

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 #: 1988 NQF Project: Neurology Project
(for Endorsement Maintenance Review) Original Endorsement Date: Most Recent Endorsement Date: Last Updated Date: Oct 21, 2015
BRIEF MEASURE INFORMATION
De.1 Measure Title: Parkinson's Disease Rehabilitative Therapy Options
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 rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.
2a1.1 Numerator Statement: Patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually.
2a1.4 Denominator Statement: All patients with a diagnosis of Parkinson's disease.
2a1.8 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).
1.1 Measure Type: Process 2a1. 25-26 Data Source: Administrative claims, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry 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● M● L● I●**

(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](#)

1a.1 Demonstrated High Impact Aspect of Healthcare: [Affects large numbers](#), [A leading cause of morbidity/mortality](#), [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 maximise 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.¹

Parkinson's disease is a neurodegenerative disorder due to the depletion of dopamine in the basal ganglia, with progressive reduction in the speed and amplitude of movements. Freezing of gait is a disorder in which patients are unable to initiate or continue locomotion. This phenomenon is frequent in patients with Parkinson's disease and can be very disabling because it impairs mobility and restricts independence.

Freezing

is one of the causes of falls in patients with Parkinson's disease and occurs in various situations: when starting to walk, during turning, when approaching a narrow space, and just before reaching destination.²

The freezing phenomenon is very difficult to treat. The pharmacological treatment is usually disappointing: whereas patients with freezing in "off" states can gain benefit from an increase in levodopa dosage, this was not observed in patients with freezing in "on" states.²

Rehabilitation is a possible treatment for gait disorders in patients with Parkinson's disease. Many studies have shown the efficacy of rehabilitation at improving specific impairments and functional limitations in individuals with Parkinson's disease. In particular, they have shown the efficacy of auditory (musical beats) and visual (white lines) cues.³⁻⁷ Treadmill training, with or without partial body-weight support, also seems promising in the restoration of gait patterns.²

PD is a chronic disorder and despite existing optimal medical and surgical therapies, patients develop progressive disability (Mehrholtz et al., 2010; Deane et al., 2009). Although pharmacological treatment is the main stream of treatment of these patients, they require broad based management including education, exercise, nutrition, general wellness maintenance and support service (Wade et al., 2003). There is now a substantial body of evidence to support effectiveness of rehabilitation following PD, and the place for rehabilitation in PD is well established amongst service planners and providers. Rehabilitation has the potential to reduce the care burden both for family and for society, and associated costs of care by

improving independence and autonomy.

Despite availability of health service frameworks that promote rehabilitation for persons with long term neurological conditions (LTNC) such as PD; and clinical guidelines and standards, gaining access to appropriate rehabilitation services continues to be challenging. One reason for this is the relatively poor understanding of the specific benefits that may be derived from rehabilitation in the context of this neurological disease.³

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.

This measure would impact and benefit all patients diagnosed with Parkinson's disease. Parkinson's disease affects both men and women. The average age of onset of Parkinson's disease is 61, but it may begin as early as age 40 or even before. The number of people in the United States with Parkinson's disease is estimated to be between 500,000 and one million, with about 50,000 to 60,000 new diagnoses each year. That number is growing every year as the American population ages.

1a.4 Citations for Evidence of High Impact cited in 1a.3: 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. Giuseppe Frazzitta, MD, Roberto Maestri, MD, Davide Uccellini, MD, Gabriella Bertotti, MD, Paola Abelli, MD; Rehabilitation Treatment of Gait in Patients with Parkinson's Disease with Freezing: A Comparison Between Two Physical Therapy Protocols Using Visual and Auditory Cues With or Without Treadmill Training; Movement Disorders Vol. 24, No. 8, 2009, pp. 1139-1143

3. F. Khan, B. Amatya; Rehabilitation for Parkinson's disease: Analysis of the Australian rehabilitation outcomes dataset; Journal of Clinical Medicine and Research Vol. 3(1), pp. 1-8 January 2011

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

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:

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.

