**Appendix e-3: AAN Parkinson's Disease Measurement Set**


# Parkinson's Disease

## Physician Performance Measurement Set

*As of December 16, 2009*

**Appendix e-3: AAN Parkinson's Disease Measurement Set**

Physician Performance Measures (measures) and related data specifications developed by the American Academy of Neurology (AAN) are intended to facilitate quality improvement activities by physicians.

These measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

Measures are subject to review and may be revised or rescinded at any time by the AAN. The measures may not be altered without prior written approval from the AAN. The measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes (e.g. use by health care providers in connection with their practices). Commercial use is defined as the sale, license, or distribution of the measures for commercial gain, or incorporation of the measures into a product or service that is sold, licensed, or distributed for commercial gain. Commercial uses of the measures require a license agreement between the user and the AAN. Neither the AAN nor its members shall be responsible for any use of the measures.

THESE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.



Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary coding sets should obtain all necessary licenses from the owners of these code sets. The AAN and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

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**Appendix e-3: AAN Parkinson's Disease Measurement Set**

## American Academy of Neurology

# Parkinson's Disease

### Physician Performance Measurement Set


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**Purpose of Measures**

These clinical performance measures, which the American Academy of Neurology (AAN) developed using the model for performance measure development from the Physician Consortium for Performance Improvement (PCPI), are designed for use in individual quality improvement. The measures may also be used in data registries, continuing medical education (CME) programs, and board certification programs. Unless otherwise indicated, the measures are also appropriate for accountability if the necessary methodological, statistical, and implementation rules are met.

The measure titles listed below may be used for accountability:

**Measure 1: Annual Parkinson's Disease Diagnosis Review**

**Measure 2: Psychiatric Disorders or Disturbances Assessment**

**Measure 3: Cognitive Impairment or Dysfunction Assessment**

**Measure 4: Querying about Symptoms of Autonomic Dysfunction**

**Measure 5: Querying about Sleep Disturbances**

**Measure 6: Querying about Falls**

**Measure 7: Parkinson's Disease Rehabilitative Therapy Options**

**Measure 8: Parkinson's Disease Related Safety Issues Counseling**

**Measure 9: Querying about Medication-related Motor Complications**

**Measure 10: Parkinson's Disease Medical and Surgical Treatment Options Reviewed**

**Intended Audience, Care Setting, and Patient Population**

These measures are designed for use by physicians and other eligible health professionals who provide care to individuals diagnosed with Parkinson's disease. The measures may be used in the emergency department only if the physician or eligible provider uses the appropriate International Classification of Disease (ICD)-9 and Current Procedural Terminology (CPT®) codes as described under each individual measure. The measures are intended to be used to calculate performance and/or to report measurement at the individual physician level.

**Measure Specifications**

The AAN seeks to specify measures for implementation using multiple data sources, including paper medical records, administrative (claims) data, and, in particular, Electronic Health Record Systems (EHRS). Specifications for reporting on the measures for Parkinson's disease using administrative (claims) data are included in this document. The AAN has identified codes for these measures, including ICD-9 and CPT (Evaluation and Management Codes, Category I and, where applicable, Category II codes). Specifications for additional data sources, including EHRS, will be fully developed at a later date.

 

**Measure Exclusions**

The AAN used the PCPI policy "Specification and categorization of measure exclusions: recommendations to PCPI work groups" as the basis for defining exclusions. (Available at: http://www.ama-assn.org/ama1/pub/upload/mm/370/exclusions053008.pdf. Accessed September 2008-December 2009)

This methodology is described below.

For process measures, the PCPI provides three categories of reasons for which a patient may be excluded from the denominator of an individual measure:

- Medical Reasons
  Includes:
  - Not indicated (absence of organ/limb, already received/performed, other)
  - Contraindicated (patient allergy history, potential adverse drug interaction, other)
- Patient Reasons
  Includes:
  - Patient declined
  - Social or religious reasons
  - Other patient reasons

- System Reasons
  Includes:
  - Resources to perform the services not available
  - Insurance coverage/Payer-related limitations
  - Other reasons attributable to health care delivery system

These measure exclusion categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exclusion for a medical, patient, or system reason. The exclusion of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons:** modifier 1P
- **Patient reasons:** modifier 2P
- **System reasons:** modifier 3P

Although this methodology does not require the external reporting of more detailed exclusion data, the PCPI recommends that physicians document the *specific* reasons for exclusion in patients' medical records, for purposes of optimal patient management and audit-readiness. The PCPI also advocates for the systematic review and analysis of each physician's exclusions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients whom physicians have identified as meeting the criteria for exclusion.

Please refer to the documentation for each individual measure for information on acceptable exclusion categories and the codes and modifiers to be used for reporting.

**Data Capture and Measure Calculation**

The intent of this measurement set is to encourage physicians to collect data on each patient eligible for a measure. Physicians should receive feedback on measures both at the patient level to facilitate patient management and in the aggregate to identify opportunities for improvement across a physician's patient population.

 

Measure calculations will differ depending on whether a rate is being calculated for performance or reporting purposes.

The method of calculation for performance follows three steps. First, identify the patients who meet the eligibility criteria for the denominator (PD); second, identify which of those patients meet the numerator criteria (A); and third, for those patients who do not meet the numerator criteria, determine whether an appropriate exclusion applies and then subtract those patients from the denominator (C) (see examples below).

The methodology also enables implementers to calculate the rates of exclusions and to analyze further both low rates and high rates, as appropriate (see examples below).

The method of calculation for reporting differs. One program that currently focuses on reporting rates is the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting Initiative (PQRI). Under that program's current design, there is a reporting denominator determined solely from claims data (CPT and ICD-9), which in some cases results in a reporting denominator that is much larger than the eligible population for the performance denominator. Additional components of the reporting denominator are explained below.

The components that make up the numerator for reporting include all patients from the eligible population for which the physician has reported, including the number of patients who meet the numerator criteria (A), the number of patients for whom valid exclusions apply (C), and the number of patients who do not meet the numerator criteria (D). These components, where applicable, are summed to make up the inclusive reporting numerator. The calculation for reporting will be the reporting numerator divided by the reporting denominator (see examples below).

Examples of calculations for reporting and performance are provided for each measure.

**Calculation for Performance**

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

- **Numerator (A) includes:** Number of patients meeting numerator criteria
- **Performance Denominator (PD) includes**: Number of patients meeting criteria for denominator inclusion
- **Denominator Exclusion (C) includes**: Number of patients with valid medical, patient, or system exclusions (where applicable; will differ by measure)

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria}}{\text{PD (\# of patients in denominator) - C (\# of patients with valid denominator exclusions)}}$$

It is also possible to calculate the percentage of patients either excluded overall or excluded by medical, patient, or system reason where applicable:

 

**Overall Exclusion Calculation**

C (# of patients with any valid exclusion)
_____
PD (# of patients in denominator)

**OR**

**Exclusion Calculation by Type**

| | | |
|---|---|---|
| $\mathbf{C_1}$ (# patients with medical reason) / **PD** (# patients in denominator) | $\mathbf{C_2}$ (# patients with patient reason) / **PD** (# patients in denominator) | $\mathbf{C_3}$ (# patients with system reason) / **PD** (# patients in denominator) |

**Calculation for Reporting**

For reporting purposes, this measure is calculated by creating a fraction with two components: Reporting Numerator and Reporting Denominator.

