National Consensus Development and Strategic Planning for Health Care Quality Measurement

Fall 2024 Management of Acute Events and Chronic Conditions Endorsement Meeting Summary

Overview

Battelle, the consensus-based entity (CBE) for the Centers for Medicare & Medicaid Services (CMS), convened the Recommendation Group of the Management of Acute Events and Chronic Conditions committee on February 7, 2025, for discussion and voting on measures under endorsement consideration for the Fall 2024 cycle. Meeting participants joined virtually through a Zoom meeting platform. Measure stewards/developers and members of the public also attended.

The objectives of the meeting were to:

- Review and discuss measures submitted to the committee for the Fall 2024 cycle;
- Review staff preliminary assessments, Advisory and Recommendation Group feedback, public comments, and developer responses regarding the measures under endorsement review; and
- Render endorsement decisions using a virtual voting platform.

The Recommendation Group endorsed 10 measures, including six with conditions (Table 1). This summary provides an overview of the meeting, the Recommendation Group deliberations, and the endorsement decision outcomes. Full measure information, including all public comments, staff preliminary assessments, Advisory Group feedback, and committee independent reviews can be found on the project committee's page on the Partnership for Quality Measurement (PQM) website.

After the endorsement meeting, measures and endorsement decisions enter an appeals period for 3 weeks, from March 4-24, 2025. Any interested party may submit an appeal, which Battelle will review for eligibility according to the criteria within the Endorsement and Maintenance (E&M) Guidebook. If eligible, the Appeals committee, consisting of all co-chairs from the five E&M project committees, will convene to evaluate the appeal and determine whether to maintain or overturn an endorsement decision.

Welcome, Roll Call, and Disclosures of Interest

Brenna Rabel, PQM technical director, welcomed the attendees to the meeting and introduced her co-facilitators, Anna Michie, E&M deputy task lead, and Matt Pickering, E&M task lead. Ms. Rabel also introduced the committee co-chairs, Florence Thicklin, patient representative co-chair, and Charles (Kurt) Mahan, non-patient representative co-chair, who each provided welcoming remarks.

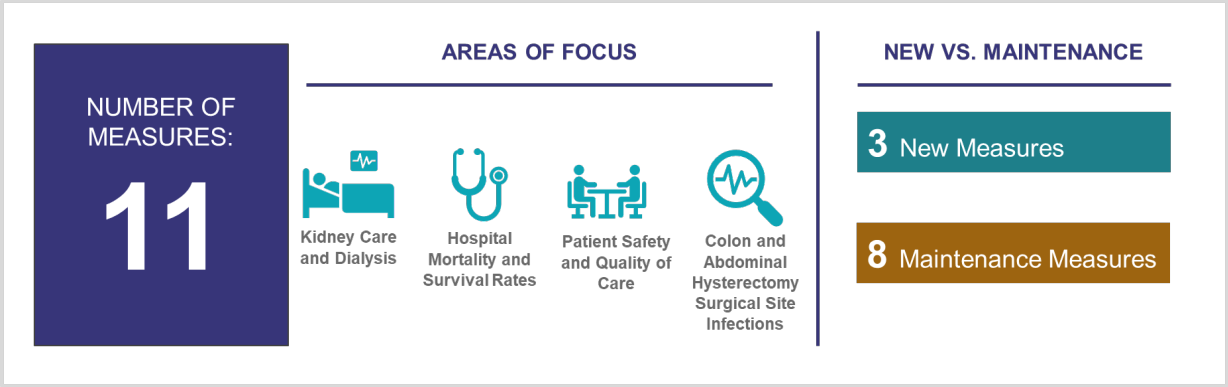
Isaac Sakyi, a member of the Battelle team, then conducted roll call, and members disclosed any perceived conflicts of interest regarding the measures under review. Two members cited conflicts related to their employment by the measure developer, which resulted in their recusal from voting: David Clayman (CBE #0531) and Lisa Suter (CBE #3502e and CBE #4595).

After roll call, Battelle staff established whether quorum was met and outlined the procedures for discussing and voting on measures. The discussion quorum requires the attendance of at least 60% of the active Recommendation Group members (n=11). Voting quorum requires at least 80% of active Recommendation Group members who have not recused themselves from the vote (n=15). Both discussion quorum and voting quorum were established and maintained throughout the meeting. During the meeting, some committee members stepped away temporarily, so Battelle collected voting counts for each measure to ensure that each vote met quorum.

Evaluation of Candidate Measures

Ms. Michie provided an overview of the measures under review. For the Fall 2024 cycle, the Management of Acute Events and Chronic Conditions committee received three new measures and eight measures undergoing maintenance endorsement review (Figure 1). The measures focused on kidney care and dialysis, hospital mortality and survival rates, patient safety and quality of care, and colon and abdominal hysterectomy surgical site infections. Ms. Michie informed the Recommendation Group that although 11 measures were submitted for endorsement consideration, the measure steward for CBE #0753: 30-Day Post-Operative Colon Surgery (COLO) and Abdominal Hysterectomy (HYST) Surgical Site Infection (SSI) Standardized Infection Ratio (SIR) withdrew the measure prior to the endorsement meeting; therefore, only 10 measures would be discussed during the meeting.

Figure 1. Management of Acute Events and Chronic Conditions measures for Fall 2024



Battelle convened an Advisory Group meeting on December 2, 2024, to gather initial feedback and questions about the measures under endorsement review. Developers had the opportunity to provide additional clarifications following the Advisory Group meetings. Battelle then shared the Advisory Group feedback and questions, along with the developer/steward responses, with the Recommendation Group prior to the endorsement meeting.

Battelle also provided Recommendation Group members the full measure submission details for each measure up for review, including all attachments, the PQM Measure Evaluation Rubric, the public comments received for the measures under review, and the staff preliminary assessments.