Rehabilitation is a possible treatment for gait disorders in patients with Parkinson's disease. Many studies have shown the efficacy of rehabilitation at improving specific impairments and functional limitations in individuals with Parkinson's disease. In particular, they have shown the efficacy of auditory (musical beats) and visual (white lines) cues. Treadmill training, with or without partial body-weight support, also seems promising in the restoration of gait patterns.

In this study of patients with Parkinson's disease who underwent two different types of rehabilitation programs, both groups of patients showed a significant improvement of gait and freezing after the rehabilitation treatment. These results are in agreement with those of previous studies on the use of rehabilitation protocols for gait. However, patients treated with treadmill training and auditory and visual cues (Group 1) had better results at the end of treatment. In particular, patients in Group 1 showed statistically significant better improvements in FOGQ score, distance walked in the 6-minute walking test, gait speed and stride cycle.

<http://www.udel.edu/PT/PT%20Clinical%20Services/journalclub/noajc/10-11/Rehab%20Treat%20of%20gait%20in%20Patients%20with%20PD%20with%20freezing%20-%20A%20comparison%20between%20%20PT%20protocols%20.pdf>

There is growing evidence that individuals with mild to moderate Parkinson's disease can benefit from treatment that targets flexibility, strengthening and cardiovascular conditioning

<http://my.clevelandclinic.org/rehab-sports-therapy/treatments-services/parkinsons-disease-rehabilitation.aspx>

Exercise may be helpful in improving motor function. 5. Speech therapy may be helpful in improving speech volume. 6.

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

Disorders of posture, balance, and gait are debilitating motor manifestations of advancing Parkinson's disease requiring rehabilitation intervention. These problems often reflect difficulties with coupling or sequencing posture and locomotion during complex whole body movements linked with falls. Considerable progress has been made with demonstrating the effectiveness of exercise interventions for individuals with Parkinson's disease. However, gaps remain in the evidence base for specific interventions and the optimal content of exercise interventions. Using a conceptual theoretical framework and experimental findings, this perspective and review advances the viewpoint that rehabilitation interventions focused on separate or isolated components of posture, balance, or gait may limit the effectiveness of current clinical practices. It is argued that treatment effectiveness may be improved by directly targeting posture and locomotion coupling problems as causal factors contributing to balance and gait dysfunction. This approach may help advance current clinical practice and improve outcomes in rehabilitation for persons with Parkinson's disease.²

There are different forms of occupational/physical therapy and several have been reported to be beneficial to Parkinson's disease patients, therefore, comparative trials must be conducted to establish if one can be recommended over another. Additional areas of research include development of validated research tools, and overcoming the difficulties of adequate blinding, and placebo effects. Neuroimaging studies examining patients before and after physical/occupational therapy will help define the anatomical basis of physical impairments in Parkinson's disease that respond to physical/occupational therapy.³

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.⁴

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. Marie-Laure Mille, Robert A. Creath, Michelle G. Prettyman, Marjorie Johnson Hilliard, Katherine M. Martinez, Colum D. MacKinnon, Mark W. Rogers; Posture and Locomotion Coupling: A Target for Rehabilitation Interventions in Persons with Parkinson's disease; Parkinson's Disease Volume 2012 (2012), Article ID 754186
3. Anthony E. Lang, MD, Andrew Lees, MD; Management of Parkinson's Disease: An Evidence-Based Review; Movement Disorders, Vol. 17, Suppl. 4, 2002, p. i
4. 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 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.¹

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. 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 checked="" type="radio"/>
L	M-H	M	Yes <input checked="" 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 checked="" 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 <input checked="" type="radio"/> IF rationale supports relationship
<p>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):</p> <p>Discussing rehabilitative therapy options with the patient will lead to appropriate treatment/therapy for the patient, which will lead to improved patient mobility and quality of life. It is believed there is a benefit to PD patients receiving rehabilitative therapies to assist with issues such as gait that are typically present in this patient population, in order to provide full benefit these patients should be identified early in their disease to receive such therapies.</p> <p>As most patients will develop some type of gait disorder at some point in their disease progression it is important for providers to recognize when rehabilitative therapies should be offered, for this reason it is important for the physician to discuss periodically the utility of such therapies.</p> <p>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 NQH 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.</p> <p>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</p> <p>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): Identify any differences from the measure focus and measure target population: not applicable</p> <p>1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): 1 guideline recommendation statements and 1 indicators were used as the basis for this quality measure.</p> <p>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:</p>			

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)

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

Primary Evidence:

A Cochrane systematic review³⁶⁸ and an RCT³⁶⁹ were found which addressed the effectiveness of physiotherapy versus standard therapy or placebo in the treatment of PD. Another study was found which addressed the effectiveness of the Alexander Technique versus no therapy or massage therapy.

