Partnership for Quality Measurement
Powered by Battelle

Spring 2023 Cycle

PATIENT SAFETY FINAL TECHNICAL REPORT

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Executive Summary

Patient safety is a fundamental topic within the health care industry. Each year, millions of patients experience harm or unsafe care, which has contributed to poor quality of life, mortality, and increased medical costs. Ensuring patients have the highest quality of care should be a top priority of health care systems in order to increase patient safety and decrease unnecessary spending and activity.

Quality measures are necessary tools for assessing improvements in patient safety, as well as the extent to which health care stakeholders are using evidence-based strategies to advance the quality of care. To support this effort, Battelle endorses and maintains performance measures through a standardized, consensus-based process.

For this project's measure review cycle, five measures were submitted for endorsement consideration (Table 1). The committee recommended four measures for endorsement and one electronic clinical quality measure was approved for trial use. The Consensus Standards Approval Committee (CSAC) upheld the committee's endorsement recommendations.

Effective March 27, 2023, the National Quality Forum (NQF) is no longer the 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. Battelle was selected to oversee the endorsement & maintenance (E&M) of clinical quality and cost/resource use measures. Since the Spring 2023 cycle launched at NQF, measures submitted to this E&M cycle continued along the prior E&M protocols that were in place at time of the Spring 2023 "Intent to Submit." Battelle took over the E&M work for the Spring 2023 when developers and/or stewards submitted their full measure information. To close out this E&M cycle, Battelle published the Spring 2023 measures for pre-evaluation public commenting, convened the E&M standing committees for their measure evaluation meetings, launched the Spring 2023 post-comment period, convened the E&M committees for the post-comment meeting, convened the CSAC to render a final endorsement decision, and executed the appeals period.

Table 1. Measures Submitted for Endorsement Consideration

Measure Number	Measure Title	New/ Maintenance	Developer/Steward	Final Endorsement Decision
CBE #3636	Quarterly Reporting of COVID-19 Vaccination Coverage among Healthcare Personnel	Maintenance	Surveillance Branch, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention (CDC)	Endorsed
CBE #3687e	ePC-07 Severe Obstetric Complications	New	The Joint Commission	Approved for Trial Use

Measure Number	Measure Title	New/ Maintenance	Developer/Steward	Final Endorsement Decision
CBE #3728	Skilled Nursing Facility Healthcare-Associated Infections Requiring Hospitalization (SNF HAI)	New	Acumen, LLC/Centers for Medicare & Medicaid Services (CMS)	Endorsed
CBE #3746	Avoid Hospitalization After Release with a Misdiagnosis- ED Stroke/Dizziness (Avoid H.A.R.M.-ED Stroke/Dizziness)	New	Johns Hopkins Armstrong Institute for Patient Safety and Quality	Endorsed
CBE #3749e	Diagnostic Delay of Venous Thromboembolism (DOVE) in Primary Care	New	Brigham and Women's Hospital	Endorsed

Summaries of the measure evaluation meetings are linked within the body of the report. Detailed summaries of the committee's discussion and ratings of the criteria for each measure are in Appendix A.

Introduction

The health care system should ideally be structured to fully support patient safety. However, according to an estimate by the World Health Organization, one in 10 patients experience harm in health care, and unsafe care causes 3 million deaths worldwide every year.[1] Patients experience harm from surgical errors, infections, falls, medication mismanagement, and numerous other causes, which account for approximately 15% of hospital spending and activity.[1] Improvements designed to increase patient safety will lead to advancements in public health, decreases in spending, and a more efficient health care system.

The Centers for Medicare and Medicaid Services (CMS) uses a quality improvement framework to produce better health outcomes for patients and their families and decrease burdens on clinicians and providers.[2] Through quality measurement benchmarks, CMS identifies gaps in performance that are negatively affecting patient outcomes such as patient safety. This system helps standardize structures and processes to improve outcomes for patients and health care organizations.

Quality measures are tools to measure or quantify health care processes, outcomes, patient perceptions, and organizational structure and/or systems that are associated with the ability to provide high-quality health. Furthermore, quality measures can be a powerful tool in helping identify substantial performance gaps in patient safety, affecting patient outcomes and overall cost.