- **Reporting Numerator includes each of the following components, where applicable (there may be instances where there are no patients to include in A, C, D, or E):**

  **A**. Number of patients meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone) AND numerator criteria

  **C**. Number of patients with valid medical, patient, or system exclusions (where applicable; will differ by measure)

  **D**. Number of patients not meeting numerator criteria and without a valid exclusion

  **E.** All other patients not meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone)

- **Reporting Denominator (RD) includes**:

  **RD.** Denominator criteria (identifiable through ICD-9 and CPT Category I coding)

**Reporting Calculation**

**A** (# of patients meeting additional denominator criteria AND numerator criteria) + **C** (# of patients with valid exclusions) + **D** (# of patients NOT meeting numerator criteria) + **E** (# of patients not meeting additional denominator criteria)
_____
**RD** (# of patients in denominator)

 

## PARKINSON'S DISEASE
### Measure #1: Annual Parkinson's Disease Diagnosis Review

This measure may be used as an accountability measure.

| **Clinical Performance Measure** |
|---|
| **Numerator**: Patients who had their Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually.<br><br>**Denominator:** All patients with a diagnosis of Parkinson's disease.<br><br>**Denominator Exclusions:**<br>• No exclusions appropriate for this measure.<br><br>**Measure:** All patients with a diagnosis of Parkinson's disease who had their Parkinson's disease diagnosis reviewed, including a review of current medications and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually. |
| **The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**<br>The diagnosis of PD should be reviewed regularly (6-12 month intervals seen to review diagnosis) and re-considered if atypical clinical features develop. (Level D (DS)) NICE GL35 (June 2006)<br><br>Determining the presence of the following clinical features in early stages of disease should be considered to distinguish PD from other parkinsonian syndromes: 1) falls at presentation and early in the disease course, 2) poor response to levodopa, 3) symmetry at onset, 4) rapid progression (to Hoehn and Yahr stage 3 in 3 years), 5) lack of tremor, and 6) dysautonomia (urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, persistent erectile failure, or symptomatic orthostatic hypotension) (Level B) AAN QSS PD (April 2006)<br><br>All veterans with the suspected diagnosis of PD who are also receiving medications known to cause parkinsonism (e.g. neuroleptics) should have a trial of withdrawal of these medications, a trial of low-potency neuroleptic, or documentation in the medical record that the medication could not be withdrawn before making the diagnosis of PD. Cheng #1 (Assessment of medication-induced PD) 2004<br><br>AAN QSS PD Diag. (April 2006) Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11; 66(7):968-75.<br><br>NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians<br><br>Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150) |

 

**Rationale for the Measure:**
Because the diagnosis of Parkinson's disease is clinical with no confirmatory laboratory or imaging study, it is important to review the diagnosis periodically in order to ensure that no atypical features emerge. The emergence of atypical features in a patient previously thought to have Parkinson's disease will influence prognosis and medical treatment. It has been demonstrated that in the course of caring for patients with suspected Parkinson's disease, 10-15% will ultimately have a different pathologic diagnosis. This measure will alert the clinician to the emergence of atypical features in Parkinson's disease and suggest alternate diagnostic possibilities.

Hughes AJ, Daniel SE, Kilford L, Lees AJ. Accuracy of clinical diagnosis of idiopathic Parkinson's disease: a clinico-pathological study of 100 cases. J Neurol Neurosurg Psychiatry. 1992 Mar; 55(3):181-4.

Hughes AJ, Ben-Shlomo Y, Daniel SE, Lees AJ. What features improve the accuracy of clinical diagnosis in Parkinson's disease: a clinicopathologic study. Neurology. 1992 Jun;42(6):1142-6.

**Data Capture and Calculations:**

**Calculation for Performance**
For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.

**Performance Numerator (A) includes:**
Patients who had their Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [ to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who had their Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |

 

**Calculation for Reporting**

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia). at least annually
**D.** Patients with no documentation of Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who had their Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually |
| **D** | # of patients with no documentation of Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications-** ***Annual Parkinson's Disease Diagnosis Review***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

 

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients who had their Parkinson's disease diagnosis reviewed, including a review of current medications (e.g., medications than can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually.

Report the CPT Category II, *Annual Parkinson's Disease Diagnosis Review* **1400F**

Denominator Exclusion(s): None.

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

## PARKINSON'S DISEASE
### Measure #2: Psychiatric Disorders or Disturbances Assessment

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- No exclusions appropriate for this measure.

**Measure:** All patients with a diagnosis of Parkinson's disease who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**

Clinicians should be aware of dopamine dysregulation syndrome, an uncommon disorder in which dopaminergic medication misuse is associated with abnormal behaviors, including hypersexuality, pathological gambling and stereotypic motor acts. This syndrome may be difficult to manage. (Level D) NICE GL35 (Jun 2006)

If a veteran with PD presents with new onset of one of the following symptoms: sad mood, feeling down; insomnia or difficulties with sleep; apathy or loss of interest in pleasurable activities; complains of memory loss; unexplained weight loss of greater than 5% in the past month or 10% over one year; or unexplained fatigue or low energy, then the patient should be asked about or treated for depression, or referred to a mental health professional within two weeks of presentation. (Outcomes Impact 5; Room for Improvement 4; Overall utility rating 4) Cheng 2004

Clinicians should have a low threshold for diagnosing depression in PD. (Level D) NICE GL35 (Jun 2006)

All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

All people with PD and psychosis should receive a general medical evaluation and treatment for any precipitating condition. (Level D) NICE GL35 (Jun 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

 

**Rationale for the Measure:**
Parkinson's disease is associated with a wide range of psychiatric disorders. Some of these problems are related to the disease itself and some are related to the medications used to treat the disease. These disorders range from anxiety and depression to psychosis and impulse control disorder. It has been demonstrated that depression, in particular, has been often overlooked as a diagnostic possibility in patients with Parkinson's disease. In fact, it has been demonstrated that depression and other psychiatric disorders are often overlooked in the general medical population. This measure will ensure that the clinician remembers to evaluate the patient for the basis of these psychiatric disorders on a yearly basis.

Marsh L. Neuropsychiatric aspects of Parkinson's disease. Psychosomatics. 2000 Jan-Feb;41(1):15-23.

