

Neurology, Fall 2020 Measure Review Cycle

Post-Comment Standing Committee Meeting Chelsea Lynch, MPH, MSN, RN, CIC, Director Oroma Igwe, MPH, Manager Ngozi Ihenacho, MPH, Analyst Jesse Pines, MD, MBA, MSCE, Consultant Monika Harvey, PMP, Project Manager

May 25, 2021

Funded by the Centers for Medicare & Medicaid Services under contract HHSM-500-2017-00060I Task Order HHSM-500-T0001

Welcome



WebEx Housekeeping Reminders

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- Optional: Dial 1-844-621-3956 and enter the access code 173 048 3750
- Please place yourself on mute when you are not speaking
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 - Chat box: to message NQF staff or the group
 - Raise hand: to be called upon to speak
- We will conduct a Committee roll call once the meeting begins

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Project Team – Neurology Committee



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Monika Harvey, PMP Project Manager



Agenda

- Attendance
- Consideration of Consensus Not Reached Measure
- Review and Discuss Public Comments
- NQF Member and Public Comment
- Next Steps
- Adjourn

Attendance



Neurology Fall 2020 Cycle Standing Committee

- David Knowlton, MA (co-chair)
- David Tirschwell, MD, MSc (co-chair)
- Mary Kay Ballasiotes
- Jocelyn Bautista, MD
- James Burke, MD
- Valerie Cotter, DrNP, AGPCNP-BC, FAANP
- Rebecca Desrocher, MS
- Bradford Dickerson, MD, MMSc
- Dorothy Edwards, PhD
- Reuven Ferziger, MD
- Susan Fowler, RN, PhD, CNRN, FAHA*

- Edward Jauch, MD, MS
- Charlotte Jones, MD, PhD, MSPH
- Scott Mendelson, MD, PhD
- David Newman Toker, MD, PhD
- Kimberly Rodgers
- Melody Ryan, PharmD, MPH
- Michael Schneck, MD
- Jane Sullivan, PT, DHS, MS
- Kelly Sullivan, PhD
- Max Wintermark, MD, MS
- Ross Zafonte, DO

Voting Test

Consideration of Consensus Not Reached Measure



3596 Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization

- Measure Steward: Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation (Yale CORE)/Centers for Medicare & Medicaid Services (CMS)
 - New measure

Brief Description of Measure:

The measure estimates the hospital-level, risk-standardized mortality rate (RSMR) for patients discharged from the hospital with a principal discharge diagnosis of acute ischemic stroke. The outcome is all-cause 30-day mortality, defined as death from any cause within 30 days of the index admission date, including in-hospital death, for stroke patients. This is a respecified measure with a cohort and outcome that is harmonized with the CMS's current publicly reported claims-based stroke mortality measure and includes the National Institutes of Health (NIH) Stroke Scale as an assessment of stroke severity upon admission in the risk-adjustment model. This measure uses Medicare fee-for-service (FFS) administrative claims for the cohort derivation, outcome, and risk adjustment.



3596 Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization

Criteria where consensus was not reached: Evidence

Does the SC agree the relationship between the measured health outcome and at least one healthcare action is demonstrated by empirical data?

Concerns:

- Stroke mortality as a quality measure may not drive healthcare improvement and could lead to unintended consequences
- Lack of consideration for functional outcomes

Revote on Evidence

 If evidence passes, revote on overall recommendation for endorsement

Related and Competing Measures



Related and Competing Measures

If a measure meets the four criteria <u>and</u> there are endorsed/new related measures (same measure focus <u>or</u> same target population) or competing measures (both the same measure focus <u>and</u> same target population), the measures are compared to address harmonization and/or selection of the best measure (Table 8).

	Same concepts for measure focus-target process, condition, event, outcome	Different concepts for measure focus-target process, condition, event, outcome
Same target population	Competing measures-Select best measure from competing measures or justify endorsement of additional measure(s).	Related measures-Harmonize on target patient population or justify differences.
Different target patient population	Related measures-Combine into one measure with expanded target patient population or justify why different harmonized measures are needed.	Neither harmonization nor competing measure issue.

The National Quality Forum. Measure Evaluation Criteria and Guidance for Evaluating Measure for Endorsement. September 2019; 32-33.



