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National Consensus Development and Strategic Planning for Health Care Quality Measurement

Spring 2024 Cycle Endorsement and Maintenance (E&M) Technical Report

MANAGEMENT OF ACUTE EVENTS AND CHRONIC CONDITIONS

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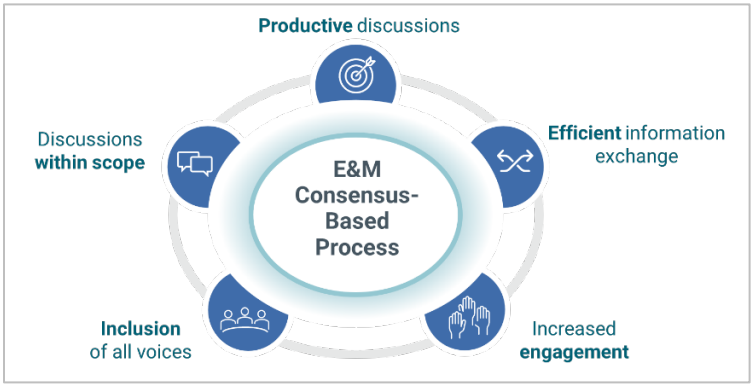
Executive Summary

For over 2 decades, the United States (U.S.) has focused on improving health care quality for Americans. One of the ways this has been done is by developing and implementing clinical quality measures to quantify the quality of care provided by health care providers and organizations. These clinical quality measures are based on standards related to the effectiveness, safety, efficiency, person-centeredness, equity, and timeliness of care.[1]

At Battelle, we have a strong collective interest in ensuring that the health care system works as well as it can. Quality measures are used to support health care improvement, benchmarking, and accountability of health care services and to identify weaknesses, opportunities, and disparities in care delivery and outcomes.[1,2]

Figure 1. E&M Consensus-Based Process



Battelle is a certified consensus-based entity (CBE) funded through the Centers for Medicare & Medicaid Services (CMS) National Consensus Development and Strategic Planning for Health Care Quality Measurement Contract. As a CMS-certified CBE, we facilitate the review of quality measures for endorsement. To support our consensus-based process, we formed the Partnership for Quality Measurement™ (PQM), which ensures informed and thoughtful endorsement reviews of quality measures across a range of focus areas that align with a person's journey through the health care system. Battelle engages PQM members to carry out the consensus-based E&M process, which relies on robust and focused discourse, efficient information exchange, effective engagement, inclusion of diverse voices (Figure 1).

One of those focus areas is the management of acute events and chronic conditions, which includes measures focusing on improving patient outcomes in key areas such as cardiovascular health, infection control, chronic disease management, and diagnostic accuracy. Cardiovascular disease (CVD) is a leading cause of death in the U.S. since 1920.[3] The American Heart Association predicts 131.2 million Americans will experience some form of CVD by 2035.[3] Evidence-based vascular health management strategies, such as controlling blood pressure and statin use, contribute to reduced mortality and morbidity.[4] Additionally, infection control in outpatient settings is critical, as more than 14,000 bloodstream infections occurred in U.S. for patients on dialysis in 2020, contributing to patient morbidity and mortality.[5] Measures reviewed by the committee this cycle also underscore the importance of accurate diagnoses and improving follow-up care after acute exacerbations of chronic conditions. Pneumonia, a leading cause of sepsis[6], hospitalizations[7], and death[8] in the U.S., is one of the most common conditions associated with diagnostic error.[9] Accurate and timely diagnosis is essential for effective clinical decision-making and optimal patient outcomes.[10] Timely follow-up after hospital

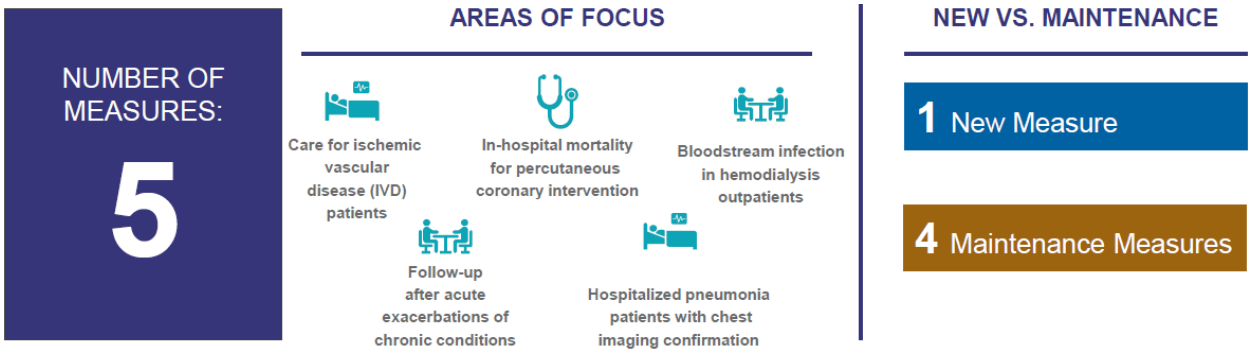
discharge is also critical component for improving patient outcomes, satisfaction, and efficiency.[11]

For this measure review cycle, developers submitted nine measures to the Management of Acute Events and Chronic Conditions committee for endorsement consideration. Measure stewards withdrew three measures that were up for maintenance endorsement review and one new measure (Table 5). Of the five remaining measures reviewed by the committee (Figure 2), the committee endorsed four measures and endorsed one measure with conditions based on the PQM Measure Evaluation Rubric of version 1.2 of the E&M Guidebook (Table 1).

