

Dementia
Quality Measurement Set Update

Status: Draft for Work Group Review
and Public Comment
October 28, 2015

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Invited Organizations

The AAN and APA deeply regret that due to limitations on the size of the work group nominations from the American College of Radiology/American Society of Neuroradiology, the American Heart Association/American Stroke Association, and the National Gerontological Nursing Association could not be accommodated

The following organizations were invited to participate, but declined: Alzheimer's Advisory Council, American Academy of Physician Assistants, American Association of Neuromuscular & Electrodiagnostic Medicine, American Association of Nurse Practitioners, American Board of Internal Medicine, American Clinical Neurophysiology Society, American College of Emergency Physicians, American Neurological Association, American Osteopathic Association, American Society of Neurorehabilitation, American Telemedicine Association, Association for Frontotemporal Degeneration, Movement Disorders Society, National Alliance for Caregiving, National Center on Elder Abuse, National Hospice and Palliative Care Organization, Society for Neuroscience, Society of Nuclear Medicine and Molecular Imaging, and The American Association for Geriatric Psychiatry, as well as additional payer organizations.

Improving Outcomes for Patients with Dementia

Purpose of Measures

In 2015, the American Academy of Neurology (AAN) and American Psychiatric Association (APA) formed a Dementia Measurement Set Update Work Group (Work Group) to review the dementia management measures developed in 2009.ⁱ The Work Group evaluatedⁱⁱ, whether 1) evidence continues to support the measures, 2) a gap in care still exists, and 3) links to desired outcomes exist

In 2009, under the American Medical Association (AMA) Physician Consortium for Performance Improvement[®] (PCPI[®]) performance measure development model, a dementia management measurement set was developed and released in 2013.ⁱⁱⁱ In 2014, the AAN and APA assumed stewardship of the dementia measurement set with the exception of the Cognitive Assessment measure, which was retained by the PCPI[®]. The AAN and APA developed the following updated quality measures based on the conviction that specialists should play a major role in selecting and creating measures that will drive performance improvement and measures that will be used in accountability program. The AAN and APA formed the Work Group with representatives from professional associations, patient advocacy organizations, and payers to ensure measures developed included input from all members of the healthcare team and other relevant stakeholders. All members of the Work Group were required to disclose relationships with industry and other entities to avoid actual, potential, or perceived conflicts of interest.

One measurement set isn't able to capture all aspects of providing care for patients with dementia and their caregivers. This measurement set focuses explicitly on measuring the quality of care provided in the management of dementia, and does not address issues related to making an initial diagnosis of dementia.

Topic Importance

Dementia is a syndrome rather than a disease. "Dementia" is a term used to describe a group of symptoms related to cognitive and functional decline with a neurodegenerative basis. For the purposes of this document, the term 'dementia' is used as a catch all for the diseases and disorders that cause dementia symptoms. It is estimated that 14.7% of people older than 70 in the United States have dementia.^{iv} Further, the cost of dementia ranges from \$159-215 billion annually, making it more costly to the United States than heart disease or cancer.^v One third of all seniors who die in a given year have been diagnosed with Alzheimer's disease or another dementia.^{vi}

The most common cause of dementia symptoms is Alzheimer's disease (AD). AD is the sixth most common cause of death in the United States, and is becoming more common.^{vii} Alzheimer's disease usually occurs in individuals who are 60 years old and older.^{viii} By 85 years of age and older, between 25 and 50 percent of people will exhibit signs of Alzheimer's disease.^{ix} Up to 5.3 million Americans currently have Alzheimer's disease.^x By 2050, the number is expected to more than double.^{xi}

Clinical Evidence Base

The co-chairs and facilitators, guided by a medical librarian, conducted a comprehensive literature search to identify published guidelines, existing performance measures, and consensus recommendations in the National Guidelines Clearinghouse, the National Quality Measures Clearinghouse, PubMed, MEDLINE, EMBASE, and the Cochrane Library. The Work Group identified over 50 guidelines relevant to the topic. The following guideline and consensus documents served as the evidence base for one or more measures:

- 2014 American Geriatrics Society (AGS) Ethics Committee and Clinical Practice and Models of Care Committee. American Geriatrics Society Feeding Tubes in Advanced Dementia Position Statement^{xii}
- 2012 Geriatric Nursing Protocol: Recognition and Management of Dementia. Springer Publishing Company. Evidence-Based Geriatric Nursing Protocols for Best Practice^{xiii}
- 2012 American Psychological Association. Guidelines for Evaluation of Dementia and Age-Related Cognitive Change^{xiv}
- 2012 American Board of Family Medicine Guidelines for the Management of Cognitive and Behavioral Problems in Dementia.^{xv}
- 2012 American Psychiatric Association (APA) Guidelines for Evaluation of Dementia and Age-Related Cognitive Change^{xvi}
- 2012 Pharmacological recommendations for the symptomatic treatment of dementia: The Canadian Consensus Conference on the Diagnosis and Treatment of Dementia^{xvii}
- 2012 European Federation of Neurological Societies (EFNS)-European Neurological Society (ENS) guidelines on the diagnosis and management of disorders associated with dementia.^{xviii}
- 2011 World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the biological treatment of Alzheimer's disease and other dementias^{xix}
- 2011 Pain Assessment in the Patient Unable to Self-Report: Position Statement with Clinical Practice Recommendations^{xx}
- 2010 AAN Practice parameter update: evaluation and management of driving risk in dementia^{xxi}
- 2010 EFNS guidelines for the diagnosis and management of Alzheimer's disease^{xxii}
- 2010 American Occupational Therapy Association (AOTA) Occupational therapy practice guidelines for adults with Alzheimer's disease and related disorders^{xxiii}
- 2010 AGS Geriatrics at your fingertips: Palliative and end-of-life care^{xxiv}
- 2010 Practice guidelines for assessing pain in older persons with dementia residing in long-term care facilities^{xxv}
- 2010 British Association for Psychopharmacology (BAP) Dementia Consensus Group. Clinical practice with anti-dementia drugs: a revised (second) consensus statement from the British Association for Psychopharmacology.^{xxvi}
- 2009 Ministry of Health Malaysia. Management of Dementia Clinical Practice Guidelines^{xxvii}
- 2008 Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia. Diagnosis and treatment of dementia: introduction^{xxviii}
- 2008 California Workgroup on Guidelines for Alzheimer's Disease Management. Guidelines for Alzheimer's disease management^{xxix}
- 2007 APA Practice guideline for the treatment of patients with Alzheimer's disease and other dementias^{xxx}
- 2006 NICE Dementia: Supporting people with dementia and their carers in health and social care.^{xxxi}
- 2005 Alzheimer's Association End-of-life Care for People with Dementia in Residential Care Settings.^{xxxii}
- 2001 AAN Practice parameter: Management of dementia (an evidence based review)^{xxxiii}

Measures Recommended by Work Group

2015 Dementia Measurement Set Update
Disclosure of Dementia Diagnosis
Caregiver Education and Support for Patients with Dementia
Functional Status Assessment for Patients with Dementia
Screening and Treatment of Behavioral and Psychiatric Symptoms Associated with Dementia
Safety Concern Screening and Follow-Up for Patients with Dementia
Driving Screening and Follow-Up for Patients with Dementia
Advance Care Planning and Palliative Care Counseling for Patients with Dementia
Pain Assessment and Follow-Up for Patients with Dementia
Treatment of Dementia

The Work Group did not assess the previously developed Measure #2: Cognitive Assessment as *PCPI*[®] maintained stewardship of this measure, placing it outside the Work Group’s scope. The Work Group recommended that the previously developed measures on Staging of Dementia, Management of Neuropsychiatric Symptoms, and Screening for Depressive Symptoms be retired. An explanation for these recommendations is provided in further detail below (Retired Measures Section.)

Definitions and Abbreviations

The Work Group utilized the following definitions and abbreviations in the measurement set:

- As noted previously, dementia is a syndrome rather than a disease. Herein, the term ‘dementia’ is used as an all-inclusive descriptor for the myriad diseases that can produce the syndrome. Please review individual measure specifications to identify whether the measure applies generally or has aspects that restrict its applicability to a particular disease or subset of diseases that produce dementia.
- “Caregiver” is broadly defined and the Work Group adopted the definition utilized by the National Quality Forum and Feinberg.^{xxxiv} Caregiver refers to any relative, partner, friend, or neighbor who has a significant relationship with, and who provides a broad range of assistance for, an older adult or an adult with chronic or disabling conditions.^{xxxv} The Work Group recognizes the essential role played by caregivers in the care of patients with dementia – insofar as the ‘patient’ is often the patient-caregiver dyad rather than an individual – and endeavored to take this aspect of dementia management into account whenever and to the greatest extent possible.

Below is a list of acronyms utilized in this document. The AAN has a Quality Improvement Glossary, which provides more in depth explanations and is available at aan.com/practice/quality-measures/quality-resources.

- AD: Alzheimer’s Disease
- ADL: Activities of Daily Living
- APA: American Psychiatric Association
- CMS: Centers for Medicare & Medicaid Services
- NQF: National Quality Forum

- PQRS: Physician Quality Reporting System

Desired Outcomes

This list represents one possible set of optimal outcomes for individuals with dementia. Achieving all of these outcomes would require resources beyond the scope of a single healthcare provider. This list is intended as a starting point for discussions on how to improve the quality of care for patients with dementia and their caregivers:

- Confirmation of dementia diagnosis as early as possible;
- Reduction of mortality directly related to dementia;
- Improved Quality of Life;
- Reduced caregiver burden;
- Reduction of dementia progression; this is unrealistic given that no disease modifying drugs exist at present;
- Decrease complications of dementia;
- Improve quality of care from a coordinated treatment team;
- Address all patient/caregiver needs and engage all patients/caregivers on a personal level;
- Improved adherence to both nonpharmacologic and pharmacologic dementia therapies;
- Increased patient engagement in the treatment decision process;
- Increased patient satisfaction with care provided;
- Decreased rates of behavioral and psychiatric symptoms (BPS), which include but are not limited to depression, aggression, apathy, impulsiveness, anxiety, resistance to care, and psychosis;
- Maintain or increase existing cognitive functioning levels;
- Decreased fall rate in patient population;
- Decreased rates of urinary incontinence and constipation;
- Maintain or increase physical functioning levels;
- Reduced number of driving accidents in patient population;
- Reduced number of injuries/hospitalizations in patient population;
- Recognize and adhere to Patient's wishes and directives about end of life care;

Intended Care Audience, Settings, and Patient Populations

The AAN and APA encourage use of these measures by physicians and other health care professionals, practices, and health care systems, where appropriate, to achieve improved performance. These measures are intended to assess the steps that can be taken by providers, practices, and systems toward optimized clinical outcomes for patients with dementia and their caregivers.