Ravina B, Marder K, Fernandez HH, Friedman JH, McDonald W, Murphy D, Aarsland D, Babcock D, Cummings J, Endicott J, Factor S, Galpern W, Lees A, Marsh L, Stacy M, Gwinn-Hardy K, Voon V, Goetz C. Diagnostic criteria for psychosis in Parkinson's disease: report of an NINDS, NIMH work group. Mov Disord. 2007 Jun 15;22(8):1061-8.

Galpern WR, Stacy M. Management of impulse control disorders in Parkinson's disease. Curr Treat Options Neurol. 2007 May;9(3):189-97.

Shulman LM, Taback RL, Rabinstein AA, Weiner WJ. Non-recognition of depression and other non-motor symptoms in Parkinson's disease. Parkinsonism Relat Disord. 2002 Jan;8(3):193-7.

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.

**Performance Numerator (A) includes:**
Patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |

 

**Calculation for Reporting**

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of assessment for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.
**D.** Patients with no documentation of assessment for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually |
| **D** | # of patients with no documentation of assessment for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications- *Psychiatric Disorders or Disturbances Assessment***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually.

- Report the CPT Category II, *Psychiatric Disorders or Disturbances Assessment* **3700F**.

Denominator Exclusion(s): None.

 

| |
|---|
| **B. Electronic Health Record System (in development)** |
| **C. Paper Medical Record (in development)** |

 

## PARKINSON'S DISEASE
## Measure # 3: Cognitive Impairment or Dysfunction Assessment

This measure may be used as an accountability measure.

| **Clinical Performance Measure** |
|---|
| **Numerator**: Patients who were assessed for cognitive impairment or dysfunction at least annually.<br><br>**Denominator:** All patients with a diagnosis of Parkinson's disease.<br><br>**Denominator Exclusions:**<br>• No exclusions appropriate for this measure.<br><br>**Measure:** All patients with a diagnosis of Parkinson's disease who were assessed for cognitive impairment or dysfunction at least annually. |
| **The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**<br>The Mini-Mental State Examination (MMSE) and the Cambridge Cognitive Examination (CAM Cog) should be considered as screening tools for dementia in patients with PD (Level B). AAN QSS (April 2006)<br><br>All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004<br><br>AAN QSS Mental (April 2006) Miyasaki JM, Shannon K, Voon V, Ravina B, Kleiner-Fisman G, Anderson K, Shulman LM, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: evaluation and treatment of depression, psychosis, and dementia in Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):996-1002.<br><br>Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150) |
| **Rationale for the Measure:**<br>Parkinson's disease is associated with cognitive impairment. It is important to assess patients with Parkinson's disease on an annual basis with regard to their cognitive abilities. Clinically significant cognitive difficulties may be present early on in the disease course, but dementia may emerge and be diagnosed later in the course of the disease. However, the insidious onset of cognitive impairment/dementia often occurs over a prolonged period of time. Emerging cognitive impairment has limited treatment, but is important to identify in terms of the patient's care and responsibilities within the home, socially, or in the work place.<br><br>Factor, S. Weiner, W. Parkinson's Disease: Diagnosis and Clinical Management. 2002 |

 

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.

**Performance Numerator (A) includes:**
Patients who were assessed for cognitive impairment or dysfunction at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who were assessed for cognitive impairment or dysfunction at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of assessment for cognitive impairment or dysfunction at least annually.
**D.** Patients with no documentation of assessment for cognitive impairment or dysfunction at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients who were assessed for cognitive impairment or dysfunction at least annually |
| **D** | # of patients with no documentation of assessment for cognitive impairment or dysfunction at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

 

**Measure Specifications: *Cognitive Impairment or Dysfunction Assessment***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients who were assessed for cognitive impairment or dysfunction at least annually.

- Report the CPT Category II, *Cognitive Impairment or Dysfunction Assessment* **3720F**.

Denominator Exclusion(s): None.

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

**PARKINSON'S DISEASE**
**Measure #4: Querying about Symptoms of Autonomic Dysfunction**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients (or caregiver(s), as appropriate) who were queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not querying patient (or caregiver) about symptoms of autonomic dysfunction at least annually (e.g., patient is unable to respond and no informant is available)

**Measure:** All patients with a diagnosis of Parkinson's disease (or caregivers, as appropriate) who were queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**
Determining the presence of the following clinical features in early stages of disease should be considered to distinguish PD from other parkinsonian syndromes: 1) falls at presentation and early in the disease course, 2) poor response to levodopa, 3) symmetry at onset, 4) rapid progression (to Hoehn and Yahr stage 3 in 3 years), 5) lack of tremor, and 6) dysautonomia (urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, persistent erectile failure, or symptomatic orthostatic hypotension) (Level B) AAN QSS PD (April 2006)

People with PD should be treated appropriately for the following autonomic disturbances:
-urinary dysfunction; weight loss; dysphagia; constipation; erectile dysfunction; orthostatic hypotension; excessive sweating; sialorrhoea (Level D) NICE GL35 (Jun 2006)

All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

Cheng Domain 3: Management of non-motor complications indicators (treatment of urologic symptoms; sildenafil for erectile dysfunction, orthostatic hypotension-medication treatment, orthostatic hypotension behavioral treatment, antiparkinsonian medications and daytime sleepiness, assessment for excessive daytime somnolence, excessive daytime somnolence and driving restrictions, assessment of driving ability in PD patients, treatment of swallowing difficulty, treatment of speech difficulty, botulinum toxin for drooling)

AAN QSS PD Diag. (April 2006) Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):968-75.

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic

 

Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

**Rationale for the Measure:**

Autonomic dysfunction is common in Parkinson's disease and manifests most commonly as orthostatic hypotension (45%), constipation (70%), urinary dysfunction (40%), and erectile dysfunction (55%). These symptoms can be disabling. Orthostasis can lead to syncope and secondary injury and may be the result of disease or therapy. Adjustments in medications or addition of pressor agents can be very effective in treating this problem. Constipation may be the result of medication (particularly anticholinergics or amantadine) or disease. The extreme effect may be bowel obstruction, which is extremely serious. This manifestation should be treated aggressively. Urinary difficulties are disabling (preventing patients from leaving home) and embarrassing to patients and include increased frequency, urgency, incomplete emptying, and obstruction. These difficulties could be due to medications (anticholinergics or amantadine), Parkinson's disease, or other ailments afflicting the elderly. Proper referral to a urologist would be important. Erectile dysfunction may be medication- or disease-related and could be addressed with medication adjustment or consultation with urology. Addressing these issues will have a large impact on morbidity and mortality and prevent hospitalizations. This would in turn reduce costs of caring for Parkinson's disease patients.

Chaudhuri KR, Healy DG, Schapira AH. Non-motor symptoms of Parkinson's disease: diagnosis and management. Lancet Neurol. 2006 Mar; 5(3):235-45.