As a CBE, Battelle convenes volunteer committees to evaluate and build consensus around quality measures for endorsement based on a standardized set of criteria. For the Spring 2023 cycle, the Patient Safety standing committee reviewed measures focused on defibrillator quality of care, emergency department (ED) use, and community-based mental health care. The standing committee reviewed five measures focused on quarterly reporting of COVID-19 vaccination coverage among health care personnel, skilled nursing facility health care-associated infections requiring hospitalization, avoiding hospitalization after release with a misdiagnosis of stroke/dizziness, diagnostic delay of venous thromboembolism in primary care, and severe obstetric complications.[3]

Infectious Disease

Infectious disease prevention is a fundamental standard of care that is essential to patient safety in all sectors of the health care system. Infection control practices must be consistently implemented and continuously evaluated and improved to help prevent infectious diseases from adding to the medical and financial burdens of patients and facilities. Health care-associated infections can prolong treatment, escalate costs, and increase both morbidity and mortality.[3] A 2015 hospital-based survey found that health care-associated infections affected 3.2% of hospitalized patients.[4]

Diagnostic Excellence

Accessing an accurate diagnosis in a timely manner is essential for patients to receive appropriate care and have the best prognoses. However, diagnosis is a challenging task for physicians, who often have many patients to care for and must make decisions quickly. Diagnostic errors affect approximately 5% of adults in outpatient settings, and in hospital settings, diagnostic errors represent 6% to 17% of adverse events. A delay in diagnosis or a misdiagnosis can cause significant complications, extended treatment, escalating costs, decreased quality of life, an increase in disease burden, and even death. The World Health Organization (WHO) recently included diagnostic errors as a high-priority problem for patient safety in primary care. [5]

Obstetric Complications

Approximately 700 women die from pregnancy-related complications every year in the US, though most of those deaths are preventable. [6] Cardiovascular and coronary conditions, hemorrhage, infections, and cardiomyopathy are responsible for almost 50% of pregnancy-related deaths. [7] There are many factors that affect a woman's chances of experiencing obstetric complications, and life-saving interventions can happen before conception, during pregnancy, in delivery, and during aftercare. Safety for obstetric patients has a significant positive economic impact, reduces morbidity, and can save many lives. [8]

Patient Safety Measure Evaluation

For this measure review cycle, the Patient Safety standing committee (Appendix B) evaluated four new measures, one of which was an eCQM submitted for trial use. The committee also evaluated one measure undergoing maintenance review. All measures were evaluated against standard measure evaluation criteria.

Table 2. Number of Spring 2023 Patient Safety Measures Submitted and Reviewed

	Maintenance	New	Total
Number of measures submitted for endorsement review	1	4	5
Number of measures withdrawn from consideration *	0	0	0
Number of measures reviewed by the committee	1	4	5
Number of measures endorsed	1	3	4
Number of measures approved for trial use	0	1	1

** Measure developers/stewards can withdraw a measure from measure endorsement review at any point before the CSAC meeting.*

Scientific Methods Panel Measure Evaluation

For the Spring 2023 cycle, the Scientific Methods Panel did not review any of the Patient Safety measures due to the transition of the CBE.

Evaluation of Electronic Clinical Quality Measures for Trial Use

The standing committee also evaluated one new eCQM for Approval for Trial Use (CBE #3687e). Approval for Trial Use is intended for eCQMs that are ready for implementation but cannot yet be adequately tested to meet the endorsement criteria. Battelle convenes measure endorsement committees to evaluate and approve eCQMs for trial use that address important areas of performance measurement and quality improvement, although they may not have the requisite testing needed for endorsement. These eCQMs must be assessed to be technically acceptable for implementation. The goal of approving eCQMs for trial use is to promote implementation and the ability to conduct more robust reliability and validity testing that can take advantage of clinical data in electronic health records (EHRs). Approval for Trial Use carries no endorsement label but may be considered as a pathway for measures to prepare for endorsement.

