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Neurology, Spring 2021 Cycle: CDP Report

DRAFT REPORT FOR COMMENT
AUGUST 27, 2021

This report is funded by the Centers for Medicare & Medicaid Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001.

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Contents

Executive Summary

Neurological conditions are disorders that affect the brain and the nerves. From 1990 to 2017, the Global Burden of Disease Study found the three most burdensome neurologic conditions in the United States (U.S.): stroke, Alzheimer's disease and other dementias, and migraine headache. Additionally, due to an aging population, neurological disorders are increasing in prevalence, incidence, mortality, and disability-adjusted life years (DALYs).[1] The National Quality Forum (NQF) Neurology Standing Committee oversees the measurement portfolio used to improve the quality of care for neurological conditions. This portfolio includes measures for stroke, subarachnoid and intracerebral hemorrhage, dementia, and carotid stenosis. The information regarding NQF's most recent Neurology Standing Committee meeting, as well as previous meetings, is available on NQF's project webpage.

For the spring 2021 cycle, the Standing Committee evaluated one newly submitted measure and one measure undergoing maintenance review against NQF's standard evaluation criteria.

The Standing Committee did not reach consensus on the following maintenance measure:

- **NQF #0507** Diagnostic Imaging: Stenosis Measurement in Carotid Imaging Reports (American College of Radiology)

The Standing Committee did not recommend the following new measure:

- **NQF #3614** Hospitalization After Release With Missed Dizzy Stroke (Johns Hopkins Armstrong Institute of Patient Safety and Quality)

Overarching issues discussed by the Standing Committee included issues with evidence and measure scientific acceptability, which were concerns in both measures. Brief summaries of the measures currently under review are included in the body of the report; detailed summaries of the Standing Committee's discussion and ratings of the criteria for each measure are in Appendix A.

Introduction

Neurological conditions are disorders that affect the brain and the nerves found throughout the body and spinal cord. The Global Burden of Disease study found the three most burdensome neurological conditions in the U.S.: stroke, Alzheimer's and other dementias, and migraine headache. Additionally, the study found that due to an increasingly aging population, many neurological disorders are rising in prevalence, incidence, and mortality as well as increasing in DALYs.[1]

According to the American Academy of Neurology, a variety of quality measures exist that are related to the structure, process, and outcomes for neurological disorders, including epilepsy, child and geriatric neurology, headache, movement disorders, multiple sclerosis, neuromuscular disorders, and stroke.[2] NQF's Neurology Standing Committee assesses new and existing measures related to brain and spinal conditions brought by measure developers for endorsement.

For the spring 2021 cycle, the NQF Neurology project evaluated one new measure and one maintenance measure. The new measure assessed the rate of missed stroke in emergency departments (EDs) when patients present themselves with dizziness, which is a nonspecific symptom. The maintenance measure correlated to the appropriate measurement of carotid stenosis (i.e., a narrowing of the carotid artery) by radiologists on imaging studies, including computed tomography (CT), angiography, ultrasound, and magnetic resonance imaging (MRI). Proper carotid artery measurement is important in assessing eligibility for evidence-based interventions, such as carotid endarterectomy, which can reduce the risk of stroke.[3]

Stroke

The neurological condition that causes the highest long-term disability is stroke. In 2017, stroke was found to be the most burdensome neurologic condition in the U.S. with 3.58 million DALYs and was also the fifth leading cause of death, causing 146,383 deaths. Every year, more than 795,000 Americans suffer a stroke. Stroke-related costs in the U.S. were estimated at $46 billion between 2014 and 2015.

Historically, stroke has had few treatments. Yet today, treatments including intravenous and intra-arterial thrombolysis, clot retrieval, and other technologies have revolutionized stroke care.[4,5] While many strokes present with classic symptoms, such as arm and leg weakness or aphasia (i.e., difficulty speaking), some strokes present with more minor symptoms, including dizziness. This is difficult for clinicians to diagnose because many conditions—mostly benign—cause dizziness. Missed stroke is a leading cause of diagnostic errors and can cause serious harm.[6] This is because missed stroke patients are not offered timely treatment and may go on to have additional, potentially preventable strokes that are more serious or potentially lethal.[7]

Carotid Stenosis

Approximately 87 percent of all strokes are ischemic strokes, in which blood flow to the brain is blocked.[7] A major cause of ischemic stroke is large blood vessel atherosclerosis, or the development of plaques in vessels, particularly the carotid arteries, which travel through the neck and brain. In 2005, the annual rate of strokes attributed to stenosis of the carotid artery was 13.4 per 100,000 persons.[8] When carotid stenosis is identified, particularly when it is causing stroke symptoms, treatment options (e.g.,

endarterectomy or stenting, anti-platelet medication) can be used to help reduce the risk of future stroke.[9]

NQF Portfolio of Performance Measures for Neurologic Conditions

The Neurology Standing Committee (Appendix C) oversees NQF's portfolio of Neurology measures (Appendix B), which includes measures for stroke, subarachnoid and intracerebral hemorrhage, dementia, and carotid stenosis. This portfolio contains 14 measures, and all 14 are process measures (see Table 1 below). There are no endorsed outcome, resource use, or composite measures.

Table 1. NQF Neurology Portfolio of Measures

Measure Portfolio	Process
Stroke	10*
Subarachnoid and Intracerebral Hemorrhage	2
Dementia	1
Carotid Stenosis	1
Total	14

*Six of these measures are currently NQF-endorsed with reserve status. *Reserve status* means that the measures are inactive because the last endorsement process did not identify a persistent performance gap.

Neurology Measure Evaluation

On June 21, July 15, and July 19, 2021, the Neurology Standing Committee evaluated one new measure and one measure undergoing maintenance review against NQF's standard measure evaluation criteria.

Table 2. Neurology Measure Evaluation Summary

Measure Summary	Maintenance	New	Total
Measures under consideration	1	1	2
Measures where consensus is not yet reached	1	0	1
Measures not recommended for endorsement	0	1	1
Reasons for not recommending		Importance – 1 Scientific Acceptability – 0 Feasibility – 0 Use and Usability – 0 Overall Suitability – 0 Competing Measure – 0	

Comments Received Prior to Standing Committee Evaluation

NQF accepts comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each

evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on April 22, 2021, and will close on September 27, 2021. As of June 10, 2021, two comments were submitted and shared with the Standing Committee prior to the measure evaluation meetings (Appendix F).