As noted above, this measurement set focuses on the management of dementia care. As a result the measurement set does not apply to those diagnosed with mild cognitive impairment, delirium, amnesic disorders, alcohol-induced persisting amnesic disorders, post-concussion syndrome, encephalopathy, memory loss, and alteration of consciousness, and other unspecified persistent mental disorders. The measurement set does apply to Alzheimer's disease, vascular dementias, dementia with Lewy bodies, dementia in Parkinson's disease, corticobasal degeneration, progressive supranuclear palsy, Pick's disease, behavioral variant frontotemporal dementia, semantic dementia, primary nonfluent aphasia, Human Immunodeficiency Virus (HIV) disease dementia, neurosyphilis, alcohol-induced persisting dementia (Wernicke-Korsakoff syndrome), variant Creutzfeldt-Jacob disease, dementias in conditions classified elsewhere, unspecified dementias, senile dementias, and presenile dementias. (See Appendix A.)

The Work Group has designated all measures as appropriate for accountability programs. For purposes of this document, accountability programs refer to pay for reporting, value-based payments, pay for performance, and public reporting programs.

2015 Dementia Measurement Set Update	Applicable Care Settings			
	Outpatient	Inpatient	Residential	Emergency Department
Disclosure of Dementia Diagnosis	√	√	√	
Caregiver Education and Support for Patients with Dementia	√		√	
Functional Status Assessment for Patients with Dementia	√	√	√	
Screening and Treatment of Behavioral and Psychiatric Symptoms Associated with Dementia	√	√	√	√
Safety Concern Screening and Follow-Up for Patients with Dementia	√	√		√
Driving Screening and Follow-Up for Patients with Dementia	√		√	
Advance Care Planning and Palliative Care Counseling for Patients with Dementia	√	√	√	√
Pain Assessment and Follow-Up for Patients with Dementia	√	√	√	√
Treatment of Dementia	√		√	

Other Potential Measures

The measures were developed via a consensus process. Work Group members were given an opportunity to submit new measures in advance of an in-person meeting where all measures were reviewed and edited individually prior to a vote to approve, not approve, or abstain for each measure. The Work Group discussed potential outcome measures for development, and during the meeting the Work Group agreed to revise driving assessment rather than include an intermediate outcome measure assessing patients who were identified as a driving risk and who ceased driving. Ultimately, the Work Group concluded no rigorous outcome measures could be developed for the management of dementia care at this time.

Measures Retired

The Work Group reviewed the 2009 set of measures, evaluating whether current evidence continues to support the measures, a gap in care still exists, and if links to desired outcomes exist. The 2009 Measurement Set included ten measures:

2009 Dementia Management Quality Measures
Measure #1: Staging of Dementia
Measure #2: Cognitive Assessment (<i>PCPI[®] maintains stewardship of this measure</i>)
Measure #3: Functional Status Assessment
Measure #4: Neuropsychiatric Symptom Assessment
Measure #5: Management of Neuropsychiatric Symptoms
Measure #6: Screening for Depressive Symptoms
Measures addressing safety
Measure #7: Counseling regarding Safety Concerns
Measure #8: Counseling regarding Risks of Driving

Measures addressing underuse of patient-centered care strategies
Measure #9: Palliative Care Counseling and Advance Care Planning
Measure #10: Caregiver Education and Support

The Work Group recommended retirement of the following measures from 2009:

Measure 1. Staging of Dementia. Consensus supported retirement following a discussion of the artificial constructs created by using and providing patients and caregivers with a dementia stage. There is value in continued assessment of disease progression, but patients and caregivers may be better aided by receiving generalized information about whether dementia is mild, moderate, or severe rather than focusing and worrying over differences, which might be small, between stages defined on scaled instruments.

Measure 5 and Measure 6. The two measures addressing management of neuropsychiatric symptoms and screening for depressive symptoms were retired following an update of Measure 4. Assessment of Neuropsychiatric Symptoms. The previous Assessment of Neuropsychiatric Symptoms measure was modified to include additional specifications on what neuropsychiatric symptoms must be assessed to meet the measure requirements, and this assessment now includes depression, making a separate depression screening measure redundant and unnecessary. This updated measure also includes confirmation of documentation of an intervention following a positive screening assessment, making the Management of Neuropsychiatric Symptoms measure unnecessary.

Measure Harmonization

The Work Group reviewed existing performance measures operating with a denominator of patient with dementia. Efforts were made to reduce duplicative measures when possible. The Work Group discussed additional abuse and violence screening as a component of the Safety Measure, but ultimately determined the concern warrants a separate measure. As a result the Work Group encourages, providers and practices to utilize the existing Elder Maltreatment Screen and Follow-Up Measure (PQRS Measure #181).

Multiple measures exist that have potential implications for patients with depression such as functional status, depression assessment and outcomes, pain screening, advance care planning, etc. Details on how these existing measures were harmonized are included in measure specifications that follow below. Efforts were made to harmonize measures when possible.

Technical Specifications Overview

The Work Group developed technical specifications for measures that may include:

- Electronic Health Record (EHR) Data
- Electronic Administrative Data (Claims)
- Chart Review (for select measures where EHR data cannot be gathered)
- Registry

Administrative claims specifications are provided for measures when applicable. The AAN and APA are in the process of creating code value sets and the logic required for electronic capture of the quality

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measures with EHRs, when possible. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date. These technical specifications will be updated as warranted.

The measurement set includes measures that require the use of validated screening or other assessment tools. The Work Group discussed more and less prescriptive ways to select these tools, eventually determining that multiple tools should be offered to allow providers to determine which tool best meets their individual practice needs. In some cases, tools may be subject to copyright and require licensing fees. The Work Group determined that measurement should occur once in a twelve month period unless otherwise specified to reduce provider burden.

Measure Exclusions Versus Exceptions

A denominator exclusion is a factor supported by the clinical evidence that removes a patient from inclusion *in the measure population*. For example, if the denominator indicates an age range from 0 to 18 years of age, a patient who is 19 years of age would be excluded.

A denominator exception is a condition that should remove the patient, procedure or unit of measurement from the denominator *only if the numerator criteria are not met*. The AAN includes three classes of possible exceptions: medical (e.g., contraindication), patient (e.g., refusal, religious belief), or system (e.g., resource limitation) reasons. For each measure, the rationale justifying an exception for a medical, patient, or system reason must be clear. The Work Group provided explicit exceptions when applicable, for ease of use in eMeasure development.

Testing and Implementation of the Measurement Set

The measures in this set are being made available without any prior testing. The AAN and APA encourage testing of this measurement set for feasibility and reliability by organizations or individuals positioned to do so. Select measures will be beta tested once the set has been released, prior to submission to the National Quality Forum for possible endorsement.

Dementia Measures

Disclosure of Dementia Diagnosis

Measure Description	
Percentage of patients with a diagnosis* of a qualifying dementing disorder or disease whose diagnosis has been disclosed to them and, if available, their primary caregiver.	
Measure Components	
Numerator Statement	<p>Patients and patient/caregiver dyads with a diagnosis* of a qualifying dementing disorder or disease who have been told (1) that they have dementia and (2) what disease is responsible.</p> <p>*Diagnosis is defined as the provider’s best current opinion about dementia etiology, which may include a disclosure that diagnosis remains unknown or that a previous diagnosis must be revised.</p>
Denominator Statement	All patients with a diagnosis of a qualifying dementing disorder or disease
Denominator Exceptions	<ul style="list-style-type: none"> • Disclosure offered, but patient declines information on their diagnosis • Patient does not have caregiver • Diagnosis previously disclosed (i.e., patient or caregiver provides diagnosis to provider, previous disclosure documented in medical record, or patient or caregiver states they were previously informed.)
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “Individuals concerned about cognitive and behavioral changes associated with aging generally come to the evaluation process seeking information as well as emotional support. This often is a severely distressing situation for the individual, who may or may not have been the key individual in making the decision to have an assessment conducted (ABA & APA, 2008; APA Presidential Task Force on the Assessment of Age-Consistent Memory Decline and Dementia, 1998). Provision of both information and support while maintaining a sense of respect and dignity for the individual, regardless of level of cognitive impairment, reflect both professional ethics and sound clinical practice (APA, 2002).” (1) • “Diagnosis of AD should be disclosed to patient (and caregivers as appropriate) (Level B). Disclosure of diagnosis should be individually tailored. It should be accompanied by information and counseling, as well as useful contacts such as Alzheimer's patient organizations. Patients and caregivers should be provided with education and support (Level A).” (2) • The experience of the diagnosis of dementia is challenging both for people with dementia and family members and for healthcare professionals, so healthcare professionals should make time available to discuss the diagnosis and its implications with the person with dementia

	<p>and also with family members (usually only with the consent of the person with dementia). Healthcare professional should be aware that people with dementia and family members may need ongoing support to cope with the difficulties presented by the diagnosis. (3)</p> <ul style="list-style-type: none"> • “Unless a patient suffering from dementia explicitly declines to know the diagnosis, the default mode should be to inform truthfully as it will enable the patient to: <ol style="list-style-type: none"> a. Plan for optimal life experiences in remaining years of intact capacities b. Designate and appoint a surrogate decision maker to take over the making of treatment decision upon eventual incompetence c. Settle personal financial and legal matters d. Participate in treatment decisions e. Consider possible enrolment in research programmes and f. Participate in informed consent process” (4)
Measure Importance	
Relationship to Desired Outcome	Patients/dyads who understand their diagnosis are better able to seek a second opinion, are more likely to be involved in decision-making for their care, receive better medical care, and are better able to cope with their symptoms and access services for ongoing care, support, and safety. (5)
Opportunity for Improvement	<p>Only 45% of people with Alzheimer’s disease or their caregivers report being told of their diagnosis. (1) Diagnosis is an unmet need for patients and patient/caregiver dyads. Many community-residing individuals with dementia and their caregivers have unmet dementia-related needs for care, services and support. In one recent study, almost one-third of individuals with dementia had not received a prior evaluation or diagnosis. (6) Providers should be aware that unmet needs may be higher among minority and low-income community residents, caregivers with lower education, and individuals with early-stage dementia.</p> <p>Disclosure of diagnosis to a patient should occur, if possible, while the patient has capacity to understand and engage in a discussion on desired treatment. Patients and their caregivers should receive education and support following disclosure. It is suggested that providers pair this measure with the Caregiver Education and Support Measure to ensure patient and caregiver needs are fully met.</p>
National Quality Strategy Domains	<input checked="" type="checkbox"/> Patient and Family Engagement <input type="checkbox"/> Patient Safety <input checked="" type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	<p>An exception was created to address situations where patients and their caregiver were previously informed of their diagnosis and the provider has documentation of this disclosure.</p> <p>A patient may also decline information on their diagnosis, and a provider should not force this information if it is detrimental to patient care.</p>