Magerkurth C, Schnitzer R, Braune S. Symptoms of autonomic failure in Parkinson's disease: prevalence and impact on daily life. Clin Auton Res. 2005 Apr; 15(2):76-82.

Allcock LM, Ullyart K, Kenny RA, Burn DJ. Frequency of orthostatic hypotension in a community based cohort of patients with Parkinson's disease. J Neurol Neurosurg Psychiatry. 2004 Oct;75(10):1470-1.

Singer C, Weiner WJ, Sanchez-Ramos JR. Autonomic dysfunction in men with Parkinson's disease. Eur Neurol. 1992; 32(3):134-40.

Edwards LL, Pfeiffer RF, Quigley EM, Hofman R, Balluff M. Gastrointestinal symptoms in Parkinson's disease. Mov Disord. 1991;6(2):151-6

**Data Capture and Calculations:**

**Calculation for Performance**

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**

Patients (or caregiver(s), as appropriate) who were queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

**Performance Denominator (PD) includes:**

All patients with a diagnosis of Parkinson's disease.

 

**Denominator Exclusion (C) includes:**

- Documentation of medical reason for not querying patient (or caregiver(s), as appropriate) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)-C (\# of patients with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |
| **C** | # of patients with valid medical reason(s) for not being queried (or a caregiver not being queried) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of being queried (or a caregiver being queried, as appropriate) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.
**C.** Patients with documentation of medical reason for not being queried (or a caregiver not being queried) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.
**D.** Patients with no documentation of being queried (or a caregiver being queried) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

 

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria) + C (\# of patients with valid exclusions) + D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually |
| **C** | # of patients with valid medical reason(s) for not being queried (or a caregiver not being queried) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually |
| **D** | # of patients with no documentation of being queried (or a caregiver being queried) about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications: *Querying about Symptoms of Autonomic Dysfunction***

Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**

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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients (or caregiver(s), as appropriate) who were queried about symptoms of autonomic dysfunction (e.g., orthostatic hypotension, constipation, urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, or persistent erectile failure) at least annually.

- Report the CPT Category II, *Querying about Symptoms of Autonomic Dysfunction* **4326F**.

Denominator Exclusion(s): Documentation of medical reason for not querying patient (or caregiver) about symptoms of autonomic dysfunction (e.g., patient is unable to respond and no informant is available).

- Append modifier to CPT II code: **4326F-1P**.

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

**PARKINSON'S DISEASE**
**Measure #5: Querying About Sleep Disturbances**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients (or caregiver(s), as appropriate) who were queried about sleep disturbances at least annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not querying patient (or caregiver) about sleep disturbances (e.g., patient is unable to respond and no informant is available).

**Measure:** All patients with a diagnosis of Parkinson's disease (or caregivers, as appropriate) who were queried about sleep disturbances at least annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**
A full sleep history should be taken from people with PD who report sleep disturbance (Level D) NICE GL35 (Jun 2006)

Good sleep hygiene should be advised in people with PD with any sleep disturbance and includes: avoidance of stimulants (for example, coffee tea, caffeine) in the evening; establishment of a regular pattern of sleep; comfortable bedding and temperature; provision of assistive devices, such as a bed lever or rails to aid with moving and turning, allowing the person to get more comfortable; restriction of daytime siestas; advice about taking regular and appropriate exercise to induce better sleep; a review of all medication and avoidance of any drugs that may affect sleep or alertness, or may interact with other medication (for example, selegiline, antihistamines, H2 antagonists, antipsychotics and sedatives) NICE GL35 (June 2006)

All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

**Rationale for the Measure:**
Sleep disorders are common in Parkinson's disease and most commonly include sleep fragmentation (80%), restless legs syndrome (20%), REM behavior sleep disorder (>40%), and excessive daytime sleepiness (~50%). Sleep fragmentation could relate to motor symptoms such as tremor and dystonia, restless legs syndrome, depression, anxiety, agitation, urinary frequency, or medication (most notably selegiline but also dopamine agonists). Several approaches to effective therapy are available. Excessive daytime sleepiness could result in sleep attacks or unintended sleep episodes. Such episodes have been described in various situations, including while driving a car. Excessive daytime sleepiness may result from medication (dopamine agonists), dementia, psychosis, or poor nocturnal sleep hygiene and is generally more common in advanced Parkinson's disease.

 

Medication adjustment and the use of stimulants may be warranted. REM behavior disorder is defined by the patient acting out dreams. The result could be either the patient or spouse moving to a different bedroom. This syndrome is treated with benzodiazepines and other medications. Assessing sleep would be expected to lead to improved morbidity and function.

Comella, C. Sleep disorders in Parkinson's disease. Curr Treat Options Neurol. 2008 May;10(3):215-21.

Adler CH, Thorpy MJ. Sleep issues in Parkinson's disease. Neurology. 2005 Jun 28;64(12 Suppl 3):S12-20.

Iranzo A, Santamaría J, Rye DB, Valldeoriola F, Martí MJ, Muñoz E, Vilaseca I, Tolosa E. Characteristics of idiopathic REM sleep behavior disorder and that associated with MSA and PD. Neurology. 2005 Jul 26;65(2):247-52

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patients (or caregiver(s), as appropriate) who were queried about sleep disturbances at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusion (C) includes:**

- Documentation of medical reason for not querying patient (or caregiver) about sleep disturbances at least annually.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)-C (\# of patients with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) queried about sleep disturbances at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |
| **C** | # of patients with valid medical reason(s) for not being queried (or a caregiver not being queried) about sleep disturbances at least annually |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of being queried (or a caregiver being queried) about sleep disturbances at

 

least annually.
**C.** Patients with documentation of medical reason for not being queried (or a caregiver not being queried) about sleep disturbances at least annually.
**D.** Patients with no documentation of being queried (or a caregiver being queried) about sleep disturbances at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{C (\# of patients with valid exclusions)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) queried about sleep disturbances at least annually |
| **C** | # of patients with valid medical reason(s) for not being queried (or a caregiver not being queried) about sleep disturbances at least annually. |
| **D** | # of patients with no documentation of being queried (or a caregiver being queried) about sleep disturbances at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications: *Querying about Sleep Disturbances***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients (or caregiver(s), as appropriate) who were queried about sleep disturbances at least annually.

- Report the CPT Category II, *Querying about Sleep Disturbances* **4328F**.

Denominator Exclusion(s): Documentation of medical reason for not querying patient (or caregiver) about sleep disturbances (e.g., patient is unable to respond and no informant is available).

- Append modifier to CPT II code: **4328F-1P**.

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

## PARKINSON'S DISEASE
## Measure #6: Querying about Falls

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patient visits with patient (or caregiver(s), as appropriate) queried about falls.