Overarching Issues

During the Standing Committee's discussion of the measures, two overarching issues emerged that were factored into the Standing Committee's ratings and recommendations for both measures under review and are not repeated in detail with each individual measure.

Concerns Over the Quality of the Evidence

For both measures, the Standing Committee raised concerns about the evidence presented by the developers. For outcome measures to pass the Standing Committee's review, a clear healthcare intervention that can improve the outcome must be present. For process measures to pass the Standing Committee's review, a clear linkage between the measured process and an important health outcome must also be present. The developer for the missed stroke measure (NQF #3614, an outcome measure) detailed interventions that could potentially be performed, such as physical examination maneuvers. However, the Standing Committee ultimately felt that this was not sufficient evidence to show that performing these examinations would reduce the risk of missed stroke in patients presenting with dizziness. For the carotid stenosis measure (NQF #0507, a process measure), the Standing Committee raised concerns about whether better measurement of carotid stenosis itself was linked to improved outcomes. The developer was unable to describe a clear linkage between the process measure and the outcome. Instead, a two-step evidence pathway was proposed, in which improved measurement would lead to a better selection of patients for interventions, which have been shown to improve outcomes. This led the Standing Committee to vote for insufficient evidence with exception due to the lack of this linkage between process and outcome.

Issues With Scientific Acceptability

For measures to receive NQF endorsement, they must be reliable, valid, and properly specified in order to be scientifically acceptable. Scientific acceptability concerns were raised in both measure discussions. Concerns were raised regarding the reliability of the missed stroke measure, particularly the importance of having sufficient observations to ensure the measure was reliable. Smaller hospitals may not achieve sufficient cases to generate a reliable measure. For NQF #0507, concerns were raised that empirical validity testing was not conducted (i.e.,, measure results are compared against another valid measure of a similar concept). While the developer did attempt to conduct empirical validity testing, they were ultimately unable to because they could not find a suitable comparator measure at the same level of analysis. The latter concern led to a "consensus not reached" vote for the measure.

Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Standing Committee considered. Details of the Standing Committee's discussion and ratings of the criteria for each measure are included in Appendix A.

Stroke

NQF #3614 Hospitalization After Release With Missed Dizzy Stroke (Johns Hopkins Armstrong Institute for Patient Safety and Quality): Not Recommended for Endorsement

Description: This outcome measure tracks the rate of patients admitted to the hospital for a stroke within 30 days of being treated and released from the ED with either a nonspecific, presumed benign symptom-only dizziness diagnosis or a specific inner ear/vestibular diagnosis (collectively referred to as *benign dizziness*). The measure accounts for the epidemiologic base rate of stroke in the population under study using a risk difference approach (observed [short-term rate] minus expected [long-term rate]). **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Emergency Department and Services; **Data Source**: Claims

To begin the Standing Committee's discussion during the meeting on June 21, 2021 (Day 1), the Standing Committee co-chair presented an overview of the measure, which tracks the rate of patients admitted to the hospital for a stroke within 30 days of being treated and released from the ED with either a nonspecific, presumed benign symptom-only dizziness diagnosis or a specific inner ear/vestibular diagnosis (collectively referred to as benign dizziness). The outcome measure accounts for the epidemiologic base rate of stroke in the population under study using a risk difference approach (observed [short-term rate] minus expected [long-term rate].

The developer stated that in the ED, missed stroke is an important cause of serious harm to patients. The most common medical presentation for these missed strokes is patients presenting with dizziness or vertigo because it is easily mistaken for inner ear disease. Each year, approximately 45,000 to 75,000 patients with stroke present themselves to the ED with dizziness or vertigo; the diagnosis for stroke is missed, and the patients are erroneously discharged. The measure is based on the Symptom-Disease Pair Analysis of Diagnostic Error (SPADE) conceptual framework, which averages the clinically sensible and biologically possible relationship between symptom and disease to identify a likely diagnostic error. The measure is calculated using the full Medicare Fee-for-Service (FFS) data set and a three-year reporting period analogous to the time frames that are used for Medicare mortality and readmission measures. The Medicare FFS data set represents 20 percent of the sample of patients with dizziness in any given ED. The developer explained that they limited analysis to larger EDs with at least 250 dizziness treat-and-release visits per year, which relates to about 80,080 total ED visits each year. The developer also described this measure as the first operationally viable performance measure of stroke misdiagnosis for the hospital setting.

The Standing Committee proceeded with discussion on the evidence criterion. First, a Standing Committee member described the collection of data to identify dizziness and stroke diagnoses by using the International Classification of Diseases, 10th Revision (ICD-10) codes was straightforward. However, the Standing Committee member expressed concerns about the ability of an intervention being performed to improve the measure. The developer first described the intervention of the Head Impulse, Nystagmus, Test of Skew (HINTS) examination battery, which can diagnose central dangerous causes of dizziness with high sensitivity and specificity. The HINTS examination, in conjunction with positional maneuvers (e.g., the Dix-Hallpike maneuver for Benign Positional Paroxysmal Vertigo [BPPV]), can assist in the diagnosis of the causes of underlying dizziness that do not need imaging. Another Standing Committee member commented that direct evidence of the use of the HINTS examination lowering

stroke rate does not appear to be presented. Rather, the literature shows that early diagnosis and interventions in stroke reduce the rates of strokes. The developer shared early clinical trial results, which showed that a Tele-Dizzy consult service was able to substantially improve the diagnosis of dizziness and eliminated the excess 30-day stroke hospitalizations from the baseline. The developer commented that consultation with a neurologist can also improve diagnostic accuracy for patients with dizziness, thus substantially increasing the yield of stroke diagnoses relative to the baseline and the accuracy of diagnoses for patients with inner ear disease. Additionally, the developer acknowledged that an area for opportunity exists among ED physicians regarding bedside diagnostic maneuvers, and the Society of Academic Emergency Medicine is currently working on guidelines for dizziness and bedside diagnostic maneuvers.