	Additionally, if patient does not have a caregiver and lacks capacity to understand their diagnosis and disclosure would be a detriment to care an exception is needed.
Harmonization with Existing Measures	No known measures addressing disclosure of diagnosis are known.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> 1. American Psychological Association. Guidelines for Evaluation of Dementia and Age-Related Cognitive Change. <i>American Psychologist</i> 2012;67(1):1-9. 2. Hort J, O'Brien JT, Gainotti G, et al. EFNS guidelines for the diagnosis and management of Alzheimer's disease. <i>European Journal of Neurology</i> 2010;17:1236-1248. 3. National Institute for Health and Care Excellence (NICE). Dementia: Supporting people with dementia and their carers in health and social care. NICE guidelines [CG42]. November 2006. 52p. 4. Ministry of Health Malaysia. Management of Dementia (2nd Edition). Clinical Practice Guidelines. November 2009 144p. 5. Derksen E, Vernooij-Dassen M, Gillissen F, et al. Impact of diagnostic disclosure in dementia on patients and carers: Qualitative case series analysis. <i>Aging Ment Health</i> 2006;10(5):525-31. 6. Alzheimer's Association. 2015 Alzheimer's Disease Facts and Figures. <i>Alzheimer's & Dementia</i>. 2015;11(3)332+. 7. Agar, M, Luckett T. Outcome measures for palliative care research. <i>Current Opinion in Supportive & Palliative Care</i> 2012;6(4):500-507. 	
Technical Specifications: Electronic Health Record (EHR) Data	
The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.	
Technical Specifications: Administrative Data (Claims)	

<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management); • 99497, 99498 (Advance care planning); • 97003, 97004 (Occupational therapy evaluation and re-evaluation); • 97001, 97002 (Physical therapy evaluation and re-evaluation); • 99221-99223 (Initial Hospital Care); • 99231-99233 (Subsequent Hospital Care); • 99238-99239 (Hospital Discharge); • 99251-99255 (Initial Inpatient Consultation); • 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation); • 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services); • 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight); • 99341, 99342, 99343, 99344, 99345 (Home Care); • 99347, 99348, 99349, 99350 (Home Care).

Caregiver Education and Support for Patients with Dementia

Measure Description	
Percentage of patients with dementia whose caregiver(s)* were provided with education** on dementia disease management and health behavior changes AND were referred to additional resources*** for support in the last 12 months.	
Measure Components	
Numerator Statement	<p>Patients with dementia whose caregiver(s) were provided with education on dementia disease management and health behavior changes AND were referred to additional resources** for support in the last 12 months.</p> <p>* “Caregiver” is broadly defined and the Work Group adopted the definition utilized by the National Quality Forum and Feinberg.(1) Caregiver refers to any relative, partner, friend, or neighbor who has a significant relationship with, and who provides a broad range of assistance for, an older adult or an adult with chronic or disabling conditions.(1)</p> <p>** “Education” requires learning and processing information about disease management and health behavior changes. This should also include advising the caregiver that, <i>as a caregiver</i>, he or she is at “increased risk of serious illness (including circulatory and heart conditions and respiratory disease and hypertension), increased physician visits and use of prescription medications, emotional strain, anxiety, and depression.”(2) Providers are encouraged to review state specific guidelines to ensure education is being provided as required.</p> <p>*** “Additional Resources” are defined as situation–specific, tailored programs to assist the caregiver; these included national organizations such as the Alzheimer’s Association, but also include local resources, such as community, senior center and religion-based support groups.</p>
Denominator Statement	All patients with dementia
Denominator Exceptions	<ul style="list-style-type: none"> • Patient does not have a caregiver • Caregiver is trained and certified in dementia care. • Patient/caregiver dyad already referred to appropriate resources and connection to resources confirmed.
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “Important aspects of psychiatric management include educating patients and families about the illness, its treatment, and sources of additional care and support (e.g., support groups, respite care, nursing homes, and other long-term-care facilities) and advising patients and their families of the need for financial and legal planning due to the patient’s eventual incapacity (e.g., power of attorney for medical and financial decisions, an up-to-date will, and the cost of long-term care) (Category I)... The family should be educated regarding basic principles of care, including

	<ol style="list-style-type: none">1. recognizing declines in capacity and adjusting expectations appropriately,2. bringing sudden declines in function and the emergence of new symptoms to professional attention,3. keeping requests and demands relatively simple,4. deferring requests if the patient becomes overly upset or angered,5. avoiding overly complex tasks that may lead to frustration,6. not confronting patients about their deficits,7. remaining calm, firm, and supportive and providing redirection if the patient becomes upset,8. being consistent and avoiding unnecessary change, and9. providing frequent reminders, explanations, and orientation cues... <p>In addition to providing families with information on support groups, there are a number of benefits of referral to the local chapter or national office of the Alzheimer's Association (1-800-272-3900; http://www.alz.org), the Alzheimer's Disease Education and Referral Center (ADEAR) (1-800-438-4380; http://www.nia.nih.gov/Alzheimers/), and other support organizations.”(3)</p> <ul style="list-style-type: none">• “Short-term programs directed toward educating family caregivers about AD should be offered to improve caregiver satisfaction” (4).• “Intensive long-term education and support services (when available) should be offered to caregivers of patients with AD to delay time to nursing home placement” (4).• “Staff of long-term care facilities should receive education about AD to reduce the use of unnecessary antipsychotics” (4)• "Support programs for caregivers and patients with dementia significantly decreased the odds of institutionalization and improved caregiver well being." (5)• “A dementia diagnosis mandates an inquiry to the community for available public health care support programmes (Good Practice Point). Counselling and case/care management amongst caring family members have positive effects on burden and satisfaction for caregivers of people with dementia (Good Practice Point).” (6)• “Following a diagnosis of dementia, health and social care professionals should, unless the person with dementia clearly indicates to the contrary, provide, them and their family with written information about<ol style="list-style-type: none">1. The signs and symptoms of dementia2. The course and prognosis of the condition3. Treatments4. Local care and support services5. Support groups6. Sources of financial and legal advice, and advocacy7. Medico-legal issues, including driving
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	8. Local information sources, including libraries and voluntary organisations.” (7)
Measure Importance	
Relationship to Desired Outcome	By providing education as well as resources to caregivers it is anticipated that caregiver burden will decreased, caregiver and patient Quality of Life will improve, and caregiver and patient physical health will improve.
Opportunity for Improvement	There is evidence that dementia-related needs for care, services and support for patients with dementia in the community and their caregivers are unmet.(8) Providers have a wealth of expertise that can be shared with caregivers of patient with dementia who often lack the time and resources to identify appropriate referrals for their needs.
National Quality Strategy Domains	<input checked="" type="checkbox"/> Patient and Family Engagement <input checked="" type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input checked="" type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	Exception created for patients who do not have caregivers, as it would be impossible to provide in this situations. An exception was also created for trained and certified caregivers, as education would be redundant. An exception was created for patient/caregiver dyads that are known to be connected with existing supports as education would be redundant.
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input type="checkbox"/> Inpatient <input type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	

<ol style="list-style-type: none"> 1. National Quality Forum. Priority Setting for Healthcare Performance Measurement: Addressing Performance Measure Gaps for Dementia, including Alzheimer’s Disease. October 2014. 75p. 2. California Workgroup on Guidelines for Alzheimer’s Disease Management. Guidelines for Alzheimer’s disease management. Los Angeles, CA: Alzheimer’s Disease and Related Disorders Association, Inc., Los Angeles Chapter. 2008. 3. American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer’s disease and other dementias. Arlington (VA): American Psychiatric Association (APA). October 2007 85 p. 4. Doody RS, Stevens JC, Beck C, et al. Practice parameter: Management of dementia (an evidence based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001;56:1154-1166. 5. Rabins PV, Rovner BW, Rummans T, et al. Guideline Watch (October 2014): Practice Guideline For The Treatment Of Patients With Alzheimer’s Disease And Other Dementias. American Psychiatric Association. 26 p. Available at: http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/alzheimerwatch.pdf Accessed on September 2, 2015 6. Sorbi S, Hort J, Erkinjuntti T, et al. EFNS-ENS Guidelines on the diagnosis and management of disorders associated with dementia. Eur J Neurol 2012;19(9):1159-1179. 7. National Institute for Health and Care Excellence (NICE). Dementia: Supporting people with dementia and their carers in health and social care. NICE guidelines [CG42]. November 2006. 52p. 8. Black BS, Johnston D, Rabins PV, et al. Unmet Needs of Community-Residing Persons with Dementia and Their Informal Caregivers: Findings from the MIND at Home Study. J Am Geriatr Soc. 2013;61(12):2087-2095. 	
<p>Technical Specifications: Electronic Health Record (EHR) Data</p> <p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
<p>Technical Specifications: Administrative Data (Claims)</p> <p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing);

	<ul style="list-style-type: none">• 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions);• 99490, 99487, 99489 (Complex Chronic Care Management);• 99497, 99498 (Advance care planning);• 97003, 97004 (Occupational therapy evaluation and re-evaluation);• 97001, 97002 (Physical therapy evaluation and re-evaluation);• 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);• 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services);• 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight);• 99341, 99342, 99343, 99344, 99345 (Home Care);• 99347, 99348, 99349, 99350 (Home Care).
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Functional Status Assessment for Patients with Dementia

Measure Description	
Percentage of patients with dementia for whom an assessment of functional status* was performed at least once in the last 12 months.	
Measure Components	
Numerator Statement	<p>Patients with dementia for whom an assessment of functional status* was performed at least once in the last 12 months.</p> <p>*Functional status is assessed by use of a validated tool, direct assessment of the patient, or by querying a knowledgeable informant. A direct assessment of functional status includes an evaluation of the patient’s ability to perform instrumental activities of daily living (IADL) (i.e., cleaning, money management, medication management, transportation, cleaning, and cooking) and basic activities of daily living (ADL) (i.e., grooming, bathing, dressing, eating, toileting, gait, and transferring). Functional status assessment tools approved for use in this measure include, but are not limited to:</p> <ul style="list-style-type: none"> • Lawton Instrumental Activities of Daily Living Scale (1) • Barthel ADL Index (2) • Katz Index of Independence in Activities of Daily Living (3) • Functional Activities Questionnaire (4)
Denominator Statement	All patients with dementia
Denominator Exceptions	Patient is unable to communicate and caregiver/informant is unavailable to provide information. Exception for outpatient care only.
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “A detailed assessment of functional status may also aid the clinician in documenting and tracking changes over time as well as providing guidance to the patient and caregivers. Functional status is typically described in terms of the patient’s ability to perform instrumental activities of daily living such as shopping, writing checks, basic housework, and activities of daily living such as dressing, bathing, feeding, transferring, and maintaining continence. These regular assessments of recent cognitive and functional status provide a baseline for assessing the effect of any intervention, and they improve the recognition and treatment of acute problems, such as delirium.” (5) • “Behavior modification, scheduled toileting, and prompted voiding should be used to reduce urinary incontinence (Standard).” (6) • “Graded assistance, practice, and positive reinforcement should be used to increase functional independence (Guideline).” (6) • “Low lighting levels, music, and simulated nature sounds may improve eating behaviors for persons with dementia, and intensive multimodality group training may improve activities of daily living, but these approaches lack conclusive supporting data (Practice Options).” (6)
Measure Importance	

Relationship to Desired Outcome	Maintaining or increasing physical functioning levels is a desired outcome. This is key to maintaining quality of life and reducing caregiver burden. This requires regular assessment of function in multiple domains. When planning interventions to improve or maintain function, it is important to consider a broad range of causes of functional impairment, including impaired cognition.
Opportunity for Improvement	In routine practice, persons with dementia may not be assessed regularly for changes in their ability to perform both basic and instrumental activities of daily living. (7) Frequent and comprehensive assessments will allow clinicians to track these changes and to make timely interventions aimed at preserving function or mitigating disability.
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	Patient or informant must be available to provide information for functional assessment to be valid.
Harmonization with Existing Measures	Efforts were made to harmonize the measure with PQRS Functional Outcome Assessment (#182). The Work Group determined that providers need additional assessment options for the unique needs of patients with dementia beyond the use of standardized functional outcome assessment tools.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> 1. Graf C. The Lawton Instrumental Activities of Daily Living Scale. AJN 2008; 108(4):52-62. 2. Collin C, Wade DT, Davies S, et al. The Barthel ADL Index: A reliability study. Disability and Rehabilitation 1998;10(2):61-63. 	