**Denominator:** All visits for patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not querying a patient (or caregiver) about falls (e.g., patient is unable to respond and no informant is available).

**Measure:** All visits for patients with a diagnosis of Parkinson's disease where patients (or caregivers, as appropriate) were queried about falls.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**

Determining the presence of the following clinical features in early stages of disease should be considered to distinguish PD from other parkinsonian syndromes: 1) falls at presentation and early in the disease course, 2) poor response to levodopa, 3) symmetry at onset, 4) rapid progression (to Hoehn and Yahr stage 3 in 3 years), 5) lack of tremor, and 6) dysautonomia (urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, persistent erectile failure, or symptomatic orthostatic hypotension) (Level B) AAN QSS PD (April 2006)

All veterans with PD should have documentation that they were asked at least annually about the occurrence of falls. (4 impact outcomes; 4 room for improvement; 3 overall utility rating) Cheng #10 2004 (Annual assessment about falls)

AAN QSS PD Diag. (April 2006) Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):968-75.

Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

**Rationale for the Measure:**

Falls represent a significant risk for injury and can lead to real emergencies (head injury, hip fracture, etc). Eighty percent of falls in Parkinson's disease patients are due to freezing and postural instability. After 8 years of Parkinson's disease, 46% of patients fall at least once and 33% are recurrent fallers. Beyond 8 years of disease, 70% fall at least once and 50% are recurrent fallers. In one study that controlled for age, gender, severity of disease, and number of falls in previous years, 46% fell over a 3-month period and 21% of these were new fallers. Approximately 25% of falls result in injury. The most important risk factor for falling is a prior fall. Assessing patients regularly for falls could allow for preventative measures, including physical therapy, medication adjustments, and use of assistive devices such as canes and walkers. Prevention of falls could have a large impact on morbidity and mortality as well as health care costs.

Michalowska M, Fiszer U, Krygowska-Wajs A, Owczarek K. Falls in Parkinson's disease. Causes and impact

 

on patients' quality of life. Funct Neurol 2005;20(4):163-168.

Balash Y, Peretz C, Leibovich G, Herman T, Hausdorff JM, Giladi N. Falls in outpatients with Parkinson's disease: frequency, impact and identifying factors. J Neurol 2005;252(11):1310-1315.

Bloem BR, Hausdorff JM, Visser JE, Giladi N. Falls and freezing of gait in Parkinson's disease: a review of two interconnected, episodic phenomena. Mov Disord 2004;19(8):871-884.

Grimbergen YA, Munneke M, Bloem BR. Falls in Parkinson's disease. Curr Opin Neurol 2004;17(4):405-415.

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patient visits with patient (or caregiver, as appropriate) queried about falls.

**Performance Denominator (PD) includes:**
All visits for patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions (C) include:**

- Documentation of medical reason for not querying patient (or caregiver) about falls.

**Performance Calculation**

$$\frac{\text{A (\# of patient visits meeting measure criteria)}}{\text{PD (\# of patient visits in denominator)} - \text{C (\# of patient visits with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patient visits where patient (or caregiver(s), as appropriate) was queried about falls |
| **PD** | # of patient visits for patients with a diagnosis of Parkinson's disease |
| **C** | # of patient visits with valid medical reason(s) for not querying the patient (or caregiver) about falls |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

 

**Reporting Numerator includes each of the following instances:**
**A.** Patient visits with a documentation of patient (or caregiver(s), as appropriate) being queried about falls.
**C.** Patient visits with documentation of medical reason(s) for not querying the patient (or caregiver) about falls.
**D.** Patient visits with no documentation of patient (or caregiver) being queried about falls.

**Reporting Denominator (RD) includes:**
**RD.** All visits for patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patient visits meeting numerator criteria)} + \text{C (\# of patient visits with valid exclusions)} + \text{D (\# of patient visits NOT meeting numerator criteria)}}{\text{RD (\# of patient visits in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patient visits with patient (or caregiver, as appropriate) being queried about falls |
| **C** | # of patient visits with documentation of medical reason for not querying the patient (or caregiver) about falls |
| **D** | # of patient visits with no documentation of the patient (or caregiver) being queried about falls |
| **RD** | # of patient visits with a diagnosis of Parkinson's disease |

**Measure Specifications- *Querying about Falls***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All visits for patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients (or caregiver(s), as appropriate) queried about falls.
Report the CPT Category II, *Querying about Falls* **6080F** .
Denominator Exclusion: Documentation of medical reason(s) for not querying the patient (or caregiver) about falls (e.g., patient is unable to respond and no informant is available).

- Append modifier to CPT Category II code: **6080F-1P**

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

**PARKINSON'S DISEASE**
**Measure # 7: Parkinson's Disease Rehabilitative Therapy Options**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not discussing rehabilitative therapy options with the patient (or caregiver(s), as appropriate) at least annually (e.g., patient has no known physical disability due to Parkinson's disease; patient is unable to respond and no informant available).

**Measure:** All patients with a diagnosis of Parkinson's disease (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**

Physiotherapy should be available for people with PD. Particular consideration should be given to: -gait re-education, improvement of balance and flexibility; enhancement of aerobic capacity; improvement of movement initiation; improvement of functional independence, including mobility and activities of daily living; provision of advice regarding safety in the home environment. (Level B) NICE GL35 (Jun 2006)

Occupational therapy should be available for people with PD. Particular consideration should be given to: -maintenance of work and family roles, home care and leisure activities; improvement and maintenance of transfers and mobility; improvement of personal self-care activities, such as eating, drinking, washing, and dressing; cognitive assessment ad appropriate intervention. (Level D) NICE GL35 (Jun 2006)

Speech and language therapy should be available for people with PD. Particular consideration should be given to: -Improvement of vocal loudness and pitch range, including speech therapy programs such as Lee Silverman Voice Treatment (LSVT) (Level B) NICE GL35 (Jun 2006)

All veterans with PD who have impairment of ADLs or in walking ability should be referred for physical therapy. Cheng et al. #9 (Referral for physical therapy) 2004

For patients with Parkinson's disease complicated by dysarthria, speech therapy may be considered to improve speech volume (Level C). Different exercise modalities, including multidisciplinary rehabilitation, active music therapy, treadmill training, balance training, and "cued" exercise training are probably effective in improving functional outcomes for patients with Parkinson's disease. For patients with Parkinson's disease, exercise therapy may be considered to improve function (Level C). AAN QSS Neuro Alt (April 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng E, Siderowf A, Swarztrauber K, Eisa M, Lee M and Vickrey B. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

 

AAN QSS Neuro Alt (April 2006) Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: neuroprotective strategies and alternative therapies for Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11; 66(7):976-82.

**Rationale for the Measure:**
For those patients with Parkinson's disease who have impaired activities of daily living, therapy options such as physical, occupational, and speech therapy should be offered. Rehabilitative therapies play an important role in improving function and quality of life for these patients. Symptomatic therapy can provide benefit for many years. Patients with Parkinson's disease commonly develop dysarthria.