A few Standing Committee members expressed concerns with the appropriateness of the 30-day time frame and the potential for overdiagnosis. According to the developer, multiple studies show that when a patient is discharged with benign dizziness, their rate of stroke is much higher than the general population or other patients who were discharged from the ED with an unrelated diagnosis (e.g., abdominal pain). The developer also shared that they engaged a Technical Expert Panel (TEP) regarding the time frame. The developer acknowledged that a seven-day time frame could potentially provide increased precision; however, the numbers were low overall. Additionally, 30 days is often used for the Centers for Medicare & Medicaid Services' (CMS) metrics and provides face validity to ED physicians. For a 90-day time frame, it has less face validity for ED physicians, even though it is biologically accurate.

The Standing Committee also expressed concern about the incompleteness of using "dizziness" to capture all classifications of dizziness (e.g., also considering syncope, imbalance, and vertiginous). One Standing Committee member shared a recent study published in the *Academic Emergency Medicine* journal in April 2021, which showed that the HINTS examination did not identify a single central cause of stroke in 2,000 patients; there were also patients who experienced missed posterior circulation strokes. The Standing Committee member noted that this was similar to his clinical experience in which patients present themselves with intense nausea and vomiting with vertigo; however, dizziness is not a main designation, which is concerning with regard to the numerator and denominator for the measure. According to the developer, studies have shown that differentiating between different symptoms (e.g., dizziness, syncope, vertigo, unsteadiness, etc.) does not adequately differentiate between the different causes of underlying dizziness. The developer acknowledged the possibility for a patient with a missed stroke to present themselves with syncope and not be coded for dizziness. From a quality improvement standpoint, however, having a symptom-specific approach is more actionable than a more general approach to stroke misdiagnosis.

Additionally, a Standing Committee member expressed concern about the generalizability of the intervention, as few EDs have neurologists available at the bedside for consultation to perform the assessments that could have an impact on this measure. The developer highlighted that proper bedside examination is highly effective in diagnosing patients with dizziness, at accurately diagnosing peripheral inner ear diseases, and accurately diagnosing stroke. The developer also acknowledged the low accuracy of performing the examinations effectively among ED physicians; nonetheless, careful training can be effective. Additionally, the developer shared that other clinicians, in addition to neurologists (e.g., a vestibular physical therapist), may be able to assist in these examinations. The developer mentioned that

there are currently no quality improvement initiatives for improving the diagnosis of dizziness because there is no way to measure performance.

The Standing Committee proceeded with a discussion on performance gap. The Standing Committee expressed recognition of the existing gap for missed stroke diagnosis. They also acknowledged the presented evidence for disparities, particularly for African Americans (i.e., greater frequency of all missed stroke as well as greater frequency of stroke) and younger patients (i.e., frequently have under-recognized stroke). The Standing Committee did not express concerns for the performance gap criterion.

The Standing Committee then began a discussion on reliability. The Scientific Methods Panel (SMP) evaluated the measure in March 2021 (SMP Meeting Summary) and passed the measure on reliability with a moderate rating. A Standing Committee member shared the SMP's concerns about the case minimum needed for the measure and expressed concern with the measure's lack of reliability for hospitals with less than 250 cases. The Standing Committee member also questioned whether the interquartile range of 0.590 for the median reliability was sufficient. The developer reminded the Standing Committee that they used Medicare FFS data, which represent 20 percent of the overall patient population; however, if they had access to all ED discharges from every hospital, they would be able to calculate a more precise measure. The developer shared data from large and small hospitals, highlighting that hospital variability can be measured if sufficient events are available. One Standing Committee member mentioned that the use of Medicare data skews the data towards an older average age group. This led to a discussion on the appropriateness of eliminating stroke misdiagnosis among the younger population. The developer shared that the risk of stroke misdiagnosis increases sevenfold for patients between the ages of 18 to 45 compared with patients over 75 years of age. Additionally, diagnostic interventions to improve the diagnosis of dizziness has an impact on young and older patients who are inappropriately irradiated by CT when their true diagnosis is benign positional vertigo.

Due to losing sufficient attendance to continue the meeting on Day 1, the Standing Committee did not complete their discussion on the reliability criterion. After the meeting, the Standing Committee received a recording of the meeting and submitted online votes for the evidence and performance gap criteria since those discussions were completed during Day 1. The Standing Committee did not pass the measure on evidence but did pass the measure on performance gap. Evidence is a must-pass criterion; therefore, the measure was not recommended for endorsement, and no additional discussion or voting occurred.

Carotid Stenosis

NQF #0507 Diagnostic Imaging: Stenosis Measurement in Carotid Imaging Reports (American College of Radiology): Consensus Not Reached

Description: This measure assesses the percentage of final reports for carotid imaging studies (e.g., neck magnetic resonance angiography [MRA], neck computerized tomographic angiography [CTA], neck duplex ultrasound, and carotid angiogram) performed that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. **Measure Type**: Process; **Level of Analysis**: Clinician: Individual; **Setting of Care**: Outpatient Services, Inpatient/Hospital; **Data Source**: Claims, Registry

The Standing Committee did not vote on the recommendation for endorsement at the meeting because the Standing Committee did not reach consensus on validity—a must-pass criterion. The Standing Committee will re-vote on the measure at the post-comment web meeting on October 27, 2021.

The Standing Committee co-chair started the discussion by introducing the measure during the meeting on July 15, 2021 (Day 2). This process measure assesses the percentage of final reports, including neck MRA, neck CT angiogram, neck duplex ultrasound, and carotid angiogram, that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement. The developer then provided an overview of the measure. This measure is intended to standardize the way carotid stenosis is measured, considering that this measurement is important in making clinical decisions about interventions for carotid stenosis, including surgery. Decreasing the variation in measurement is important to treatment planning. This measure has been NQF-endorsed since 2013 and has been used in quality improvement and public reporting since 2011. The developer then described the details of the measure submission. It was noted that this was a maintenance measure and that empirical validity testing is required for re-endorsement. The developer explained some of the issues they faced when generating the evidence for empirical validity. After trying to compare this measure with several other measures, the developer was ultimately unsuccessful in generating empirical validity. As a replacement to the empirical validity, an additional face validity survey was performed in November 2020; in addition, 82 percent of the Expert Panel agreed or strongly agreed that the measure was beneficial for quality measurement.