Comments Received Prior to Standing Committee Evaluation

Battelle accepts comments on measures under endorsement review through the Partnership for Quality Measurement (PQM)™ website. For this evaluation cycle, the pre-evaluation commenting period opened on May 18, 2023, and closed on July 25, 2023. Twenty-one pre-evaluation comments were submitted and shared with the standing committee prior to the measure evaluation meetings on August 1, 2023, and August 11, 2023. Ten comments were received for CBE #3746, all in support of the measure due to its relevance and value for emergency departments and frontline providers, its potential impact on diagnostic accuracy for frequently misdiagnosed patients, and overall improvements for early diagnosis of stroke.

Six comments were received for CBE #3636, all of which were non-supportive, expressing concern with the burden and challenges of reporting COVID-19 vaccination data on hospitals and staff, the measure's relevance due to decreases in data collection requests due to the end of the Public Health Emergency, and the measurement frequency.

Three comments were received for CBE #3687e, one of which supported the measure due to its potential for increasing the quality of care for maternal health and women's health. The other two comments were non-supportive, requesting the removal of a COVID-19 exclusion and including a specific numerator exclusion for transfusions to ensure appropriate severe maternal morbidity (SMM) is identified without penalizing providers for non-pregnancy-related disorders.

Lastly, CBE #3728 received two comments, both in support of the measure's relevance and appropriateness.

A summary of comments for each measure reviewed is provided in Appendix A.

Comments Received Post Standing Committee Evaluation

Following the standing committee's measure evaluation meeting, the committee endorsement recommendations were posted on the PQM website for public comment. The commenting period opened on August 25, 2023, and closed on September 13, 2023. The committee received 17 comments pertaining to the measures under review and the committee endorsement recommendations. CBE #3636 received two comments of concern related to the measure being outdated, unclear, and burdensome.

CBE #3746 received 14 comments, 12 of which expressed support for the measure. The remaining two comments expressed concern over whether CBE #3746 would lead to improved patient outcomes and care. The commenters also raised concern with the absence of broader data demonstrating the measure's clinical utility and cautioned against creating new practice guidelines based on limited data, particularly from a select setting. One of the commenters stated overcrowding in the emergency department is of greater concern.

Lastly, CBE #3749e received one comment, which expressed that the measure is flawed and requested more information pertaining to the measure.

Battelle convened the committee for the Spring 2023 post-comment web meeting on October 20, 2023, to review the full text of comments received. A summary of comments for each measure reviewed is provided in Appendix A.

Summary of Potential High-Priority Gaps

During the Patient Safety committee meetings, the committee shared several remarks related to the emerging area of diagnostic excellence measures focusing on diagnostic delay and/or misdiagnosis. The committee expressed interest in developing guidance for the evaluation of diagnostic excellence measures. The committee also expressed interest in clustering future diagnostic error measures, and it underscored the need for greater consideration on how to educate and empower clinicians who will be tasked with meeting standards set by endorsed diagnostic excellence measures. Details of the standing committee's discussion and ratings of the criteria for each measure are included in Appendix A.

Summary of Major Concerns or Methodological Issues

During the standing committee's evaluation of the measures, no major concerns or methodological issues emerged.

References

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Appendix A: Details of Measure Evaluation

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

Battelle ensures that quorum is maintained for all live voting. A quorum is 66% of active standing committee members minus any recused standing committee members. Due to the exclusion of recused standing committee members from the quorum calculation, the required quorum for live voting may vary among measures. During the August 1 meeting, the quorum required for live voting (14 of 20 committee members) was achieved for CBE #3687e. However, quorum was lost prior to the discussion of CBE #3636 and was not regained for the remainder of the meeting. In addition, quorum was not achieved for the August 11 meeting. Therefore, the standing committee discussed all criteria for measures CBE #3636, CBE #3728, CBE #3746, and CBE #3749e and voted after the meetings using an online voting tool. The standing committee received a recording of the meeting and a link to submit online votes. Voting closed after 48 hours with at least the number of votes required for quorum. Voting results are provided below.

