)

Consider Other Depressive Disorder

- if there are 2-4 ✓s in the shaded section (one of which corresponds to Question #1 or #2)

Note: Since the questionnaire relies on patient self-report, all responses should be verified by the clinician, and a definitive diagnosis is made on clinical grounds taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient.

Diagnoses of Major Depressive Disorder or Other Depressive Disorder also require impairment of social, occupational, or other important areas of functioning (Question #10) and ruling out normal bereavement, a history of a Manic Episode (Bipolar Disorder), and a physical disorder, medication, or other drug as the biological cause of the depressive symptoms.

To monitor severity over time for newly diagnosed patients or patients in current treatment for depression:

1. Patients may complete questionnaires at baseline and at regular intervals (eg, every 2 weeks) at home and bring them in at their next appointment for scoring or they may complete the questionnaire during each scheduled appointment.
2. Add up ✓s by column. For every ✓: Several days = 1 More than half the days = 2 Nearly every day = 3
3. Add together column scores to get a TOTAL score.
4. Refer to the accompanying **PHQ-9 Scoring Box** to interpret the TOTAL score.
5. Results may be included in patient files to assist you in setting up a treatment goal, determining degree of response, as well as guiding treatment intervention.

Scoring: add up all checked boxes on PHQ-9

For every ✓ Not at all = 0; Several days = 1;
More than half the days = 2; Nearly every day = 3

Interpretation of Total Score

Total Score	Depression Severity
1-4	Minimal depression
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

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A2662B 10-04-2005

CUESTIONARIO DE SALUD DEL PACIENTE (PHQ-9) + 3

Lista de los Nueve Síntomas para Revisión de la Depresión

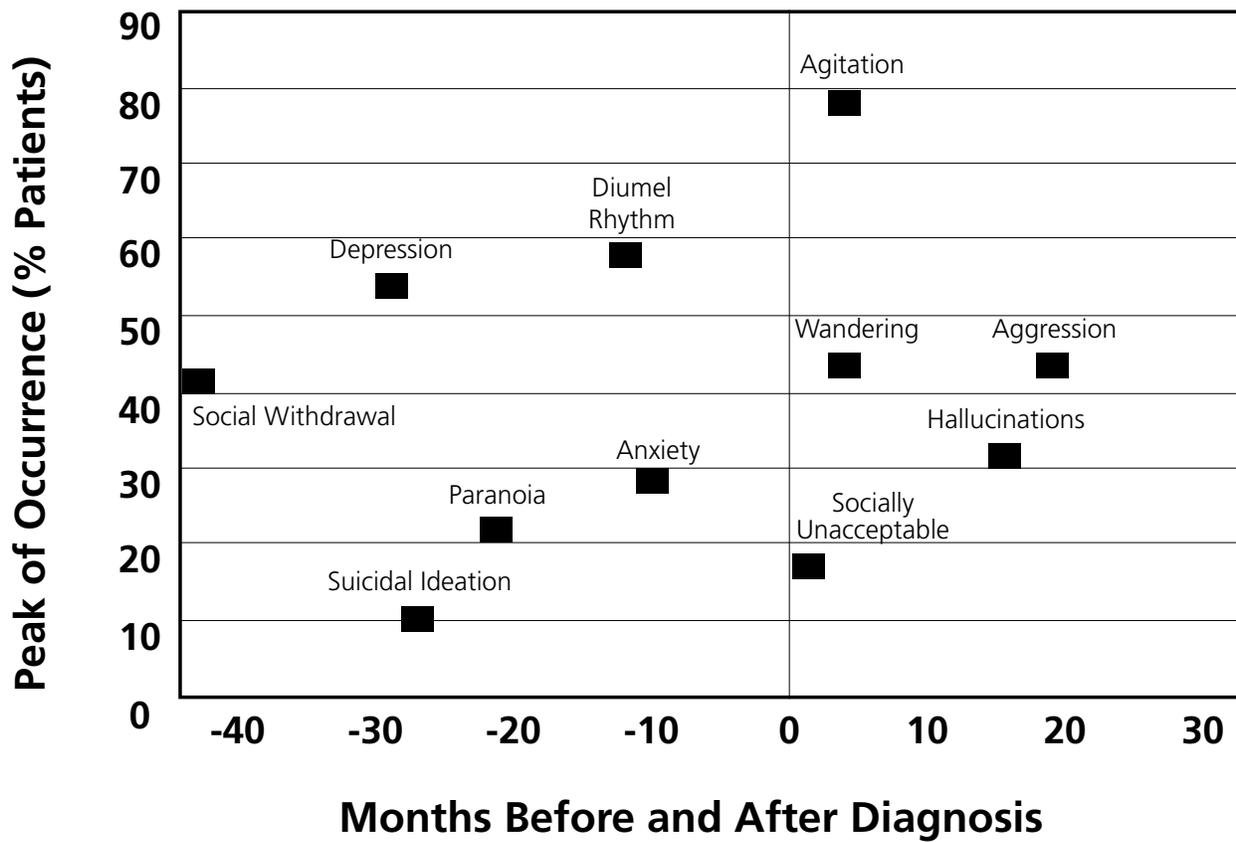
Nombre del Paciente: _____ Fecha De Nacimiento: _____ Fecha: _____