AAN QSS Neuro Alt (April 2006) Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: neuroprotective strategies and alternative therapies for Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):976-82.

Factor, S. Weiner, W. Parkinson's Disease: Diagnosis and Clinical Management. 2002

**Data Capture and Calculations:**

**Calculation for Performance**
For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusion (C) includes:**

- Documentation of medical reason for not discussing rehabilitative therapy options (e.g., physical, occupational, or speech therapy) at least annually.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)-C (\# of patients with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |

 

| | |
|---|---|
| **C** | # of patients with valid medical reason(s) for not discussing rehabilitative therapy options (with patient or caregiver) (e.g., physical, occupational, or speech therapy) at least annually |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients with documentation of rehabilitative therapy options discussed with the patient (or caregiver(s), as appropriate) (e.g., physical, occupational, or speech therapy) at least annually.
**C.** Patients with documentation of medical reason for not discussing rehabilitative therapy options with the patient (or caregiver(s), as appropriate) (e.g., physical, occupational, or speech therapy) at least annually.
**D.** Patients with no documentation of discussing rehabilitative therapy options with the patient (or caregiver(s), as appropriate) (e.g., physical, occupational, or speech therapy) at least annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{C (\# of patients with valid exclusions)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually |
| **C** | # of patients with valid medical reason(s) for not discussing rehabilitative therapy options with patient (or caregiver(s), as appropriate) (e.g., physical, occupational, or speech therapy) at least annually |
| **D** | # of patients with no documentation of discussing rehabilitative therapy options with patient (or caregiver(s), as appropriate) (e.g., physical, occupational, or speech therapy) at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications: *Parkinson's Disease Rehabilitative Therapy Options***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

 

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.

- Report the CPT Category II, *Parkinson's Disease Rehabilitative Therapy Options* **4400F**.

Denominator Exclusion(s): Documentation of medical reason(s) for not discussing rehabilitative therapy options with patient (or caregiver, as appropriate) (e.g., physical, occupational, or speech therapy) at least annually (e.g., patient has no known physical disability due to Parkinson's disease; patient is unable to respond and no informant available).

- Append modifier to CPT II code: **4400F-1P**

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

**PARKINSON'S DISEASE**
**Measure # 8: Parkinson's Disease Related Safety Issues Counseling**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients (or caregiver(s), as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not counseling the patient (or caregiver) about context-specific safety issues appropriate to the patient's stage of disease (e.g., patient is unable to respond and no informant is available)

**Measure:** All patients with a diagnosis of Parkinson's disease (or caregivers, as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**

If a veteran with PD has newly diagnosed dementia, then the diagnosing physician should advise the patient not drive a motor vehicle or request that the Department of Motor Vehicles ( or an equivalent agency) retest the patient's ability to drive, or refer the patient to a driver's safety course that includes assessment of driving ability (consistent with state laws). Cheng et al. #24 (Advising against driving in dementia) 2004

All veterans with PD should be asked about their ability to operate a motor vehicle. Cheng et al. 2004. #30 (Assessment of driving ability in PD patients)

All veterans with PD who report excessive daytime sleepiness should be instructed not to drive a motor vehicle. Cheng et al. 2004 #29 (Excessive daytime somnolence and driving restrictions)

If a veteran with PD or his or her family expresses concern about driving safely, then the clinician should advise the patient not to drive a motor vehicle and/or request the DMV retest the patients' ability to drive, and/or refer the patient to a driver's safety course that includes assessment of driving ability, in accordance with state laws. Cheng #46 (Actions regarding driving safety concerns)

Cheng E, Siderowf A, Swarztrauber K, Eisa M, Lee M and Vickrey B. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

**Rationale for the Measure:**

There are several scenarios where safety issues are important in Parkinson's disease. One relates to balance and the risk of falling. Patients with Parkinson's disease need to be counseled regarding the dangers of climbing on ladders and chairs, climbing and descending stairs, and walking on uneven terrain because of the dangers of falling. Twenty-five percent ( 25%) of falls result in injury. Medication can cause adverse effects such as orthostasis and excessive daytime sleepiness that result in concerns about safety. Patients need to be counseled on these issues. Patients with Parkinson's disease experience a number of functional difficulties that may affect driving safety. Motor function, visual perceptive activities, reaction time, attention maintenance, sleep disorders, and information processing are all abnormal in patients with Parkinson's disease, which leads to an increase in accidents per mile driven. Dementia is often associated with Parkinson's disease

 

adds another dimension to the problem. In the mild-to-moderate stages of dementia, some patients remain competent whereas others are not. Many continue to drive even in advanced stages because of the issue of independence and the social impact of cessation. The responsibility for determining driving competence in early-to-mid-duration patients with Parkinson's disease is the responsibility of patients, families, and physicians. Driving should be discussed with all patients, and referral for a proper driving assessment by an experienced driver rehabilitation specialist should be considered if necessary. Those who continue to drive should be assessed regularly because the disease and its therapies change with time.

Factor SA, Weiner WJ. Driving. In: Parkinson's Disease: Diagnosis and Clinical Management. Second Edition. Factor SA, Weiner WJ, eds. Demos Publishing, New York, NY. 2008. pp: 779-790.

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patients (or caregiver(s), as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusion (C) includes:**

- Documentation of medical reason for not counseling patient (or caregiver) about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)-C (\# of patients with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |
| **C** | # of patients (or caregivers) with valid medical reason(s) for not being counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication, management, or driving) at least annually |

## Calculation for Reporting

 

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients (or caregivers, as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.
**C.** Patients with documentation of medical reason for not being counseled(or caregivers being counseled) about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.
**D.** Patients with no documentation of being counseled (or caregivers being counseled) about context-specific safety issues appropriate to the patient's stage of disease (e.g. injury prevention, medication management, or driving) at least annually.

