

NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

NQF #: 1989	NQF Project: Neurology Project
(for Endorsement Maintenance Review)	
Original Endorsement Date:	Most Recent Endorsement Date: Last Updated Date: Oct 17, 2012
BRIEF MEASURE INFORMATION	
De.1 Measure Title: Parkinson's Disease Medical and Surgical Treatment Options Reviewed	
Co.1.1 Measure Steward: American Academy of Neurology	
De.2 Brief Description of 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.	
2a1.1 Numerator Statement: 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.	
2a1.4 Denominator Statement: All patients with a diagnosis of Parkinson's disease.	
2a1.8 Denominator Exclusions: 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)	
1.1 Measure Type: Process 2a1. 25-26 Data Source: Administrative claims , Electronic Clinical Data : Electronic Health Record , Electronic Clinical Data : Registry , Paper Medical Records 2a1.33 Level of Analysis: Clinician : Individual	
1.2-1.4 Is this measure paired with another measure? No	
De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed): N/A	

STAFF NOTES <i>(issues or questions regarding any criteria)</i>
Comments on Conditions for Consideration:
Is the measure untested? Yes <input checked="" type="radio"/> No <input checked="" type="radio"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5): 5. Similar/related endorsed or submitted measures (check 5.1): Other Criteria:
Staff Reviewer Name(s):

1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See [guidance on evidence](#).

Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)

1a. High Impact: **H O M O L O I O**

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

De.4 Subject/Topic Areas (Check all the areas that apply): [Neurology](#)

De.5 Cross Cutting Areas (Check all the areas that apply): [Health and Functional Status](#), [Health and Functional Status : Development/Wellness](#), [Health and Functional Status : Functional Status](#), [Prevention](#), [Safety](#), [Safety : Complications](#), [Safety : Medication Safety](#)

1a.1 Demonstrated High Impact Aspect of Healthcare: [Affects large numbers](#), [Patient/societal consequences of poor quality](#), [Severity of illness](#)

1a.2 If "Other," please describe:

1a.3 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):

[Physiotherapy primarily addresses the physical components of rehabilitation, essentially to maximisemaximize the functional capacity of a person and their role within society. Where people receiving physiotherapy have a longer-term condition, such as PD, physiotherapy is generally regarded as an active, ongoing process and one that should be client-focused in its approach and regularly reviewed .](#)

[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.](#)

[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. 1](#)

[This measure would impact and benefit all patients diagnosed with Parkinson's disease. 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.](#)

1a.4 Citations for Evidence of High Impact cited in 1a.3: [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

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

1b. Opportunity for Improvement: H● M● L● I●

(There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this 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.

1b.2 Summary of Data Demonstrating Performance Gap *(Variation or overall less than optimal performance across providers): [For Maintenance – Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.]*

There is encouraging RCT evidence of the effectiveness of some of the physiotherapy interventions for people with PD. However, further definitive trials are required to confirm these findings. Additional work is necessary to define what physical therapy interventions are effective in the different stages of the disease. The GDG acknowledge that physiotherapists would not use many of the outcome measures reported in the trial evidence.¹

We examined the medical records, from 1998 to 2004, of 401 Los Angeles veterans with Parkinson's disease to determine whether care met key indicators of PD care quality. We compared adherence to each indicator through logistic regression models. Over the study period, 10 indicators of PD care quality were triggered 2,227 times. The 10 PD indicators were triggered 2,227 times during the study period, and patients received recommended care 1,541 times (69%). Gaps in care were particularly large for annual assessment of nonmotor symptoms such as orthostatic hypotension, falls, depression, and hallucinations. Gaps in care were also noted for treatment of wearing off among non-neurologists.²

1b.3 Citations for Data on Performance Gap: [For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

1. 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

2. Cheng E, Swartztrauber K, Siderowf A, Eisa M, Lee M, Vassar S, Jacob E, Vickrey B. Association of specialist involvement and quality of care for Parkinson's disease. Movement disorders. 2007;22:515

1b.4 Summary of Data on Disparities by Population Group: [For Maintenance –Descriptive statistics for performance results for this measure by population group]