¿En las últimas dos semanas, con qué frecuencia ha experimentado los siguientes síntomas?

PREGUNTAS	Nunca	Varios días	Más de la mitad de los días	Casi todos los días
Conteste las preguntas 1-9 inicialmente y después todos los Puntos de Decisión Crítica (PDC)	0	1	2	3
1. Poco interés o placer en hacer cosas	0	0	0	0
2. Sentirse desanimado, deprimido o sin esperanza	0	0	0	0
3. Tener problemas para dormir, mantenerse dormido o dormir demasiado	0	0	0	0
4. Sentirse cansado o tener poca energía	0	0	0	0
5. Poco apetito o comiendo demasiado	0	0	0	0
6. Sentir falta de amor propio o pensar que es un fracaso o fallarle a usted mismo o a su familia	0	0	0	0
7. Tener dificultad en concentrarse en cosas tales como leer el periódico o ver televisión	0	0	0	0
8. El moverse o hablar tan despacio que otras personas a su alrededor se dan cuenta; o todo lo contrario, que cuando está nervioso/a o inquieto/a usted se mueva muchísimo más de lo normal.	0	0	0	0
9. Pensamientos de que pudiera estar mejor muerto o hacerse daño a si mismo. (Si contestó afirmativamente, complete la Evaluación de Riesgo de Suicidio)	0	0	0	0
PHQ-9 Scoring Formula				
# Symptoms	___ X 0 =	___ X 1 =	___ X 2 =	___ X 3 =
Per Category	___ +	___ +	___ +	___ =
PHQ-9 Total Score: _____				
10. Si contestó afirmativamente a cualquiera de los problemas en el cuestionario, ¿cuánta dificultad le han causado estos problemas en el trabajo, al atender su hogar o llevarse bien con otras personas?				
<input type="checkbox"/> Ninguna Dificultad <input type="checkbox"/> Alguna Dificultad <input type="checkbox"/> Mucha Dificultad <input type="checkbox"/> Muchísima Dificultad				
COMPLETE LAS PREGUNTAS 11 Y 12 SOLAMENTE EN LA VISITA INICIAL				
11. ¿En los últimos dos años, se ha sentido deprimido/a o triste la mayoría de los días, a pesar de sentirse bien en otras ocasiones?				
<input type="checkbox"/> Si <input type="checkbox"/> No				
12. ¿Ha habido un periodo, de al menos cuatro días, en los que se sentía tan feliz, con demasiada energía o tan irritable que se metió en problemas, o su familia o amigos se preocuparon o el médico le dijo que se encontraba en un estado maniaco?				
<input type="checkbox"/> Si <input type="checkbox"/> No				
Número de Teléfono: _____ ¿Se puede dejar mensaje? SI or NO Nota: _____				
Medication: _____ Dose: _____ Frequency: _____				
1 st copy to Medical Record			2 nd copy to Initiate Phone Protocol	



Appendix 3: Peak Frequency of Behavioral Symptoms With Alzheimer Disease Progression⁹



Source: Jost BC, et al. *J Am Geriatr Soc.* 1996;44:1078-1081

Appendix 4

Common Scales Used in the Assessment of BPSD

(Adapted from Tampi et al. (2011)²¹)