<ol style="list-style-type: none"> 3. Katz S, Ford AB, Moskowitz RW, et al. Studies of illness in the aged: The index of ADL: A standardized measure of biological and psychosocial function. JAMA 1963;185(12):914-919. 4. Pfeffer RI, Kurosaki TT, Harrah CJ, et al. Measurement of Functional Activities in Older Adults in the Community. J Gerontol 1982;37(3):323-329. 5. American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA). October 2007 85 p. 6. Doody RS, Stevens JC, Beck C, et al. Practice parameter: Management of dementia (an evidence based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001;56:1154-1166. 7. Black BS, Johnston D, Rabins PV, et al. Unmet Needs of Community-Residing Persons with Dementia and Their Informal Caregivers: Findings from the MIND at Home Study. J Am Geriatr Soc 2013;61(12):2087-2095. 	
Technical Specifications: Electronic Health Record (EHR) Data	
<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
Technical Specifications: Administrative Data (Claims)	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
Denominator (Eligible Population)	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management); • 99497, 99498 (Advance care planning); • 97003, 97004 (Occupational therapy evaluation and re-evaluation); • 97001, 97002 (Physical therapy evaluation and re-evaluation); • 99221-99223 (Initial Hospital Care); • 99231-99233 (Subsequent Hospital Care); • 99238-99239 (Hospital Discharge); • 99251-99255 (Initial Inpatient Consultation);

Do Not Cite. **Do NOT Distribute.**

	<ul style="list-style-type: none">• 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);• 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services);• 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight);• 99341, 99342, 99343, 99344, 99345 (Home Care);• 99347, 99348, 99349, 99350 (Home Care).
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Screening and Treatment of Behavioral and Psychiatric Symptoms Associated with Dementia

Measure Description	
<p>Percentage of patients with dementia for whom there was a documented screening* for behavioral and psychiatric symptoms, including depression, and for whom, if screening positive, there was also documentation of recommendations for management in the last 12 months.</p>	
Measure Components	
Numerator Statement	<p>Patients with dementia for whom there was a documented screening* for behavioral and psychiatric symptoms, including depression in the last 12 months and for whom, if screening positive, there was also documentation of recommendations for management in the last 12 months.</p> <p>*Screening is defined as using a validated instrument or directly examining the patient or knowledgeable informant to determine the presence or absence of symptoms from three domains: activity disturbances, mood disturbances (including depression), and thought and perceptual disturbances.</p> <p>The following is a non-exhaustive list of symptoms falling into each of the three domains pertinent to this measure:</p> <p><i>Activity disturbances (To meet measure, patient or knowledgeable informant must be screened for at least one symptom from this list):</i></p> <ul style="list-style-type: none"> ○ agitation ○ wandering ○ purposeless hyperactivity ○ verbal or physical aggressiveness ○ resisting care ○ apathy ○ impulsiveness ○ socially inappropriate behaviors ○ eating disturbances ○ sleep problems ○ diurnal/sleep-wake cycle disturbances ○ repetitive behavior <p><i>Mood disturbances (To meet measure, patient or knowledgeable informant must be screened for depression and at least one more symptom from this list):</i></p> <ul style="list-style-type: none"> ○ anxiety ○ depression ○ elation ○ irritability ○ mood lability/fluctuations <p><i>Thought and perceptual disturbances (To meet measure, patient or knowledgeable informant must be screened for at least one symptom from this list):</i></p> <ul style="list-style-type: none"> ○ having fixed false beliefs (delusions) ○ hearing or seeing non-present entities (hallucinations) ○ paranoia <p>Examples of reliable and valid instruments that are commonly used in research settings and that can be used to assess behavior include, but are not limited to:</p>

	<ul style="list-style-type: none"> ○ Dementia Signs and Symptoms (DSS) Scale (1) or Neuropsychiatric Inventory (NPI) (2). The assessment of behavioral status may include the assessment of Behavioral and Psychological Symptoms of Dementia (BPSD) (3). For patients residing in nursing homes, it may include an assessment of the behavioral symptom items from the Minimum Data Set (MDS) (4).
Denominator Statement	All patients with dementia
Denominator Exceptions	None
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “It is important for the [clinician] treating a patient with dementia to regularly assess cognitive deficits or behavioral difficulties that potentially pose a danger to the patient or others.” (5) • “Traditionally cognitive function has been the main focus of interest in treatment and research of people with dementia. It is becoming increasingly recognized, however, that noncognitive symptoms are those that are most disturbing to families and caregivers and may seriously impact not only the patient’s well-being, but also the family’s, caregiver’ and providers’ approaches to managing the patient”(6) • “Assess and monitor for behavioral changes; in particular, the presence of agitation, aggression, anxiety, disinhibitions, delusions, and hallucinations” (7) • “Identification of neuropsychiatric symptoms is essential for both the diagnosis and treatment, as some BPSD constitute the core or supportive diagnostic features of some non-AD dementias, such as DLB, PDD or FTLD” (8)
Measure Importance	
Relationship to Desired Outcome	Decreasing the rate of behavioral and psychiatric symptoms of dementia is a desired outcome. These symptoms, including depression, have serious adverse impact on quality of life for patients and caregivers and increase the risk of institutionalization. They may go unrecognized and untreated by clinicians if they are not actively screened for with specific attention to discrete symptom domains.
Opportunity for Improvement	Behavioral and psychiatric symptoms, including depression, are very common in dementia, are major sources of disability and distress, and are frequently not detected or appropriately treated (9, 10). Regular screening for and treatment of these symptoms will improve the quality of life for patients and reduce caregiver burden.
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources

	<input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	This measure has no exceptions.
Harmonization with Existing Measures	Depression assessment measures endorsed by NQF and incorporated into PQRS exist: process measure (Preventive Care and Screening NQF #0418; PQRS #134) and intermediate outcome measure (NQF #0710; PQRS #370). A separate measure is needed and created to address all the behavioral and psychiatric symptoms specific to patients with dementia. The treatment plan for a patient with dementia will differ significantly.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input checked="" type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> 1. Loreck DJ, Bylsma FW, Folstein MF. A New Scale for Comprehensive Assessment of Psychopathology in Alzheimer's Disease. <i>Am J Geriatr Psychiatry</i>. 1994, 2:52-59. 2. Cummings JL, Mega M, Gray K, Rosenberg-Thompson S, Carusi DA, Gornbein J. The Neuropsychiatric Inventory: comprehensive assessment of psychopathology in dementia. <i>Neurology</i>. 1994, 44(12):2308-14. 3. International Psychogeriatric Association. Introduction to Behavioral and Psychological Symptoms of Dementia (Revised). Available at: http://www.ipa-online.org/ipaonlinev3/ipaprograms/bpsdarchives/bpsdrev/toc.asp. Accessed August 25, 2015. 4. Center for Medicaid and Medicare. Minimum Data Set. Available at: https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/IdentifiableDataFiles/LongTermCareMinimumDataSetMDS.html. Accessed August 25, 2015. 5. American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA). October 2007 85 p. 6. Sadowsky CH, Galvin JE. Guidelines for the management of cognitive and behavioral problems in dementia. <i>JABFM</i> 2012;25(3):350-366. 	

<p>7. Fletcher K. Geriatric Nursing Protocol: Recognition and Management of Dementia. Springer Publishing Company. Evidence-Based Geriatric Nursing Protocols for Best Practice, 4th Edition. August 2012. Available at: http://consultgerim.org/topics/dementia/want_to_know_more Accessed on September 2, 2015</p> <p>8. Sorbi S, Hort J, Erkinjuntti T, et al. EFNS-ENS Guidelines on the diagnosis and management of disorders associated with dementia. Eur J Neurol 2012;19(9):1159-1179.</p> <p>9. Troeung L, Gasson N, Egan S: Patterns and predictors of mental health services utilization in people with Parkinson’s Disease. J of Geriatric Psychiatry and Neurology 2015; 28:12-18.</p> <p>10. Sivanathan S, Pyat JH, McGrail KM. Variations in Self-Reported Practice of Physicians Providing Clinical Care to Individuals with Dementia: A Systematic Review. J Am Geriatr Soc 2013;61:1277-1285.</p>	
<p>Technical Specifications: Electronic Health Record (EHR) Data</p>	
<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
<p>Technical Specifications: Administrative Data (Claims)</p>	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120,96127 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management); • 99497, 99498 (Advance care planning); • 97003, 97004 (Occupational therapy evaluation and re-evaluation); • 97001, 97002 (Physical therapy evaluation and re-evaluation); • 99221-99223 (Initial Hospital Care); • 99231-99233 (Subsequent Hospital Care); • 99238-99239 (Hospital Discharge); • 99251-99255 (Initial Inpatient Consultation); • 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);

Do Not Cite. Do NOT Distribute.