Table 1. Measures Reviewed by the Management of Acute Events and Chronic Conditions Committee

CBE Number	Measure Title	New/Maintenance	Developer/Steward	Final Endorsement Decision
0076	Optimal Vascular Care	Maintenance	Minnesota Community Measurement	Endorse
0133	In-Hospital Risk Standardized Mortality for Percutaneous Coronary Intervention (Excluding Cardiogenic Shock and Cardiac Arrest)	Maintenance	American College of Cardiology	Endorse
1460	Bloodstream Infection in Hemodialysis Outpatients	Maintenance	Centers for Disease Control and Prevention, National Healthcare Safety Network	Endorse with Conditions
3455	Timely Follow-Up After Acute Exacerbations of Chronic Conditions	Maintenance	Yale Center for Outcomes Research and Evaluation (Yale CORE)/Centers for Medicare & Medicaid Services (CMS)	Endorse
4440e	Percent of Hospitalized Pneumonia Patients with Chest Imaging Confirmation	New	University of Utah	Endorse

Figure 2. Spring 2024 Measures for Committee Review

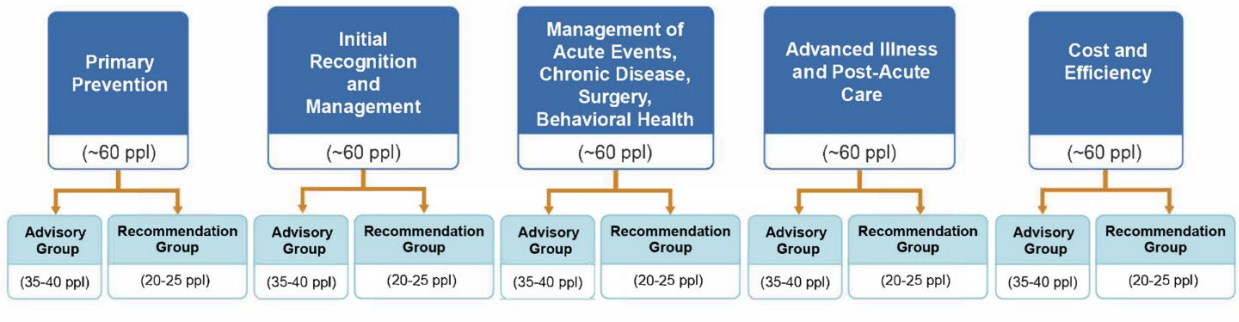


Endorsement and Maintenance (E&M) Overview

Battelle's E&M process ensures measures submitted for endorsement are evidence based, scientifically sound, and both safe and effective, meaning use of the measure will increase the likelihood of desired health outcomes; will not increase the likelihood of unintended, adverse health outcomes; and is consistent with current professional knowledge.

We organize measures for E&M by five project areas. Each project topical area has a committee that evaluates, discusses, and assigns endorsement decisions for measures under endorsement review. These E&M committees are composed of diverse PQM members, representing all facets of the health care system. Each E&M committee is divided into an Advisory Group and a Recommendation Group (Figure 3).

*Figure **3**. E&M Committee Structure*



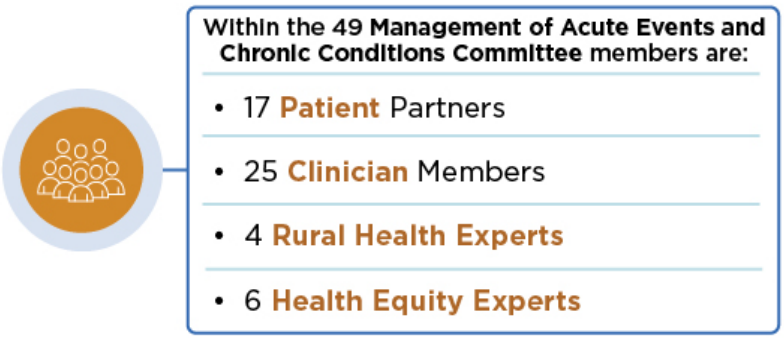
The goal is to create inclusive committees that balance experience, expertise, and perspectives. The E&M process convenes and engages interested parties throughout the cycle. The interested parties include those who are impacted or affected by quality and cost/resource use and represent a diverse group of people and perspectives (Figure 4).

Figure 4. E&M Interested Parties

For the Management of Acute Events and Chronic Conditions committee, membership for the Spring 2024 cycle consisted of 17 patient partners (i.e., patients, caregivers, advocates) and 25 clinicians, with specialties in general internal medicine, anesthesiology, nephrology, pediatrics, and others (Figure 5). The committee also included four experts in rural health and six in health equity.