The Standing Committee proceeded with discussion on the evidence criterion. NQF staff outlined their preliminary analysis and described several comments received from the Standing Committee, stating they did not observe a relationship between the measure and any objective health outcome. As a result, the measure could be considered for passing with insufficient evidence with exception. The Standing Committee co-chair clarified that the insufficient evidence with exception could be considered if the Standing Committee felt that the measure would be beneficial to hold providers accountable for this measure in the absence of empirical evidence or if better measure performance increased the accuracy of selection for carotid endarterectomy.

A Standing Committee member highlighted the importance of the level of stenosis for symptomatic carotid stenosis and that assessing the risk in asymptomatic stenosis is being tested in the Carotid Revascularization and Medical Management for Asymptomatic Carotid Stenosis Trial (CREST-2) study. Therefore, the Standing Committee member thought that the measurement of asymptomatic stenosis was less critical than the measurement of symptomatic stenosis. Another Standing Committee member agreed it was a good idea to measure carotid stenosis for better stroke care. The co-chair added that the level of evidence supporting interventions for carotid stenosis was based on randomized trial data.

A Standing Committee member compared this measure to a previous measure evaluated by the Standing Committee about inpatient stroke mortality and questioned whether the evidence criterion assessment was different for new and maintenance measures. NQF staff clarified that the evidence criterion was assessed in the same way for both new and maintenance measures; however, for other criteria, such use being a must-pass criterion and the requirement for empiric validity were both different when evaluating maintenance measures. A separate Standing Committee member shared that

they thought support for this measure would be improved with any evidence of better performance having an impact on any objective outcome, such as unnecessary surgery. The developer was then asked whether any such data existed.

The developer referred to a study in the *New England Journal of Medicine*, in which visual inspection was used to assess stenosis; this study stated that it was difficult to generate such evidence linking measurement processes to outcomes. A Standing Committee member referred to the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) criteria about levels of evidence for diagnostic studies, in which two-step inference (i.e., the pairing of diagnostic studies and treatment studies) is commonly performed. The GRADE working group has noted several pitfalls with this approach. A Standing Committee member mentioned that accepting the two-step inference for this measure would be failing to hold the measure to the same standard the Standing Committee applied to previously evaluated measures. Another Standing Committee member expressed concern that approving this measure would result in penalizing people for not including carotid measurement in imaging reports; they also expressed that this requirement felt like a "stretch" based on the data presented by the developer. The developer commented that the Measure Applications Partnership (MAP) had previously taken the following approach: If a diagnostic test was an inclusion criterion for an effective treatment approach and was assessed rigorously, the diagnostic test was validated. The Co-chair clarified that this approach had not been formalized as a rule.

The Standing Committee inquired whether the performance gap discussion would be helpful in informing the evidence discussion. NQF staff described the performance gap data, which were submitted by the developer. According to these data, the rate appeared to have increased from 17 percent from when the measure was first being used to 97.7 percent in the most recent data. The developer clarified that the data provided in the submission initially included incorrect information; as a result, updated data was provided, which showed that the performance rate for individuals is between 75 to 80 percent. A Standing Committee member questioned the value of this performance gap because the measure had not objectively shown to be useful or specifically linked to any objective outcome. In particular, there were concerns regarding whether the increase in measure performance related to improved patient care. It was also mentioned that complications related to carotid stenosis surgery had decreased over the last decade; although this improvement could not be directly linked to this measure, it was opined that it may be indirectly correlated. Ultimately, the Standing Committee voted for insufficient evidence with exception due to the absence of empirical evidence but agreed that holding providers accountable for this measure is beneficial to patients.

The Standing Committee proceeded with additional discussion regarding the performance gap criterion and requested clarification of the submitted data. The developer clarified that group data were included in the initial submission but were later removed in the updated data to align with the measure's individual level of analysis. The Standing Committee requested additional clarification about the impact of removing the group data from the data set, particularly the number of physicians who were removed from the analysis. The developer reported that by removing the group data, the number of physicians in the analysis decreased by approximately 50 percent. Additionally, a Standing Committee member highlighted that the number of physicians included in the data analysis decreased each year, starting with over 3 million in 2012 to about 9,000 in 2015; they also questioned how performance can be

determined with this progressively smaller subgroup of physicians. The developer could not explain this large decline in the number of physicians because CMS provided the data set. Following this discussion, the Standing Committee voted and passed the measure on the performance gap criterion.

Next, the Standing Committee began their discussion on the scientific acceptability criteria, starting with reliability. A Standing Committee member clarified that the reliability being evaluated is the inclusion of the carotid stenosis measurement in imaging reports, not the accuracy of the measurement itself. Additionally, at the request of the Standing Committee, the developer provided additional explanation about the use of signal-to-noise ratio testing for reliability. There was no further discussion on reliability; the Standing Committee voted and passed the measure on reliability.

The Standing Committee proceeded with discussing the validity criterion and the lack of empirical validity testing, which is required for maintenance measures. The developer attempted construct validity testing by correlating results of this measure with other measures; however, they were unable to find suitable measures for this correlation within the same accountability program. The developer also attempted criterion validity testing using data at the population level but was unable to format the measures' data sets to perform empirical analysis. Additionally, the developer attempted to correlate the measure with Merit-Based Incentive Payment System (MIPS) #409 *Clinical Outcome Post Endovascular Stroke Treatment* and MIPS #413 *Door to Puncture Time for Endovascular Stroke Treatment*. However, while these measures were specified at the individual-clinician level, CMS was unable to provide the developer with the individual-level data since all submissions were done at the group level. The developer then performed a new face validity study in November 2020, which demonstrated that 82 percent of the Expert Panel either agreed or strongly agreed that this measure accurately distinguishes good from poor quality. NQF staff provided clarification about how the Standing Committee should evaluate the validity criterion, specifically that the Standing Committee should assess whether the developer had a reasonable approach to attempting empirical validity and whether it was sufficient to resort to face validity. Based upon this discussion, the Standing Committee voted and did not reach consensus on the validity criterion. A Standing Committee member asked the developer if they could have approached validity testing by auditing a sample number of charts outside of the measure's data set to demonstrate the accuracy of the method used to report. The developer stated they did not know this was an option for testing but that it could be possible. The Standing Committee strongly encouraged the inclusion of empirical validity in the next submission if endorsement is maintained.