Recommendation Group members conducted independent reviews for each measure against the PQM Measure Evaluation Rubric. Recommendation Group members assigned a rating of "Met," "Not Met but Addressable," or "Not Met" for each domain of the PQM Measure Evaluation Rubric. In addition, Recommendation Group members provided associated rationales for each domain rating, which were based on the rating criteria listed for each domain. Battelle staff

aggregated and summarized the results and distributed them back to the Recommendation Group, and to the respective measure developers/stewards, for review within 1 week of the endorsement meeting.

Table 1. Fall 2024 Management of Acute Events and Chronic Conditions Measure Endorsement Decisions

CBE ID	Measure Title	New/ Maintenance	Endorsement Decision	Endorse | N (%)	Endorse with Conditions | N (%)	Do Not Endorse/Remove Endorsement | N (%)	Recusals
#3502e	Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure with Claims and Electronic Health Record Data	Maintenance	Endorse with Conditions	5 (33%)	10 (67%)	0 (0%)	1
#4595	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization with Claims-Based Risk Adjustment for Stroke Severity	New	Endorse	14 (100%)	0 (0%)	0 (0%)	1
#2706	Pediatric Peritoneal Dialysis Adequacy: Achievement of Target Kt/V	Maintenance	Endorse with Conditions	2 (13%)	13 (81%)	0 (0%)	0
#1423	Minimum spKt/V for Pediatric Hemodialysis Patients	Maintenance	Endorse with Conditions	3 (20%)	12 (80%)	0 (0%)	0
#1425	Measurement of nPCR for Pediatric Hemodialysis Patients	Maintenance	Endorse with Conditions	4 (24%)	13 (76%)	0 (0%)	0
#0318	Delivered Dose of Peritoneal Dialysis Above Minimum	Maintenance	Endorse	16 (100%)	0 (0%)	0 (0%)	0
#4650	Facility Level Percentage of Chronic Hyperphosphatemia in Dialysis Patients	New	Endorse	16 (100%)	0 (0%)	0 (0%)	0

CBE ID	Measure Title	New/ Maintenance	Endorsement Decision	Endorse | N (%)	Endorse with Conditions | N (%)	Do Not Endorse/Remove Endorsement | N (%)	Recusals
#0531	Patient Safety Indicator (PSI) 90: Patient Safety and Adverse Events Composite	Maintenance	Endorse	14 (93%)	0 (0%)	1 (7%)	1
#3309	Risk-Standardized Survival Rate (RSSR) for In-Hospital Cardiac Arrest	Maintenance	Endorse	17 (100%)	0 (0%)	0 (0%)	0
#4580	Composite Measure for the Quality of Care Provided to Patients Undergoing Percutaneous Coronary Interventions (PCI)	New	Endorse	16 (100%)	0 (0%)	0 (0%)	0

CBE #3502e – Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure with Claims and Electronic Health Record Data [Yale Center for Outcomes Research and Evaluation (Yale CORE)/CMS]

Specifications | Discussion Guide

Description: Hybrid Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality Measure with Claims and Electronic Health Record Data measure estimates a hospital-level 30-day risk-standardized mortality rate (RSMR), defined as death from any cause within 30 days after the index admission date for Medicare fee-for-service and Medicare Advantage patients who are between the ages of 65 and 94. Index admissions are assigned to one of 15 clinically cohesive and mutually exclusive divisions: six surgical divisions and nine non-surgical divisions, based on the reason for hospitalization. The surgical divisions are: Surgical Cancer (includes a surgical procedure and a principal discharge diagnosis code of cancer), Cardiothoracic Surgery, General Surgery, Neurosurgery, Orthopedic Surgery, and Other Surgical Procedures. The non-surgical divisions are Cancer, Cardiac, Gastrointestinal, Infectious Disease, Neurology, Orthopedic, Pulmonary, Renal, Other Conditions. The final measure score (a single risk-standardized mortality rate) is calculated from the results of these 15 different divisions, modeled separately. Variables from administrative claims and electronic health records are used for risk adjustment.

Committee Final Vote: Endorse with Conditions

Conditions: When the measure returns for maintenance (5 years), the measure developer should have:

- Explored actionability of the measure with reporting entities (e.g., through qualitative data collection).

Vote Count: Endorse (5 votes; 33%), Endorse with Conditions (10 votes; 67%), Remove Endorsement (0 votes; 0%); recusals (1).

Public Comments: Battelle received one comment prior to the meeting. The comment noted the challenges with data collection and submission of measures that leverage data from electronic health record (EHR) systems and that the current measure specifications do not align with current workflows.

Advisory Group Comments: The Advisory Group expressed skepticism about the measure's utility for facilities and clinicians, with limited support among members. Challenges with EHR data submission and meeting CMS reporting thresholds were identified, and the initial voluntary reporting in 2024 saw limited participation, complicating the generalization of improvements.

Measure Discussion:

Discussion Topic/Theme	Source of Comment[1]	Recommendation Group Discussion
Importance	• Patient Partner	• Several Recommendation Group members indicated that this is an important measure that can help reduce preventable issues impacting patient mortality.

[1] Patient partners are committee members representing the patient perspective.