While a list of committee members is provided in Appendix A, full committee rosters and bios are posted on the respective project pages on the PQM website.

Figure 5. Management of Acute Events and Chronic Conditions Committee Members



At the beginning of each E&M cycle, committee members complete a measure-specific disclosure of interest (MS-DOI) form identifying potential conflicts with the measures under endorsement review for the respective E&M cycle. Members are recused from voting on measures potentially affected by a perceived conflict of interest (COI) based on Battelle's COI policy.

Each E&M cycle (i.e., Fall or Spring) has a designated Intent to Submit deadline, when measure developers/stewards must submit key information (e.g., measure title, type, description, specifications) about the measure. One month after the Intent to Submit deadline (Table 2), measure developers/stewards submit the full measure information by the respective Full Measure Submission deadline.

Table 2. Intent to Submit and Full Measure Submission Deadlines by Cycle

E&M Cycle	Intent to Submit*	Full Measure Submission*
Fall	October 1	November 1
Spring	April 1	May 1

**Deadlines are set at 11:59 p.m. (ET) of the day indicated. If the deadline falls on a weekend or holiday, the deadline will be the next immediate business day.*

We then publish measures to the PQM website for a 30-day public comment period, which occurs prior to the endorsement meeting and concurrently with the development of the E&M staff preliminary assessments. The intent of this 30-day comment period is to solicit both supportive and non-supportive comments with respect to the measures under endorsement review. Any interested party may submit a comment on any of the measures up for endorsement review for a given cycle (i.e., Fall or Spring). Prior to the close of the public comment period, we host Public Comment Listening Sessions to gather additional public comments on the measures; these virtual sessions are organized by project with measures grouped by topic/condition. Any interested party may attend to give a brief verbal statement on one or more of the measures.

All public comments received during this 30-day period, including those shared during the Public Comment Listening Sessions, are posted to the respective measure page on the PQM website. A summary of the comments received for the measures submitted to the Management of Acute Events and Chronic Conditions committee for the Spring 2024 cycle is provided below.

Following the Public Comment Listening Sessions, we convene the Advisory Group of each E&M project for a public virtual meeting. The purpose of these meetings is to gather initial

feedback and questions about the measures under endorsement review. We summarize the feedback and questions received from the Advisory Group members and share that information, along with all public comments received, with developers/stewards for review and written response. For Management of Acute Events and Chronic Conditions, the Advisory Group convened on June 3, 2024, and a summary of the member feedback and developer/steward responses is published on the PQM website.

Prior to the Recommendation Group endorsement meeting, we share the full measure submission details, including all attachments, the PQM Measure Evaluation Rubric, the staff preliminary assessments, the public comments, Advisory Group feedback, and the developer/steward responses with the Recommendation Group for review. For Management of Acute Events and Chronic Conditions, the Recommendation Group convened on July 30, 2024. Brief summaries of the Recommendation Group deliberations and voting results are provided below, while a detailed meeting summary is available on the PQM website.

During the endorsement meeting, the Recommendation Group focuses their discussions on key themes identified from the public comments, the Advisory Group meetings, the associated developer/steward responses, independent reviews, and the E&M project staff preliminary assessments. Measure developers/stewards attend endorsement meetings to provide a measure overview and answer questions from the Recommendation Group. The Recommendation Group considers the various inputs and renders a final endorsement decision via a vote. Consensus is reached when there is 75% or greater agreement among all active, non-recused Recommendation Group members (Table 3). However, if no consensus is reached, the measure is not endorsed due to no consensus.

Table 3. Endorsement Decision Outcomes

Decision Outcome	Description	Maintenance Expectations
Endorsed	**Applies to new and maintenance measures.** The E&M committee agrees by 75% or more to endorse the measure.	Measures undergo maintenance of endorsement reviews every 5 years with a status report review at 3 years (*see Evaluations for Maintenance Endorsement for more details*).± Developers/stewards may request an extension of up to 1 year (two consecutive cycles), except if it has been more than 6 years since the measure's date of last endorsement.
Endorsed with Conditions*	**Applies to new and maintenance measures**. The E&M committee agrees by 75% or greater that the measure can be endorsed as it meets the criteria, but committee reviewers have conditions they would like addressed when the measure	Measures undergo maintenance of endorsement reviews every 5 years with a status report at 3 years, unless the condition

Decision Outcome	Description	Maintenance Expectations
	comes back for maintenance. If these recommendations are not addressed, the developer/steward should provide a rationale for consideration by the E&M committee review.	requires the measure to be reviewed earlier (*see Evaluations for Maintenance Endorsement for more details*). The E&M committee evaluates whether conditions have been met in addition to all other maintenance endorsement minimum requirements.
Not Endorsed°	**Applies to new measures only**. The E&M committee agrees by 75% or greater to not endorse the measure.	None
Endorsement Removed°	**Applies to maintenance measures only.** Either: • The E&M committee agrees by 75% or greater to remove endorsement; or • A measure steward retires a measure (i.e., no longer pursues endorsement); or • A measure steward never submits a measure for maintenance, and the steward does not respond after targeted outreach; or • There is no longer a meaningful gap in care, or the measure has topped out (i.e., no significant change in measure results for accountable entities over time).	None

±Maintenance measures may be up for endorsement review earlier if an emergency/off-cycle review is needed (see Emergency/Off-Cycle Reviews for more details).