During the meeting on July 19, 2021 (Day 3), the Standing Committee proceeded to discuss the feasibility criterion. The Standing Committee did not raise any concerns, although one comment was made about the process of chart abstraction being prone to errors. The co-chair clarified that data had been gathered on this measure for many years. It was also clarified that some data are collected from electronic fields, while others are manually abstracted from charts; in addition, it was also noted that the measure developer collects subscription fees.

The use criterion was discussed next. This measure is currently being used in a CMS accountability program and for quality improvement within the American College of Radiology (ACR) registries for public reporting. The Standing Committee raised no concerns on use.

The final Standing Committee discussion addressed the usability criteria. The Standing Committee did not identify any potential harms, and no concerns were raised.

Following the Day 3 meeting, the Standing Committee received a recording of the meeting and submitted online votes for the feasibility, use, and usability criteria. The Standing Committee passed the measure on feasibility, use, and usability. Since consensus was not reached on the validity criterion for this measure, the Standing Committee did not vote on overall suitability for endorsement. The Standing Committee will re-vote on validity during the post-comment call.

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Appendix A: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable

Vote totals may differ between measure criteria and between measures as Standing Committee members often have to join calls late or leave calls early. NQF ensures that quorum is maintained for all live voting. All voting outcomes are calculated using the number of Standing Committee members present during the meeting for that vote as the denominator. Denominator vote counts may vary throughout the criteria due to intermittent Standing Committee attendance fluctuation. The vote totals reflect members present and eligible to vote at the time of the vote. If quorum is not achieved or maintained during the meeting, the Standing Committee receives a recording of the meeting and a link to submit online votes. Voting closes after 48 hours with at least the number of votes required for quorum.

For the spring 2021 cycle, one Neurology Standing Committee member was recused because this member served as part of the measure development team for NQF #3614. Another Standing Committee member was also recused because this member served as part of the Expert Panel that assessed the face validity for NQF #0507.

During the Day 1 meeting, quorum (12 Standing Committee members) was not achieved. The Standing Committee discussed two criteria for one measure (i.e., the evidence and performance gap criteria for NQF #3614) before the meeting attendance fell below the required attendance for holding the meeting (50 percent of the full Standing Committee membership, nine members). After the Day 1 meeting, the full Standing Committee received a recording of the Day 1 meeting and voted for the two criteria discussed using an online voting tool. During the Day 2 meeting, quorum was met and maintained for the entirety of the meeting (15 out of 19 Standing Committee members attended Day 2), although some Standing Committee members were unable to attend the entirety of the meeting due to scheduling conflicts. The vote totals for the criteria discussed (i.e., evidence, performance gap, reliability, and validity for NQF #0507) reflect members present and eligible to vote at the time of the vote. During the Day 3 meeting, quorum was not achieved; nonetheless, sufficient attendance was maintained (12 out of 19 Standing Committee members attended Day 3, but one was recused from the evaluation of the measure; therefore, only 11 eligible Standing Committee members were in attendance) and the evaluation of the measure was completed (feasibility, use, and usability criteria for NQF #0507). After the meeting, the Standing Committee received a recording of the Day 3 meeting and voted for the three criteria discussed using an online voting tool.

Measure Where Consensus Is Not Yet Reached

NQF #0507 Diagnostic Imaging: Stenosis Measurement in Carotid Imaging Reports

Submission | Specifications

Description: This measure assesses the percentage of final reports for carotid imaging studies (i.e., neck magnetic resonance angiography [MRA], neck computerized tomographic angiography [CTA], neck duplex ultrasound, and carotid angiogram) performed that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement.

Numerator Statement: Final reports for carotid imaging studies that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement

Denominator Statement: All final reports for carotid imaging studies (i.e., neck MRA, neck CTA, neck duplex ultrasound, and carotid angiogram) performed

Exclusions: No denominator exclusions or denominator exceptions
Adjustment/Stratification: No risk adjustment or stratification
Level of Analysis: Clinician: Individual
Setting of Care: Outpatient Services, Inpatient/Hospital
Type of Measure: Process
Data Source: Claims, Registry Data
Measure Steward: American College of Radiology (ACR)

STANDING COMMITTEE MEETING [July 15, 2021, and July 19, 2021]

1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Total Votes: 15; H-0**; **M-1**; **L-0**; **I-9**

Evidence Exception: **Total Votes: 15; Yes-11; No-4 (11/15 – 73%, Pass Insufficient Evidence with Exception)**

1b. Performance Gap: **Total Votes: 14; H-0**; **M-9**; **L-3**; **I-2 (9/14 – 64%, Pass)**

Rationale:

- Moderate and severe stenosis (50-90% occlusion) of the carotid artery affects approximately 10% of the general population by their 8th decade and causes approximately 10% of strokes.
- The stroke risk associated with asymptomatic carotid stenosis (ACS) falls between 60-80% with medical treatment alone versus additional carotid endarterectomy (CEA). This improved stroke prevention efficacy also has implications for better outcomes for patients with symptomatic carotid stenosis (SCS).
- There is a significantly higher overall risk of stroke or death associated with carotid angioplasty/stenting than with CEA.
- The Standing Committee did not see a relationship between outcomes/quality of care with accurate versus inaccurate carotid measurement. However, multiple Standing Committee members expressed that the measurement of carotid stenosis was good for improving stroke care.
- The Standing Committee ultimately voted for insufficient evidence with exception due to the absence of empirical evidence but agreed that holding providers accountable for this measure is beneficial to patients.
- The developer provided data with performance rates increasing from 16.85 in 2012 to 74.97 in 2018.
- The Standing Committee questioned the developer's data because the original submission included data from both individual providers and groups. As the measure's level of analysis is for individuals, the group data were removed, and updated data were provided. When the group data were removed, the number of physicians included in the data analysis decreased by approximately 50%. The Standing Committee also highlighted that the number of physicians included in the data analysis decreased from about 3 million physicians in 2012 to about 9,000 in 2015 and questioned how performance could be determined.