The physiotherapy RCT³⁶⁹ (N=8) investigated the effect of a 16-week aerobic exercise programme on aerobic capacity and movement initiation time for PD.

The Alexander Technique RCT³⁷⁰ (N=88) randomised participants to three groups: controls (N=30) or Alexander Technique (N=29) or massage group (N=29). The massage group received two massage sessions per week for 12 weeks (the massage group was used as control for touch and attention). The Alexander Technique consisted of two 40-minute lessons per week for 12 weeks, then 5 weeks after completion the participants received a short audio tape that led them through a 20-minute lying down exercise.

The Cochrane review included 11 randomised trials; four of these trials^{371–374} reported significant outcomes in relation to physiotherapy treatment for people with PD, with a total of 280 people. The participants in these trials received physiotherapy directed to trunk and limb functions and were treated for 8–30 hours over 3–52 weeks. The method of physiotherapy was usually described in a very broad manner; even the time spent by the therapist with the patient was not specified in half of these trials.

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 (see Table 10.1).

Recommendation:

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 and appropriate intervention. (Level D) NICE GL35 (Jun 2006)

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

Primary Evidence:

A Cochrane review³⁷⁹ was found on the effectiveness of OT versus placebo (or no interventions) in people with PD. The review included two randomised, parallel group trials, with a total of 84 people (N=64380 and N=20381).

There were significant differences between the methodologies of the two studies. One trial conducted 20 hours of treatment over 5 weeks with 1-year follow-up while the other trial conducted 12 hours of treatment over 1 month with no follow-up. The methodological limitations of these studies are covered in section 10.3.

Due to the lack of RCT evidence, papers with lower-level study designs (eg non-randomised and/or uncontrolled trials) were also included in the search, but no further papers were found which addressed the

effectiveness of OT in the treatment of people with PD.

In view of the methodological flaws in the trials and the small numbers of randomized participants, and only one outcome measure reported from one trial, there is insufficient evidence to support the efficacy of OT interventions in PD. However, the GDG support the value of many of the aspects of this therapy, particularly with respect to the provision of aids and adaptations to maintain functional independence in people with PD. There is evidence to support this from one trial where there was maintenance of ADL scores in the treated group but a decline in those not treated. Further trials are required to evaluate the role of different aspects of OT.

Despite this lack of evidence, the experience of the GDG members supports the use of OT interventions in people with PD. It is recognised that, in practice, some of these interventions may be carried out by health professionals other than occupational therapists.

Recommendation:

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)

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

Primary Evidence:

A systematic review³⁸⁷ was found which addressed the efficacy of speech and language therapy versus standard medical therapy in people with PD.

The review included three RCTs,^{384,388,389} with a total sample size of 63. One of these trials used the LSVT technique,³⁸⁹ whereas the rest used the more conventional speech and language therapy techniques. No raw numerical data were available from one of these studies, so data on only 41 participants were available from the review's³⁸⁷ analysis. Another included study showed the intervention groups differed significantly from one another at baseline on a number of outcome measures, but no further analysis was provided.

There were significant differences in the intensity of the speech and language therapy intervention between studies. One trial³⁸⁸ treated participants for 10 hours over 4 weeks, another trial provided treatment for 16 hours over 4 weeks and a third trial treated people for 35–40 hours over 2 weeks.

With respect to the assessment of speech impairment:

_ One study³⁸⁸ found total impairment with the Frenchay Dysarthria Assessment improved in the intervention group compared with the placebo ($p<0.05$), showing an overall improvement in the dysarthria score, while all participants in the untreated group showed lower scores with a significant deterioration ($p<0.05$).

