### Querying About Sleep Disturbances 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 (or caregivers, as appropriate) who were queried about sleep disturbances* in the past 12 months.</td>
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</tbody>
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### Measure Components

<table>
<thead>
<tr>
<th>Numerator Statement</th>
<th>Denominator Statement</th>
<th>Denominator Exceptions</th>
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<tbody>
<tr>
<td>Patients with a diagnosis of PD (or caregivers, as appropriate) who were queried about sleep disturbances* in the past 12 months.</td>
<td>All patients with a diagnosis of PD.</td>
<td>None</td>
</tr>
</tbody>
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*Sleep disturbances are defined as excessive daytime sleepiness, insomnia/fragmentation (including nocturnal motor features), dream enactment/REM Sleep behavior symptoms, Restless Leg Syndrome, or sleep disorder breathing (obstructive sleep apnea).*

### Supporting Guideline & Other References

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) (1)
- 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) (1)
- The majority of patients with synucleinopathies experience one or more sleep disorders. It is recommended to perform a detailed medical history…and SDB PSG recording, preferably with audiovisual recording…(Level B).(2)
- Patients with neurological diseases often have significant sleep disorders that affect sleep and daytime function, with increased morbidity and even mortality. Many of these disorders are treatable. Therefore, increased awareness should be directed toward sleep disorders in patients with neurodegenerative, cerebrovascular, and neuromuscular diseases. Despite this, there are limited number of studies with a high evidence level.(2)
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. (3)

<table>
<thead>
<tr>
<th>Measure Importance</th>
<th>Relationship to Desired Outcome</th>
<th>Opportunity for Improvement</th>
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</thead>
<tbody>
<tr>
<td>Sleep disorders are quite common in PD and impact on Quality of Life. (4)</td>
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<td>Screening for sleep disturbances increases recognition, enhance likelihood that treatment options will be discussed and offered, and ultimately decrease rates of sleep disturbance in this patient population.</td>
</tr>
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<td>Approximately 2/3 of all patients with PD report a sleep disorder. (5) A guideline addressing nonmotor symptoms of PD, released in 2010, addresses sleep disorders with recommendations on effective treatments for excessive daytime somnolence in PD. (6)</td>
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<td>In a 2013 study by Baek et al. reviewing compliance with quality measure recommendations, it was noted provider compliance rate for annual review of sleep disturbance was 29.6%. (7) This measure was adopted into the PQRS reporting system as measure #292 in 2012. Eligible provider compliance rates for 2012 are not yet available.</td>
</tr>
</tbody>
</table>

**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>
</tr>
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<tbody>
<tr>
<td>332.0 (Paralysis agitans)</td>
<td></td>
<td>G20 Parkinson’s Disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hemiparkinsonism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Idiopathic Parkinsonism or Parkinson’s Disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paralysis agitans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parkinsonisms or Parkinson’s disease NOS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary Parkinsonism or Parkinson’s disease</td>
</tr>
</tbody>
</table>

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).