SCALE	TIME FOR COMPLETION (MINUTES)	SCORE RANGE	HIGHER SCORE MEANS
GENERAL ASSESSMENT SCALES			
Behavioral Pathology in Alzheimer's Disease Rating Scale	20	0-75	Greater severity of behavioral symptoms
Columbia University Scale for Psychopathology in Alzheimer's Disease (CUSPAD)	25	0-51	Greater severity of behavioral symptoms
Consortium to Establish a Registry for Alzheimer's Disease Behavior Rating Scale for Dementia (CERAD-BRSD)	30	0-148	Greater severity of behavioral symptoms
Neuropsychiatric Inventory	20	1-144	Greater severity of behavioral symptoms
SPECIFIC ASSESSMENT SCALES			
Apathy Inventory (Clinician Version)	5	0-12	Greater apathy
Cohen-Mansfield Agitation Inventory (CMAI)	15	29-203	Greater severity of behavioral symptoms
Cornell Scale for Depression in Dementia	30	0-38	Greater severity of depression

Preparing for Your Doctor's Visit

Fill out the information below to the best of your ability. Share it with your doctor. Be open and honest in answering any questions your doctor may ask you about the changes you've been experiencing. It is recommended to bring someone with you, either a family member or someone who knows you well enough to contribute information and can take notes so you don't have to worry about remembering anything.

Has your health, memory or mood changed?

How did it change?

When did you first notice the change?

How often does it happen?

When does it happen? Is it always at a certain time of day?

What do you do when it happens?

What behaviors are the same?

Do you have problems with any of the following?

Please check the answer.

Repeating or asking the same thing over and over?

Not at all Sometimes Frequently Does not apply

Remembering appointments, family occasions, holidays?

Not at all Sometimes Frequently Does not apply

Writing checks, paying bills, balancing the checkbook?

Not at all Sometimes Frequently Does not apply

Shopping independently (e.g., for clothing or groceries)?

Not at all Sometimes Frequently Does not apply

Taking medications according to the instructions?

- Not at all Sometimes Frequently Does not apply

Getting lost while walking or driving in familiar places?

- Not at all Sometimes Frequently Does not apply

Medications and medical history

List of medications (dosage, frequency) including over-the-counter and prescription: (Bring all over-the-counter and prescription medications with you to your visit.)

List vitamins and herbal supplements:

List current medical conditions:

List past medical conditions:

What to bring with you to your doctor visit

Bring someone with you, either a family member or someone who knows you well enough to contribute information and can take notes so you don't have to worry about remembering everything.

Bring all over-the-counter and prescription medications.

Bring your Advance Directives if you have them.

Questions to ask the doctor

What are tests I need to take and how long will it take to get a diagnosis? Will you refer me to a specialist?

Could the medicines I'm taking be causing my symptoms?

Do I have any other conditions that could be causing my symptoms or making them worse?

What should I expect if it is Alzheimer's?

Which treatments are available for Alzheimer's? What are the risks and benefits and possible side effects?

What about participating in a clinical trial? What are the risks and benefits?

Is there anything else I should know?

When should I come back for another visit?

Where can I get information about Advance Directives if I don't yet have one?

This tool was amended from tools developed by the Alzheimer's Association. Some information in this tool was developed for the Chronic Care Networks for Alzheimer's Disease (CCNIAD) project and is the joint property of the Alzheimer's Association and the National Chronic Care Consortium.

SAN DIEGO COUNTY ALZHEIMER'S DISEASE AND RELATED DEMENTIAS

INFORMATION & RESOURCES FOR CAREGIVERS

Information & Resource Lines

- 211: County-wide info/resources, <http://211sandiego.org>
- Aging & Independence Services: (800) 510-2020, specific info/resources for older adults, including Adult Protective Services, <http://sandiegocounty.gov/hhsa/programs/ais/>
- Alzheimer's Association: (800) 272-3900, Alzheimer's disease specific <http://info/resources.alz.org>
- Alzheimer's San Diego: (858) 492-4400, San Diego based resource organization; <http://alzsd.org>
- Southern Caregiver Resource Center: (800) 827-1008, Caregiver focused info/resources <http://caregivercenter.org/>