**Conditions are determined by the E&M committee, with the consideration as to what is feasible and appropriate for the developer/steward to execute by the time of maintenance endorsement review.*

°Measures that fail to reach the 75% consensus threshold are not endorsed.

The "Endorsed with Conditions" category serves as a means of endorsing a measure but with conditions set by the Recommendation Group. These conditions take into consideration what is feasible and appropriate for the developer/steward to execute by the time of maintenance endorsement review.

After the E&M endorsement meeting, committee endorsement decisions and associated rationales are posted to the PQM website for 3 weeks, which serves as the appeals period. During this time, any interested party may request an appeal regarding any E&M committee endorsement decision. If a measure's endorsement, including an "Endorsed with Conditions" decision, is being appealed, the appeal must:

- Cite evidence the appellant's interests are directly and materially affected by the measure, and provide evidence that the CBE's endorsement of the measure has had, or will have, an adverse effect on those interests; and

- Cite the existence of a CBE procedural error or information that was available by the cycle's Intent to Submit deadline but was not considered by the E&M committee at the time of the endorsement decision that is reasonably likely to affect the outcome of the original endorsement decision.

In the case of a measure not being endorsed, the appeal must be based on one of two rationales:

- The CBE's measure evaluation criteria were not applied appropriately. For this rationale, the appellant must specify the evaluation criteria they believe were misapplied.
- The CBE's E&M process was not followed. The appellant must specify the process step, how it was not followed properly, and how this resulted in the measure not being endorsed.

If Battelle determines that an appeal is eligible, we convene the Appeals Committee, consisting of the co-chairs from all five E&M project committees (n=10), to review and discuss the appeal. The Appeals Committee concludes its review of an appeal by voting to uphold (i.e., overturn a committee endorsement decision) or deny (i.e., maintain the endorsement decision) the appeal. Consensus is determined to be 75% or greater agreement via a vote among members.

For the Spring 2024 cycle, the appeals period opened on August 30 and closed on September 20, 2024. No appeals were received for the measures reviewed by the Management of Acute Events and Chronic Conditions committee.

Management of Acute Events and Chronic Conditions Measure Evaluation

For this measure review cycle, the Management of Acute Events and Chronic Conditions committee evaluated one new measures and three measures undergoing maintenance review against standard measure evaluation criteria. During the Recommendation Group endorsement meeting, the committee voted to endorse four measures and one measure was endorsed with conditions (Table 4).

Table 4. Number of Spring 2024 Management of Acute Events and Chronic Conditions Measures Submitted and Reviewed

	Maintenance	New	Total
Number of measures submitted for endorsement review	7	2	9
Number of measures withdrawn from consideration*	3	1	4
Number of measures reviewed by the committee	4	1	5
Number of measures endorsed	3	1	4
Number of measures endorsed with conditions	1	0	1
Number of measures not endorsed/ endorsement removed	0	0	0

**Measure developers/stewards can withdraw a measure from measure endorsement review at any point before the committee endorsement meeting. Table 5 provides a summary of withdrawn measures.*

Table 5. Measures Withdrawn from Consideration

Measure Number	Measure Title	Developer/ Steward	New/ Maintenance	Reason for Withdrawal
0059	Glycemic Status Assessment for Patients With Diabetes (GSD): Glycemic Status >9.0%	National Committee for Quality Assurance (NCQA)	Maintenance	Withdrawn by steward and deferred to future endorsement review cycle.
0061	Blood Pressure Control for Patients With Diabetes (BPD)	NCQA	Maintenance	Withdrawn by steward and deferred to future endorsement review cycle.

Measure Number	Measure Title	Developer/ Steward	New/ Maintenance	Reason for Withdrawal
0575	Glycemic Status Assessment for Patients With Diabetes (GSD): Glycemic Status <8.0%	NCQA	Maintenance	Withdrawn by steward and deferred to future endorsement review cycle.
4300	Hepatitis C Virus (HCV): Sustained Virological Response (SVR)	American Gastroenterological Association	New	Withdrawn by steward and deferred to future endorsement review cycle.

Public Comments Received Prior to Committee Evaluation

Battelle accepts comments on measures under endorsement review through the PQM website. For this evaluation cycle, the public comment period opened on May 16, 2024, and closed on June 14, 2024, during which time we hosted a Public Comment Listening Session on May 29, 2024. The measures received five public comments, and Battelle published the comments to the respective measure pages on the PQM website. If a measure received any comments, they are summarized under the measure's evaluation summary below, and developer/steward responses to public comments are available on the PQM website.

Summary of Potential High-Priority Gaps

During the committee's evaluation of the measures, committee members identified gap areas that are summarized below for future development and endorsement considerations.

Inclusion of Pharmacists as Providers

Regarding CBE #3455, two committee members highlighted that pharmacists are excluded from being recognized as providers. They expressed that this exclusion limits the ability to fully capture the contributions of pharmacists in patient care, potentially undermining comprehensive care delivery.