A measure is recommended for endorsement by the standing committee when greater than 60% of voting members select a passing vote option (i.e., Pass, High and Moderate, or Yes) on all must-pass criteria and overall suitability for endorsement. A measure is not recommended for endorsement when less than 40% of voting members select a passing vote option on any must-pass criterion or overall suitability for endorsement.

A.1 Measures Endorsed

CBE #3636 Quarterly Reporting of COVID-19 Vaccination Coverage among Healthcare Personnel

Staff Assessment | Specifications

Numerator Statement: The numerator for this measure consists of the cumulative number of HCP in the denominator population who:

1. Are considered up to date with recommended COVID-19 vaccines administered at the health care facility; or
2. Are considered up to date with recommended COVID-19 vaccines administered elsewhere, based upon having reported in writing (paper or electronic) or provided documentation of being up to date with recommended COVID-19 vaccines.

Denominator Statement: The target population is the number of health care personnel (HCP) eligible to work in the health care facility for at least one day during the one-week data collection reporting period, excluding persons with contraindications/exclusions to COVID-19 vaccination. The quarterly reported measure includes at least one week of data collection a month for each of the 3 months in a quarter.

Exclusions: Exclusions include individuals with medical contraindications to COVID-19 vaccination.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Inpatient/Hospital; Acute Care Hospitals; Outpatient Dialysis Facilities; Ambulatory Surgical Centers; Long-Term Care Hospitals; Inpatient Psychiatric Facilities; Post-Acute Care

Type of Measure: Process

Data Source: Other: Source not specified, varies by facility

Measure Steward: Surveillance Branch, Division of Healthcare Quality Promotion, CDC

STANDING COMMITTEE EVALUATION

Table A.1-1.1. Importance to Measure and Report (MUST PASS)

Criterion	Total Votes	Rationale
1a. Evidence	• Total Votes-18; H-0; M-16; L-0; I-2 (16/18 – 88.9%, Pass)	• In its review of the evidence, the committee recognized the measure received a Battelle staff preliminary rating of “insufficient” for the evidence criterion due to lack of evidence on the impact of reporting up-to-date COVID-19 coverage among health care workers. However, the committee acknowledged the developer cited evidence from real-world observational data supporting the positive impact of COVID-19 vaccination, HCP vaccination, and booster COVID19 vaccine dose(s). The committee, therefore, passed the measure on evidence.

Criterion	Total Votes	Rationale
1b. Performance Gap	• Total Votes-18; H-6; M-11; L-1; I-0 (17/18 – 94.4%, Pass)	• The measure previously passed on performance gap with no concerns. In the new submission, the developer stated that it was not possible to provide evaluation of the performance over time due to limited data based on the timing of updated National Healthcare Safety Network reporting. • However, performance scores were calculated among facilities reporting at least 1 week of data during Q3 2022 and among facilities reporting 1 week per month for Q3 2022 as of January 2, 2023. • The developer reported that skilled nursing facilities had the largest portion of active facilities reporting complete data for Q3 2022 at the time of analysis. Among the other facility types, dialysis facilities had the largest portion of active facilities reporting complete data for Q3 2022 at the time of analysis. • The committee did not raise any major concerns or questions regarding the performance gap and passed the measure on this criterion.

Table A.1-1.2. Scientific Acceptability of Measure Properties (MUST PASS)

