



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

Brief Measure Information

NQF #: 0244

Corresponding Measures:

De.2. Measure Title: [Stroke and Stroke Rehabilitation: Rehabilitation Services Ordered](#)

Co.1.1. Measure Steward: [American Academy of Neurology](#)

De.3. Brief Description of Measure: [Percentage of patients aged 18 years and older with a diagnosis of ischemic stroke or intracranial hemorrhage for whom occupational, physical, or speech rehabilitation services were ordered at or prior to inpatient discharge OR documentation that no rehabilitation services are indicated at or prior to inpatient discharge](#)

1b.1. Developer Rationale: [Specifically, stroke rehabilitation programs are provided to optimize neurological recovery, teach compensatory strategies for residual deficits, teach activities of daily living \(ADLs\) and skills required for community living, and provide psychosocial and medical interventions to manage depression.](#)

S.4. Numerator Statement: [Patients for whom occupational, physical, or speech rehabilitation services were ordered at or prior to inpatient discharge OR documentation that no rehabilitation services are indicated at or prior to inpatient discharge](#)

S.7. Denominator Statement: [All patients aged 18 years and older with a diagnosis of ischemic stroke or intracranial hemorrhage](#)

S.10. Denominator Exclusions: [None](#)

De.1. Measure Type: [Process](#)

S.23. Data Source: [Claims, Electronic Health Records, Other, Registry Data](#)

S.26. Level of Analysis: [Clinician : Group/Practice, Clinician : Individual](#)

IF Endorsement Maintenance – Original Endorsement Date: [May 01, 2007](#) **Most Recent Endorsement Date:** [Nov 01, 2012](#)

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? [This measure is not included in a composite.](#)

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
[0244_Evidence_MSF5.0_Data.doc](#)

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure) Specifically, stroke rehabilitation programs are provided to optimize neurological recovery, teach compensatory strategies for residual deficits, teach activities of daily living (ADLs) and skills required for community living, and provide psychosocial and medical interventions to manage depression.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

Data from the BRFFS (CDC) 2005 survey on stroke survivors in 21 states and the District of Columbia found that 30.7% of stroke survivors received outpatient rehabilitation. The findings indicated that the prevalence of stroke survivors receiving outpatient stroke rehabilitation was lower than would be expected if clinical practice guideline recommendations for all stroke patients had been followed.(1)

CMS Physician Quality Reporting Initiative(2):

This measure was used in the 2007, 2008, 2009, 2010, 2011 and 2012 CMS Physician Quality Reporting Initiative/System. There is a gap in care as shown by this data; 50.64% of patients reported on did not meet the measure.

10th percentile: 0.00%
25th percentile: 25.00%
50th percentile: 50.00%
75th percentile: 85.71%
90th percentile: 100.00%

Exception Rate: This measure is not specified with exceptions.

CMS 2010 Reporting Experience(3)

Average Performance Rate per Eligible Professional

2009: 71.9%
2010: 69.7%

It is important to note that PQRS is currently a voluntary reporting program, with about 24% of eligible professionals participating in 2010, and performance rates may not be nationally representative.

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

1. Roger VL, Go AS, Lloyd-Jones DM, Benjamin EJ, et al. Heart Disease and Stroke Statistics-2012 Update: A Report from the American Heart Association. Circulation 2012;125:e2-e220.

2. Confidential CMS PQRI 2008 Performance Information by Measure. Jan-Sept TAP file

3. CMS 2010 Physician Quality Reporting System and eRx Experience Report. Accessed at: <http://www.CMS.gov/PQRS>.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

Information on access to rehabilitation services offers conflicting findings. Current evidence shows that minorities have equal access to rehabilitation services and that they have longer stays and poorer functional status than whites.(1)

Although the effects of other demographic factors such as socioeconomic status, educational level, and access to medical care have not been studied as thoroughly as race, some research does exist that suggests trends in disparate access to rehabilitation services. In the study by Ngo et al, the authors found that after an incident stroke, older patients received more monthly PT compared to

younger patients but they received less monthly OT. For both types of therapy, females received more than males, and patients who earned less than \$25,000 per year received more therapy than people who earned more than \$25,000 per year. As for education level, patients who had earned a high school diploma or less received more PT than people who had higher education, but education level did not affect the rate of OT use. Of all these results, however, the authors mentioned that the only statistically significant finding was that for monthly OT; earning less money makes a patient more likely to receive monthly therapy.(2)