NQF 3596 Related Measures

- 0467 Acute Stroke Mortality Rate (American Institutes for Research)
- 3502 Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure (YNH HSC/CORE)
- 3504 Claims-Only Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure (YNH HSC/CORE)
- Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Acute Ischemic Stroke (Non NQF endorsed competing measure)

Review and Discuss Public Comments



3596 Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization

- Measure Steward: Yale New Haven Health Services Corporation Center for Outcomes Research and Evaluation (YNHHSC/CORE) / Centers for Medicare & Medicaid Services
 - New measure
- Summary of Comments Received: 9 comments received
 - Risk adjustment use for mortality measures
 - Inclusion of functional outcome assessment
 - Median reliability score concern

<u>See Appendix A, items 1-9 for full comments</u> <u>See Appendix B, item 1-2 for fall 2020 pre-evaluation comment</u>



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NQF Member and Public Comment

Next Steps



Activities and Timeline – Fall 2020 Cycle *All times ET

Meeting	Date, Time
CSAC Review	June 29 (9:00 AM – 5:00 PM) June 30 (9:00 AM – Noon)
Appeals Period (30 days)	July 7 – August 5



Project Contact Info

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Appendix – Full Comments



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

1. We are a comprehensive stroke center, offering care to a mixed rural and small city population, with a large uninsured and underserved population. Risk stratifing measures of mortality would be a step in the right direction. One important measure would be to look at comorbidities identified after admission, as patients often come in without any prior medical care, with diabetes, hypertension, heart failure, but without diagnoses for any of this, because of lack of prior medical care. Functional outcomes would also be a welcome addition to outcomes grading. However follow up outcomes vary, with patients from more disadvantaged settings having difficulties with follow up including loss of phone access, fear of being called for bill collection, loss of follow up while indigent care is established. We would suggest moving to the risk adjusting mortality model, and keeping the conversation going regarding outcomes.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. Since 2012, when CMS first developed the version of this measure that is currently in use , the AHA/ASA and others have on numerous occasions expressed our serious concerns that the risk-adjustment model used in the measure is inadequate because it fails to take stroke severity into account. A measure of stroke severity is essential for adequate discrimination of hospital-level mortality risk, given the great variability in stroke severity and outcomes for patients hospitalized with ischemic stroke and the central role of severity in predicting mortality. *Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. Cont'd. When the measure (without stroke severity) was submitted to NQF, AHA/ASA and multiple other organizations commented opposing endorsement because of the significant risk of misclassification of hospital performance and the potential adverse impact on patient care. CMS ultimately withdrew the measure and the measure was not endorsed. When the Measures Application Partnership (MAP) reviewed the measure later the same year, they did not support the measure for inclusion in CMS reporting programs. Nevertheless, CMS proposed to include it in the Hospital Inpatient Quality Reporting (HIQR) program for FY 2014. This proposal was finalized, and the measure has been included in HIQR since that time *Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. Cont'd. While we opposed CMS implementing this flawed measure, we also understood that it was not at that time feasible to capture stroke severity in administrative claims data. For this reason, the AHA/ASA and the organizations that make up the Brain Attack Coalition proposed new ICD-10 codes for Initial National Institutes of Health Stroke Scale (NIHSS) to allow this information to be captured in claims data. The NIHSS is an objective, standardized, well-validated assessment of stroke severity that is an essential tool for determining eligibility for thrombolytic therapy and facilitating communication among health care providers, helping to guide appropriate care, and potentially improving patient outcomes. It has been shown to predict mortality in acute ischemic stroke in several prior studies and its use is supported by evidence-based guidelines. The new ICD-10 codes for Initial NIHSS became effective October 1, 2016. Continued



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. Cont'd. In the FY 2014 final rule, CMS also committed to working with stakeholders to refine the measure and seek feasible ways to incorporate stroke severity adjustment as suggested. They quickly followed through on this commitment and tasked their measure development contractor, Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (YNHHSC/CORE), with revising the risk-adjustment model to incorporate the NIHSS.

The work to revise the measure began even before the newly approved ICD-10 codes for initial NIHSS had become effective. Since the AHA/ASA's clinical registry, Get with the Guidelines (GWTG)-Stroke captures NIHSS, we were able to provide data from GWTG to validate the revised risk model. We believe that GWTG data is an appropriate proxy since we would expect the process of documenting the NIHSS should be very similar whether it is entered as a numerical score, as it is in the registry, or as an ICD-10 code that represents the score, in administrative claims data.*Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

Cont'd. The AHA/ASA agrees with the Standing Committee that measuring 30-day 2. mortality in isolation has potential unintended consequences, such as incentivizing efforts to prolong life through invasive interventions without considering functional outcomes. We also agree that it may not be the best approach to measuring the quality of stroke care or of driving improvement. However, reporting 30-day mortality inaccurately can also lead to serious adverse consequences for hospitals and for patients. The AHA/ASA has and will continue to strongly advocate that 30day mortality should be balanced with measures such as functional status or healthy days at home. However, it is undeniable that mortality is also an outcome that is important to all patients and their families. As such, we expect that CMS is very likely to continue reporting it, even if the measure is imperfect. It is therefore critical that risk-adjusted mortality be reported as accurately as possible. Measure 3596 would be a tremendous improvement over the current CMS measure, an improvement that has been long sought by AHA/ASA and other stakeholders. Continued



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

 Cont'd. NQF endorsement would emphatically affirm this. Measure 3596 will incentivize hospitals to routinely document the NIHSS, as required by good clinical practice and evidence-based guidelines and would appropriately penalize those who do not. This alone would represent a tremendous advance in the quality of stroke care.