Alzheimer's-Specific Resources

- Alzheimer's Association: (800) 272-3900, Includes information on specific behavioral issues
- Alzheimer's San Diego: (858) 492-4400, <http://alzsd.org>
- Glenner Center: (619) 543-4700, <http://glenner.org>
- Southern Caregiver Resource Center: (800) 827-1008, <http://caregivercenter.org>
- UC San Diego Shiley-Marcos Alzheimer's Disease Research Center: (858) 822-4800, <http://adrc.ucsd.edu>

Common Needs Resources

- California Department of Aging, 916-322-5290, <http://www.aging.ca.gov>
- Caregiver Resources: Southern Caregiver Resource Center, (800) 827-1008, <http://caregivercenter.org>
- Health Insurance Resources: Health, Information, Counseling & Advocacy Program (HICAP), (858) 565-1392, <http://www.cahealthadvocates.org>
- In-Home Care Resources: In-Home Supportive Services, (800) 510-2020, <http://sandiegocounty.gov/hhsa/programs/ais/>
- Jewish Family Services Older Adult Helpline 858-637-3040, <http://www.jfssd.org>
- Legal Resources: Elder Law & Advocacy, (858) 565-1392, <http://www.seniorlaw-sd.org>
- SeniorHelp.org Directory for assisted living communities, in-home caregivers, etc. 866-333-5183.
- US Department of Health and Human Services Administration on Aging, <http://www.aoa.gov>
- VA San Diego Healthcare System Caregiver Support. www.caregiver.va.gov 619-497-8424.
- Getting to Know Dementia: A Patient's Guide to Diagnosis, Treatment and Care, Fourth Edition, 2011. UBC eHealth Strategy Office, 855 W 10th Avenue, Vancouver, British Columbia, Canada, V5Z http://www.iconproject.org/dnn_icon/Portals/0/Docs/2011-06-08-GTKDEnglish-Web.pdf
 - Mace, N. & Rabins, P. The 36-Hour Day: A Family Guide to Caring for People with Alzheimer Disease, other Dementias, and Memory Loss in Later Life.

Conversation Project: http://theconversationproject.org/wp-content/uploads/2016/05/TCP_StarterKit_Alzheimers.pdf

Safety Resources

- Alzheimer's Association "Safe Return" program using identification products such as necklaces and bracelets, wallet cards, clothing labels with toll free 800 numbers on them. www.alz.org/SafeReturn
- Adult Protective Services: (800) 510-2020, for elder and disabled adult abuse reporting
- Sheriff's "Take Me Home" Program and You Are Not Alone Program: www.sdsheriff.net/tmh (info on registering)

EFFECTIVE COMMUNICATION WITH INDIVIDUAL WITH COGNITIVE ISSUES

Tips for improved communications:

- Make just one request at a time.
- Speak slowly with good diction.
- Allow time for the individual to respond to your question or request.
- Use many of the five senses with the individual: sight, smell, touch, taste, sound.
- Maintain eye contact.
- Assume a comfortable, relaxed posture to make the individual at ease.
- Identify and reflect the individual's concerns, "I see you are uncomfortable..."
- Use simple, direct statements or requests.

Using Redirection to Improve Communications

Redirection is an intention method of refocusing the individual to remain calm, cooperative, content and safe. Often, individuals with cognitive issues may be frustrated or agitated due to their inability to effectively communicate or have their needs met. It is key to enter the individual's reality, approach in a calm manner, and communicate your desire to help.

- Present options: "Would you like this or this?"
- Compliment: "My that's a beautiful sweater!"
- Request Help: "Can you please help me fold these towels?"
- Helpful Distractions: Food, drink, reminiscent stories, music, humor
- Validate: "You look worried."
- Distract: "Let's look over there..." "Let's plan to do that later. In the meantime, ..."
- Redirect: "That coffee smells good. Do you want a cup?"

Common Delusions in Individuals with Dementia

- Accusations of infidelity
- Persons or images from TV are real
- Fear of abandonment
- Accusations of theft of one's property
- Claims of impersonation (spouse is imposter)
- Current residence is not one's home
- Misidentification of familiar persons

THE ALZHEIMER'S PROJECT



LIVE WELL
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