Summary of Major Concerns or Methodological Issues

The following brief summaries of the measure evaluations highlight the major concerns and/or methodological issues that the committee considered.

Impact of Low-Volume Facilities on Measure Reliability

The committee discussed the reliability of CBE #1460 and acknowledged that including facilities with low numbers of expected event counts reduces the overall reliability results. The Recommendation Group discussed exploring a minimum case volume to improve reliability results. However, the developer explained that bloodstream infections (BSIs) are rare enough that 30% of facilities report zero events; therefore, prioritizing the achievement of a reliability score of 0.7 or higher could exclude too many facilities from assessment. Given the importance

of monitoring for any BSI event, the developer opted to prioritize inclusivity of all facilities despite the lower reliability scores. The Recommendation Group suggested using a reliability approach that accounts for facility size, such as empirical Bayes, which pools information across different facilities to improve the reliability estimates, especially for smaller facilities that might have less data.

Measure Evaluation Summaries

CBE #0076: Optimal Vascular Care [Minnesota Community Measurement] – Maintenance

Specifications | Discussion Guide

Description: The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving ALL of the following:

- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelet medication, unless allowed contraindications or exceptions are present

Committee Final Vote: Endorse

Vote Count: Endorse (18 votes; 100.00%), Remove Endorsement (0 votes; 0.00%); Recusals (0).

Summary of Public Comment: The measure received one supportive public comment that was received prior to the meeting. The comment supported the measure's importance. The commenter questioned if the measure would identify certain population groups that may be more prone to IVD.

Summary of Measure Evaluation: This measure was last endorsed in Spring 2020 and is used in the Minnesota (MN) HealthScores program and a HealthPartners pay-for-performance program, Partners in Quality, which covers the state of Minnesota. Advisory Group members recognized the importance of the measure due to the high prevalence of vascular and cardiovascular diseases but raised several questions. They asked about the determination of blood pressure readings, definitions and capture methods for statins and proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors, the exclusion of patients in hospice/palliative care, and the definition of "urgent care." The Advisory Group also had questions about the measure's scalability and data submission process, particularly the use of the Process Intelligence Performance Engine (PIPE) system and the frequency of data reporting. The developer addressed these clarification questions, and the Recommendation Group did not have any concerns with the developer responses. The Recommendation Group agreed that the measure is important and noted that it is focused on evaluating provider behavior as opposed to patient adherence. The Recommendation Group noted a decrease in measure performance, which the developer attributed to the COVID-19 pandemic. The developer emphasized stabilization and improvement in scores observed in the 2023 data.

The Advisory Group expressed an equity concern, citing the predominantly white patient sample, and inquired about the methods used to identify disparities. The developer noted that they stratify this measure by race, ethnicity, preferred language, country of origin, geographic

location, and insurance type (Minnesota Health Care Programs vs. Other Purchasers). They added that although they did not submit data for the optional equity domain, they have compared results across subpopulations for 2021 and 2022 and provide the information to medical groups to drive improvement. The Recommendation Group did not express any significant concerns that would prevent endorsement and unanimously voted to endorse the measure.

Appeals: None.

Additional Recommendations for the Developer/Steward: None

CBE #0133: In-Hospital Risk Standardized Mortality for Percutaneous Coronary Intervention (Excluding Cardiogenic Shock and Cardiac Arrest) [American College of Cardiology] – Maintenance

Specifications | Discussion Guide

Description: This measure estimates a hospital-level risk standardized mortality rate (RSMR) in adult patients without cardiogenic shock or cardiac arrest undergoing percutaneous coronary intervention (PCI). The outcome is defined as in-hospital mortality following a PCI procedure performed during the episode of care. Mortality is defined as death for any cause during the episode of care.

Committee Final Vote: Endorse

Vote Count: Endorse (17 votes; 100.00%), Remove Endorsement (0 votes; 0.00%); Recusals (1).

Summary of Public Comments: The measure received one public comment prior to the meeting, asking why there is an upper age limit. The developer clarified that this measure collects data on all adult patients 18 years and older.

Summary of Measure Evaluation: This registry-based measure was initially endorsed in 2007 and is currently used in CathPCI Registry®. The Advisory Group expressed concerns that the measure only considers in-hospital mortality and does not account for deaths occurring after discharge. The developer acknowledged the utility of considering mortality beyond discharge but expressed challenges about accessing reliable and valid data across the entire data set for 30 days. The Recommendation Group concurred that inaccuracies in cause of death data make it difficult to distinguish between all-cause mortality and PCI-related mortality post discharge.

The Advisory Group noted the minimal performance gap, with a median of 0.85%. The developer highlighted that this translates to 6,500 deaths and there is significant variability between the minimum and maximum rates. Therefore, while the overall gap may appear small, its impact is substantial. The Recommendation Group discussed whether facilities and providers have clear mechanisms for understanding how they can improve. The developer stated that the CathPCI Registry includes a comprehensive set of process and outcome measures that can be utilized alongside this mortality measure to facilitate improvement. The Recommendation Group did not express any significant concerns that would prevent endorsement and unanimously voted to endorse the measure.

Appeals: None.