Discussion Topic/Theme	Source of Comment[1]	Recommendation Group Discussion
	• Recommendation Group	• A patient partner emphasized the importance of the measure related to survival rates and noted that patients can use the measure to decide where to receive care for certain conditions/procedures.
Feasibility	• Advisory Group • Public Comment • Recommendation Group • Staff Assessment	• Despite concerns from the Advisory Group and public comments, the Recommendation Group members generally agreed that the measure is feasible. One member suggested that these feasibility concerns might be overstated, emphasizing that extracting core clinical data elements (CCDE) from EHRs is a feasible task. This process is part of a broader CMS programmatic requirement, which exists independently of this measure, indicating that the task aligns with existing healthcare frameworks and is manageable. • Recommendation Group members expressed their support of the transition to digital quality measures and agreed that hospitals should be able to extract clinical data from the EHR. • A Recommendation Group member indicated that their concern stemmed from hospitals' ability to respond and adjust based on patient risk, noting that those with patients at higher-risk of mortality might be negatively impacted. Another Recommendation Group member agreed that lower-resourced hospitals who serve underserved and vulnerable populations are at a disadvantage and inquired about the resources available to assist hospitals in extracting data in a cost-effective way. • The developer clarified that the measure is in a pay-for-reporting program; thus, hospitals receive payment for submitting data and not based on their scores. In addition, the risk-adjustment methodology uses CCDE to adjust for patient case mix. A Recommendation Group member noted that even with pay for reporting, hospitals can be negatively impacted if their scores are distributed publicly. • The developer confirmed that the measure is currently in voluntary reporting as hospitals work through any challenges. CMS decided to extend voluntary reporting, not due to feasibility issues but to ensure hospitals can successfully submit data for payment. Eventually, scores will be posted on the consumer interface Care Compare. • The developer reported that there are many support channels available to assist hospitals in eCQM data collection, as this hybrid measure is meant to drive measurement into the future. Their testing found that most hospitals submitted their data successfully.
Risk Adjustment and Stratification	• Patient Partner • Recommendation Group	• A patient partner highlighted the need for differentiation based on health status to aid in patient decision-making. • A subject matter expert (SME) and emergency medicine physician affiliated with the developer noted that differentiation based on health status happens in many ways, including exclusions, risk adjustment, and stratification.
Usability and Actionability	• Advisory Group • Recommendation Group	• Recognizing that several Advisory Group members raised concerns about the measure's usability, a Recommendation Group member also questioned if the measure information is actionable given that it reflects a broad swath of conditions. They acknowledged the importance

Discussion Topic/Theme	Source of Comment[1]	Recommendation Group Discussion
		and strength of having an all-encompassing measure but said the measure has methodological challenges (e.g., obscuring poor results in one diagnostic category with good results in another). • A Recommendation Group member acknowledged the importance of having hospital-wide measures that may uncover cross-cutting issues. However, similar measures of hospital-wide mortality have been used in Europe and Canada, which have been found to have potential issues with statistical aggregation and the obscuring of poor results. Several Recommendation Group members shared this concern, with one member inquiring about the extent to which the stratified conditions are used. The developer explained that hospitals receive detailed reports and can drill-down into specific areas for improvement, as well as compare their results to those at the state and national levels. Furthermore, many hospitals do not have the volume needed to report each condition or procedure separately, so this measure makes it possible for them to receive quality data. • A Recommendation Group member echoed concerns about the implications of all-cause mortality measures, highlighting the risk of attributing community-level mortality differences to hospital care quality. • A Recommendation Group member called for a more expansive investigation of the true actionability of this measure that details how the hospitals are applying the measure. Another Recommendation Group member noted there are intervention studies (e.g., multidisciplinary team approach) that show hospitals can improve mortality outcomes. The Recommendation Group placed one condition on the measure, which was to explore (e.g., through qualitative discussions) actionability of the measure with reporting entities.
Unintended Consequences	• Recommendation Group	• A Recommendation Group member echoed the measure's importance as a balancing tool, especially for smaller hospitals. • The developer reported that this measure is balanced by the hospital-wide readmission measure to avoid unintended consequences.

Additional Recommendations: None.

CBE #4595 – Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization with Claims-Based Risk Adjustment for Stroke Severity [Yale CORE/CMS]

Specifications | Discussion Guide

Description: The measure estimates the hospital-level, risk-standardized mortality rate (RSMR) for Medicare patients (Fee-for-Service [FFS] and Medicare Advantage [MA]) 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. The measure includes the National Institutes of Health (NIH) Stroke Scale as an assessment of stroke severity upon admission in the risk-adjustment model.

Committee Final Vote: Endorse

Vote Count: Endorse (14 votes; 100%), Endorse with Conditions (0 votes; 0%), Do Not Endorse (0 votes; 0%); recusals (1).

Public Comments: Battelle received one comment prior to the meeting. The comment suggested that a case minimum of 25 individuals should be required as part of this measure's endorsement. The 25 minimum would also ensure reliability closer to 0.7, which the commenter suggested to be standard for endorsed measures.

Advisory Group Comments: The Advisory Group questioned the measure's utility for driving improvements and raised concerns about potential unintended consequences, particularly its impact on under-resourced and rural communities.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Importance	• Patient Partner • Recommendation Group • Staff Assessment	• Recommendation Group members agreed with the staff assessment rating of "Met" and recognized the importance of the measure and the patient group. • A patient partner highlighted the significance of the measure for patients affected by stroke, emphasizing the need for reliable reporting even in facilities with fewer than 25 cases.
Reliability Testing	• Public Comment • Recommendation Group • Staff Assessment	• The developer addressed concerns about the reliability testing. They initially submitted signal-to-noise testing; however, based on feedback from the staff assessment, they conducted additional testing using the bootstrapping method and found the average intraclass correlation coefficient (ICC) was 0.866, which was higher than the results using the signal-to-noise method. • A Recommendation Group member noted that both results demonstrate the measure can reliably differentiate results between entities. • Another Recommendation Group member explained that looking at the overall reliability across the entire sample is important, as results for low-volume hospitals can be less reliable. They agreed with the public comment that it would be best to limit to the applicability of the measure to hospitals with a minimum case volume of 25 for improved reliability. Battelle confirmed that the developer did