2. Scientific Acceptability of Measure Properties: The measure is "consensus not reached" on the Scientific Acceptability criteria.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **Total Votes: 14; H-6**; **M-8**; **L-0**; **I-0 (14/14 – 100%, Pass)**

2b. Validity: **Total Votes: 15; M-7**; **L-5**; **I-3 (7/15 – 47%, Consensus Not Reached)**

Rationale:

- The beta-binominal model was used to assess the signal-to-noise ratio at the performance-score level. The overall mean reliability score was 0.9340, CI (0.99331, 0.99350).
- The Standing Committee had no concerns about reliability.
- The developer attempted construct validity by correlating the results of NQF #0507 with other measures but was unable to find suitable measures for this purpose within same accountability program.
- The developer also attempted criterion validity testing using data at the population level but was unable to format measures' data sets to perform an empirical analysis; while MIPS #409 and MIPS #413 were

specified at the individual-clinician level, the Centers for Medicare & Medicaid Services (CMS) was unable to provide the developer with individual level data because all submissions were done at the group level.
- The developer performed a new face validity study in November 2020, which demonstrated that 82.15% (23 members) of the panel either agreed or strongly agreed that this measure accurately distinguishes good from poor quality.
- Empirical validity testing is required for maintenance measures. However, the Standing Committee can assess whether the developer had a reasonable approach to attempting empirical validity and whether it was sufficient to resort to face validity.
- A Standing Committee member asked the developer if they could have approached validity testing by auditing a sample number of charts outside of the measure data set to demonstrate the accuracy of the method used to report. The developer stated they did not know that this was an option for testing but that it could be possible.
- The Standing Committee did not reach consensus on validity.

3. Feasibility: Total Votes: 13; H-5; M-8; L-0; I-0 (13/13 – 100%, Pass)

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- Data elements are abstracted from a record, some are in defined fields in electronic clinical data, and some elements are manually abstracted from the radiology report. The American College for Radiology (ACR) is working to enable artificial intelligence (AI) and natural language processing (NLP) in their data collection.
- Subscription fees are collected for use of this measure.
- The Standing Committee highlighted that chart abstraction is prone to errors; nonetheless, this measure has been used for a long time.
- The Standing Committee did not have any additional concerns regarding feasibility.

4. Usability and Use: The maintenance measure meets the Use subcriterion.

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

4a. Use**: Total Votes: 13; Pass-13; No Pass-0 (13/13 – 100%, Pass)**;

4b. Usability: **Total Votes: 13; H-2; M-11; L-0; I-0 (13/13 – 100%, Pass)**

Rationale:

- This measure is being used for accountability (i.e., CMS Payment Program for accountability and reimbursement) and public reporting (i.e., quality improvement within ACR registries).
- This measure has created more standardization for carotid imaging results while supporting increased communications between radiologists and referring physicians.
- The Standing Committee did not identify potential harms.
- The Standing Committee did not have any concerns regarding use or usability.

5. Related and Competing Measures

- No related or competing measures were noted.

6. Standing Committee Recommendation for Endorsement: Yes-X; No-X

Rationale:

-

7. Public and Member Comment

-

Measure Not Recommended

NQF #3614 Hospitalization After Release With Missed Dizzy Stroke

Submission

Description: This outcome measure tracks the rate of patients admitted to the hospital for a stroke within 30 days of being treated and released from the ED with either a nonspecific, presumed benign symptom-only dizziness diagnosis or a specific inner ear/vestibular diagnosis (collectively referred to as *benign dizziness*). The measure accounts for the epidemiologic base rate of stroke in the population under study using a risk difference approach (observed [short-term rate] minus expected [long-term rate]).
Numerator Statement: The number of ED index visits during the performance period that are followed within 30 days by an inpatient hospital admission to any hospital that ends in a primary diagnosis of stroke
Denominator Statement: Patients discharged from the ED with benign dizziness as the primary diagnosis code, counting a patient's first such discharge during the performance period (an "index visit") and all subsequent such discharges that fall outside a 360-day follow-up window from the previous qualifying "index visit"
Exclusions: No exclusions
Adjustment/Stratification: No risk adjustment or stratification
Level of Analysis: Facility
Setting of Care: Emergency Department and Services
Type of Measure: Outcome
Data Source: Claims
Measure Steward: Johns Hopkins Armstrong Institute of Patient Safety and Quality

STANDING COMMITTEE MEETING [June 21, 2021]

1. Importance to Measure and Report: The measure does not meet the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Total Votes: 13; Yes-4; No-9 (4/13 – 31%, No Pass)**

1b. Performance Gap: **Total Votes: 13; H-3**; **M-8**; **L-2**; **I-0 (11/13 – 85%, Pass)**

Rationale:

- This is intended to be a measure of patients who had a treat-and-release ED visit with a diagnosis of benign dizziness who were discharged and later had a stroke, with the suggestion being that the dizziness treat-and-release ED visit reflected a potentially missed stroke diagnosis.
- Dizziness is commonly misdiagnosed in the ED with rates as high as 80%.
- Patients hospitalized for stroke (about 190,000 admissions from 9 U.S. states in 2009) are more likely to have had a treat-and-release ED visit for so-called "benign" dizziness within the prior 14 days than those who have had an ED visit for a different chief complaint.
- Benign dizziness treat-and-release discharges from the ED (about 30,000 visits per year) are more likely to return for an inpatient stroke admission within the subsequent 30 days than a heart attack admission.
- The Standing Committee expressed concerns about the ability of an intervention (e.g., Head Impulse, Nystagmus, Test of Skew [HINTS] examination or positional maneuvers, such as Dix-Hallpike for Benign Positional Paroxysmal Vertigo) being performed to improve the measure as well as the lack of evidence to support that these particular interventions lower stroke rates.
- Some Standing Committee members expressed concern about the appropriateness of the 30-day time frame and a concern about the potential for overdiagnosis. The developer mentioned that they engaged a Technical Expert Panel (TEP) regarding the time frame, and overall, a period of 30 days provided face validity to ED physicians as is often used for other CMS metrics.
- The Standing Committee also expressed concern about the incompleteness of using "dizziness" to capture all classifications of dizziness (e.g., also considering syncope, imbalance, and vertiginous) and referenced an April 2021 journal article that showed that the HINTS examination did not identify a single central cause of stroke in 2,000 patients as well as patients who experienced missed posterior circulation strokes. According to the developer, studies have shown that differentiating between different symptoms (e.g.,

dizziness, syncope, vertigo, unsteadiness, etc.) does not adequately differentiate between the different causes of underlying dizziness.

- The Standing Committee additionally expressed concern about the generalizability of the intervention, as few EDs have neurologists available at the bedside for consultation to perform the assessments that could have an impact on this measure. The developer highlighted that proper bedside examination is highly effective in diagnosing patients with dizziness, at accurately diagnosing peripheral inner ear diseases, and accurately diagnosing stroke.
- The Standing Committee had no concerns regarding performance gap.
- Quorum was not present during the meeting, and online voting occurred for the evidence and performance gap criteria. The Standing Committee did not pass the measure on evidence; therefore, the measure was not recommended for endorsement.

2. Public and Member Comment

3. Consensus Standards Approval Committee (CSAC) Endorsement Decision: Yes-X; No-X (Month Date, Year: Not approved for endorsement)

The CSAC [upheld/did not uphold] the Standing Committee's decision to not recommend the measure for endorsement.

Appendix B: Neurology Portfolio—Use in Federal Programs[a]

NQF #	Title	Federal Programs: Finalized or Implemented as of June 30, 2021
0434*	STK 01: Venous Thromboembolism (VTE) Prophylaxis	N/A
0435*	STK 02: Discharged on Antithrombotic Therapy	Hospital Inpatient Quality Reporting (Implemented 2015) Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals (Implemented 2012)
0436*	STK 03: Anticoagulation Therapy for Atrial Fibrillation/Flutter	Hospital Inpatient Quality Reporting (Implemented 2015) Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals (Implemented 2012)
0437	STK 04: Thrombolytic Therapy	N/A
0438*	STK 05: Antithrombotic Therapy by End of Hospital Day Two	Hospital Inpatient Quality Reporting (Implemented 2015) Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals (Implemented 2012)
0439*	STK 06: Discharged on Statin Medication	Hospital Inpatient Quality Reporting (Implemented 2015) Medicare and Medicaid Promoting Interoperability Program for Eligible Hospitals and Critical Access Hospitals (Implemented 2012)
0441*	STK 10: Assessed for Rehabilitation	N/A
0507	Diagnostic Imaging: Stenosis Measurement in Carotid Imaging Reports	Merit-Based Incentive Payment System (MIPS) Program (Implemented 2018) Physician Compare (Implemented 2018)
0661	Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients Who Received Head CT or MRI Scan Interpretation Within 45 Minutes of ED Arrival	Care Compare (Implemented 2016) Hospital Outpatient Quality Reporting (Implemented 2012)
1952	Time to Intravenous Thrombolytic Therapy	N/A

[a] Per CMS Measures Inventory Tool as of June 30, 2021

NQF #	Title	Federal Programs: Finalized or Implemented as of June 30, 2021
2863	CSTK-06: Nimodipine Treatment Administered	N/A
2864	CSTK-01: National Institutes of Health Stroke Scale (NIHSS) Score Performed for Ischemic Stroke Patients	Merit-Based Incentive Payment System (MIPS) Program (Implemented 2018)
2866	CSTK-03: Severity Measurement Performed for Subarachnoid Hemorrhage (SAH) and Intracerebral Hemorrhage (ICH) Patients (Overall Rate)	N/A
2872e	Dementia: Cognitive Assessment	Medicaid Promoting Interoperability Program for Eligible Professionals (Implemented 2019) Merit-Based Incentive Payment System (MIPS) Program (Implemented 2018) Physician Compare (Implemented 2018)

*Endorsed With Reserve Status

Appendix C: Neurology Standing Committee and NQF Staff

STANDING COMMITTEE

David Tirschwell, MD, MSc (Co-Chair)
University of Washington, Harborview Medical Center
Seattle, Washington

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Executive Director, International Alliance for Pediatric Stroke
Charlotte, North Carolina

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Jonah Lewis
Administrative Assistant

Jesse Pines, MD, MBA, MSCE
Consultant

Appendix D: Measure Specifications

#0507 Diagnostic Imaging: Stenosis Measurement in Carotid Imaging Reports

STEWARD

American College of Radiology (ACR)

DESCRIPTION

Percentage of final reports for carotid imaging studies (neck magnetic resonance angiography (MRA), neck computerized tomographic angiography (CTA), neck duplex ultrasound, carotid angiogram) performed that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement

TYPE

Process

DATA SOURCE

Claims, Registry Data Not applicable

LEVEL

Clinician: Individual

SETTING

Inpatient/Hospital, Outpatient Services

NUMERATOR STATEMENT

Final reports for carotid imaging studies that include direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement

NUMERATOR DETAILS

Definition:

"Direct or indirect reference to measurements of distal internal carotid diameter as the denominator for stenosis measurement" includes direct angiographic stenosis calculation based on the distal lumen as the denominator for stenosis measurement OR an equivalent validated method referenced to the above method (e.g., for duplex ultrasound studies, velocity

parameters that correlate with anatomic measurements that use the distal internal carotid lumen as the denominator for stenosis measurement).