We sought to identify racial disparities in the treatment of Parkinson's disease (PD). We identified 307 incident PD cases using Pennsylvania State Medicaid claims, and extracted claims for medications, physical therapy, and healthcare visits for the 6 months after diagnosis. After controlling for age, sex, and geography, African-Americans were four times less likely than whites to receive any PD treatment (odds ratio, 0.24; 95% confidence interval, 0.09-0.64), especially indicated medications. In a group with the same healthcare insurance, disparities in PD treatment exist. Physician and community awareness of these racial differences in PD treatment is the first step in addressing healthcare disparities.¹

One study found that nonwhite veterans were 15% less likely to receive high-quality care as defined by a series of 10 indicators that measured management of wearing off in advanced PD, assessment and treatment of nonmotor symptoms (including depression), avoidance of neuroleptics, and appropriate medication titration. The observed differences were largely a function of less depression treatment among nonwhites. This study, however, did not compare initial treatment between white and minority PD patients for symptomatic motor control.¹

Although both antiparkinsonian medications and physical therapy are effective for PD, only about one third of newly diagnosed PD patients were started on therapy. African American patients were significantly less likely to receive treatment for PD than white patients. These differences remained after controlling for other demographic and clinical factors, including age, sex, geography, initial visit with a neurologist, and reason for Medicaid eligibility.¹

It is unclear whether the incidence and prevalence of PD is the same in white and African American populations in the United States. Studies to assess the prevalence of PD in African American populations show varied results. A review of 20 studies¹³ concluded that differences in prevalence in African Americans compared with European populations remain unproven. Some evidence suggests that PD is underdiagnosed in African Americans. The objective of this study is to assess the presence of differences in disease severity and disability in patients with parkinsonism treated at a tertiary Movement Disorders Center based on race, annual income, and educational level.²

Evidence of health disparities in PD is growing. Cheng et al examined quality indicators at medical follow-up among veterans with PD and found that non-Hispanic white patients were more likely than minorities to receive care that adhered to certain quality indicators, particularly treatment of depression.²

Dahodwala et al abstracted data from the Pennsylvania Medicaid claims bank and reported that African Americans were half as likely to be diagnosed as having PD as whites. After controlling for age, sex, and geography, African Americans were 4 times less likely to receive any treatment for PD. Yacoubian et al found that among the cohort of patients in the Reasons for Geographic and Racial Differences in Stroke study, whites were nearly twice as likely to be prescribed medication for PD. ²

Our study shows that race and SES influence disease severity and disability related to parkinsonism among patients being treated at an academic Movement Disorders Center. African Americans had greater parkinsonian disease severity and disability than whites, and significant differences in management were also seen based on race and SES. These findings may be explained by delayed diagnosis, referral patterns, access to care, economic factors, or a combination of all these. ²

We examined the medical records of 309 (83%) non-Hispanic White and 65 (17%) non-White Los Angeles veterans with PD from 1998 to 2004 to determine if care quality as measured by 10 PD indicators different by race/ethnicity. In multivariate modeling, adherence to indicators was higher among non-Hispanic Whites (71% vs. 65%, risk ratio 1.15, 95% CI [1.07–1.32]) compared to non-Whites. Differences in adherence by race/ethnicity were greatest for initial treatment for depression and follow-up treatment of depression (p<0.05). We detected disparities in quality of PD care, particularly in initial treatment and follow-up treatment of depression.³

1b.5 Citations for Data on Disparities Cited in 1b.4: [For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

1. Nabila Dahodwala, MD; Ming Xie, MS; Elizabeth Noll, MA; Andrew Siderowf, MD, MSCE; David S. Mandell, ScD; Treatment Disparities in Parkinson's Disease; Ann. Neurol. 2009 August; 66(2): 142-145

2. J. Patrick Hemming, MD; Ann L. Gruber-Baldini, PhD; Karen E. Anderson, MD; Paul S. Fishman, MD; G. Reich, MD; William J. Weiner, MD; Lisa M. Schulman, MD; Racial and Socioeconomic Disparities in Parkinsonism; Arch Neurol. 2011; 68(4): 498-503

3. Cheng EM, Siderowf AD, Swartztrauber K, Lee M, Vassar S, Jacob E, Eisa MS, Vickrey BG. Disparities of care in veterans with Parkinson's disease. Parkinsonism Relat Disord. 2008;14:8-14