The standing committee and commenters also expressed concerns about the reliability of the measure and the impact of missing data, given that the uptake of the new ICD-10 codes is still not universal. CMS has indicated that initially they will impute the NIHSS when it is missing, which we acknowledge is a suboptimal approach, however, it is reasonable as a starting point. Once missingness rates decline, they can revise their approach. We would suggest that the standing committee consider revisiting this issue when the measure undergoes maintenance of endorsement after it has been in widespread use for a period of time.*Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. Cont'd. NQF also received comments regarding the 25-case minimum used in the analysis of reliability. This is a fairly standard approach to the risk of inaccuracies inherent in measuring outcomes when sample sizes are small. We believe this approach is reasonable, especially since CMS does not plan to publicly report facility-level performance for hospitals with fewer than 25 cases. We were extremely pleased when CMS announced plans to replace the current 30-day mortality measure that does not account for stroke severity, with measure 3596 for the 2023 payment determination. NQF endorsement would both affirm that there is national consensus that this is the appropriate decision and help to ensure that CMS is able to follow through on this proposal. We believe that this refined measure, which incorporates stroke severity in the risk model, captured using the new ICD-10 codes for initial NIHSS, represents a significant improvement over the measure that is currently reported. We strongly urge the Standing Committee to vote to endorse it. The more parsimonious and discriminating risk model used in the refined measure should greatly enhance the accuracy of reporting and classifying the performance of hospitals and ultimately benefit patients. 31



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

Our system supports endorsement of the new measure that includes adjusting for 3. stroke severity. The intention of healthcare is to provide timely, effective and safe treatment in order to assist patients recover to their fullest potential. This is most evident in the national effort to reduce the occurrence of stroke and minimize the disabilities caused by stroke across our population. The evidence-based care provided in our system for our stroke patients does focus on the best outcome possible for that patient and stroke severity influences all aspects of this goal. The evidence submitted to the committee using GWTG stroke-severity risk adjusted mortality showed improvement of 30-day, all-cause RSMR from the 2013/2016 to the 2016/2019 data sets. The evaluation of NIHSS to evaluate stroke severity as well as use of the modified Rankin score to compare functional status over time is part of the evidence-based care our provided by our system. These measurements should also guide quality measures reported outside our system. This will standardize the measurement across entities invested in guality improvement and accurately reflects the intention of stroke care as a patient-focused outcome.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

4. BJC HealthCare ("BJC") is comprised of fourteen acute care hospitals, a large multi-specialty physician practice, and post-acute, corporate, and behavioral health services, with a service area spanning the St. Louis metropolitan region, as well as parts of mid and southeastern Missouri and southwest Illinois. BJC appreciates the opportunity to comment on Measure #3596, Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic stroke hospitalization with claims-based risk adjustment for stroke severity. BJC supports the updated version of the Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic to include the initial NIH Stroke Scale, a validated measure of stroke severity in its risk adjustment model.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

4. Cont'd. We fully support the additional commentary and support of this metric offered by the American Heart Association, and American Stroke Association. We also offer the following comments regarding measure implementation and future quality metrics:

• CMS will need to ensure 100% compliance with NIHSS documentation by all stroke centers. If not, severe stroke patients that are transferred to higher acuity centers from lower acuity centers, may lack of the adequate risk adjustment. This could paint a very inaccurate picture of stroke care and suggest the best care is mainly given at smaller centers and worst care at larger centers.

• NIHSS scores documented earlier in the stay may not be as accurate as those documented after evaluation and initial recovery. CMS should be careful of the timing of NIHSS assessment and use later documentation to abstract the appropriate value.

• Stroke severity alone outperforms all other variables in models predicting stroke mortality, even when these other variables are combined. *Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

4. • Cont'd. BJC historically has always supported more robust and clinically relevant risk adjustment in the CMS outcome measures. We have also advocated for inclusion of adjustment for social determinants of health in risk-adjusted outcome measures and encourage CMS to continue to evaluate the inclusion of these variables in their metrics, in addition to the clinically relevant indicators such as the NIHSS score. There are some concerns from the literature that measuring mortality in isolation could lead to unintended consequences of prolonging life through invasive interventions without considering functional outcomes. We would urge CMS to be cognizant of this concern and to consider the development of metrics that look at functional outcomes in addition to mortality, and continue to promote advance care planning.