Numerator Instructions:

For duplex imaging studies the reference is indirect, since the degree of stenosis is inferred from velocity parameters and cross referenced to published or self-generated correlations among velocity parameters and results of angiography or other imaging studies which serve as the gold standard. In Doppler ultrasound, the degree of stenosis can be estimated using Doppler parameter of the peak systolic velocity (PSV) of the internal

carotid artery (ICA), with concordance of the degree of narrowing of the ICA lumen. Additional Doppler parameters of ICA-to-common carotid artery (CCA) PSV ratio and ICA end-diastolic velocity (EDV) can be used when degree of stenosis is uncertain from ICA PSV. (Grant et al, 2003)

Measure performance is met when study methodology is identified and findings are reported as a percentage or range of percentages of carotid stenosis. Documented findings of "No Stenosis" determined through NASCET or comparable methodology also meet measure performance. A short note can be made in the final report, such as:

A short note can be made in the final report, such as:

- "Severe left ICA stenosis of 70-80% by NASCET criteria" or
- "Severe left ICA stenosis of 70-80% by criteria similar to NASCET" or
- "70% stenosis derived by comparing the narrowest segment with the distal luminal diameter as related to the submitted measure of arterial narrowing" or
- "Severe stenosis of 70-80% - validated velocity measurements with angiographic measurements, velocity criteria are extrapolated from diameter data as defined by the Society of Radiologists in Ultrasound Consensus Conference Radiology 2003; 229;340-346".

In a small number of denominator cases the distal ICA may not be viewed (e.g. an innominate artery or common carotid injection). Performance would be met if there is documentation, for example, that indicates "stenosis measurements are made with reference to the distal lumen", as a matter of process and consistent practice method.

DENOMINATOR STATEMENT

All final reports for carotid imaging studies (neck MRA, neck CTA, neck duplex ultrasound, carotid angiogram) performed

DENOMINATOR DETAILS

This measure is to be submitted each time a carotid imaging study is performed during the performance period for all patients, regardless of age. There is no diagnosis associated with this measure. Eligible clinicians who provide the professional component of diagnostic imaging studies of the carotids will submit this measure.

Denominator Criteria (Eligible Cases) for Claims and Registry:

Patient procedure during the performance period (CPT): 36221, 36222, 36223, 36224, 37215, 37216*, 37217, 37218, 70498, 70547, 70548, 70549, 93880, 93882

DENOMINATOR NOTE: (*) Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs

EXCLUSIONS

No Denominator Exclusions or Denominator Exceptions

EXCLUSION DETAILS

None

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.

TYPE SCORE

Rate/proportion/better quality = higher score

ALGORITHM

To calculate performance rates:

1) Find the patients who meet the initial patient population (i.e., 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 (i.e., 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 (i.e., 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.

If the patient does not meet the numerator, this case represents a quality failure. 108475| 145989| 141015| 142351| 151468

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Appendix E: Related and Competing Measures

There are no related or competing measures for the measures evaluated by the Neurology Standing Committee during the spring 2021 cycle.

Appendix F: Pre-Evaluation Comments

Comments received as of July 16, 2021.

#3614 Hospitalization After Release With Missed Dizzy Stroke (H.A.R.M Dizzy-Stroke)

COMMENTER

Submitted by Donald May, Federation of American Hospitals

COMMENT

The Federation of American Hospitals (FAH) appreciates the opportunity to comment on this measure. While FAH supports the measure's focus of driving improvements in diagnostic accuracy, we are concerned that the measure may require additional exclusions and question if case minimums to ensure adequate reliability and risk adjustment are needed and whether the measure scores produce sufficient variation to make the results meaningful for accountability purposes. The FAH asks the Standing Committee to consider whether some exclusions, delineation of a case minimum, and possible risk adjustment would be appropriate for inclusion in this measure. For example, is it appropriate to hold a facility accountable for a possible missed diagnosis when an individual leaves against medical advice (AMA)? We are also concerned that a minimum number of patients will be required to ensure that the measure produces acceptable reliability thresholds of 0.7 or higher, yet we were unable to identify any such requirement. Finally, while we appreciate the analyses completed to justify the lack of risk adjustment, we request that the Committee discuss whether there are any clinical or social risk factors that could contribute to an individual presenting with a stroke within the 30-day window that is unrelated to the chief complaint of dizziness during the emergency department visit and as a result if there should be some adjustment based on those variables. The FAH also questions the usefulness of this measure given the limited variation in performance scores with no hospitals identified as statistically worse than the national average; only eight were identified as having significant harm, and the vast majority of the hospitals were no different or better than the national average. We do not believe that this measure provides any new information that would be useful to hospitals and patients. The FAH asks that the Committee carefully consider these concerns during their review.

#3614 Hospitalization After Release With Missed Dizzy Stroke (H.A.R.M Dizzy-Stroke)

COMMENTER

Submitted by Koryn Rubin

COMMENT

The American Medical Association (AMA) appreciates the opportunity to comment on this measure. While addressing diagnostic error is absolutely critical to ensuring that patients receive the highest quality of care possible, we are concerned with the lack of exclusions such as those patients who leave against medical advice and question whether the measure should be risk adjusted for clinical and/or social risk factors. Specifically, it remains unclear to us whether there are any factors that could contribute to an individual being treated for benign dizziness

but then present with an unrelated stroke within the 30-day time window and if this scenario is possible, we believe that the measure should include risk adjustment.

In addition, we are disappointed to see the minimum measure score reliability results appeared to be less than 0.2 according to the histogram included in the testing form. While the median reliability score was 0.590, we believe that measures must meet minimum acceptable thresholds of 0.7 for reliability and the developer should include a minimum case number as a part of the measure specifications to achieve this threshold across all reporting hospitals.

Lastly, we question whether the information provided as a result of this measure is truly useful for accountability purposes and for informing patients on the quality of care provided by hospitals. Specifically, our concern relates to the relatively limited amount of variation across facilities. While 627 hospitals out of the 967 facilities were identified as performing "Better" than the national average, zero hospitals performed "Worse" and only eight were identified as having statistically significant "Harm". Endorsing a measure that currently only identifies such a small number of outliers does not enable users to distinguish meaningful differences in performance and limits a measure's usability.

We request that the Standing Committee evaluate whether the measure adequately meets the measure evaluation criteria.

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