Black stroke survivors had greater limitations in ambulation than did white stroke survivors, after adjustment for age, sex, and educational attainment but not stroke subtype, according to data from the NHIS (2000-2001, NCHS) as analyzed by the CDC. A national study of inpatient rehabilitation after first stroke found that blacks were younger, had a higher proportion of hemorrhagic stroke, and were more disabled on admission. Compared with non-Hispanic whites, blacks and Hispanics also had a poorer functional status at discharge but were more likely to be discharged to home rather than to another institution even after adjustment for age and stroke subtype. After adjustment for the same covariates, compared with non-Hispanic whites, blacks also had less improvement in functional status per inpatient day.(3)

After stroke, women have greater disability than men. A cross-sectional analysis of 5888 community-living elderly people (>65 years of age) in the CHS who were ambulatory at baseline found that women were half as likely to be independent in activities of daily living after stroke, even after controlling for age, race, education, and marital status. A prospective study from a Michigan-based stroke registry found that women had a 63% lower probability of achieving independence in activities of daily living 3 months after discharge, even after controlling for age, race, subtype, prestroke ambulatory status, and other patient characteristics.(3)

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

1. Cruz-Flores S, Rabinstein A, Biller J, Elkind MSV, et al. Racial-Ethnic Disparities in Stroke Care: The American Experience: A Statement for Healthcare Professionals From the American Heart Association/American Stroke Association. *Stroke* 2011;42:2091-2116.

2. Dowla N, Chan L. Improving Quality in Stroke Rehabilitation. *Top Stroke Rehabil* 2010;17(4):230-238.

3. Roger VL, Go AS, Lloyd-Jones DM, Benjamin EJ, et al. Heart Disease and Stroke Statistics-2012 Update: A Report from the American Heart Association. *Circulation* 2012;125:e2-e220.

1c. High Priority (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare

Affects large numbers, A leading cause of morbidity/mortality, Severity of illness

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.

List citations in 1c.4.

An estimated 7,000,000 Americans > or = 20 years of age have had a stroke. Overall stroke prevalence during this period is an estimated 3.0%.(1)

Stroke is the leading cause of serious long-term disability in the United States.(1)

In the NHLBI's FHS, among ischemic stroke survivors who were > or = to 65 years of age, these disabilities were observed at 6 months after stroke.

-50% had some hemiparesis

-30% were unable to walk without some assistance

-26% were dependent in activities of daily living

- 19% had aphasia
- 35% had depressive symptoms
- 26% were institutionalized in a nursing home(1)

After a stroke, 50% to 70% of patients regain functional independence; however, 15% to 30% of patients are permanently disabled and 20% require institutional care at 3 months after onset. Stroke rehabilitation involves a combined and coordinated use of medical, social, educational, and vocational measures for retraining individuals to reach their maximal physical, psychological, social, vocational, and avocational potential. (2)

1c.4. Citations for data demonstrating high priority provided in 1a.3

1. Roger VL, Go AS, Lloyd-Jones DM, Benjamin EJ, et al. Heart Disease and Stroke Statistics-2012 Update: A Report from the American Heart Association. *Circulation* 2012;125:e2-e220.
2. Schwamm LH, Pancioli A, Acker JE, Goldstein LB, et. al. Recommendations for the Establishment of Stroke Systems of Care : Recommendations From the American Stroke Association's Task Force on the Development of Stroke Systems. *Stroke* 2005;36:690-703.

1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)

2. Reliability and 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. ***Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.***

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):
Neurology, Neurology : Stroke/Transient Ischemic Attack (TIA)

De.6. Non-Condition Specific (check all the areas that apply):

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

The updated specifications for this measure are attached with this form. Additional measure information can be found at www.physicianconsortium.org.