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		provide analyses using the case minimum; however, they acknowledged the patient perspective that viewing reports from lower-volume hospitals is valuable.
Usability and Unintended Consequences	• Advisory Group • Recommendation Group • Staff Assessment	• A Recommendation Group member echoed Advisory Group concerns around the impact of resource allocation depending on how the measure is used. The developer noted the measure is in the CMS Inpatient Quality Reporting (IQR) Program, a pay-for-reporting program. • Recommendation Group members raised concerns about the usability of the measure for facilities with fewer resources. The developer clarified that smaller hospitals with fewer than 25 cases would not have their scores publicly reported and critical access hospitals could opt out of reporting. All hospitals receive quality reports (e.g., patient-level data, state- and national-level benchmarks).
Handling of Transfers and Palliative Care	• Recommendation Group	• A Recommendation Group member inquired about the attribution of patients who transfer between hospitals. The developer clarified that outcomes are attributed to the first admitting hospital. • Another Recommendation Group member raised concerns about potential gaming with hospice and palliative care designations. For example, if a patient comes in with a stroke and they can be saved but do not receive appropriate treatment and die, but before they do, are they placed in hospice and excluded from mortality reporting. The developer confirmed that if a patient was enrolled in hospice in the 12 months prior to the date of the admission or if they enter hospice within 24 hours of admission, they are excluded. Do not resuscitate (DNR) status and palliative care are included in the risk-adjustment model.
Stroke Severity and Data Imputation	• Recommendation Group	• A Recommendation Group member noted that stroke severity, measured by the National Institutes of Health (NIH) Stroke Scale, is an important potential confounder and inquired how missing data impacts measure validity. • The developer reported that the NIH Stroke Scale was not previously included in risk adjustment but was added based on feedback from the measurement and clinical communities. They acknowledged the missing data issue, noting improvement over time, with 65% of patients coded in the last reporting period. The developer imputes the missing data with zero and explained that hospitals that report stroke severity have lower RSMRs than those that do not. Collecting stroke mortality using the NIH Stroke Scale has been a clinical standard for 2 decades; however, collecting and coding the data is relatively new and there has been a steady increase in adoption. Measure imputation encourages hospitals to collect this clinical standard and submit it in their administrative claims. • A Recommendation Group member expressed uncertainty with using a statistical method to incentivize hospitals to collect the data. Given the amount of missing data, they suggested using a different approach such as multiple imputation. The developer looked at multiple imputation approaches and found that the results were very similar to zero imputation.
Stratification	• Recommendation Group • Staff Assessment	• A Recommendation Group member voiced their agreement that the results should be stratified by social risk factors, as the purpose of the measure is to enable hospitals to make improvements that are relevant to them.

Additional Recommendations: A Recommendation Group member recommended stratifying performance results by social risk factors.

CBE #2706 – Pediatric Peritoneal Dialysis Adequacy: Achievement of Target Kt/V [University of Michigan (UMICH)/CMS]

Specifications | Discussion Guide

Description: Percentage of pediatric (< 18 years old) peritoneal dialysis patient-months whose delivered peritoneal dialysis dose was a weekly Kt/Vurea ≥ 1.8 (dialytic + residual).

Committee Final Vote: Endorse with Conditions

Conditions: When the measure returns for maintenance (5 years), the measure developer should have:

- Aligned with any forthcoming CBE polices around pediatric population measures;
- Explored meaningfulness with patients/parents/caregivers that have direct lived experience in this measure area; and
- Explored the potential for risk adjustment based on patient age.

Vote Count: Endorse (2 votes; 13%), Endorse with Conditions (13 votes; 81%), Remove Endorsement (0 votes; 0%); recusals (0).

Public Comments: Battelle received three comments prior to the meeting. The three comments expressed their support for continued endorsement for this measure, highlighting the importance of having measures that focus on the pediatric population, the measure's alignment with the current Kidney Disease Outcomes Quality Initiative (KDOQI), and the measure's reliability and validity.

Advisory Group Comments: The Advisory Group emphasized the importance of pediatric measures, noting that small sample sizes should not deter their development. They also questioned the need for risk adjustment, suggesting that while not required for intermediate outcome measures, discussing it would enhance the measure's submission.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Importance and Evidence	• Advisory Group • Patient Partner • Public Comment • Recommendation Group	• Recommendation Group members agreed with the public comment and the Advisory Group, highlighting the importance of the measure for the small and vulnerable pediatric population. • A patient partner noted that the measure is meaningful for patients and encourages shared decision-making between patients and health care providers. • A Recommendation Group member acknowledged the challenges of using old, sometimes limited evidence in pediatrics, but emphasized that it does not undermine the measure's meaningfulness.
Patient Engagement	• Patient Partner • Recommendation Group	• A few Recommendation Group members discussed the importance of patient engagement in the measurement process. • A patient partner emphasized the importance of connecting with patient advocates who have lived experiences with the condition being measured. They indicated that it is difficult to read language