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)

Is the measure focus a health outcome? Yes ☐ No ☐ **If not a health outcome, rate the body of evidence.**

Quantity: H ☐ M ☐ L ☐ I ☐ Quality: H ☐ M ☐ L ☐ I ☐ Consistency: H ☐ M ☐ L ☐ I ☐

Quantity	Quality	Consistency	Does the measure pass subcriterion 1c?
M-H	M-H	M-H	Yes <input type="radio"/>
L	M-H	M	Yes <input type="radio"/> IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No <input type="radio"/>
M-H	L	M-H	Yes <input type="radio"/> IF potential benefits to patients clearly outweigh potential harms: otherwise No <input type="radio"/>
L-M-H	L-M-H	L	No <input type="radio"/>

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service

Does the measure pass subcriterion 1c?
Yes ☐ IF rationale supports relationship

1c.1 Structure-Process-Outcome Relationship (Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process-health outcome; intermediate clinical outcome-health outcome):

Reviewing treatment options for Parkinson's disease on a periodic basis is critical to appropriately treating this progressive, degenerative disease. There are multiple factors that the clinician will need to consider which treatment is appropriate for the patient at that time. With the advent of new pharmacological treatments from many different ongoing clinical trials and studies it is very important that the patient's treatment should be reviewed as therapy-based reviews are updated. This will lead to better symptom management, better medication management and improved quality of life.

The American Academy of Neurology has preliminary data from the implementation of these measures into the Maintenance of Certification Performance in Practice (NeuroPI) Parkinson's disease Modules. There have been 119 physicians to date who have enrolled in Parkinson's disease modules. However, the extrapolation of data from this module is not yet appropriate as the sample size is believed to be too small to be able to provide generalizable data. However, by the time this measure comes back to the NQF for the end of the Temporary Endorsement period (estimated by 1/2014) there will be additional data available to support the link of this measure to the desired patient outcomes. In addition, we will have some data back from the CECity registry database, which just went live in August 2012, by 1/2014 to add additional support to this measure.

1c.2-3 Type of Evidence (*Check all that apply*):

Clinical Practice Guideline, Other, Systematic review of body of evidence (other than within guideline development)
indicator paper

1c.4 Directness of Evidence to the Specified Measure (*State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population*):

Because of the progressive nature of Parkinson's disease the patient's treatment options should be reviewed with the clinician at least once annually. The recommendation statements focus on monitoring and treating the patient as appropriate. This is concordant with the intention of this measure.

1c.5 Quantity of Studies in the Body of Evidence (*Total number of studies, not articles*): 2
recommendation statements/indicators were used as the basis for this quality measure.

1c.6 Quality of Body of Evidence (*Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events*): The guideline/indicator authors did not provide an explicit process or documentation of a process like GRADE whereby precision, directness, etc were detailed in a systematic review to demonstrate the quality of the body of evidence for this measure. The available information from the guideline/indicator paper is provided below.

Recommendation:

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)

Primary Evidence:

Physiotherapy might incorporate only education and advice ensuring maintenance of a current level of fitness and ability, or involve exercises specific to the needs of the person with PD to regain movement, prevent falls, maximise respiratory function or reduce pain. It also has a role alongside medical and surgical intervention to enhance the person's potential with these interventions.

Surgical techniques vary between centres, but it is generally performed in three stages: radiological localisation, physiological localisation, and then either an ablation or a stimulation procedure. Radiological localisation involves the rigid fixation to the skull under local anaesthesia of a stereotactic base ring onto which a fiducial array can be mounted. In the past, ventriculography (ie outlining the ventricles of the brain by instilling air or contrast medium) was the radiological technique used, but this has been largely replaced by CT and MRI. It is now possible to identify most of the targets on MRI, and their position in stereotactic space is calculated using sophisticated computer programs.

The included trials all had methodological limitations common to non-analytical study designs. Firstly, none of the included trials were randomised into surgical or non-surgical intervention groups. Secondly, none of the trials were performed under blinded conditions, either single or double. None of the trials were controlled

with a cohort of non-surgical patients for longitudinal comparison over time.