_ Another study³⁸⁴ reported that the scores of the Dysarthria Profile were comparable at baseline, but immediately after therapy the scores were significantly higher in the treatment group ($p<0.05$).

With respect to vocal loudness:

_ In two trials objective loudness improved by 11 dB³⁸⁸ and by 5.4 dB³⁸⁹ ($p<0.005$) immediately after therapy.

_ This gain was reduced by 3.5 dB³⁸⁹ after 6 months but was still significantly in favour of therapy ($p<0.05$).

_ Mean objective loudness of speech when the participants were asked to describe a picture improved by 5.2 dB ($p<0.025$) and this improvement was maintained over 6 months (4.2 dB, $p<0.02$).

_ The reading loudness of participants receiving LSVT was more than the placebo group immediately after therapy ($p<0.001$) and improvement was mostly maintained ($p<0.005$) at 6 months.

- _ Mean objective loudness improved when people were asked to give a prolonged 'a' (12.1 dB, $p < 0.001$) and this was mostly maintained (9.4 dB, $p < 0.001$) at 6 months.
- _ Maximum vocal loudness increased after therapy³⁸⁸ by 16 dB ($p < 0.01$).
- _ Mean pitch range increased in the therapy group by 66 Hz (162.7 to 228.3) and remained virtually static in the placebo group.

Recommendation:

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

2. Cheng E, Siderowf A, Swaztrauber 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)

Primary Evidence:

The ACOVE indicators on coordination of care and medication use were also highly ranked by the panel. Medical information on every VA patient is recorded in a single medical chart, allowing a VA provider to quickly review medical care rendered by another VA provider. The VA's electronic medical record system contains a link to the VA pharmacy record that shows an updated medication list for each patient. By comparing performances of these indicators in the VA with those found in two-managed care plans in which ACOVE has already been implemented, we can examine whether the features of an integrated electronic medical system are linked to better coordination of care and medication use.

Recommendation:

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)

3. 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.

Primary Evidence:

Five studies employed assessors of outcome that were masked to treatment allocation whereas one study used only objective, unmasked outcome measures. One study described concealed randomization, whereas alternate allocation was employed in three studies. One study did not describe allocation concealment.

The number of patients with PD enrolled ranged from 12 to 45. In the studies describing losses to follow-up, drop-out rates varied from 15% to 18% to 27%.

Because of important differences in baseline characteristics after treatment allocation and unmasked, non-objective, non-independent outcome assessment, we graded one study Class IV.⁵⁸ Because of nonconcealed treatment allocation or excessive losses to follow-up we graded three studies Class II. We classified one study Class I.

In both studies comparing the efficacy of different speech therapy modalities, the authors did not statistically compare changes in outcomes from one therapy to another. Thus, it is impossible to determine if one modality was superior to another.

In the two Class II studies comparing the effectiveness of speech therapy to no therapy, objective loudness

of treated patients significantly improved by 11 dB⁵⁹ and 5.4 dB.⁶⁰ This improvement lessened but remained significant (3.5 dB) at 6 months. These improvements are probably clinically important given that the average difference between objective speech loudness in patients with PD with dysarthria and healthy age-matched controls was 2.3 dB.

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 rehabilitative therapy options discussed at least 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: 1. American Academy of Neurology

Classification of evidence for therapeutic articles

Class I: Prospective, randomized, controlled clinical trial with masked outcome assessment, in a representative population. The following are required:

- a) Primary outcome(s) is/are clearly defined.
- b) Exclusion/inclusion criteria are clearly defined.
- c) Adequate accounting for drop-outs and cross-overs with numbers sufficiently low to have minimal potential for bias.
- d) Relevant baseline characteristics are presented and substantially equivalent among treatment groups or there is appropriate statistical adjustment for differences.

Class II: Prospective, matched, group cohort study in a representative population with masked outcome assessment that meets a-d above OR a RCT in a representative population that lacks one criterion a–d.

Class III: All other controlled trials including well-defined natural history controls or patients serving as own controls in a representative population, where outcome assessment is independently assessed or independently derived by objective outcome measurement (an outcome measure that is unlikely to be affected by an observer's [patient, treating physician, investigator] expectation or bias [eg, blood tests, administrative outcome data]).