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		(e.g., "cooperation of the patient") that appears disconnected from the realities of the patient population, which includes children and caregivers managing complex care needs and possibly new diagnoses. They highlighted the need for measures to reflect the responsibility of parents and caregivers and the importance of inclusion and understanding patient circumstances. • A Recommendation Group member expressed satisfaction with the input received through the STAR Ratings technical expert panel (TEP), but noted that the indirect evidence fell short, as the criteria's intent is direct engagement with patients. • The developer reported that the TEP included individuals who were living with kidney disease, were care partners, or who had some experience in dialysis and kidney disease. They noted the importance of shared decision-making and of patients having a treatment plan consistent with their values and helps them achieve adequate dialysis to stay as healthy as possible. • The Recommendation Group placed a condition on the measure to explore meaningfulness with patients/parents/caregivers that have direct lived experience in this measure area.
Risk Adjustment	• Advisory Group • Recommendation Group • Staff Assessment	• A Recommendation Group member raised questions about risk adjustment, particularly for younger pediatric patients for whom it may be more challenging to achieve therapeutic goals compared to older patients. They inquired about the potential need for adjustments based on age or body habitus. The member indicated that risk adjustment might be appropriate to account for differences in facilities that treat more physiologically challenging individuals. They stated that although the measure is an intermediate outcome measure, it is still an outcome measure, and, in their experience, most outcome measures merit some risk adjustment. • Another Recommendation Group member noted that developing a risk adjustment for such a small population might be challenging. • The developer explained that younger children are more likely to do peritoneal dialysis, and many teenagers transition to hemodialysis. The benefit of peritoneal dialysis is the flexibility in prescription that allows patients and providers to engage in shared decision-making to determine the most workable treatment plan. People who are larger in size require more dialysis than people who are smaller so they would not want to adjust for body size and potentially curtail dialysis for people who need more. That said, the developer indicated that they could explore this type of risk adjustment in the future. They acknowledged that some dialysis prescriptions might represent a larger challenge than others and discussion is warranted about the treatment modality and the burden of treatment on patients. The Recommendation Group placed a condition on the measure to explore the potential for risk adjustment based on patient age.
Validity Testing	• Advisory Group • Recommendation Group • Staff Assessment	• A Recommendation Group member inquired about requirements for demonstrating empirical validity. Battelle clarified that starting in the Spring 2025 cycle, empirical validity will be required for the accountable entity testing. A Recommendation Group member pointed out that the small sample size presents a challenge in accurately accessing the measure's validity, as a small sample size generates a weak signal. Battelle discussed the potential for building on Food and Drug Administration (FDA) guidance around using adult data to support pediatric measures and noted

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		this policy would be considered in a future E&M Guidebook. Battelle also suggested the possibility of placing conditions on the measure for endorsement to align with upcoming validity policy. The Recommendation Group placed a condition on the measure to align with any forthcoming CBE polices around pediatric population measures. • The developer acknowledged this challenge of measuring small patient populations and the need for larger samples for validity testing. • A Recommendation Group member asked the developer if there were plans to use the measure in the Quality Incentive Program (QIP). The developer indicated that the QIP uses a composite measure of dialysis adequacy and the current measure feeds into that composite measure.

Additional Recommendations: None.

CBE #1423 – Minimum spKt/V for Pediatric Hemodialysis Patients [UMICH/CMS]

Specifications | Discussion Guide

Description: Percentage of patient months for all pediatric (<18 years old) in-center hemodialysis patients in which the delivered dose of hemodialysis (calculated from the last measurement of the month using the UKM or Daugirdas II formula) was spKt/V ≥ 1.2.

Committee Final Vote: Endorse with Conditions

Conditions: When the measure returns for maintenance (5 years), the measure developer should have:

- Aligned with any forthcoming CBE polices around pediatric population measures;
- Explored meaningfulness with patients/parents/caregivers that have direct lived experience in this measure area; and
- Explored the potential for risk adjustment based on patient age.

Vote Count: Endorse (3 votes; 20%), Endorse with Conditions (12 votes; 80%), Remove Endorsement (0 votes; 0%); recusals (0).

Public Comments: Battelle received three comments prior to the meeting. The three comments expressed their support for continued endorsement for this measure, highlighting the importance of having measures that focus on pediatric population, the measure's alignment with the current Kidney Disease Outcomes Quality Initiative (KDOQI), and the measure's reliability and validity.

Advisory Group Comments: The Advisory Group stressed the importance of this measure for the pediatric population, acknowledging that while evidence may be limited due to small sample sizes, these patients are among the most vulnerable. They also questioned the need for risk adjustment, suggesting that although not required for intermediate outcome measures, including a discussion on risk adjustment would enhance the measure's submission.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Maintain Conditions from CBE #2706	• Recommendation Group	• The Recommendation Group indicated that they had similar thoughts on the current measure as they did for CBE #2706. They agreed to apply the same conditions to the measure without further discussion.

Additional Recommendations: None.

CBE #1425 – Measurement of nPCR for Pediatric Hemodialysis Patients [UMICH/CMS]

Specifications | Discussion Guide

Description: Percentage of patient months of pediatric (< 18 years old) in-center hemodialysis patients (irrespective of frequency of dialysis) with documented monthly normalized protein catabolic rate (nPCR) measurements.

Committee Final Vote: Endorse with Conditions

Conditions: When the measure returns for maintenance (5 years), the measure developer should have:

- Aligned with any forthcoming CBE polices around pediatric population measures; and
- Explored meaningfulness with patients/parents/caregivers that have direct lived experience in this measure area.

Vote Count: Endorse (4 votes; 24%), Endorse with Conditions (13 votes; 76%), Remove Endorsement (0 votes; 0%); recusals (0).

Public Comments: Battelle received three comments prior to the meeting. The three comments indicated support for continued endorsement for the measure. The comments stated that the measure is a step in the right direction for pediatric assessment of nutrition and ensures pediatric patients are being monitored with the most appropriate measurement that is currently available.

Advisory Group Comments: The Advisory Group would like the Recommendation Group to consider whether this is still appropriate as a process measure or whether it would be possible to consider a new measure that recommends a range or threshold for nPCR.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Apply Most Conditions from CBE #2706	• Recommendation Group	• The Recommendation Group indicated that they had similar thoughts on the current measure as they did for CBE #2706. They agreed to apply the same conditions to the measure except for the risk-adjustment condition, as this is a process measure.
Alternative Outcomes	• Advisory Group • Recommendation Group	• A Recommendation Group member inquired about other outcomes the developer might consider, such as survival to transplantation. • The developer indicated that while survival to transplantation has not been discussed, height, weight, and growth trajectories could be meaningful outcomes related to nutrition. However, these ideas are still in the early stages of consideration. • Another Recommendation Group member commented that assessing survival meaningfully is challenging due to the small patient population and low outcome rate.
Reliability	• Recommendation Group	• A Recommendation Group member expressed interest in additional information on the bootstrapping method used for reliability testing.