Additional Recommendations for the Developer/Steward: None

CBE #1460: Bloodstream Infection in Hemodialysis Outpatients [Centers for Disease Control and Prevention, National Healthcare Safety Network] – Maintenance

Specifications | Discussion Guide

Description: Annual standardized infection ratio (SIR) of bloodstream infections (BSIs) among children and adults receiving maintenance hemodialysis at outpatient hemodialysis facilities. BSIs are defined as positive blood cultures for hemodialysis patients which are reported monthly by participating facilities. The SIR is reported for a yearly period (calendar year) and is calculated by dividing the number of observed BSIs by the number of predicted BSIs during the year.

Committee Final Vote: Endorse with Conditions

Conditions: Update the BSI rate baseline year (2014 in current submission) by measure maintenance.

Vote Count: Endorse (13 votes; 68.42%), Endorse with Conditions (6 votes; 31.58%), Remove Endorsement (0 votes; 0.00%); Recusals (0).

Summary of Public Comments: The measure did not receive any public comments.

Summary of Measure Evaluation: This measure was initially endorsed in 2011 and is currently used in the CMS End-Stage Renal Disease Quality Incentive Program (ESRD QIP), CDC NHSN health care-associated infection tracking system, and publicly reported on Care Compare. The Advisory Group noted the use of baseline data from 2014 and asked about the availability of more recent data, highlighting that updates in clinical practice since 2014 may have changed the relative risk of bloodstream infections by route. The Recommendation Group agreed with updating the baseline year and added this as a condition for when the measure is resubmitted for future endorsement maintenance.

The Advisory Group raised concerns about the attribution of infections to dialysis facilities, particularly when infections might originate elsewhere, and sought clarification on the exclusions listed on the Centers for Disease Control (CDC) website. Additionally, Advisory Group members suggested improvements to increase comprehension of how the measure is calculated, such as visual aids, and expressed concerns about the measure's low reliability, especially given its role in the End-Stage Renal Disease Quality Incentive Program. The Recommendation Group reiterated the importance of this measure but shared similar concerns about infection attribution, noting the potential for overreporting. They also questioned whether access type might affect infection risk. The developer confirmed that access type was the most salient factor they found to be associated with the incidence of BSIs, adding that that they will be including additional covariates beyond access type to their model for additional discrimination in BSI incidents.

Both the Recommendation Group and Advisory Group acknowledged the low reliability among entities with few expected events and discussed applying a minimum-case volume to improve reliability. The developer explained that BSIs are rare (30% of facilities report zero events) and implementing a minimum threshold to achieve a reliability score of 0.7 or higher would limit assessments to a small subset of facilities. Given the importance of monitoring for any BSI event, the developer decided against a minimum-case volume and included all facilities. The Recommendation Group did not have any concerns with this rationale and voted to endorse the

measure with the condition that the BSI rate baseline year is updated by the next maintenance review of the measure.

Appeals: None.

Additional Recommendations for the Developer/Steward: None

CBE #3455: Timely Follow-Up After Acute Exacerbations of Chronic Conditions [Yale CORE/CMS] – Maintenance

Specifications | Discussion Guide

Description: This is a measure of follow-up clinical visits for patients with chronic conditions who have experienced an acute exacerbation of one of six conditions (eight categories) of interest (coronary artery disease [CAD] (high or low acuity), hypertension (high or medium acuity), heart failure [HF], diabetes, asthma, and chronic obstructive pulmonary disease [COPD]) and are among adult Medicare Fee-for-Service (FFS) beneficiaries who are attributed to entities participating in the CMMI Accountable Care Organization (ACO) Realizing Equity, Access, and Community Health (REACH) model.

Committee Final Vote: Endorse

Vote Count: Endorse (18 votes; 100.00%), Remove Endorsement (0 votes; 0.00%); Recusals (1).

Summary of Public Comments: Two commenters supported the measure but questioned the timing and duration of follow-up visits post-exacerbation. The developer clarified that follow-ups could be office or telehealth visits and occur in various care settings, with timeframes guided by clinical practice guidelines and evidence.

Summary of Measure Evaluation: This measure was initially endorsed in 2019 and is currently in use for public reporting, payment programs, and quality improvement with benchmarking. The Advisory Group and Recommendation Group discussed follow-up visit eligibility. The Advisory Group suggested expanding visit eligibility to include pharmacist- or nurse-led visits and Medicare Wellness visits and questioned whether provider types could be specifically identified. The developer addressed these concerns by explaining that the measure allows a wide range of providers to fulfill the follow-up visit requirement, with over 180 codes covering various visit types (e.g., rehabilitation, behavioral health, telehealth, and home visits).

The Advisory Group appreciated the equity analysis and detailed stratification and further acknowledged the developer's decision not to risk adjust certain social risk factors due to the potential of hiding certain modifiable disparities. The Recommendation Group discussed the rationale behind the different follow-up windows for the various chronic conditions and sought clarification on the exclusion criteria for readmitted patients. The developer clarified that they relied on evidence-based guidelines to determine the follow-up intervals. The developer confirmed that while the measure does not exclude acute exacerbations, it excludes cases where another visit occurs within 2 days of the initial visit, as this is considered a continuation of the same visit. The Recommendation Group did not express any significant concerns that would prevent endorsement and unanimously voted to endorse the measure.

