**Cognitive Impairment or Dysfunction Assessment for Patients with Parkinson’s Disease**

<table>
<thead>
<tr>
<th>Measure Description</th>
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<tbody>
<tr>
<td>Percentage of all patients with a diagnosis of PD who were assessed* for cognitive impairment or dysfunction in the past 12 months.</td>
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<table>
<thead>
<tr>
<th>Measure Components</th>
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<tbody>
<tr>
<td><strong>Numerator Statement</strong></td>
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<tr>
<td>All patients with a diagnosis of PD who were assessed* for cognitive impairment or dysfunction in the past 12 months.</td>
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*Assessed is defined as use of a screening tool or referral to neuropsychologist for testing. Screening tools approved for use in this measure include:

1. Mini-Mental Status Examination (MMSE)(2,3)
2. Montreal Cognitive Assessment (MoCA)(2,3)
3. Dementia Rating Scale (DRS-2)
4. Parkinson’s Disease Dementia – Short Screen (PDD-SS)
5. Parkinson Neuropsychiatric Dementia Assessment (PANDA)
6. Parkinson’s Disease- Cognitive Rating Scale (PD-CRS)
7. Scales for Outcomes of Parkinson’s Disease – Cognition (SCOPA-Cog)

<table>
<thead>
<tr>
<th>Denominator Statement</th>
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<tr>
<td>All patients with a diagnosis of PD.</td>
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<thead>
<tr>
<th>Denominator Exceptions</th>
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<tbody>
<tr>
<td>None</td>
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<tr>
<th>Supporting Guideline &amp; Other References</th>
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| The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

- 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).(4)
- An assessment of neuropsychological functioning in a person presenting with parkinsonism suspected of being PD is recommended (Level A) and should include: (I) A collateral history from a reliable carer (II) A brief assessment of cognition (III) Screening for a rapid eye movement (REM) sleep behavior disorder (RBD), psychotic manifestations and severe depression.(5)
- Clinical history should be supplemented by an informant (GPP). A neurological and general physical examination should be performed in all patients with dementia (GPP).(6)
- Cognitive assessment is central to diagnosis and management of dementias and should be performed in all patients (Level A). Screening tests are available of good accuracy in the general diagnosis of dementia or have been proposed specifically for the differential diagnosis between the different forms of dementia (GPP). Neuropsychological assessment should be performed in all patients in the early stages of the disease (Level B) when the
cognitive impairment reflects the disruption of specific brain structures. The neuropsychological assessment should include a global cognitive measure and, in addition, more detailed testing of the main cognitive domains including memory, executive functions and instrumental functions (Level C). (6)

- The general practitioner knows the cognitive-behavioral profile of his/her patients and can identify the clinical signs of cognitive decay at their onset, taking also into account the observation of relatives (I/A). (7)
- General practitioners should assess all pathological conditions that could cause cognitive disorders (VI/A). (7)
- In raising the diagnostic hypothesis of dementia, general practitioners should assess the presence of co-morbidities and identify risk factors due to social isolation (VI/A). (7)

### Measure Importance

| Relationship to Desired Outcome | Cognitive functioning impacts life satisfaction and health-related quality of life. It is anticipated that if assessed on an ongoing basis, cognitive deficits may be identified and addressed in a timely manner. Once identified, such deficits could be treated (or patients referred to appropriate resources) and thereby improve individuals quality of life. |
| Opportunity for Improvement | Patients with PD were found to have an incidence rate of dementia that increased 4-6 times compared to age-matched controls. (6) Dementia was found to be present in 83% of 20-year survivors of PD. (7) |
| | In a 2013 study by Baek et al. reviewing compliance with quality measure recommendations, it was noted provider compliance rate for annual review of cognitive dysfunction was 32%. (8) This measure was adopted into the PQRS reporting system as measure #291 in 2012. Eligible provider compliance rates for 2012 are not available. |

### National Quality Strategy Domains

- ☐ Patient and Family Engagement
- ☐ Patient Safety
- ☐ Care Coordination
- ☐ Population/Public Health
- ☐ Efficient Use of Healthcare Resources
- ☒ Clinical Process/Effectiveness

### Exception Justification

Not Applicable

### Harmonization with Existing Measures

Not Applicable

### Measure Designation

| Measure Purpose (Check all that apply) |
| ☒ Quality improvement |
| ☒ Accountability |
| Type of Measure (Check all that apply) | ☒ Process  
| | ☐ Outcome  
| | ☐ Structure  
| Level of Measurement (Check all that apply) | ☒ Individual Provider  
| | ☒ Practice  
| | ☒ System  
| Care Setting (Check all that apply) | ☒ Outpatient  
| | ☒ Inpatient  
| | ☒ Skilled Nursing Home  
| | ☐ Emergency Departments and Urgent Care  
| Data Source (Check all that apply) | ☒ Electronic health record (EHR) data  
| | ☒ Administrative Data/Claims  
| | ☐ Chart Review  
| | ☒ Registry  

References


Technical Specifications: Electronic Health Record (EHR) Data

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

Technical Specifications: Administrative Data (Claims)

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/ denominator criteria.
<table>
<thead>
<tr>
<th>Denominator (Eligible Population)</th>
<th>ICD-9 Code</th>
<th>ICD-10 Code</th>
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<tbody>
<tr>
<td>332.0 (Paralysis agitans)</td>
<td>G20 Parkinson’s Disease</td>
<td></td>
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<tr>
<td></td>
<td>Hemiparkinsonism</td>
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<tr>
<td></td>
<td>Idiopathic Parkinsonism or Parkinson’s Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paralysis agitans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkinsonisms or Parkinson’s disease NOS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary Parkinsonism or Parkinson’s disease</td>
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AND

CPT E/M Service Code:
- 99201, 99202, 99203, 99204, 99205 (Office or other outpatient visit-New Patient);
- 99211, 99212, 99213, 99214, 99215 (Office or other outpatient visit-Established Patient);
- 99241, 99242, 99243, 99244, 99245 (Office or Other Outpatient Consultation-New or Established Patient);
- 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Home Consultation);
- 99221-99223 (Initial Hospital Care);
- 99231-99233 (Subsequent Hospital Care);
- 99238-99239 (Hospital Discharge);
- 99251-99255 (Initial Inpatient Consultation).