In summary, BJC supports the use of new ICD-10 codes for initial NIHSS, represents a significant improvement over the measure that is currently reported. We strongly urge the Standing Committee to vote to endorse it to relieve providers of some of the regulatory burden associated with public programs.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

5. Thank you for the opportunity to submit comments regarding the Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic stroke hospitalization measure. Cleveland Clinic's position aligns with the position of the American Heart Association that stroke severity is the most important prognostic factor for individual patients and is a significant predictor of hospital-level performance on 30-day mortality. Including it in risk adjustment is, therefore, critical to characterizing a hospital's performance accurately. The NIH Stroke Scale is a validated measure of stroke severity, and its incorporation into the risk adjustment model is strongly endorsed by Cleveland Clinic. We currently report the NIH Stroke Scale on our claims using ICD-10 codes, and this does not create a reporting burden for our hospitals.

Cleveland Clinic's Stroke Program is one of the nation's largest stroke programs caring for 9,714 patients in 2020 across the enterprise, of which 92% are diagnosed with ischemic stroke and TIA. Our main campus is designated by The Joint Commission as a Comprehensive Stroke Center, four of our enterprise hospitals are Joint Commission Thrombectomy-Capable Stroke Centers, and our other 11 hospitals are Joint Commission Primary Stroke Centers.*Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

5. Cont'd. Sixty-nine percent of Cleveland Clinic main campus ischemic stroke patients are transported from other hospitals within Ohio or from neighboring states for care. These are often patients with devastating injuries that require the complex stroke care that our comprehensive stroke center can provide. Many arrive with high NIH Stroke Scores which is reflective of their very high risk of mortality; we are committed to caring for these very sick patients. We believe that including the NIH Stroke Scale in the risk adjustment model for this measure is critical to accurately capture the population of ischemic stroke patients that Cleveland Clinic and other Comprehensive Stroke Centers serve.*Continued*



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

6. This addition of NIHSS at baseline is the best and important change in measuring stroke mortality for CMS since the model was first implemented. The reality is that hospitals are already being measured for stroke mortality and compared using the current model which is tremendously incomplete. And there are excellent scientific data about stroke severity and the NIHSS is the accepted measure across the world for clinical decisions for acute treatment and also prediction of outcome. Stroke severity alone out performs all other variables in models predicting stroke mortality, even when these other variables are combined. It is why so much effort was made to implement and approve the codes necessary for coding of NIHSS more than 5 years ago.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

6. Cont'd. The NQF members are correct that mortality is not the ideal measure for stroke care but it is one measure that is easily measured. And other measures, such as the modified Rankin Scale, which measures functional outcome, are simply not done at discharge or more importantly at a month or 3 months at most institutions.

It is true that not all hospitals are consistently using NIHSS for all stroke patients but this will evolve quickly once this is implemented. And it will provide a much better model of expected to observed mortality.

Thus, unless CMS decides not to use stroke mortality to compare hospitals, this is by far the best change that is possible. I highly and strongly recommend it.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

7. JCMC supports measure #3596 capturing stroke severity, utilizing the NIHSS, when reporting the risk-adjusted mortality measure. Stroke severity is necessary for proper discrimination of mortality risk. It is important for risk-adjusted mortality to be reported accurately, taking into account stroke severity and also functional status.



3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

- 8. The Federation of American Hospitals (FAH) remains concerned with the less than desirable reliability threshold at the minimum sample size. In addition, FAH agrees with the Standing Committee's concerns that mortality may not be the best outcome to track in this population, rather measures that ensure that treatment decisions are aligned with patient preferences and emphasize improved functional outcomes would be more appropriate.
- *9.* The University Hospitals Health System in Northeast Ohio which includes 23 hospitals fully supports this measure.



Appendix B: Pre-evaluation Member and Public Comments

3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

1. The American Medical Association (AMA) appreciates the opportunity to comment on #3596, Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic stroke hospitalization with claims-based risk adjustment for stroke severity. We are disappointed to see the minimum measure score reliability results of 0.24 using a minimum case number of 25 patients. We believe that measures must meet minimum acceptable thresholds of 0.7 for reliability. We request that the Standing Committee evaluate whether the measure specifications with only a case minimum of 25 patients is acceptable and if the measure meets the reliability criterion



Appendix B: Pre-evaluation Member and Public Comments

3596: Hospital 30-day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Acute Ischemic Stroke Hospitalization

2. The Federation of American Hospitals (FAH) appreciates the opportunity to comment on Measure #3596, Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic stroke hospitalization with claims-based risk adjustment for stroke severity. FAH is concerned that even though the median reliability score was 0.7 for hospitals with at least 25 cases, reliability ranged from 0.24 to 0.95 and believes that the developer must increase the minimum sample size to a higher number to produce a minimum reliability threshold of sufficient magnitude (e.g. 0.7 or higher). As a result, the FAH requests that the Standing Committee carefully consider whether the measure as specified meets the reliability criterion.