Class IV: Evidence from uncontrolled studies, case series, case reports, or expert opinion.

Classification of recommendations

A _ Established as effective, ineffective, or harmful for the given condition in the specified population. (Level A rating requires at least two consistent

Class I studies.)

B _ Probably effective, ineffective, or harmful for the given condition in the specified population. (Level B rating requires at least one Class I study or at least two consistent Class II studies.)

C _ Possibly effective, ineffective, or harmful for the given condition in the specified population. (Level C rating requires at least one Class II study or two consistent Class III studies.)

U _ Data inadequate or conflicting given current knowledge, treatment is unproven.

NICE Grading

Rating Scheme for Strength of the Evidence

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

Ib-At least one randomized controlled trial

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

IIb-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

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Created on: 10/27/2015 at 06:43 AM

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 recommendation/indicator citation

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

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

Cheng E, Siderowf A, Swaztrauber 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)

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

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

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 and 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)

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)

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

AAN QSS Neuro Alt (April 2006) Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Created on: 10/27/2015 at 06:43 AM

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.

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 Guideline Development Work Group](#) [NICE Guideline Development work group](#)

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: [See recommendation/indicator citations](#)

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

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 rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least 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 Rehabilitative Therapy Options 4400F.

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 99306 99307 99308 99309

and

ICD-9 code: 332.0

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

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).

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*):

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

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

2a1.25 Data Source (Check all the sources for which the measure is specified and tested). If other, please describe:

[Administrative claims](#), [Electronic Clinical Data : Electronic Health Record](#), [Electronic Clinical Data : Registry](#)

2a1.26 Data Source/Data Collection Instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): [AAN 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 an Parkinson's disease module that includes this quality measure.

[CECity PQRI Wizard](#)

[Physician Quality Reporting System \(2012\) program measure](#)

[National Parkinson Foundation Registry](#)

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment: [URL](#)

<http://www.aan.com/practice/pip/>

2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:

URL

<http://www.aan.com/go/practice/quality/measurements>

2a1.33 Level of Analysis (Check the levels of analysis for which the measure is specified and tested):

Clinician : Individual

2a1.34-35 Care Setting (Check all the settings for which the measure is specified and tested): Ambulatory Care : Clinician Office/Clinic, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

2a2. Reliability Testing. (Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)

2a2.1 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

2a2.2 Analytic Method (Describe method of reliability testing & rationale):

N/A

2a2.3 Testing Results (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):

N/A

2b. VALIDITY. Validity, Testing, including all Threats to Validity: H ● M ● L ● I ●

2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) **are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:**

N/A

2b2. Validity Testing. (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

2b2.1 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

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):

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable

Created on: 10/27/2015 at 06:43 AM

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 meaningfully 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: CMS has not yet provided data on this measure which is in the 2012 PQRS program.

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/>

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 from 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.

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.

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
<p>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?</p> <p>5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:</p>
5b. Competing Measure(s)
<p>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 (<i>e.g., a more valid or efficient way to measure quality</i>); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):</p>

CONTACT INFORMATION
<p>Co.1 Measure Steward (Intellectual Property Owner): American Academy of Neurology, 201 Chicago Avenue, Minneapolis, Minnesota, 55415</p> <p>Co.2 Point of Contact: Amy, Bennett, abennett@aan.com, 612-928-6072-</p> <p>Co.3 Measure Developer if different from Measure Steward: American Academy of Neurology, 201 Chicago Avenue, Minneapolis, Minnesota, 55415</p> <p>Co.4 Point of Contact: Amy, Bennett, abennett@aan.com, 612-928-6072-</p> <p>Co.5 Submitter: Amy, Bennett, abennett@aan.com, 612-928-6072-, American Academy of Neurology</p> <p>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.</p> <p>Co.7 Public Contact: Rebecca, Swain-Eng, MS, rswaineng@aan.com, 612-928-6121-, American Academy of Neurology</p>

ADDITIONAL INFORMATION
<p>Workgroup/Expert Panel involved in measure development</p> <p>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and</p>

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.

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.

Ad.9 Additional Information/Comments:

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