	<ul style="list-style-type: none">• 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services);• 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight);• 99341, 99342, 99343, 99344, 99345 (Home Care);• 99347, 99348, 99349, 99350 (Home Care);• 99281-99285 (Emergency Department);• 99201-99205 or 99211-99215 (Urgent Care).
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Safety Concern Screening and Follow-Up for Patients with Dementia

Measure Description	
<p>Percentage of patients with dementia or their caregiver(s) for whom there was a documented safety screening * in two domains of risk: dangerousness to self or others and environmental risks, and for whom, if screening positive, there was documentation they were provided with recommendations for their mitigation, which may include referral to other resources, in the last 12 months.</p>	
Measure Components	
Numerator Statement	<p>Patients with dementia or their caregiver(s) for whom there was a documented screening for safety concerns* in two domains of risk: dangerousness to self or others and environmental risks, and for whom, if screening positive, there was documentation they were provided with recommendations for their mitigation, which may include referral to other resources, in the last 12 months.</p> <p>*The following is a non-exhaustive list of safety concerns in the two domains pertinent to this measure. To meet measure requirements a patient or their caregiver(s) must have documentation of being screened on at least one concern from each of the two domains.</p> <p><i>Dangerousness to self or others</i></p> <ul style="list-style-type: none"> • Medication misuse • Physical aggressiveness • Wandering, including addressing precautions that may include physical measures (e.g., locks, fences or hedges), video surveillance, GPS monitoring, personal companions, schedule modifications (e.g., adult day care), rehabilitative measures, and risk mitigation strategies • Inability to respond rapidly to crisis/household emergencies • Financial mismanagement, including being involved in “scams” • Other concerns raised by patient or their caregiver <p><i>Environmental risks</i></p> <ul style="list-style-type: none"> • Home safety risks that could arise from cooking or smoking • Access to firearms or other weapons • Access to potentially dangerous chemicals and other materials • Access to and operation of tools and equipment • Trip hazards in the home increasing the risk of falling • Other concerns raised by patient or their caregiver
Denominator Statement	All patients with dementia
Denominator Exceptions	<p>Patient unable to communicate and informant not available.</p> <p>Patient resides in an institutional setting.</p>
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “Recommended assessments include evaluation of suicidality, dangerousness to self and others, and the potential for aggression, as well as evaluation of living conditions, safety of the environment, adequacy of supervision, and evidence of neglect or abuse (Category I). [I]mportant safety issues in the management of patients with dementia include

	<p>interventions to decrease the hazards of wandering and recommendations concerning activities such as cooking, driving, hunting, and the operation of hazardous equipment. Caregivers should be referred to available books [and other materials] that provide advice and guidance about maximizing the safety of the environment for patients with dementia...As patients become more impaired, they are likely to require more supervision to remain safe, and safety issues should be addressed as part of every evaluation. Families should be advised about the possibility of accidents due to forgetfulness (e.g., fires while cooking), of difficulties coping with household emergencies, and of the possibility of wandering. Family members should also be advised to determine whether the patient is handling finances appropriately and to consider taking over the paying of bills and other responsibilities. At this stage of the disease [i.e., moderately impaired patients], nearly all patients should not drive.” (1)</p> <p>For mild to moderate Alzheimer's disease</p> <ul style="list-style-type: none"> • “Assess for safety risks (e.g., driving, financial management, medication management, home safety risks that could arise from cooking or smoking, potentially dangerous behaviours such as wandering)” (2)
Measure Importance	
Relationship to Desired Outcome	Reducing injuries, including those associated with falls, accidents, and aggression are desired outcomes. These are devastating complications of dementia that have serious adverse impact on the quality of life of patients and caregivers. It is possible to reduce the risk of these outcomes by means of simple preventive measures. Opportunities for these preventive measures may be overlooked by clinicians if they don't screen for safety risks with specific attention to discrete domains of risk.
Opportunity for Improvement	Screening for safety concerns has been identified as a major unmet need of persons with dementia (3).
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input checked="" type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	Patient or informant must be able to provide information for counseling on this issue to be valid. Patients residing in an institutional setting will have different safety concerns and counseling should be tailored to their situation.
Harmonization with Existing Measures	The work group recommends that all individuals with dementia be screened for abuse and violence, but recognized that previously developed measures exist to address this need. The work group recommends that providers, practices, and systems consider implementing the previously developed Elder Maltreatment Screen and Follow-Up Plan Measure (PQRS Measure #181.)
Measure Designation	

Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input checked="" type="checkbox"/> Emergency Departments and Urgent Care <input type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> 1. American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA). October 2007 85 p. 2. Chertkow H. Diagnosis and treatment of dementia: introduction. Introducing a series based on the Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia. CMAJ. 2008;178:316-321. 3. Black BS, Johnston D, Rabins PV, et al. Unmet Needs of Community-Residing Persons with Dementia and Their Informal Caregivers: Findings from the MIND at Home Study. J Am Geriatr Soc 2013;61(12):2087-2095. 	
Technical Specifications: Electronic Health Record (EHR) Data	
<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
Technical Specifications: Administrative Data (Claims)	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
Denominator (Eligible Population)	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient);

	<ul style="list-style-type: none">• 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient);• 99201, 99202, 99203, 99204, 99205 (E/M Codes);• 99211, 99212, 99213, 99214, 99215 (E/M Codes);• 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy);• 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing);• 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions);• 99490, 99487, 99489 (Complex Chronic Care Management);• 99497, 99498 (Advance care planning);• 97003, 97004 (Occupational therapy evaluation and re-evaluation);• 97001, 97002 (Physical therapy evaluation and re-evaluation);• 99221-99223 (Initial Hospital Care);• 99231-99233 (Subsequent Hospital Care);• 99238-99239 (Hospital Discharge);• 99251-99255 (Initial Inpatient Consultation);• 99281-99285(Emergency Department);• 99201-99205 or 99211-99215 (Urgent Care).
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Driving Screening and Follow-Up for Patients with Dementia

Measure Description	
Percentage of patients with dementia for whom there was a documented screening for driving risks and for whom, if screening positive, there was also documentation they were informed of alternatives to driving in the last 12 months.	
Measure Components	
Numerator Statement	Patients with dementia for whom there was a documented screening for driving risks and for whom, if screening positive, there was also documentation they were informed of alternatives to driving in the last 12 months.
Denominator Statement	All patients with dementia
Denominator Exceptions	Patient or caregiver reports patient is no longer driving at time of visit.
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “For patients with dementia, consider the following characteristics useful for identifying patients at increased risk for unsafe driving: the Clinical Dementia Rating scale (Level A), a caregiver’s rating of a patient’s driving ability as marginal or unsafe (Level B), a history of crashes or traffic citations (Level C), reduced driving mileage or self-reported situational avoidance (Level C), Mini-Mental State Examination scores of 24 or less (Level C), and aggressive or impulsive personality characteristics (Level C). Consider the following characteristics not useful for identifying patients at increased risk for unsafe driving: a patient’s self-rating of safe driving ability (Level A) and lack of situational avoidance (Level C). There is insufficient evidence to support or refute the benefit of neuropsychological testing, after controlling for the presence and severity of dementia, or interventional strategies for drivers with dementia (Level U). Clinicians may present patients and their caregivers with the data showing that, as a group, patients with mild dementia (CDR of 1) are at a substantially higher risk for unsafe driving and thus should strongly consider discontinuing driving. At the very least, patients and their caregivers should prepare for the eventuality of driving cessation as dementia severity increases.” (1) • “Assessment of driving ability should be made after diagnosis with particular attention paid to visuospatial, visuo-perceptual and executive abilities (Good Practice Point). Advice either to allow driving but to review after an interval, to cease driving, or to refer for retesting should be given (Good Practice Point) EFNS-ENS Guidelines on the diagnosis and management of disorders associated with dementia.”(2)
Measure Importance	
Relationship to Desired Outcome	Reducing the number of driving accidents in persons with dementia is a desired outcome. As dementia progresses driving skills will deteriorate. (1)

	Screening patients with dementia for the ability to drive safely, and recommending alternatives to driving for patients who are judged unable to drive safely, are measures that promote the achievement of this outcome.
Opportunity for Improvement	Clinicians are often reluctant to raise the issue of driving safety with their patients because they don't feel competent to assess driving safety and because patients frequently resist discussing it. Providers may consider referring patients to a driving center to conduct a driving assessment; an impartial third party expert in driving assessments may be able to address patient concerns beyond the capability of a healthcare provider. Providers are encouraged to review state specific requirements to ensure screening and notification practices are compliant.
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input checked="" type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	Measure is not meaningful to patients who have already made the decision to stop driving.
Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input type="checkbox"/> Inpatient <input type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> Iverson DJ, Gronseth GS, Reger MA, et al. Practice Parameter update: Evaluation and management of driving risk in dementia. Report of the Quality Standards Subcommittee of the American Academy of Neurology. <i>Neurology</i> 2010;74(16):1316-1324. Sorbi S, Hort J, Erkinjuntti T, et al. EFNS-ENS Guidelines on the diagnosis and management of disorders associated with dementia. <i>Eur J Neurol</i> 2012;19(9):1159-1179. 	
Technical Specifications: Electronic Health Record (EHR) Data	

<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
<p>Technical Specifications: Administrative Data (Claims)</p>	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management); • 99497, 99498 (Advance care planning); • 97003, 97004 (Occupational therapy evaluation and re-evaluation); • 97001, 97002 (Physical therapy evaluation and re-evaluation); • 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation); • 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services); • 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight); • 99341, 99342, 99343, 99344, 99345 (Home Care); • 99347, 99348, 99349, 99350 (Home Care).

Advance Care Planning and Palliative Care Counseling for Patients with Dementia

Measure Description	
<p>Percentage of patients with dementia who</p> <p>1) have an advance care plan or surrogate decisions maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan AND</p> <p>Percentage of patients with dementia or their surrogate decision maker who</p> <p>2) received comprehensive counseling regarding ongoing palliation & symptom management, and end of life decisions within two years of initial diagnosis or assumption of care.</p>	
Measure Components	
Numerator Statement	<p>Patients with dementia who</p> <p>1) have an advance care plan or surrogate decisions maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan AND</p> <p>Patients with dementia or their surrogate decision maker who</p> <p>2) received comprehensive counseling* regarding ongoing palliation & symptom management, and end of life decisions within two years of initial diagnosis or assumption of care.</p> <p>*Comprehensive counseling regarding end of life decisions (recognition of end-stage dementia, goals of care, comfort care and hospice referral) is defined as a discussion of the risks and benefits of the following medical interventions to address the major clinical issues associated with advanced dementia:</p> <ul style="list-style-type: none"> • Hospitalization • Treatment for infections • Surgery • Artificial nutrition and hydration • Cardiopulmonary resuscitation • Mechanical ventilation
Denominator Statement	All patients with dementia
Denominator Exceptions	None
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “At this stage [i.e., severely and profoundly impaired patients]...the treatment team should help the family prepare for the patient’s death. Ideally, discussions about feeding tube placement, treatment of infection, cardiopulmonary resuscitation, and intubation will have taken place when the patient could participate, but if they have not, it is important to raise these issues with the family before a decision about one of these options is urgently required.”(1) • “A crucial component of [care for nursing home residents] is providing information about the benefits and burdens of [medical] interventions to the resident’s surrogate decision maker, supporting development of a care plan