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure Attachment:

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

No data dictionary Attachment:

S.3. For endorsement maintenance, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Patients for whom occupational, physical, or speech rehabilitation services were ordered at or prior to inpatient discharge OR documentation that no rehabilitation services are indicated at or prior to inpatient discharge

S.5. Time Period for Data (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

Once during each hospital stay during measurement period

S.6. 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, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Definition:

Rehabilitation Services – Includes services required in order to improve physical, cognitive (including neuropsychological), behavioral, and speech functions.

NUMERATOR NOTE: Rehabilitation order can include one or more of the services listed.

For Claims:

Rehabilitation Services Ordered

G8699: Rehabilitation services (occupational, physical, or speech) ordered at or prior to Discharge

OR

Documentation of Rehabilitation Services not Indicated at or Prior to Discharge

G8700: Rehabilitation services (occupational, physical, or speech) not indicated at or prior to discharge

For EHR:

eSpecification currently under development.

S.7. Denominator Statement (Brief, narrative description of the target population being measured)

All patients aged 18 years and older with a diagnosis of ischemic stroke or intracranial hemorrhage

S.8. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Elderly

S.9. Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

Patients aged = 18 years on date of encounter

AND

Diagnosis for ischemic stroke or intracranial hemorrhage (ICD-9-CM): 430, 431, 432.0, 432.1, 432.9, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91

Diagnosis for ischemic stroke or intracranial hemorrhage (ICD-10-CM): I60.00, I60.01, I60.02, I60.10, I60.11, I60.12, I60.20, I60.21, I60.22, I60.30, I60.31, I60.32, I60.4, I60.50, I60.51, I60.52, I60.6, I60.7, I60.8, I60.9, I61.0, I61.1, I61.2, I61.3, I61.4, I61.5, I61.6, I61.8, I61.9, I62.00, I62.01, I62.02, I62.03, I62.1, I62.9, I63.00, I63.011, I63.012, I63.019, I63.02, I63.031, I63.032, I63.039, I63.09, I63.10, I63.111, I63.112, I63.119, I63.12, I63.131, I63.132, I63.139, I63.19, I63.20, I63.211, I63.212, I63.219, I63.22, I63.231, I63.232,

I63.239, I63.29, I63.30, I63.311, I63.312, I63.319, I63.321, I63.322, I63.329, I63.331, I63.332, I63.339, I63.341, I63.342, I63.349, I63.39, I63.40, I63.411, I63.412, I63.419, I63.421, I63.422, I63.429, I63.431, I63.432, I63.439, I63.441, I63.442, I63.449, I63.49, I63.50, I63.511, I63.512, I63.519, I63.521, I63.522, I63.529, I63.531, I63.532, I63.539, I63.541, I63.542, I63.549, I63.59, I63.6, I63.8, I63.9

AND

Patient encounter during the reporting period (CPT): 99221, 99222, 99223, 99231, 99232, 99233, 99234, 99235, 99236, 99238, 99239

For EHR:
eSpecification currently under development

S.10. Denominator Exclusions (Brief narrative description of exclusions from the target population)

None

S.11. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

N/A

S.12. Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)

We encourage the results of this measure to be stratified by race, ethnicity, primary language, and administrative sex.

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification

If other:

S.14. Identify the statistical risk model method and variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

Not applicable

S.15. Detailed risk model specifications (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

S.15a. Detailed risk model specifications (if not provided in excel or csv file at S.2b)

S.16. Type of score:

Rate/proportion

If other:

S.17. 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)

Better quality = Higher score

S.18. 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.)

To calculate performance rates:

- 1) Find the patients who meet the initial patient population (ie, the general group of patients that the performance measure is designed to address).
- 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.
- 3) From the patients within the denominator, find the patients who qualify for the numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
- 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator exception when exceptions have been specified [for this measure: medical reason(s)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. –Although exception cases are removed from the denominator population for the performance calculation, the number of patients with valid exceptions should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

S.20. Sampling *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

Not applicable. The measure does not require sampling or a survey.

S.21. Survey/Patient-reported data *(If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)*

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

S.22. Missing data (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

S.23. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*

If other, please describe in S.24.