Additional Recommendations: None.

CBE #0318 – Delivered Dose of Peritoneal Dialysis Above Minimum [UMICH/CMS]

Specifications | Discussion Guide

Description: Percentage of all patient months for adult patients (≥ 18 years old) whose delivered peritoneal dialysis dose was a weekly Kt/Vurea ≥ 1.7 (dialytic + residual).

Committee Final Vote: Endorse

Vote Count: Endorse (16 votes; 100%), Endorse with Conditions (0 votes; 0%), Remove Endorsement (0 votes; 0%); recusals (0).

Public Comments: This measure did not receive any comments during the public comment period.

Advisory Group Comments: The Advisory Group questioned whether the measure allows sufficient flexibility for patient-provider shared decision-making, noting that some patients on dialysis were doing well without meeting the 1.7 threshold. They also debated the need for risk adjustment, suggesting that discussing it would enhance the measure's submission. Additionally, given the measure's age and high adherence rate, some members questioned its current impact and whether the focus should shift to addressing any remaining performance gaps.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Importance	• Patient Partner • Recommendation Group • Staff Assessment	• A patient partner emphasized the measure's importance and meaningfulness for patient safety, despite the guidelines being based on older information. Both the staff assessment and Recommendation Group reviewers also recognized importance as "Met."
Performance Gap	• Advisory Group • Recommendation Group	• Addressing the mixed opinions on the performance gap by the Advisory Group, several Recommendation Group members emphasized the importance of maintaining measures even if the performance gap is small and they appear topped out, as removing them could lead to a decline in care quality. • A Recommendation Group member proposed that the developer consider focusing on outcome measures such as mortality or infection rates instead of intermediate outcomes to address the concern about the measure being topped out. • The developer indicated that there is a group of other dialysis facility quality measures that assess outcomes such as standardized mortality ratio, hospitalization, and readmission. They like the idea of looking at peritonitis specific to the peritoneal dialysis population and have considered developing a measure related to this topic in the future.

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		• The developer explained that dialysis is a capitated reimbursement environment so the financial incentive leans toward providing less dialysis. Thus, they appreciated the comments indicating that this measure serves as a guardrail that ensures patients continue to receive adequate treatment.
Risk Adjustment and Validity	• Advisory Group • Patient Partner • Recommendation Group • Staff Assessment	• Some Advisory Group members, including a patient partner, suggested that risk adjustment could add value to the measure. A Recommendation Group member thought that risk adjustment might not be necessary and that it would be easier for hospitals to calculate their score internally without risk adjustment. • The developer mentioned that no comorbidities or patient-level factors appear suitable for risk adjustment. They expressed worries about considering factors that might be beyond the control of facilities or that could exacerbate disparities in care through improper risk adjustment. They considered stratifying the measure; however, doing so might result in less reporting from smaller facilities with inadequate sample sizes.
Reducing Burden	• Recommendation Group	• A Recommendation Group member discussed the potential for measurement fatigue and suggested transitioning to a different measure that might offer a better opportunity to close the gap and improve quality. The member inquired whether any other measures get to the same need for improvement. • The developer indicated that there is currently no other measure of adequacy; however, given that the measure focus is an important issue, other ways to assess adequacy beyond Kt/V may emerge in the future. • Another Recommendation Group member recommended integrating data from EHRs to reduce burden. • The developer reported that the measure data comes from the End Stage Renal Disease Quality Reporting System (EQRS) and the burden is minimal, as the measure is completed seamlessly and automatically for most dialysis facilities.

Additional Recommendations: To address the concern about the measure being topped out, a Recommendation Group member proposed focusing on outcome measures like mortality or infection rates instead of intermediate outcomes.

CBE #4650 – Facility Level Percentage of Chronic Hyperphosphatemia in Dialysis Patients [UMICH/CMS]

Specifications | Discussion Guide

Description: Percentage of adult dialysis patients with a 6-month rolling average phosphorus value greater than or equal to 6.5 mg/dL.

Committee Final Vote: Endorse

Vote Count: Endorse (16 votes; 100%), Endorse with Conditions (0 votes; 0%), Do Not Endorse (0 votes; 0%); recusals (0).

Public Comments: Battelle received two comments prior to the meeting. One comment indicated that the measure lacks supporting evidence. Another comment highlighted the importance of this measure and of addressing mineral and bone disorders (MBD), as improper management of MBD can put individuals at risk of experiencing further health complications, such as hyperphosphatemia.

Advisory Group Comments: The Advisory Group debated the need for risk adjustment, suggesting that including it would strengthen the measure's submission. They expressed concern that phosphorus levels are influenced by food insecurity and other community issues, limiting facilities' ability to effect change. Additionally, they noted that changes in phosphate binder coverage starting January 1 might increase the measure's importance.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Risk Adjustment	• Advisory Group • Recommendation Group • Staff Assessment	• Recognizing the staff assessment and Advisory Group questions surrounding risk adjustment, a Recommendation Group member inquired whether other factors, unrelated to social risk factors, might be suitable for risk adjustment. • The developer reported that after assessing comorbidities and several other factors, they found that intuitively expected factors related to the outcome, such as access to healthy nutrition, did not yield significant results.
Evidence	• Recommendation Group • Public Comment	• A Recommendation Group member expressed concern about the lack of support for the measure by a major society in this area (American Society of Nephrology). They asked what other experts in dialysis management might think of this measure. • The developer explained that there are significant gaps in nephrology where the evidence base is not as robust as desired. Specifically, for this measure, the evidence is limited due to the lack of high-quality clinical trials investigating phosphate control and phosphate binders. However, large-scale observational studies have demonstrated the increased risk associated with high phosphorus levels and that controlling phosphorus is associated with improved outcomes. Most experts acknowledge that high phosphorus is associated with poor outcomes. TEP discussions