Appeals: None.

Additional Recommendations for the Developer/Steward: A Recommendation Group member highlighted that pharmacists, despite their training, are not recognized as providers under the Social Security Act and likely cannot bill for most services in the measure. The member noted it would be helpful for pharmacists to be included as providers so they can help with these types of measures. Another Recommendation Group member echoed this sentiment

and noted the importance of ensuring that pharmacists can seek reimbursement, as they are becoming the most accessible health care practitioner to some patients.

CBE #4440e: Percent of Hospitalized Pneumonia Patients with Chest Imaging Confirmation [University of Utah] – New

Specifications | Discussion Guide

Description: The chest imaging-confirmed measure of pneumonia diagnosis is a process measure of inpatient hospitalizations that identifies the proportion of adult patients hospitalized with a discharge diagnosis of pneumonia and who received systemic or oral antimicrobials at any time during admission who received chest imaging that supported the diagnosis of pneumonia, as recommended by clinical practice guidelines.

Committee Final Vote: Endorse

Vote Count: Endorse (17 votes; 89.47%), Not Endorse (2 votes; 10.53%); Recusals (0).

Summary of Public Comment: One commenter expressed surprise that this measure was not already in existence and agreed with the importance of the measure, sharing that they had to wait hours for X-rays to determine if they had pneumonia.

Summary of Measure Evaluation: The Advisory Group commended the methodological rigor of the measure specifications, particularly the stratification by rural and non-rural populations and the combination of chart extractions with electronic health record (EHR) data. They appreciated the thoroughness of the limitations section, which addressed issues such as clinician trust. The Advisory Group questioned the significance of the measure's performance gap, as nearly 95% of patients receive chest imaging at the 75th percentile. The developer acknowledged mixed results in their topped-out analysis but emphasized the measure's potential as a foundational digital quality measure that helps characterize the cohort of patients for digital measures in the future. The Advisory Group asked the developer to elaborate on the Bayesian empirical reliability approach and requested further details due to discrepancies between this approach and Adams' signal-to-noise method. In response, the developer stated the key difference is that the Adams approach accounts for the overall measure score regardless of the size of the institution, whereas the Bayesian approach accounts for potential instability in estimates from smaller facilities by incorporating information from the overall mean distribution of scores across facilities.

The Recommendation Group expressed concerns about whether resource limitations in critical access or rural hospitals might prevent chest X-rays from being performed. The developer reassured the committee that while some settings might avoid chest X-rays due to costs or patient risks, the measure appropriately focuses on the inpatient population because chest imaging with radiography is available across all U.S. emergency departments and hospitals. The Recommendation Group also discussed concerns about antimicrobial use and the potential overuse of computed tomography (CT) scans. The developer noted that the measure complements existing measures focused on the judicious use of antibiotics. Addressing the concerns about the potential overuse of CT scans, the developer acknowledged patient preference for CT scans over chest X-rays, despite the radiation risks, due to improved diagnostic accuracy. A patient representative's experience underscored the importance of CT scans for reliable diagnosis over time, a perspective that resonated with the committee as a reminder to prioritize patient-centered decision-making. The Recommendation Group did not express any significant concerns that would prevent endorsement and voted to endorse the measure.

Appeals: None.

Additional Recommendations for the Developer/Steward: None.

References

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Appendix A: Management of Acute Events and Chronic Conditions Committee Roster

Spring 2024 Cycle

Member	Affiliation/Organization	Perspective(s)	Advisory/Recommendation Group
Whitney Bowman-Zatzkin (Patient Representative Co-chair)	Rare Dots Consulting	Patient Partner; Rural Health Expert; Health Equity Expert; Other Interested Parties	Recommendation
Marybeth Farquhar (Non-Patient Representative Co-chair)	American Urological Association	Health Services Researcher, Other Interested Parties	Recommendation
Abate Mammo	New Jersey Hospital Association	Other Interested Parties	Advisory
Aileen Schast	Jefferson Einstein Hospital	Health Equity Expert; Clinician; Facility/Institutional; Other Interested Parties	Advisory
Amber Kavan	Nebraska Hospital Association	Other Interested Parties; Clinician	Recommendation
Anna Doubeni	Ohio State Wexner Medical Center	Health Equity Expert; Clinician; Facility/Institution	Recommendation
Antoinette Schoenthaler	NYU Langone Health	Health Equity Expert	Advisory
Ashley Pugh	National Committee for Quality Assurance	Patient Partner	Recommendation
Ashley Tait-Dinger	Florida Alliance for Healthcare Value	Purchaser and Plan; Other Interested Parties	Advisory
Benjamin Shirley	Pharmacy Quality Assurance	Other Interested Parties	Advisory
Bianca Young	--	Patient Partner	Advisory
Bonnie Zima	UCLA Semel Institute for Neuroscience and Human Behavior; Mental Health Informatics and Data Science	Clinician; Facility/Institutional; Health Services Researcher	Advisory