	<p>that takes into consideration previous wishes of the resident, if any, and his or her best interest as interpreted by the decision maker. The care plan should consider the goals of care and priority order of the three possible goals – survival, maintenance of function, and comfort.”(2)</p> <ul style="list-style-type: none"> • “[Advance directives are d]esigned to respect patient's autonomy and determine his/her wishes about future life-sustaining medical treatment if unable to indicate wishes... Key interventions, treatment decisions to include in advance directives [are]: resuscitation procedures, mechanical respiration, chemotherapy, radiation therapy, dialysis, simple diagnostic tests, pain control, blood products, transfusions, intentional deep sedation.”(3) • “When eating difficulties arise, feeding tubes are not recommended for older adults with advanced dementia. Careful hand feeding should be offered because hand feeding has been shown to be as good as tube feeding for the outcomes of death, aspiration pneumonia, functional status, and comfort. Moreover, tube feeding is associated with agitation, greater use of physical and chemical restraints, healthcare use due to tube-related complications, and development of new pressure ulcers.”(4)
Measure Importance	
Relationship to Desired Outcome	Dementia is under-recognized as a terminal disease.(5) Individuals with advanced cognitive impairment who did not have an advanced directive had a 15% greater chance of a burdensome transition at the end of life.(6)
Opportunity for Improvement	<p>Growing evidence indicates that patients want to engage in advance care plan discussions to ensure their wishes are met(7), but few patients with dementia are engaged in these discussions.(2) All providers have a responsibility to review existing care plans to identify if patient choices have changed as the disease progresses.(8)</p> <p>There is also evidence indicating that patients and surrogate decision makers are not being engaged in ongoing palliation and symptom management. (2) It is anticipated that through measurement providers will increasingly provide patients with, and their surrogate decisions makers will engage in, counseling on these important topics.</p>
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	This measure has no exceptions.
Harmonization with Existing Measures	NQF has endorsed an Advance Care Plan measure developed by National Committee for Quality Assurance (NCQA) #0326 that measures: Percentage patients 65 years of age and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.

	The work group harmonized with the NCQA measure removing the age restriction and applying specifically to the population with dementia as many individuals with early onset dementia will benefit from these discussions as well. Additionally, a second component addressing ongoing palliation and symptom management is needed for this population.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input checked="" type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
<ol style="list-style-type: none"> 1. American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA). October 2007 85 p. 2. Volicer L. for Alzheimer's Association. End-of-life Care for People with Dementia in Residential Care Settings. 2005. 35p. Available at: http://www.alz.org/documents/national/endoflifelitreview.pdf. Accessed on September 3, 2015. 3. American Geriatrics Society (AGS). Geriatrics at your fingertips: Palliative and end-of-life care. In: Reuben DB, Herr KA, Pacala JT, et al., eds. Online edition: Geriatrics at your fingertips. 2010; 12th edition. 4. American Geriatrics Society Ethics Committee and Clinical Practice and Models of Care Committee. American Geriatrics Society Feeding Tubes in Advanced Dementia Position Statement. <i>J Am Geriatr Soc.</i> 2014;62(8):1590-1593. 5. Lönnroos E, Kyyrönen P, Bell JS, et al. Risk of Death Among Persons with Alzheimer's Disease: A National Register-Based Nested Case Control Study <i>J Alzheimers Dis</i> 2013; 33(1): 157-164. 6. Gozalo P, Teno JM, Mitchell SL, et al. End-of-Life Transitions among Nursing Home Residents with Cognitive Issues. <i>N Engl J Med</i> 2011;365:1212-1221. 7. Pollack KM, Morhaim D, Williams M. The public's perspectives on advance directives in Maryland: implications for state legislative and regulatory policy. <i>Health Policy.</i> 2010;96(1):57-63. 8. American Medical Association. AMA Code of Medical Ethics Opinion 2.191. Advance Care Planning. Issued June 2011 based on the report "Advance Care Planning" adopted November 	

<p>2010. Available at: http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion2191.page?. Accessed on September 3, 2015.</p>	
<p>Technical Specifications: Electronic Health Record (EHR) Data</p>	
<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
<p>Technical Specifications: Administrative Data (Claims)</p>	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management); • 99497, 99498 (Advance care planning); • 97003, 97004 (Occupational therapy evaluation and re-evaluation); • 97001, 97002 (Physical therapy evaluation and re-evaluation); • 99221-99223 (Initial Hospital Care); • 99231-99233 (Subsequent Hospital Care); • 99238-99239 (Hospital Discharge); • 99251-99255 (Initial Inpatient Consultation); • 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation); • 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services); • 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight); • 99341, 99342, 99343, 99344, 99345 (Home Care); • 99347, 99348, 99349, 99350 (Home Care); • 99281-99285(Emergency Department); • 99201-99205 or 99211-99215 (Urgent Care).

Pain Assessment and Follow-Up for Patients with Dementia

Measure Description	
Percentage of patients with dementia who underwent documented screening * for pain symptoms at every visit and if screening positive also had a documentation of a follow-up plan.	
Measure Components	
Numerator Statement	<p>Patients with dementia who underwent documented screening * for pain symptoms at every visit and if screening positive also had a documentation of a follow-up plan.</p> <p>*Screening is defined as use of a validated screening tools approved for use in this measure include, but are not limited to:</p> <ul style="list-style-type: none"> • Pain Assessment in Advanced Dementia (PAINAD) (1) • Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC or PACSLAC-II) (2,3) • Visual Analog Scale and Verbal Pain Intensity Scale (4) • Pain Assessment for the Dementing Elderly (PADE) (5) • Likert Pain Scale • Minimum data set (MDS)–version 3.0, Section J (6) <p>OR evaluation of verbal and non-verbal expressions of pain behaviors (i.e., changes in breathing quality, negative types of verbalization separate from breathing, facial expression, body language) medication usage.</p>
Denominator Statement	All patients with dementia
Denominator Exceptions	None
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “Pain-assessment results should be used to evaluate the efficacy of pain management interventions” (7) • “Recommendations Specific to Self-Report Measures <ol style="list-style-type: none"> 1 Use of synonyms when asking about the pain experience (e.g., hurt, aching) will facilitate the self-report of some patients who have limitations in ability to communicate verbally. 2 Self-report scales should be modified to account for any sensory deficits that occur with aging (e.g., poor vision, hearing difficulties). 3 Use self-report tools that have been found to be most valid among seniors (e.g., the Coloured Analogue Scale, Numeric Rating Scales, Behavioural Rating Scales, the 21 Point Box Scale). 4 Use of horizontal visual analogue scales should be avoided, as some investigators have found

	<p>unusually high numbers of unscorable responses among seniors.” (7)</p> <ul style="list-style-type: none">• “Recommendations Specific to Observational Measures<ol style="list-style-type: none">1 Observational tools that have been shown to be reliable and valid for use in this population include the PACSLAC and DOLOPLUS-2. The PACSLAC is the only tool that covers all six behavioural pain-assessment domains that have been recommended by the American Geriatrics Society. Nonetheless, clinicians should always exercise caution when using these measures because they are relatively new and research is continuing.2 When assessing pain in acute-care settings tools that primarily focus on evaluation of change over time should be avoided.3 Observational assessments during movement-based tasks would be more likely to lead to the identification of underlying pain problems than assessments during rest.4 Some pain-assessment tools, such as the PACSLAC, do not have specific cut off scores because of recognition of tremendous individual differences among people with severe dementia. Instead, it is recommended that pain be assessed on a regular basis (establishing baseline scores for each patient) with the clinician observing score changes over time.5 Examination of pain-assessment scores before and after the administration of analgesics is likely to facilitate pain assessment.6 Some of the symptoms of delirium (which are seen frequently in long-term care) overlap with certain behavioural manifestations of uncontrolled pain (e.g., behavioural disturbance). Clinicians assessing patients with delirium should be aware of this. On the positive side, delirium tends to be a transient state, and pain assessment, which can be repeated or conducted when the patient is not delirious, is more likely to lead to valid results. It is important to note also that pain can cause delirium, and clinicians should be astute in order to avoid missing pain problems among patients with delirium.7 Observational pain-assessment tools are screening instruments only and cannot be taken to represent definitive indicators of pain. Sometimes they may suggest the presence of pain when pain is not present, and at other times they may fail to identify pain.” (7)
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	<p>“Recommendations for pain assessment in older adults with advanced dementia unable to self-report that are unique from the general recommendations include the following. Self-Report...Search for Potential Causes of Pain...Observation of Patient Behaviors...Use of Behavioral Pain Assessment Tools...Proxy Reporting of Pain.” (8)</p>
Measure Importance	
Relationship to Desired Outcome	<p>By screening and treating pain for all patients with dementia including those who are not able to verbally communicate, it is anticipated that patient quality of life and movement will improve. Current dementia measures do not specifically include pain assessment in people with dementia. There is a growing body of evidence that pain influences dementia outcomes.(9)</p>
Opportunity for Improvement	<p>“Under-treatment of pain in dementia is a frequent and frightening observation; its risk increases with the severity of dementia.”(10) Pain symptoms in a patient with dementia can present as non-verbal expressions or pain behaviors that can include: changes in breathing quality (rapid breathing, short or long bursts of hyperventilation), negative types of verbalization separate from breathing (e.g. moaning, negative speech), facial expression (e.g. frowning, grimacing), body language (e.g. increased muscle tension, threatening postures), disinterest in engaging in relationships and favored activities, depression symptoms, cognitive decline, functional decline, neuropsychiatric symptoms. People with dementia are typically of geriatric age and have a higher incidence of age-related degenerative joint pain which is known to exponentially increase with advancing age.(12) People with dementia can feel pain but often cannot isolate the source of the pain.(10) The number one modifiable risk factor for dementia in the United States is physical activity.(13) Hence, pain symptoms should be measured so they can be assessed and effectively treated so that pain does not become a barrier to movement or unknowingly negatively affect other outcome measures being studied.</p> <p>The Work Group encourages providers to consider referral to appropriate therapy services as therapy can address pain that is a barrier to movement. Treatment of chronic pain conditions should be conducted by a specialist.</p>
National Quality Strategy Domains	<p><input type="checkbox"/> Patient and Family Engagement <input checked="" type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness</p>
Exception Justification	Not Applicable

<p>Harmonization with Existing Measures</p>	<p>2015 PQRS Measure 131: Pain Assessment and Follow-up for patients aged 18 years and older with documentation of a pain assessment using a standardized tool(s) on each visit AND documentation of a follow-up plan when pain is present. The work group determined a separate measure for patients with dementia is needed. The current PQRS measure focuses on adults with normal ability to communicate. This measure of pain assessment and follow-up does not take into account people with dementia, their caregivers, pain behaviors and nationally recognized standardized non-verbal pain assessment tools (e.g. Pain Assessment in Advanced Dementia)(14). The measure excludes people as not eligible for pain assessment and/or follow-up if the following reasons exist: “patient refused to participate, and/or severe mental and/or physical incapacity where the person is unable to express himself/herself in a manner understood by others. For example, when pain cannot be accurately assessed through use of nationally recognized standardized pain assessment tools...”(11)</p>
<p>Measure Designation</p>	
<p>Measure Purpose (Check all that apply)</p>	<p><input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability</p>
<p>Type of Measure (Check all that apply)</p>	<p><input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure</p>
<p>Level of Measurement (Check all that apply)</p>	<p><input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System</p>
<p>Care Setting (Check all that apply)</p>	<p><input checked="" type="checkbox"/> Outpatient <input checked="" type="checkbox"/> Inpatient <input checked="" type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)</p>
<p>Data Source (Check all that apply)</p>	<p><input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry</p>
<p>References</p>	
<ol style="list-style-type: none"> 1. Warden V, Hurley AC, Volicer V. Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) Scale. J Am Med Dir Assoc. 2003;4:9-15. 2. Fuchs-Lacelle S, Hadjistavropoulos T. Development and preliminary validation of the pain assessment checklist for seniors with limited ability to communicate (PACSLAC). Pain Management Nursing 2004; 5(1):37-49. 3. Chan S, Hadjistavropoulos T, Williams J, et al. Evidence-based development and initial validation of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate-II (PACSLAC-II). The Clinical Journal of Pain 2014;30(9):816-824. 4. Visual Analog Scale and Verbal Pain Intensity Scale: From Pain Management: Theory and Practice, edited by RK Portenoy & RM Tanner, copyright 1996 by Oxford University Press, Inc. Used by permission of Oxford University Press. 	