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		noted that phosphorus levels can fluctuate rapidly, which is the measure uses a 6-month rolling average. • A Recommendation Group member suggested issuing a call to action to nephrology organizations for studies and evidence for both pediatric and adult populations.
Facilities' Ability to Impact Performance	• Advisory Group • Recommendation Group	• A Recommendation Group member requested the developer address the issues of food insecurity and community-based challenges, noting that facilities might have limited resources to effect change. They expressed concerns about the potential influence of social determinants of health on facilities' performance, particularly if the measure is incorporated into pay-for-performance programs. • The developer highlighted the role of dieticians and social workers in addressing food insecurity and the recent shift in responsibility for providing phosphate binders to dialysis facilities, which could improve access and control of phosphorus levels. The developer indicated that they are not able to comment on how the measure will be used programmatically.

Additional Recommendations: To address the challenge of the limited evidence-base for the measure, a Recommendation Group suggested issuing a call to action to nephrology organizations for studies and evidence for both pediatric and adult populations.

CBE #0531 – Patient Safety Indicator (PSI) 90: Patient Safety and Adverse Events Composite [Mathematica/CMS]

Specifications | Discussion Guide

Description: PSI 90 is a composite of ten adverse event indicators that summarizes hospitals' performance on patient safety for the CMS Medicare fee-for-service population. The timeframe used in the CMS Hospital Acquired Conditions Reduction Program (HACRP) and Care Compare public reporting are set within the Inpatient Prospective Payment Systems (IPPS) Final Rule annually. Typically, the performance periods use multiple months of claims data.

Committee Final Vote: Endorse

Vote Count: Endorse (14 votes; 93%), Endorse with Conditions (0 votes; 0%), Remove Endorsement (1 vote; 7%); recusals (1).

Public Comments: Battelle received one comment prior to the meeting. The comment expressed concern over the reliability of the individual measures in this composite measure. In addition, because this measure is based on administrative claims, the commenter questioned if this measure is truly useful for accountability and improvement purposes.

Advisory Group Comments: The Advisory Group, especially the patient members, emphasized the measure's importance for creating accountability and transparency, noting its meaningfulness to patients.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Importance and Evidence	• Advisory Group • Recommendation Group	• Several Recommendation Group members agreed with the Advisory Group, highlighting the importance of the measure. A patient partner also noted its meaningfulness to patients. • A Recommendation Group member commended the submission for its comprehensiveness and clarity, stating it was methodologically strong and effectively translated complex methods into lay language. • The developer provided additional feedback in response to the staff assessment regarding the intermittent grading of the evidence related to importance. They stated that they submitted additional documentation that provides the grading for each component measure. The Recommendation Group did not raise any questions or concerns regarding this additional documentation.
Usability	• Public Comment • Recommendation Group	• A Recommendation Group member voiced concern about the usability of the measure, specifically around its ability to assess potential variability in addressing gaps in quality depending on factors such as different hospital sizes and nurse turnover. • The Recommendation Group recognized that the measured entities also have access to a guide to support the interpretation of the results. These results can be used to help

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		measured entities understand which PSI 90 components are impacting their score, run further analyses, and compare their performance to other organizations. The group had no further questions and recognized the staff assessment as "Met" for this domain.
Impact of COVID-19 on Data	• Recommendation Group	• A Recommendation Group member requested clarification on the impact of COVID-19 on data capture for the measure given the 2-year lag in reporting. • The developer explained that COVID-19 is a variable in the risk adjustment model. They indicated that they also adjust for the time trend during the 2-year period. • The developer noted that there is an inevitable lag in data reporting due to the process of using claims data, which involves several steps and can take over a year to finalize.
Accuracy of Data	• Recommendation Group	• A Recommendation Group member indicated that while they have had concerns about the accuracy of claims data in the past, current literature shows there have been significant improvements in data-level validity. • Another Recommendation Group member questioned the accuracy of outcomes captured using claims data, noting the lack of validity testing at the data element level. They highlighted the possibility that variations in hospital performance might reflect differences in coding rather than true performance differences. • The developer acknowledged that they did not perform any data element-level validity testing; however, they did compare the measure and its components with external measures and found consistent patterns (mostly weak positive correlations). They clarified that they focused on construct validity rather than data element-level validity. • The developer indicated that data elements are prescribed value sets that are provided to each hospital. They stated that they review whether codes are implemented accurately and while they have seen issues, they account for this by consistently reviewing coding standards.
Reliability	• Public Comment	• The Recommendation Group did not have questions or concerns regarding reliability, noting that the staff assessment found the measure to be "Met" for this domain.

Additional Recommendations: A Recommendation Group member suggested that future research should include data element-level validity testing to ensure accuracy and address concerns about coding variations affecting measure scores.

CBE #3309 – Risk-Standardized Survival Rate (RSSR) for In-Hospital Cardiac Arrest [American Heart Association]

Specifications | Discussion Guide

Description: This measure estimates a hospital-level risk-standardized survival rate (RSSR) for patients aged 18 years and older who experience an in-hospital cardiac arrest.

Committee Final Vote: Endorse

Vote Count: Endorse (17 votes; 100%), Endorse with Conditions (0 votes; 0%), Remove Endorsement (0 votes; 0%); recusals (0).

Public Comments: This measure did not receive any comments during the public comment period.