**Reporting Denominator (RD) Includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{C (\# of patients with valid exclusions)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g. injury prevention, medication management, or driving) at least annually |
| **C** | # of patients with valid medical reason(s) for not being counseled (or caregivers not being counseled) about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication, management, or driving) at least annually |
| **D** | # of patients with no documentation of being counseled (or caregivers being counseled) about context-specific safety issues appropriate to the patient's stage of disease (e.g. injury prevention, medication management, or driving) at least annually |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications: *Parkinson's Disease Related Safety Issues Counseling***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

 

| |
|---|
| Numerator: Patients (or caregivers, as appropriate) who were counseled about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually.<br>• Report the CPT Category II, *Parkinson's Disease Related Safety Issues Counseling* **6090F**.<br><br>Denominator Exclusion(s): Documentation of medical reason(s) for not counseling the patient (or caregiver, as appropriate) about context-specific safety issues appropriate to the patient's stage of disease (e.g., injury prevention, medication management, or driving) at least annually (e.g., patient is unable to respond and no informant is available).<br>• Append modifier to CPT II code: **6090F-1P**. |
| **B. Electronic Health Record System (in development)** |
| **C. Paper Medical Record (in development)** |

 

**PARKINSON'S DISEASE**
**Measure # 9: Querying about Parkinson's Disease Medication-Related Motor Complications**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patient visits with patient (or caregiver(s), as appropriate) queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

**Denominator:** All visits for patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not querying patient (or caregiver) about Parkinson's disease medication-related motor complications (e.g., patient is not on a Parkinson's disease medication; patient is unable to respond and no informant is available)

**Measure:** All visits for patients with a diagnosis of Parkinson's disease where patients (or caregiver(s), as appropriate) were queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**
MAO-B inhibitors may be used to reduce motor fluctuations in people with later PD. (Level A) NICE GL35 (June 2006)

Catechol-O-methyl transferase (COMT) inhibitors may be used to reduce motor fluctuations in people with later PD. (Level A) NICE GL35 (June 2006)

Modified-release levodopa preparations may be used to reduce motor complications in people with later PD, but should not drugs of first choice. (Level B) NICE GL35 (June 2006)

Dopamine agonists may be used to reduce motor fluctuations in people with later PD. (Level A) NICE GL35 (June 2006)

Wearing-off
-Adjust levodopa dosing. In an early phase, when motor fluctuations are just becoming apparent, adjustments in the frequency of levodopa dosing during the day, tending to achieve four to six daily doses, might attenuate the wearing-off (good practice point). EFNS PD Part II (Nov. 2006)
- Switch from standard levodopa to controlled release (CR) formulation. CR formulations of levodopa can also improve wearing-off (level C). EFNS PD Part II (Nov. 2006)
- Add catechol-O-methyltransferase (COMT) inhibitors or monoamine oxidase isoenzyme type B (MAO-B) inhibitors. No recommendations can be made on which treatment should be chosen first – on average, all reduce OFF time by about 1 to 1.5 h/day. The only published direct comparison (level A) showed no difference between entacapone and rasagiline. EFNS PD Part II (Nov. 2006)
- Add dopamine agonists. Oral dopamine agonists are efficacious in reducing OFF time in patients experiencing wearing-off. Currently, no dopamine agonist has proven better than another, but switching from one agonist to another can be helpful in some patients (level B/C). EFNS PD Part II (Nov. 2006)
- Add amantadine or an anticholinergic. In patients with disabling recurrent OFF symptoms that fail to improve further with the above mentioned strategies, the addition of an anticholinergic (in younger patients), or amantadine, may improve symptoms in some cases (good practice point). EFNS PD Part II (Nov. 2006)

 

Peak-Dose Dyskinesia
Add amantadine– most studies use 200 to 400 mg/day. The benefit may last <8 months. (Level A) EFNS PD Part II (Nov. 2006)
Reduce individual levodopa dose size, at the risk of increasing OFF time. The latter can be compensated for by increasing the number of daily doses of levodopa or increasing the doses of a dopamine agonist. (Level C) EFNS PD Part II (Nov 2006)
Discontinue or reduce dose of MAO-B inhibitors or COMT inhibitors at the risk of worsening wearing-off. (GPP) EFNS PD Part II (Nov 2006)
Add atypical antipsychotics, clozapine with doses ranging between 12.5 and 75 mg/day up to 200 mg/day (Level A) EFNS PD Part II (Nov 2006)
Add quetiapine (Level C) EFNS PD Part II (Nov 2006)

Amandatine may be considered to reduce dyskinesia (Level C) AANQSS PD Dyskin (April 2006)

Entacapone and rasagiline should be offered to reduce off time (Level A) AANQSS PD Dyskin (April 2006)

Pergolide, Pramipexole, ropinirole, and Tolcapone should be considered to reduce off time. (Level B) AANQSS PD Dyskin (April 2006)

Apomorphine, cabergoline, and selegiline may be considered to reduce off time. (Level C) AAN QSS PD Dyskin (April 2006)

The available evidence does not establish superiority of one medicine over another in reducing off time. (Level B) AAN QSS PD Dyskin (April 2006)

AAN QSS PD Diag. (April 2006) Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):968-75.

AAN QSS PD Dyskin (April 2006) Pahwa R, Factor SA, Lyons KE, Ondo WF, Gronseth G, Bronte-Stewart H, Hallet M, Miyasaki J, Stevens J, and Weiner WJ. Practice Parameter: Treatment of Parkinson's disease with motor fluctuations and dyskinesia (an evidence-based review): Report of the quality Standards Subcommittee of the American Academy of Neurolgoy. Neurology 2006 April 2;66;983-995

EFNS PD Part I (Nov. 2006)
Horstink M, Tolosa E, Bonuccelli U, Deuschl G, Friedman A, Kanovsky P, Larsen JP, Lees A, Oertel W, Poewe W, Rascol O, Sampaio C, European Federation of Neurological Societies, Movement Disorder Society-European Section. Review of the therapeutic management of Parkinson's disease. Report of a joint task force of the European Federation of Neurological Societies and the Movement Disorder Society-European Section. Part I: early (uncomplicated) Parkinson's disease. Eur J Neurol 2006 Nov;13(11):1170-85.

EFNS PD Part II (Nov. 2006)
Horstink M, Tolosa E, Bonuccelli U, Deuschl G, Friedman A, Kanovsky P, Larsen JP, Lees A, Oertel W, Poewe W, Rascol O, Sampaio C, European Federation of Neurological Societies, Movement Disorder Society-European Section. Review of the therapeutic management of Parkinson's disease Parkinson's disease. Report of a joint task force of the EFNS and the MDS-ES. Part II: late (complicated) Parkinson's disease. Eur J Neurol 2006 Nov;13(11):1186-202.

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic

 

Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

**Rationale for the Measure:**
Dopaminergic therapies are commonly accompanied by motor fluctuations, including off time (periods of return of Parkinson's disease symptoms when medication effect wears off) and dyskinesia (drug-induced involuntary movements, including chorea and dystonia) in most patients. It is important to query patients about these problems because medication adjustments and the addition of adjunctive medications can often ameliorate the problem(s). With these adjustments, the patient's quality of life can be improved.