There was also a general lack of inclusion/exclusion criteria, which could lead to pre-selected patient populations, lack of multi-centre comparative results analysis, and lack of sample size calculations. The mean follow-up of most trials was 7–12 months and the patient population tended to be younger with an average age of approximately 60 years.

This study looked at PDQ-39, patients with high levels of depression, who also had a mini mental status exam of 24 or less, postural instability, and a history of falls or gait difficulties had a significantly worse PDQ-39 score than those patients who did not have these features. These scores were the same regardless of gender. Those patients with akinetic subtype were found to be worse than those with a tremor dominant disease. This difference could not be explained by age or disease duration.

1c.7 Consistency of Results across Studies (*Summarize the consistency of the magnitude and direction of the effect*): These studies are consistent that all patients with a diagnosis of Parkinson's disease should have their treatment options reviewed annually.

1c.8 Net Benefit (*Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms*):
See quality of body of evidence question

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? **Yes**

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: NICE Rating Scale for Evidence and Recommendation

Rating Scheme for Strength of the Evidence

Ia-Systematic review or meta-analysis of randomized controlled trials

Ib-At least one randomized controlled trial

Ila-At least one well-designed controlled study without randomization

Ilb-At least one well-designed quasi-experimental descriptive studies, such as a cohort study

III-Well-designed non-experimental descriptive studies, case-control studies, and case studies

IV-Expert committee reports, opinions and/or clinical experience of respected authorities

Rating Recommendations

A* Directly based on category I evidence (meta-analysis of randomized controlled trials (RCTs) or at least one RCT)

B* Directly based on category II evidence (at least one controlled study without randomization or at least one other quasi-experimental study) or extrapolated from category I evidence

C* Directly based on category III evidence (non-experimental descriptive studies) or extrapolated from category I or II evidence

D* Directly based on category III evidence (expert committee reports or opinions and/or clinical experience of respected authorities) or extrapolated from category I, II or III evidence

N Recommendation taken from NICE guideline or technology appraisal guidance

1c.11 System Used for Grading the Body of Evidence: GRADE

1c.12 If other, identify and describe the grading scale with definitions:

1c.13 Grade Assigned to the Body of Evidence: See 1c.16

1c.14 Summary of Controversy/Contradictory Evidence: N/A

1c.15 Citations for Evidence other than Guidelines(*Guidelines addressed below*):

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

1c.16 Quote verbatim, the specific guideline recommendation (*Including guideline # and/or page #*):

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)

1c.17 Clinical Practice Guideline Citation: 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

1c.18 National Guideline Clearinghouse or other URL:

<http://www.aan.com/globals/axon/assets/9084.pdf>;
<http://www.guideline.gov/search/search.aspx?term=parkinson+aan>

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? **Yes**

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: **American Academy of Neurology**

1c.21 System Used for Grading the Strength of Guideline Recommendation: **GRADE**

1c.22 If other, identify and describe the grading scale with definitions:

1c.23 Grade Assigned to the Recommendation: **Level C; Level D**

1c.24 Rationale for Using this Guideline Over Others: **Supports the basis for the measure and demonstrates the gap in current care provided.**

Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?

1c.25 Quantity: **High** **1c.26 Quality:** **Moderate** **1c.27 Consistency:** **High**

1c.28 Attach evidence submission form:

1c.29 Attach appendix for supplemental materials:

Was the threshold criterion, *Importance to Measure and Report*, met?

(1a & 1b must be rated moderate or high and 1c yes) Yes ☒ No ☐

Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.

For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (**evaluation criteria**)

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

S.1 Measure Web Page (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? **Yes**

S.2 If yes, provide web page URL: <http://www.aan.com/globals/axon/assets/9084.pdf>

2a. RELIABILITY. Precise Specifications and Reliability Testing: H M L I NA

2a1. Precise Measure Specifications. (*The measure specifications precise and unambiguous.*)

2a1.1 Numerator Statement (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):

[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.](#)

2a1.2 Numerator Time Window (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*):

[At least once annually](#)

2a1.3 Numerator Details (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):

[Report the CPT Category II, Parkinson's Disease Medical and Surgical Treatment Options Reviewed 4325F.](#)