Advisory Group Comments: The Advisory Group discussed the inclusion of patient-level risk factors in the measure, emphasizing the importance of considering whether it might reveal inequities in the treatment of certain patient groups.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Importance and Evidence	• Patient Partner • Recommendation Group	• Several Recommendation Group members agreed that the measure is important and meaningful to patients. • Patient partners expressed support for the measure, emphasizing the measure's potential to provide meaningful information for patients regarding in-hospital cardiac arrest. • Recommendation Group members noted that in a previous evaluation of the measure they were involved in, they did not have any issues with the measure's evidence, reliability, validity, feasibility, use, and usability. One Recommendation Group member highlighted the measure fills a gap, as in-hospital cardiac arrest receives less attention in the literature compared to out-of-hospital cardiac arrest and expressed support for the measure's continuation.
Extracorporeal Membrane Oxygenation (ECMO) Capability	• Recommendation Group	• A Recommendation Group member questioned if this measure was to be used for both quality reporting and for value-based purchasing, if it would make sense to stratify hospitals in terms of their ability to place patients on extracorporeal membrane oxygenation (ECMO). • The developer indicated that hospitals could be stratified based on various hospital-level factors, including ECMO capability, and noted that ECMO-treated patients often have lower survival rates due to delayed initiation.
Prevalence and Competing Measures	• Recommendation Group	• A Recommendation Group member expressed concerns about the relatively low prevalence of cardiac arrest captured in the measure. They indicated that the measure could potentially compete with other measures with higher prevalence and questioned its priority given the measure load on hospitals.

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
		• The developer clarified that the incidence of in-hospital cardiac arrest is higher than previously estimated, ranging from 2% to 5% depending on the hospital. • Another Recommendation Group member agreed that the literature shows that the incidence of in-hospital cardiac arrest is increasing.
Risk Adjustment and Equity	• Advisory Group	• The Recommendation Group recognized that the developer, in consultation with multiple experts, intentionally did not include social risk variables as they did not wish to mask any disparities in care with risk adjustment. The developer analyzed registry data and found that hospitals with a higher proportion of Black patients had lower survival rates compared to those with fewer Black patients. • The developer noted that the risk adjustment is robust and controls for cardiac arrest variables such as initial rhythm, which cannot be obtained with administrative databases.

Additional Recommendations: None.

CBE #4580 – Composite Measure for the Quality of Care Provided to Patients Undergoing Percutaneous Coronary Interventions (PCI) [American College of Cardiology]

Specifications | Discussion Guide

Description: This is a weighted composite measure comprised of six component measures: three all-cause risk standardized outcome measures on all-cause mortality, bleeding, acute kidney injury, and three process measures focused on discharge on guideline-directed medical therapy, referral to a cardiac rehabilitation program, and PCI performed within ninety minutes of symptoms for patients with acute myocardial infarctions. The target population includes adults (age 18 and greater) undergoing percutaneous coronary interventions. The timeframe for reporting will be a rolling four quarters.

Committee Final Vote: Endorse

Vote Count: Endorse (16 votes; 100%), Endorse with Conditions (0 votes; 0%), Do Not Endorse (0 votes; 0%); recusals (0).

Public Comments: This measure did not receive any comments during the public comment period.

Advisory Group Comments: The Advisory Group questioned the appropriateness of the weighting of individual components, with some members emphasizing the topic's importance in informing care and enabling patients to make decisions and actively participate in their treatment.

Measure Discussion:

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Patient Engagement	• Patient Partners • Staff Assessment	• Patient partners emphasized the importance of early and frequent patient input and engagement in the measure development processes, highlighting the value of including patients' perspectives and lived experiences. A Patient partner advocated for creating an environment where the community feels comfortable sharing genuine feedback. • In response to the staff assessment comment about potentially insufficient patient input, the developer clarified that measure input was gathered through a technical expert panel with patient and caregiver representation and a survey distributed to over 1,500 individuals, including patient advocates, which received positive feedback.
Feasibility	• Staff Assessment	• In response to the staff assessment noting an incomplete discussion of feasibility, the developer explained that over 1,600 hospitals are already submitting data for the composite measure. They noted that, apart from participation in the National Cardiovascular Data Registry (NCDR), there are no licensing or fees associated with this measure. Data collection is standardized, and many of the individual measures within the composite have been collected for several years.

Discussion Topic/Theme	Source of Comment	Recommendation Group Discussion
Support and Acknowledgement of Importance	• Advisory Group • Patient Partners • Recommendation Group • Staff Assessment	• Several Recommendation Group members, including patient partners, agreed with the Advisory Group and expressed their support for the measure. • A Recommendation Group member congratulated the developers on the measure, noting its importance and the shift from process to outcome measures. • In response to the staff assessment note of a sparse logic model, the developer provided an enhanced logic model, which Battelle noted can be found on the event page in the Developer Responses to Staff Assessment Excel sheet.
Measure Exclusions and Stratification	• Recommendation Group	• A Recommendation Group member inquired about the handling of elective PCI versus primary PCI for myocardial infarction. They indicated that the PCI community has been vocal about issues related to patients presenting with cardiac arrest requiring PCI, as many measures exclude certain types of PCI patients. • The developer confirmed that all PCI patients are included. The risk model in the endorsed mortality component adjusts for factors such as acute coronary syndrome status, cardiogenic shock, and cardiac arrest and is structured in a way that reflects changes in measurement strategy and practice. For example, the measure excludes patients with refractory cardiogenic shock and patients with cardiac arrest without neurologic status, for consistency with best practices. • Another Recommendation Group member inquired whether there is any stratification of the measure scores. • The developer stated that there is no stratification; the measure is only in the risk adjustment.

Additional Recommendations: None.

Next Steps

Battelle staff shared that they would publish a meeting summary by March 4, 2025. The appeals period will run from March 4-24, 2025. If an eligible appeal is received, the Appeals Committee will meet on March 31, 2025, to evaluate the appeal and determine whether to maintain or overturn an endorsement decision.