AAN QSS PD Dyskin (April 2006) Pahwa R, Factor SA, Lyons KE, Ondo WF, Gronseth G, Bronte-Stewart H, Hallet M, Miyasaki J, Stevens J, and Weiner WJ. Practice Parameter: Treatment of Parkinson's disease with motor fluctuations and dyskinesia (an evidence-based review): Report of the quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 April 2;66;983-995

**Data Capture and Calculations:**

**Calculation for Performance**
For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patient visits with patient (or caregiver(s), as appropriate) queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

**Performance Denominator (PD) includes:**
All visits for patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions (C) include:**

- Documentation of medical reason for not querying patient (or caregiver) about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

**Performance Calculation**

$$\frac{\text{A (\# of patient visits meeting measure criteria)}}{\text{PD (\# of patient visits in denominator)} - \text{C (\# of patient visits with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) |
| **PD** | # of patient visits for patients with a diagnosis of Parkinson's disease |

 

| | |
|---|---|
| **C** | # of patient visits with documentation of valid medical reason(s) for not querying the patient (or caregiver) about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patient visits with documentation of patient (or caregiver, as appropriate) being queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).
**C.** Patient visits with documentation of medical reason(s) for not querying patient (or caregiver) about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).
**D.** Patient visits with no documentation of patient (or caregiver) being queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

**Reporting Denominator (RD) includes:**
**RD.** All visits for patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patient visits meeting numerator criteria)} + \text{C (\# of patient visits with valid exclusions)} + \text{D (\# of patient visits NOT meeting numerator criteria)}}{\text{RD (\# of patient visits in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patient visits where patient (or caregiver, as appropriate) was queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) |
| **C** | # of patient visits with documentation of medical reason for not querying patient (or caregiver(s), as appropriate) about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) |
| **D** | # of patient visits with no documentation of patient (or caregiver) being queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) |
| **RD** | # of patient visits with a diagnosis of Parkinson's disease |

**Measure Specifications-** ***Querying about Parkinson's Disease Medication-Related Motor Complications***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

 

Denominator (Eligible Population): All visits for patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patient visits where patient (or caregiver(s), as appropriate) was queried about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time).

- Report the CPT Category II, *Querying about Parkinson's Disease Medication-Related Motor Complications* **4324F**.

Denominator Exclusion: Documentation of medical reason(s) for not querying the patient (or caregiver) about Parkinson's disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) (e.g., patient is not on a Parkinson's disease medication; patient is unable to respond and no informant is available).

- Append modifier to CPT Category II code: **4324F-1P**

**B. Electronic Health Record System (in development)**

**C. Paper Medical Record (in development)**

 

**PARKINSON'S DISEASE**
**Measure # 10: Parkinson's Disease Medical and Surgical Treatment Options Reviewed**

This measure may be used as an accountability measure.

**Clinical Performance Measure**

**Numerator**: Patients (or caregiver(s), as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.

**Denominator:** All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions:**

- Documentation of medical reason for not reviewing the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) at least once annually (e.g., the patient is unable to respond and no informant is available)

**Measure:** All patients with a diagnosis of Parkinson's disease (or caregiver(s), as appropriate who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.

**The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:**

People with PD should have regular access to the following: -clinical monitoring and medication adjustment; -a continuing point of contact for support, including home visits when appropriate; -a reliable source of information about clinical and social matters of concern to people with PD and their carers which may be provided by a Parkinson's disease nurse specialist. NICE GL35. (June 2006)

With the current evidence it is not possible to decide if the subthalamic nucleus or globus pallidus interna is the preferred target for deep brain stimulation for people with PD, or whether one form of surgery is more effective or safer than the other. In considering the type of surgery, account should be taken of:-clinical and lifestyle characteristics of the person with PD; -patient preference, after the patient has been informed of the potential benefits and; -drawbacks of the different surgical procedures. (Level D) NICE GL35 (June 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

**Rationale for the Measure:**
There are many different pharmacological, non-pharmacological, and surgical treatment options available for patients diagnosed with Parkinson's disease. Within each type of treatment, there are also multiple factors to be considered when deciding whether a patient with Parkinson's disease is a candidate for the treatment option.

With the advent of newly available pharmacological treatments from many different ongoing clinical trials and studies, the patient's current medication treatment should be reviewed as therapy-based reviews are updated.

AAN QSS Init. Treatment of Parkinson's Disease (Jan 2002) Miyasaki JM, Martin W, Suchowersky O, Weiner WJ, Lang AE. Practice parameter: initiation of treatment for Parkinson's disease: an evidence-based review:

 

Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2002 Jan 8;58(1):11-7.

Anthony E. Lang, Jean-Luc Houeto, Paul Krack, et al. Deep brain stimulation: Preoperative issues Movement Disorders 2006 June; 21(S14): S171-S196

**Data Capture and Calculations:**

## Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

**Performance Numerator (A) includes:**
Patients (or caregivers, as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.

**Performance Denominator (PD) includes:**
All patients with a diagnosis of Parkinson's disease.

**Denominator Exclusions (C) include:**

- Documentation of medical reason for not reviewing the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) at least once annually.

**Performance Calculation**

$$\frac{\text{A (\# of patients meeting measure criteria)}}{\text{PD (\# of patients in denominator)} - \text{C (\# of patients with valid denominator exclusions)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually |
| **PD** | # of patients with a diagnosis of Parkinson's disease |
| **C** | # of patients with valid medical reason(s) for not having the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually |

## Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator.

**Reporting Numerator includes each of the following instances:**
**A.** Patients (or caregivers, as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.
**C.** Patients (or caregivers) with documentation of medical reason(s) for not having the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment)

 

reviewed at least once annually.
**D.** Patients (or caregivers) with no documentation of having Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.

**Reporting Denominator (RD) includes:**
**RD.** All patients with a diagnosis of Parkinson's disease.

**Reporting Calculation**

$$\frac{\text{A (\# of patients meeting numerator criteria)} + \text{C (\# of patients with valid exclusions)} + \text{D (\# of patients NOT meeting numerator criteria)}}{\text{RD (\# of patients in denominator)}}$$

**Components for this measure are defined as:**

| | |
|---|---|
| **A** | # of patients (or caregivers, as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually |
| **C** | # of patients (or caregivers) with documentation of medical reason(s) for not having the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually |
| **D** | # of patients (or caregivers) with no documentation of having Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually. |
| **RD** | # of patients with a diagnosis of Parkinson's disease |

**Measure Specifications: *Parkinson's Disease Medical and Surgical Treatment Options Reviewed***
Measure specifications for data sources other than administrative claims will be developed at a later date.

**A. Administrative Claims Data**
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).

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients with a diagnosis of Parkinson's disease.

- CPT ®Procedure Codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310

AND

- ICD-9 diagnosis codes: 332.0

Numerator: Patients (or caregiver(s), as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually.

- Report the CPT Category II, *Parkinson's Disease Medical and Surgical Treatment Options Reviewed* **4325F**.

Denominator Exclusion(s): Documentation of medical reason(s) for not reviewing the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) at least once annually. (e.g., the patient is unable to respond and no informant is available)

- Append modifier to CPT Category II code: **4325F-1P**

 

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|---|
| **B. Electronic Health Record System (in development)** |
| **C. Paper Medical Record (in development)** |

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