2a1.4 Denominator Statement (*Brief, narrative description of the target population being measured*):
[All patients with a diagnosis of Parkinson's disease.](#)

2a1.5 Target Population Category (*Check all the populations for which the measure is specified and tested if any*): [Populations at Risk](#)

2a1.6 Denominator Time Window (*The time period in which cases are eligible for inclusion*):
[At least once annually](#)

2a1.7 Denominator Details (*All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses*):

[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 Paralysis agitans, idiopathic, primary, NOS](#)

[Parkinsonism or Parkinson's disease: NOS idiopathic primary](#)

2a1.8 Denominator Exclusions *(Brief narrative description of exclusions from the target population):*

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)

2a1.9 Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):*

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

2a1.10 Stratification Details/Variables *(All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):*

N/A

2a1.11 Risk Adjustment Type *(Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13):* No risk adjustment or risk stratification **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):*

N/A

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score:

2a1.19 Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score):*

2a1.20 Calculation Algorithm/Measure Logic *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):*

N/A

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):

N/A
<p>2a1.25 Data Source (<i>Check all the sources for which the measure is specified and tested</i>). If other, please describe: Administrative claims, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry, Paper Medical Records</p> <p>2a1.26 Data Source/Data Collection Instrument (<i>Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.</i>): AAN NeuroPI-NeuroPI clinical modules are designed to help neurologists meet the American Board of Psychiatry and Neurology (ABPN) Part 4 performance in practice requirement for Maintenance of Certification (MOC). There is a Parkinson disease module that includes this quality measure. National Parkinson Foundation Registry CECity PQRI Wizard Physician Quality Reporting System (2012) program measure</p> <p>2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment:</p> <p>2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment: URL http://www.aan.com/go/practice/quality/measurements</p> <p>2a1.33 Level of Analysis (<i>Check the levels of analysis for which the measure is specified and tested</i>): Clinician : Individual</p> <p>2a1.34-35 Care Setting (<i>Check all the settings for which the measure is specified and tested</i>): Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility</p>
<p>2a2. Reliability Testing. (<i>Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.</i>)</p>
<p>2a2.1 Data/Sample (<i>Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included</i>): N/A</p> <p>2a2.2 Analytic Method (<i>Describe method of reliability testing & rationale</i>): N/A</p> <p>2a2.3 Testing Results (<i>Reliability statistics, assessment of adequacy in the context of norms for the test conducted</i>): N/A</p>
<p>2b. VALIDITY. Validity, Testing, including all Threats to Validity: H ● M ● L ● I ●</p>
<p>2b1.1 Describe how the measure specifications (<i>measure focus, target population, and exclusions</i>) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence: N/A</p>
<p>2b2. Validity Testing. (<i>Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.</i>)</p>
<p>2b2.1 Data/Sample (<i>Description of the data or sample including number of measured entities; number of</i></p>

patients; dates of data; if a sample, characteristics of the entities included):

N/A

2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):

N/A

2b2.3 Testing Results (Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):

N/A

POTENTIAL THREATS TO VALIDITY. (All potential threats to validity were appropriately tested with adequate results.)

2b3. Measure Exclusions. (Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)

2b3.1 Data/Sample for analysis of exclusions (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

No exclusions

2b3.2 Analytic Method (Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):

N/A

2b3.3 Results (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):

N/A

2b4. Risk Adjustment Strategy. (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

2b4.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

N/A

2b4.2 Analytic Method (Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):

N/A

2b4.3 Testing Results (*Statistical risk model:* Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. *Risk stratification:* Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata):

N/A

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: N/A

2b5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b5.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

N/A

2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):

N/A

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningful differences in performance):

N/A

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

N/A

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):

N/A

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):

N/A

2c. Disparities in Care: H ☐ M ☐ L ☐ I ☐ NA ☐ (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): N/A

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:

N/A

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met? (Reliability and Validity must be rated moderate or high) Yes ☐ No ☐
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (**evaluation criteria**)

C.1 Intended Actual/Planned Use (Check all the planned uses for which the measure is intended):
Payment Program, Professional Certification or Recognition Program, Public Reporting, Quality Improvement (Internal to the specific organization), Regulatory and Accreditation Programs