Member	Affiliation/Organization	Perspective(s)	Advisory/Recommendation Group
Charles Mahan	University of New Mexico (UNM)	Clinician; Facility/Institution	Recommendation
Chloe Slocum	Harvard Medical School, Spaulding Rehabilitation Network at Mass General Brigham, Harvard Medical School Department of Physical Medicine and Rehabilitation	Clinician; Patient Partner; Facility/Institutional	Advisory
Christopher Tignanelli	University of Minnesota Medical School	Health Services Researcher; Clinician; Facility/Institutional; Other Interested Parties	Recommendation
David Clayman	Mathematica	Other Interested Parties; Clinician	Advisory
David P. May	Jefferson Health	Facility/Institutional; Clinician; Other Interested Parties	Recommendation
David Shahian	Department of Surgery and Division Cardiac Surgery, Massachusetts General Hospital; Harvard Medical School	Other Interested Parties; Clinician	Advisory
Eleni Theodoropoulos	URAC	Other Interested Parties	Recommendation
Eric Youngstrom	University of North Carolina Chapel Hill; Helping Give Away Psychological Science	Other Interested Parties	Advisory
Florence Thicklin	--	Patient Partner	Advisory
Icilma Fergus Rowe	Icahn School of Medicine Mount Sinai	Facility/Institutional; Clinician; Health Equity Expert; Health Services Researcher	Advisory
Jamieson Wilcox	University of Southern California; Keck Medicine of USC	Clinician; Facility/Institutional; Other Interested Parties	Advisory
Jason Wasfy	Massachusetts General Hospital; Harvard Medical School	Clinician; Facility/Institutional;	Recommendation

Member	Affiliation/Organization	Perspective(s)	Advisory/Recommendation Group
		Health Services Researcher	
Jill Nagel	Mayo Clinic	Facility/Institutional	Recommendation
John Wagner	NYC Health + Hospitals/Kings County	Facility/Institutional; Clinician; Health Equity Expert	Advisory
Kyle Albert Hultz	Memorial Healthcare System- Memorial Regional Hospital	Clinician; Facility/Institutional	Recommendation
Laurent Glance	University of Rochester Medical Center; RAND Corporation	Facility and Institutional; Clinician; Health Services Researcher; Other Interested Parties	Advisory
Lisa Albers	CalPERS	Purchaser and Plan	Recommendation
Lisa Suter	Yale University School of Medicine; YNHHSC Center for Outcomes Research & Evaluation (CORE)	Clinician; Facility/Institutional; Health Services Researcher; Other Interested Parties	Recommendation
Marisa Valdes	Baylor Scott and White Health	Clinician; Facility/Institutional; Other Interested Parties	Recommendation
Marjorie Everson	American Association of Nurse Anesthesiology	Rural Health Expert; Clinician; Facility/Institutional	Recommendation
Michael Hanak	Rush University Medical Center	Facility/Institutional; Clinician; Other Interested Parties	Advisory
Mika Gans	Colorado Access	Purchaser/Plan; Health Equity; Other Interested Parties (Expert in Quality Improvement)	Recommendation
Misty Votaw	FH Foundation Advocate	Patient Partner	Advisory
Monique Sartor	Oakland Home Care	Patient Partner	Recommendation
Nasir Khan	Loyola Medicine, Trinity Health	Other Interested Parties; Facility/Institutional	Recommendation

Member	Affiliation/Organization	Perspective(s)	Advisory/Recommendation Group
Raquel Mayne	Phelps Hospital Northwell Health	Facility/Institutional; Clinician	Recommendation
Rosie Bartel	--	Patient, Caregiver, and Patient Advocate	Advisory
Samantha Tierney	American College of Physicians	Other Interested Parties	Advisory
Sarah Duggan Goldstein	Phreesia	Other Interested Parties	Recommendation
Sharon Ayers	--	Patient Partner	Advisory
Tarik Yuce	Indiana University School of Medicine	Health Services Researcher; Clinician; Facility/Institutional; Health Equity Expert; Other Interested Parties	Advisory
Vandolynn Tucker	--	Patient Partner	Advisory
Vikram Shah	Cigna	Purchaser and Plan; Clinician; Other Interested Parties	Advisory
Vilma Joseph	Albert Einstein College of Medicine/Montefiore Medical Center	Facility/Institutional; Clinician; Health Services Researcher; Other Interested Parties	Recommendation
Virna Little	Zero Overdose; Concert Health	Rural Health Expert; Facility/Institutional; Other Interested Parties	Recommendation
Wiley Jenkins	Southern Illinois University School of Medicine	Rural Health Expert; Health Services Researcher	Advisory
Yvonne Commodore-Mensah	American Heart Association, Johns Hopkins School of Nursing	Health Equity Expert; Clinician; Health Services Researcher; Other Interested Parties	Recommendation

Partnership for Quality Measurement Organizations

Battelle

Institute for Healthcare Improvement

Measure Stewards

American College of Cardiology

Centers for Disease Control and Prevention, National Healthcare Safety Network

Minnesota Community Measurement

University of Utah

Centers for Medicare & Medicaid Services (CMS)

Measure Developers

Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (Yale CORE)


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