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7. Hadjistavropoulos T, Dever Fitzgerald T, et al. Practice guidelines for assessing pain in older persons with dementia residing in long-term care facilities. Physiother Can. 2010;62:104–113.
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14. City of Hope of Pain and Palliative Care Resource Center. State of the Art Review of Tools for Assessment of Pain in Nonverbal Older Adults. Available at: <http://prc.coh.org/PAIN-NOA.htm>. Accessed May 20, 2015.

Technical Specifications: Electronic Health Record (EHR) Data

The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.

Technical Specifications: Administrative Data (Claims)

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.

Denominator (Eligible Population)

See Appendix A for Diagnosis Codes

AND

CPT® Code:

- 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient);
- 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient);
- 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient);
- 99201, 99202, 99203, 99204, 99205 (E/M Codes);
- 99211, 99212, 99213, 99214, 99215 (E/M Codes);
- 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy);

	<ul style="list-style-type: none">• 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing);• 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions);• 99490, 99487, 99489 (Complex Chronic Care Management);• 99497, 99498 (Advance care planning);• 97003, 97004 (Occupational therapy evaluation and re-evaluation);• 97001, 97002 (Physical therapy evaluation and re-evaluation);• 99221-99223 (Initial Hospital Care);• 99231-99233 (Subsequent Hospital Care);• 99238-99239 (Hospital Discharge);• 99251-99255 (Initial Inpatient Consultation);• 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);• 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services);• 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight);• 99341, 99342, 99343, 99344, 99345 (Home Care);• 99347, 99348, 99349, 99350 (Home Care);• 99281-99285 (Emergency Department);• 99201-99205 or 99211-99215 (Urgent Care).
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Treatment of Dementia

Measure Description	
Percentage of patients with dementia or their caregivers with whom available treatment options and lifestyle modifications were discussed at least once in the last 12-month period	
Measure Components	
Numerator Statement	Patients with dementia or their caregivers with whom available treatment options and lifestyle modifications were discussed at least once in the last 12-month period.
Denominator Statement	All patients with dementia
Denominator Exceptions	None.
Supporting Guideline & Other References	<p>The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:</p> <ul style="list-style-type: none"> • “Cholinesterase inhibitors should be considered in patients with mild to moderate AD (Standard), although studies suggest a small average degree of benefit. There is insufficient evidence to support the use of other antioxidants, anti-inflammatories, or other putative disease-modifying agents specifically to treat AD because of the risk of significant side effects in the absence of demonstrated benefits (Practice Option).”(1) • “The type of dementia, the individual symptom constellation and the tolerability should determine what medication should be used. There are hints that combination therapy of drugs with different therapeutic mechanisms might improve the efficacy. In treating neuropsychiatric symptoms (NPS), psychosocial intervention should be the treatment of first choice. Pharmaceuticals can only be recommended when psychosocial interventions is not adequate. However, even then the side effects of pharmaceuticals limit their use.” (2) • “Many cases of dementia have more than one condition contributing to causation. Most commonly this will be a combination of AD with other brain pathology. We recommend management be based on those diagnoses that are believed to be the predominant contributing cause(s). (Grade 1B)” (3) • “We recommend ChEIs as a treatment option for AD with cerebrovascular disease. (Grade 1B)” (3) • “We recommend ChEIs as a treatment option for dementia associated with Parkinson’s disease. (Grade 1A)” (3) • “There is insufficient and inconsistent evidence on which to make a recommendation either for or against the use of the currently available ChEIs for the treatment of vascular dementia. (Grade 2B)” (3) • “All three ChEIs have demonstrated efficacy for mild to severe AD. We recommend a trial of a ChEIs for most patients with AD. (Grade 1A)” (3) • “Direct comparisons do not suggest differences between ChEIs (Grade 2B). Selection of which agent to be used will be based on the adverse effect profile, ease of use, familiarity, and differences between the agents in their pharmacokinetics and other mechanisms of action.”(3)

	<ul style="list-style-type: none">• The specific goals of therapy are to preserve cognitive and functional ability, minimize behavioral disturbances, and slow disease progression with maintenance of patients' and caregivers' QoL. Nevertheless, realistic expectations of treatment outcomes are needed because the impact for most patients is likely to be modest and temporary, with not every patient responding to treatment. The main benefit of pharmacotherapy is an attenuation of decline over time rather than an improvement in cognitive or behavioral symptoms.....Despite minor variations in their mode of action there is no evidence to suggest any difference in efficacy between the 3 commonly used ChEIs. Likewise, the tolerability profile is similar between the ChEIs for the oral formulations.Donepezil, rivastigmine, and galantamine cause a broad spectrum of AEs, of which nausea, vomiting, diarrhea, and weight loss are the most common.” (4)• “Use of cholinesterase inhibitors (ChEIs), memantine or selective serotonin reuptake inhibitors (SSRIs) in any of the FTLD subtypes is possibly ineffective for cognitive improvement (Level C) (Bei et al., 2010; Lebert et al., 2004). Dopaminergic replacement with bromocriptine in progressive aphasia is probably ineffective (Good Practice Point) (Reed et al., 2004). Given the insufficient classes II and III evidence and the evidence being largely based on class IV, the use of ChEIs and memantine in FTLD cannot be recommended. There is little class III evidence in support of rivastigmine and memantine (Bei et al., 2010; Lebert et al., 2004). There is no independent evidence for recommending any therapeutic intervention for CBS (Litvan et al., 2001; Zerr, 2009). Rivastigmine is the approved ChEI for the treatment of PDD with class I evidence. PDD diagnosis warrants the use of rivastigmine (Good Practice Point) (Maidment, Fox, & Boustani, 2006). Parallels with PDD in terms of clinical picture and disease mechanisms suggest that rivastigmine is possibly effective in DLB (GPP). The evidence for the efficacy of galantamine is insufficient for both PDD and DLB. Memantine is probably effective for both PDD and DLB (Level B) as there were consistently significant improvements in global measures, but not in cognitive measures in two class II studies (Aarsland et al., 2009; Emre et al., 2010). There is insufficient evidence for recommending any specific agent in the treatment of human prion diseases. Surgical treatment can be considered in normal pressure hydrocephalus (NPH) (Level C), and risk to benefit ratio must be individualized for each patient (Marmarou et al., 2005; Esmonde & Cooke, 2002). There is insufficient evidence for recommending any of non-pharmacological treatments.” (5)• “In patients with AD, treatment with ChEIs (donepezil, galantamine, or rivastigmine) should be considered at the time of diagnosis, taking into account expected therapeutic benefits and potential safety issues (Level A). Benefits on cognitive and non-cognitive symptoms have been demonstrated in those with mild, moderate, and severe disease (Level A). Realistic expectations for treatment effects and potential side effects should be discussed with the patient and caregivers (Good Practice Point).....In patients with moderate to severe AD, treatment with memantine should be considered taking into account expected therapeutic benefits and potential safety issues (Level A). Benefits on cognitive and
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	<p>noncognitive symptoms are apparent, some non-cognitive symptoms (agitation, delusions) may respond better than others (Level B). Realistic expectations for treatment effects and potential side effects should be discussed with the patient and caregivers (Good Practice Point).” (6)</p> <ul style="list-style-type: none"> • “Cholinesterase inhibitors (donepezil, rivastigmine, and galantamine) are effective for mild to moderate Alzheimer's disease (A) and memantine for moderate to severe Alzheimer's disease (A). Until further evidence is available other drugs, including statins, anti-inflammatory drugs, vitamin E and Ginkgo biloba, cannot be recommended either for the treatment or prevention of Alzheimer's disease (A). Neither cholinesterase inhibitors nor memantine are effective in those with mild cognitive impairment (A). Cholinesterase inhibitors are not effective in frontotemporal dementia and may cause agitation (A), though selective serotonin reuptake inhibitors may help behavioural (but not cognitive) features (B). Cholinesterase inhibitors should be used for the treatment of people with Lewy body dementias (Parkinson's disease dementia and dementia with Lewy bodies (DLB)), especially for neuropsychiatric symptoms (A). Cholinesterase inhibitors and memantine can produce cognitive improvements in DLB (A).” (7) • “An increasing number of nonpharmacologic therapies are now available for people with dementia, including behavioral therapy, reality orientation, art therapy, music therapy, complementary therapy, aromatherapy and bright-light therapy, as well as cognitive behavioral therapies;..... it is therefore useful for clinicians to be familiar with several of these approaches to enable a combination of treatments to be tailored to individual requirements..... Nonpharmacologic interventions can be as simple as redirecting and refocusing the patient, increasing social interaction, initiating enjoyable activities, establishing regular sleep habits, eliminating sources of conflict and frustration (eg, activities that the patient can no longer undertake), and establishing rewards for successes, however small.....the removal of any triggers of behavioral problems or the provision of comforting stimulation, such as the patient’s favorite music, also may be beneficial.” (4) • “In the early stages of the disease, a referral [to occupational therapy] is indicated if cognitive limitations are barriers to participation in daily living skills, social activities, leisure interests, or work and volunteer activities. In the middle stages of the disease, additional indications for referrals may be to determine service needs such as home health assistance, memory care or day service programs, or caregiver respite support. In later stages of the disease, occupational therapy is referred to resolve barriers to performance in self-care or to manage challenging behaviors such as agitation, aggression, disruptive vocalizations, wandering, altered sleep–wake cycles, catastrophic reactions, or frustrations related to communication problems.” (8)
Measure Importance	
Relationship to Desired Outcome	Pharmacologic therapy to slow down symptomatic progression and occupational therapy to maximize function and safety are available and should be discussed