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in

the following questions): [Public Reporting, Payment Program, Professional Certification or Recognition Program, Regulatory and Accreditation Programs, Quality Improvement \(Internal to the specific organization\)](#)

3a. Usefulness for Public Reporting: H● M● L● I●

(The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[For Maintenance** – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]

All of six Parkinson's disease measures are currently in use in the 2012 Physician Quality Reporting System program. They have also been implemented in the CE City Registry, a CMS qualified registry for PQRS, so that physicians can complete the registry and individual claims based measures. In addition, these measures were used as the basis for the American Academy of Neurology's Maintenance of Certification Performance in Practice (NeuroPI) Parkinson's disease Modules. Although we do not have specific data to identify which physicians are using these measures, we do know that many AAN members have told the AAN that they are aware of these measures and are using them in their practices.

3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: The AAN has not yet received any data from CMS regarding the usefulness of the measures in the PQRS program as the measures were only implemented as part of the program in 2012.

3.2 Use for other Accountability Functions (payment, certification, accreditation). If used in a public accountability program, provide name of program(s), locations, Web page URL(s): [NeuroPI](http://www.aan.com/practice/pip/)

3b. Usefulness for Quality Improvement: H● M● L● I●

(The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. If used in quality improvement program, provide name of program(s), locations, Web page URL(s):

[For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].

[NeuroPI](http://www.aan.com/practice/pip/) <http://www.aan.com/practice/pip/>

There are currently 119 individuals participating in the AAN's NeuroPI module on Parkinson's disease.

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:

Due to the amount of time it takes to complete a Performance in Practice module the AAN does not yet have data regarding those participating using the Parkinson's disease measures. The AAN anticipates having supporting data from the NeuroPI modules by January 2014, the end of the temporary endorsement period for this measure.

Overall, to what extent was the criterion, Usability, met? H● M● L● I●

Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (**evaluation criteria**)

4a. Data Generated as a Byproduct of Care Processes: H ☐ M ☒ L ☐ I ☐

4a.1-2 How are the data elements needed to compute measure scores generated? (*Check all that apply*).

Data used in the measure are:

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

4b. Electronic Sources: H ☐ M ☒ L ☐ I ☐

4b.1 Are the data elements needed for the measure as specified available electronically (*Elements that are needed to compute measure scores are in defined, computer-readable fields*): Some data elements are in electronic sources

4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources: Currently, this measure has been specified for administrative claims. The AAN has contracted with two separate consultants to learn the process to develop eSpecifications, code value sets, logic, and develop eMeasures. The training was complete as of 9/25/12 and the measures will be fully specified for eMeasures by December 2012.

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H ☐ M ☒ L ☐ I ☐

4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:

Testing has not begun yet but will be completed by January 2014. Strategies to prevent, minimize or detect unintended consequences will be identified during testing in 2013. Operational use of this measure has not identified any inaccuracies, errors or unintended consequences of measurement.

4d. Data Collection Strategy/Implementation: H ☐ M ☒ L ☐ I ☐

A.2 Please check if either of the following apply (*regarding proprietary measures*):

4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (*e.g., fees for use of proprietary measures*):

Testing has not begun yet but will be completed by January 2014. Operational use of this measure helped identify the need for a registry to simplify usage of measures (available via the CECity registry as of 8/2012). No other problems or issues have been identified.

Overall, to what extent was the criterion, *Feasibility*, met? H ☐ M ☒ L ☐ I ☐
Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes ☒ No ☐

Rationale:

If the Committee votes No, STOP.

If the Committee votes Yes, the final recommendation is contingent on comparison to related and

competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 If there are related measures (*either same measure focus or target population*) or competing measures (*both the same measure focus and same target population*), list the NQF # and title of all related and/or competing measures:

5a. Harmonization

5a.1 If this measure has EITHER the same measure focus OR the same target population as [NQF-endorsed measure\(s\)](#): Are the measure specifications completely harmonized?