Criterion	Total Votes	Rationale
2a. Reliability	• Total Votes- 18; H-6; M-10; L-2; I-0 (16/18 – 88.9%, Pass)	• Reliability scores were calculated separately for Skilled Nursing Facilities (SNFs) and Healthcare Personnel Safety (HPS) facilities and included the mean, min, max, and quantiles (5, 25, 50, 75, 95). The percentage of facilities with reliability greater than 0.7 was also calculated. • Average reliability (mean/median) for SNFs and all types of HPS facilities was around or greater than 0.9, which is considered high. • The committee did not raise any major concerns about these results and passed the measure on reliability.
2b. Validity	• Total Votes- 18; H-2; M-13; L-3; I-0 (15/18 – 83.3%, Pass)	• A correlation was found among SNFs (0.4504 with a p-value of < .0001), indicating moderate correlation between the proposed (up-to-date) and previously endorsed (primary series) COVID-19 vaccination coverage measure. For HPS Component facilities, the overall Pearson correlation coefficient between the two measures across all HPS facility types was moderate (0.4278 with a p-value of <.0001). All HPS facility types had positive correlation between quarterly primary series COVID-19 coverage measure for Q3 (July, August, September) 2022 and quarterly rates of up-to-date COVID-19 vaccination coverage. • For validity, the committee considered the developer's correlation results with the originally validated quality measure (quarterly primary series COVID-19 vaccination of HCP), which resulted in a moderate correlation within skilled nursing facilities (0.43) and other health care personnel safety facilities (0.43). The committee did not raise any major concerns about these results and passed the measure on validity.

Table A.1-1.3. Feasibility

Criterion	Total Votes	Rationale
3. Feasibility	• Total Votes-18; H-2; M-14; L-2; I-0 (16/18 – 88.9%, Pass)	• The committee discussed the burden of quarterly reporting, as cited in one of the public comments. In response, the developer shared plans to assess disease seasonality and re-define this measure in future. • The committee did not have any further questions and passed the measure on feasibility.

Table A.1-1.4. Use and Usability (USE IS MUST PASS FOR MAINTENANCE MEASURES)

Criterion	Total Votes	Rationale
4a. Use	• Total Votes-18; Pass-17; No Pass-1 (17/18 – 94.4%, Pass)	• The committee did not raise any major concerns or questions regarding use and passed the measure on this criterion.
4b. Usability	• Total Votes-18; H-3; M-12; L-3; I-0 (15/18 – 83.3%, Pass)	• For usability, the committee mentioned this measure may interact with state-level legislation regarding vaccine status disclosure and mandates. The developer considered this concern and will be exploring this issue further. The committee did not have any further questions and passed the measure on usability.

Table A.1-1.5. Related and Competing Measures

Criterion	Related and/or Competing Measure(s)	Rationale
5. Related and Competing	• CBE #0431	• One committee member said there may be opportunity for further harmonization with CBE #0431 as health care providers gain more experience with COVID-19 vaccinations and as influenza and COVID-19 vaccinations are given together.

Table A.1-1.6. Standing Committee Recommendation for Endorsement

Committee Endorsement Recommendation	Total Votes	Rationale
Recommended for Endorsement	• Total Votes-18; Yes-15; No-3 (15/18 – 83.3%, Pass)	• Overall, the committee voted to recommend the measure for continued endorsement.

Table A.1-1.7. Public and Member Comment

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary
Non-supportive comments	• Eight	*Pre-evaluation* • Six comments were received, all of which were non-supportive, expressing concern with the burden and challenges of reporting COVID-19 vaccination data on hospitals and staff, the measure's relevance due to decreases in data collection requests as a result of the end of the Public Health Emergency, and the measurement frequency. *Post-evaluation* • Two comments expressed concern related to the measure being outdated, unclear, and burdensome.

CONSENSUS STANDARDS APPROVAL COMMITTEE (CSAC) EVALUATION

Table A.1-1.8. CSAC Endorsement Decision

CSAC Endorsement Decision	Total Votes	Rationale
Endorsed	• Total Votes-11; Yes-11; No-0 (11/11 – 100% - Pass)	• Unanimous approval to endorse the measure via a consent calendar.

APPEALS BOARD EVALUATION

Table A.1-1.9. Appeals

Appeal Received (Yes/No)	Appellant Organization	Summary of Appeal and Its Review
No	• N/A	• N/A

CBE #3728 Skilled Nursing Facility Healthcare-Associated Infections Requiring Hospitalization (SNF HAI)

Staff Assessment | Specifications

Numerator Statement: The measure numerator is the number of stays with an HAI acquired during SNF care and resulting in an inpatient hospitalization. The hospitalization must occur during the period beginning on day four after SNF admission and within three days of SNF discharge.