	with patients and their caregivers, with the goal of improving quality of life and delaying or preventing institutionalization.
Opportunity for Improvement	Guideline-adherent dementia interventions occurred in 33-91% of primary care practices according to a recent meta-analysis.(9) The AAN has created a shared decision-making tool to assist providers and patients who are starting a discussion on if a medication is appropriate for their situation.(10) Providers need to tailor treatment recommendations based on each individual patient situation. Treatment options for the beginning stages will vary greatly from patients who may opt to end pharmacological treatments as they near their end-of-life.
National Quality Strategy Domains	<input type="checkbox"/> Patient and Family Engagement <input type="checkbox"/> Patient Safety <input type="checkbox"/> Care Coordination <input type="checkbox"/> Population/Public Health <input type="checkbox"/> Efficient Use of Healthcare Resources <input checked="" type="checkbox"/> Clinical Process/Effectiveness
Exception Justification	Not Applicable
Harmonization with Existing Measures	No measures addressing treatment via pharmacologic and non-pharmacologic means are known.
Measure Designation	
Measure Purpose (Check all that apply)	<input checked="" type="checkbox"/> Quality improvement <input checked="" type="checkbox"/> Accountability
Type of Measure (Check all that apply)	<input checked="" type="checkbox"/> Process <input type="checkbox"/> Outcome <input type="checkbox"/> Structure
Level of Measurement (Check all that apply)	<input checked="" type="checkbox"/> Individual Provider <input checked="" type="checkbox"/> Practice <input checked="" type="checkbox"/> System
Care Setting (Check all that apply)	<input checked="" type="checkbox"/> Outpatient <input type="checkbox"/> Inpatient <input type="checkbox"/> Emergency Departments and Urgent Care <input checked="" type="checkbox"/> Residential (i.e., nursing facility, domiciliary, home care)
Data Source (Check all that apply)	<input checked="" type="checkbox"/> Electronic health record (EHR) data <input checked="" type="checkbox"/> Administrative Data/Claims <input type="checkbox"/> Chart Review <input checked="" type="checkbox"/> Registry
References	
1. Doody RS, Stevens JC, Beck C, et al. Practice parameter: Management of dementia (an evidence based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001;56:1154-1166.	

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<p>Technical Specifications: Electronic Health Record (EHR) Data</p>	
<p>The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs. A listing of the quality data model elements, code value sets, and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date.</p>	
<p>Technical Specifications: Administrative Data (Claims)</p>	
<p>Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.</p>	
<p>Denominator (Eligible Population)</p>	<p>See Appendix A for Diagnosis Codes</p> <p>AND</p> <p>CPT® Code:</p> <ul style="list-style-type: none"> • 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient); • 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient); • 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient); • 99201, 99202, 99203, 99204, 99205 (E/M Codes); • 99211, 99212, 99213, 99214, 99215 (E/M Codes); • 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838 (Psychiatric Diagnostic Evaluation and psychotherapy); • 96116, 96118, 96119, 96120 (Neurobehavior status exam and neuropsychological testing); • 96150, 96151, 96152, 96153, 96154, 96155 (Health and behavior assessment and interventions); • 99490, 99487, 99489 (Complex Chronic Care Management);

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	<ul style="list-style-type: none">• 99497, 99498 (Advance care planning);• 97003, 97004 (Occupational therapy evaluation and re-evaluation);• 97001, 97002 (Physical therapy evaluation and re-evaluation);• 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);• 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Domiciliary, Rest Home Care Services);• 99339, 99340 (Domiciliary, Rest Home Care Services Care Plan Oversight);• 99341, 99342, 99343, 99344, 99345 (Home Care);• 99347, 99348, 99349, 99350 (Home Care).
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Do Not Cite. **Do NOT Distribute.**

Contact Information

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Appendix A

290.0 Senile dementia, uncomplicated	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)</p>
290.10 Presenile dementia, uncomplicated	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)</p>
290.12 Presenile dementia with delusional features	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)</p> <p>F05 Delirium due to known physiological condition Acute or subacute brain syndrome Acute or subacute confusional state (nonalcoholic) Acute or subacute infective psychosis Acute or subacute psycho-organic syndrome Delirium of mixed etiology Delirium superimposed on dementia Sundowning</p> <p><i>Code first the underlying physiological condition</i> Excludes1: delirium NOS Excludes2: delirium tremens alcohol-induced or unspecified (F10.231, F10.921)</p>
290.13 Presenile dementia with depressive features	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition</p>

	<p>senile dementia with delirium or acute confusional state (F05)</p>
<p>290.20 Senile dementia with delusional or depressive features</p>	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)</p> <p>F05 Delirium due to known physiological condition Acute or subacute brain syndrome Acute or subacute confusional state (nonalcoholic) Acute or subacute infective psychosis Acute or subacute psycho-organic syndrome Delirium of mixed etiology Delirium superimposed on dementia Sundowning</p> <p><i>Code first the underlying physiological condition</i> Excludes1: delirium NOS Excludes2: delirium tremens alcohol-induced or unspecified (F10.231, F10.921)</p>
<p>290.21 Senile dementia with delusional features</p>	<p>F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)</p>
<p>290.40 Vascular dementia, uncomplicated Use additional code to identify cerebral atherosclerosis (437.0) or other condition resulting in this diagnosis</p>	<p>F01.50 Vascular dementia without behavioral disturbance Includes: arteriosclerotic dementia <i>Code first the underlying physiological condition or sequelae of cerebrovascular disease</i></p>
<p>290.42 Vascular dementia with delusions Use additional code to identify cerebral atherosclerosis (437.0) or other condition resulting in this diagnosis</p>	<p>F01.51 Vascular Dementia with behavioral disturbance Vascular dementia with aggressive behavior Vascular dementia with combative behavior Vascular dementia with violent behavior</p> <p>Includes: arteriosclerotic dementia <i>Code first the underlying physiological condition or sequelae of cerebrovascular disease</i></p>
<p>290.43 Vascular dementia with depressed mood Use additional code to identify cerebral atherosclerosis (437.0) or other condition resulting in this diagnosis</p>	<p>F01.51 Vascular Dementia with behavioral disturbance Vascular dementia with aggressive behavior Vascular dementia with combative behavior Vascular dementia with violent behavior</p> <p>Includes: arteriosclerotic dementia</p>

	<i>Code first the underlying physiological condition or sequelae of cerebrovascular disease</i>
291.2 Alcohol-induced persisting dementia	F10.27 Alcohol dependence with alcohol-induced persisting dementia
294.10 Dementia in conditions classified elsewhere without behavioral disturbance <i>Code first the underlying condition</i>	F02.80 Dementia in other diseases classified elsewhere, without behavioral disturbance Dementia in other diseases classified elsewhere not otherwise specified <i>Code first the underlying physiologic condition</i>
294.11 Dementia in conditions classified elsewhere with behavioral disturbance <i>Code first the underlying condition</i>	F02.81 Dementia in other diseases classified elsewhere, with behavioral disturbance Dementia in other diseases classified elsewhere with aggressive behavior Dementia in other diseases classified elsewhere with combative behavior Dementia in other diseases classified elsewhere with violent behavior <i>Code first the underlying physiologic condition</i>
294.20 Dementia, unspecified, without behavioral disturbance Dementia, not otherwise specified	F03.90 Unspecified dementia without behavioral disturbance Includes: presenile dementia NOS presenile psychosis NOS primary degenerative dementia NOS senile dementia NOS senile dementia depressed or paranoid type senile psychosis NOS Excludes1: senility NOS (R41.81) Excludes2: mild memory disturbance due to known physiological condition senile dementia with delirium or acute confusional state (F05)
294.21 Dementia, unspecified, with behavioral disturbance	F03.91 Unspecified dementia with behavioral disturbance Unspecified dementia with aggressive behavior Unspecified dementia with combative behavior Unspecified dementia with violent behavior
331.0 Alzheimer's disease <i>Use additional code, where applicable, to identify dementia: with behavioral disturbance (294.11) without behavioral disturbance (294.10)</i>	G30.0 Alzheimer's disease with early onset G30.1 Alzheimer's disease with late onset G30.8 Other Alzheimer's disease G30.9 Alzheimer's disease, unspecified <i>Use additional code to identify:</i> delirium, if applicable (F05) dementia with behavioral disturbance (F02.81) dementia without behavioral disturbance (F02.80)
331.11 Pick's disease	G31.01 Pick's disease Circumscribed brain atrophy Progressive isolated aphasia <i>Use additional code to identify:</i> delirium, if applicable (F05) dementia with behavioral disturbance (F02.81) dementia without behavioral disturbance (F02.80)
331.19 Other frontotemporal dementia	G31.09 Other frontotemporal dementia
331.6 Corticobasal degeneration	G31.85 Corticobasal degeneration
331.7 Cerebral degeneration in diseases classified elsewhere. <i>Code first underlying disease</i>	G94 Other disorders of brain in diseases classified elsewhere <i>Code first underlying disease</i>
331.82 Dementia with Lewy bodies	G31.83 Dementia with Lewy bodies Dementia with Parkinsonism Lewy body dementia Lewy body disease
331.89 Other cerebral degeneration, Other	G31.89 Other specified degenerative diseases of nervous system

(Corticobasal degeneration)	
<i>(dementia in)</i> 332.0 Parkinson's disease <i>Use additional code to identify dementia, if present, from 294.10 to 294.11</i>	G20 Parkinson's disease F02 Dementia in other diseases classified elsewhere
042 Human immunodeficiency virus [HIV] disease <i>Use additional code(s) to identify all manifestations</i> <i>Use additional code to identify HIV-2 infection (079.53)</i>	B20 Human immunodeficiency virus [HIV] disease <i>Use additional code(s) to identify all manifestations of HIV infection</i>
094.1 Neurosyphilis, General Paresis Dementia Paralytica <i>Use additional code to identify associated mental disorder</i>	A52.17 General paresis Dementia paralytica
046.11 Variant Creutzfeldt-Jacob disease vCJD <i>Use additional code to identify dementia:</i> <i>with behavioral disturbance (294.11)</i> <i>without behavioral disturbance (294.12)</i> 046.19 Other and unspecified Creutzfeldt-Jacob disease CJD Familial Creutzfeldt-Jacob disease Iatrogenic Creutzfeldt-Jacob disease Sporadic Creutzfeldt-Jacob disease Subacute spongiform encephalopathy <i>Use additional code to identify dementia:</i> <i>with behavioral disturbance (294.11)</i> <i>without behavioral disturbance (294.12)</i>	A81.00 Creutzfeldt-Jacob disease, unspecified A81.01 Variant Creutzfeldt-Jacob disease vCJD A81.89 Other Creutzfeldt-Jacob disease CJD Familial Creutzfeldt-Jacob disease Iatrogenic Creutzfeldt-Jacob disease Sporadic Creutzfeldt-Jacob disease Subacute spongiform encephalopathy (with dementia)

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