Claims, Electronic Health Records, Other, Registry Data

S.24. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)*

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

Not applicable

S.25. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

S.26. Level of Analysis *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*

Clinician : Group/Practice, Clinician : Individual

S.27. Care Setting *(Check ONLY the settings for which the measure is SPECIFIED AND TESTED)*

Inpatient/Hospital

If other:

S.28. COMPOSITE Performance Measure - Additional Specifications *(Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)*

2a. Reliability – See attached Measure Testing Submission Form

2b. Validity – See attached Measure Testing Submission Form

[0244_MeasureTesting_MS5.0_Data.doc](#)

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

[generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition](#)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields? *(i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)*

[ALL data elements are in defined fields in electronic health records \(EHRs\)](#)

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.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.

IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.

[This measure was found to be reliable and feasible for implementation.](#)

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Planned	Current Use (for current use provide URL)
Public Reporting	
Quality Improvement (Internal to the specific organization)	

4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

4b. Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)
- Geographic area and number and percentage of accountable entities and patients included

4b.2. If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4c. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for

individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.

We are not aware of any unintended consequences related to this measurement.

5. Comparison to Related or 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.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0441 : STK-10: Assessed for Rehabilitation

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications completely harmonized?

No

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

This measure is more specific regarding the types of rehabilitation services, which are most appropriate and beneficial to the stroke population. The order can also include one or more of the services listed in the measure, as oftentimes, stroke patients require rehabilitation in several areas.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses 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.)

This measure is more specific in including and defining the types of rehabilitation services which may be ordered for stroke patients. This measure also notes that the order for rehabilitation services can include one or more of the services listed.

Additionally, our measure is specified at the clinician level, but measure results can be aggregated at a higher level of measurement.

We have developed and will maintain specifications for multiple data sources, including Electronic Health Records (EHRs) and

Claims-Based Reporting. Our specifications for EHRs are developed in accordance with the terminology standards (eg, SNOMED, RxNorm, LOINC) named in the Meaningful Use Program (CMS EHR Incentive Program).

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

Attachment:

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): American Academy of Neurology

Co.2 Point of Contact: Amy, Bennett, abennett@aan.com, 612-928-6072-

Co.3 Measure Developer if different from Measure Steward: American Academy of Neurology

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Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

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

List of Work Group Members:

Joseph Drozda, Jr., MD (Co-Chair) (methodology)

Robert G. Holloway, MD, MPH (Co-Chair) (neurology)

David Seidenwurm, MD (Co-chair) (neuroradiology)

David N. Alexander, MD (neurology, vascular neurology, spinal cord injury)

M. Carolyn Baum, PhD, OTR/L (occupational therapy)

Christopher Bever, Jr., MD, MBA (neurology)

Thomas P. Bleck, MD, FCCM (internal medicine, critical care, neurology, vascular neurology, clinical neurophysiology)

John Y. Choi, MD, MPH (neurology)

Janet Y. Forbes, MD (internal medicine)

Millie Hepburn-Smith, MSN, RN, ACNS-BC (neuroscience nursing)

Judith Hinchey, MD, MS (neurology)

Peggy Jones (patient representative)

Irene Katzan, MD (neurology)

Adam Kelly, MD (neurology)

Rahul K. Khare, MD, MS, FACEP (emergency medicine)

Michael Lev, MD (radiology)

David Likosky, MD, SFHM (neurology, internal medicine, vascular neurology)

Constantine Moschonas, MD (neurology)

Suresh Mukherji, MD, FACR (neuroradiology)

Robert C. Mullen, MPH (speech-language pathology)

Charles Prestigiacomo, MD (neurological surgery)

Eric Russell, MD, FACR (radiology/neuroradiology)

Pina C. Sanelli, MD, MPH (radiology/neuroradiology)

Daniel Triezenberg, MD (family medicine)

Patrick Turski, MD, FACR (neuroradiology)

Richard Zorowitz, MD (physical medicine and rehabilitation)

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the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2006

Ad.3 Month and Year of most recent revision: 05, 2012

Ad.4 What is your frequency for review/update of this measure? Please see section Ad.9

Ad.5 When is the next scheduled review/update for this measure? 09, 2013

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