### Querying about Parkinson’s Disease Medication-Related Motor Complications

#### Measure Description
Percentage of all visits for patients with a diagnosis of PD where patients (or caregiver(s), as appropriate) were queried about dopaminergic medication-related motor complications (i.e., wearing off, dyskinesia, dystonia, on-off phenomena, and amount of off time).

#### Measure Components

<table>
<thead>
<tr>
<th>Numerator Statement</th>
<th>All visits for patients with a diagnosis of PD where patients (or caregiver(s), as appropriate) were queried about dopaminergic medication-related motor complications (i.e., wearing off, dyskinesia, dystonia, on-off phenomena, and amount of off time).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator Statement</td>
<td>All visits for patients with a diagnosis of PD on a dopaminergic medication (i.e., levodopa, agonists, monomine oxidase (MAO) inhibitors, and cathechol-O-methyl transferase (COMT) inhibitors).</td>
</tr>
<tr>
<td>Denominator Exceptions</td>
<td>Patient is unable to communicate and caregiver/informant is unavailable to provide information.</td>
</tr>
</tbody>
</table>
| Supporting Guideline & Other References | Dopaminergic medications are associated with motor-complications, and approximately 10% of patients per year develop these complications. (1). The following clinical recommendation statements and other references represent the evidence base for the measure:  
  - From Table 1 Options for initial pharmacotherapy in early PD:     
    - Levodopa evidence of increased motor complications (2)  
  - The dose of levodopa should be kept as low as possible to maintain good function in order to reduce the development of motor complications.(2)  
  - “Levodopa, the most effective symptomatic antiparkinsonian drug (Level A). After a few years of treatment, levodopa is frequently associated with the development of motor complications. As older patients are more sensitive to neuropsychiatric adverse reactions and are less prone to developing motor complications, the early use of levodopa is recommended in the older population (GPP). The early use of controlled release levodopa formulations is not effective in the prevention of motor complications. (Level A)”(3) |

#### Measure Importance
| Relationship to Desired Outcome | Motor complications are commonly associated with the medications treating Parkinson Disease, and these complications are associated with lowered quality of life.(1,4-6) Frequent adjustment may be needed to minimize the adverse effect. By measuring how frequently providers assess these complications it is anticipated that earlier interventions will be provided and quality of life will improve as routine assessment becomes standard. |
| Opportunity for Improvement | Medication-related motor complications that include wearing off, dyskinesia, dystonia, on-off phenomena, and amount of off time impact quality of life and mobility.(4-6) |
Clinicians often fail to identify medication related motor complications.\(^{(1)}\) In a 2013 study by Baek et al. reviewing compliance with quality measure recommendations, it was noted provider compliance rate for every visit Parkinson’s disease medication-related motor complications (e.g., wearing off, dyskinesia, or off-time) was 23.5\%\(^{(6)}\).

| 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**

Patient or informant must be able to provide information for assessment of complications to be valid.

**Harmonization with Existing Measures**

Not applicable

| 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>
</thead>
<tbody>
<tr>
<td>332.0 (Paralysis agitans)</td>
<td>G20 Parkinson’s Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hemiparkinsonism</td>
<td></td>
</tr>
<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>
<td></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).