5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:

5b. Competing Measure(s)

5b.1 If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (*e.g., a more valid or efficient way to measure quality*); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): [American Academy of Neurology, 201 Chicago Ave South, Minneapolis, Minnesota, 55415](#)

Co.2 Point of Contact: [Rebecca, Swain-Eng, MS, rswaineng@aan.com, 612-928-6121-](#)

Co.3 Measure Developer if different from Measure Steward: [American Academy of Neurology, 201 Chicago Ave South, Minneapolis, Minnesota, 55415](#)

Co.4 Point of Contact: [Rebecca, Swain-Eng, MS, rswaineng@aan.com, 612-928-6121-](#)

Co.5 Submitter: [Rebecca, Swain-Eng, MS, rswaineng@aan.com, 612-928-6121-, American Academy of Neurology](#)

Co.6 Additional organizations that sponsored/participated in measure development:

[American Parkinson's Disease Association](#)
[National Parkinson Foundation](#)
[Parkinson's Disease Foundation](#)
[American Academy of Family Physicians](#)
[American Association of Neurosurgeons/Congress of Neurological Surgeons](#)
[American Neurological Association](#)
[American Psychological Association](#)

American Psychiatric Association
 Movement Disorder Society
 National Academy of Neuropsychology
 Aetna Inc.
 Anthem Blue Cross and Blue Shield
 Humana Inc.
 UnitedHealth Group Inc.

Co.7 Public Contact: Rebecca, Swain-Eng, MS, rswaineng@aan.com, 612-928-6121-, American Academy of Neurology

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

William Weiner, MD (Co-Chair, American Academy of Neurology)
 Stewart Factor, MD (Co-Chair, American Academy of Neurology)
 Christopher Bever Jr., MD, MBA (Expert Panel Facilitator, American Academy of Neurology)
 Eric Cheng, MD (Expert Panel Facilitator, American Academy of Neurology)
 Michele Popadynec, RN (Panel Member, American Parkinson's Disease Foundation)
 Joyce Oberdorf, MA (Panel Member, National Parkinson Foundation)
 Jim Beck, PhD (Panel Member, Parkinson's Disease Foundation)
 H. James Brownlee Jr., MD (Panel Member, American Academy of Family Physicians)
 Lisa Shulman, MD (Panel Member, American Academy of Neurology)
 Sotirios A. Parashos, MD, PhD (Panel Member, American Academy of Neurology)
 Helen Bronte-Stewart, MD (Panel Member, American Academy of Neurology)
 Janis Miyasaki, MD (Panel Member, American Academy of Neurology)
 Marian Evatt, MD (Panel Member, American Academy of Neurology)
 Karl Sillay, MD (Panel Member, American Association of Neurological Surgeons/Congress of Neurological Surgeons)
 Blair Ford, MD (Panel Member, American Neurological Association)
 Paul Moberg, PhD, ABPP/CN (Panel Member, American Psychological Association)
 Laura Marsh, MD (Panel Member, American Psychiatric Association)
 Daniel Tarsy, MD (Panel Member, Movement Disorder Society)
 Alexander Troster, PhD (Panel Member, National Academy of Neuropsychology)
 Marc R. Nuwer, MD, PhD (Panel Member, American Academy of Neurology Coding Specialist)
 Mustafa Saad Siddiqui, MD (Panel Member, American Academy of Neurology Coding Specialist)
 Robert M. Kropp, MD, MBA (Panel Member, Aetna, Inc.)
 Wesley B. Wong, MD, MMM (Panel Member, Anthem Blue Cross and Blue Shield)
 Monte Masten, MD (Panel Member, Humana, Inc.)
 David Stumpf, MD (Panel Member, UnitedHealth Group, Inc.)
 Rebecca Kresowik (Panel Member, Methodologist)
 Rebecca Swain-Eng, MS (American Academy of Neurology Staff)
 Sarah Tonn, MPH (American Academy of Neurology Staff)

Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward: N/A

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 Year the measure was first released: 2010

Ad.4 Month and Year of most recent revision: 11, 2010

Ad.5 What is your frequency for review/update of this measure? Every 3 years

Ad.6 When is the next scheduled review/update for this measure? 01, 2013

Ad.7 Copyright statement: ©2009 American Academy of Neurology. All rights reserved. AAN BOD approved 12.21.09.

Ad.8 Disclaimers: 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.

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Ad.9 Additional Information/Comments:

Date of Submission (MM/DD/YY): 07/13/2012