Denominator Statement: The study population includes Medicare Part A fee-for-service (FFS) SNF stays that were admitted during the measure time period (one year) and that meet the inclusion criteria during the measurement period.

Exclusions: SNF stays are excluded from the denominator if they meet one or more of the following criteria: (i) residents who are less than 18 years of age at the time of admission; (ii) the SNF length of stay was shorter than four days; (iii) residents who were not continuously enrolled in Part A FFS Medicare during the SNF stay, 12 months prior to the measure period, and three days after the end of the SNF stay; (iv) residents who did not have a Part A short-term acute care hospital stay within 30 days prior to the SNF admission date (the short-term stay must have positive payment and positive length of stay); (v) residents who were transferred to a federal hospital from the SNF as determined by the discharge status code on the SNF claim, (vi) residents who received care from a provider located outside of the United States, Puerto Rico, or a United States territory as determined from the first two characters of the SNF CMS Certification Number (CCN); (vii) SNF stays in which data were missing on any variable used in the measure construction or risk adjustment, (viii) stays where Medicare did not pay for the stay resulting in a non-positive payment on the SNF claim, and (xi) swing bed stays in critical access hospitals.

Adjustment/Stratification: Statistical risk model

Level of Analysis: Facility

Setting of Care: Post-Acute Care

Type of Measure: Outcome

Data Source: Claims

Measure Steward: Acumen LLC/CMS

STANDING COMMITTEE EVALUATION

Table A.1-2.1. Importance to Measure and Report (MUST PASS)

Criterion	Total Votes	Rationale
1a. Evidence	• Total Votes-17; Pass-16; No Pass-1 (16/17 – 94.1%, Pass)	• In its review of the evidence, the committee questioned the evidence related to the HAI outcome at the facility level, namely that the measure included broad criteria for what is considered an HAI, which was not directly supported by the evidence provided. • The developer responded, stating its methodology for determining the measure specifications, including HAI criteria, was informed by a developer-convened technical expert panel (TEP) and the consideration for not overburdening facilities with multiple HAI measures. • The committee did not have any additional concerns and passed the measure on evidence.

Criterion	Total Votes	Rationale
1b. Performance Gap	• Total Votes-17; H-2; M-15; L-0; I-0 (17/17 – 100%, Pass)	• Moving to performance gap, the committee did not have any major concerns or questions and passed the measure on this criterion.

Table A.1-2.2. Scientific Acceptability of Measure Properties (MUST PASS)

Criterion	Total Votes	Rationale
2a. Reliability	• Total Votes-17; H-3; M-14; L-0; I-0 (17/17 – 100%, Pass)	• The committee did not have any questions or concerns about reliability and passed the measure on this criterion.
2b. Validity	• Total Votes-17; H-0; M-13; L-3; I-1 (13/17 – 76.5%, Pass)	• Moving to validity, the committee raised questions regarding risk adjustment and whether the measure should be stratified and the rationale for the time window for HAIs within the measure's specifications. • The developer responded by explaining the risk adjustment approach and rationale and informed the committee that stratification would limit the reportability of the measure, as it would only be possible for some facilities with large case counts. Additionally, the development team addressed the committee's concern around the time window given for HAI by explaining the rationale for determining the incubation window and infection rate based on prior data. • The committee did not raise any concern with the developer's responses and passed the measure on validity.

Table A.1-2.3. Feasibility

Criterion	Total Votes	Rationale
3. Feasibility	• Total Votes-17; H-8; M-9; L-0; I-0 (17/17 – 100%, Pass)	• The committee had no questions or concerns regarding feasibility and passed the measure on this criterion.

Table A.1-2.4. Use and Usability (USE IS MUST PASS FOR MAINTENANCE MEASURES)

Criterion	Total Votes	Rationale
4a. Use	• Total Votes-17; Pass-17; No Pass-0 (17/17 – 100%, Pass)	• The committee had no questions or concerns regarding use and passed the measure on this criterion.
4b. Usability	• Total Votes-17; H-2; M-13; L-1; I-1 (15/17 – 88.2%, Pass)	• The committee had no questions or concerns regarding usability and passed the measure on this criterion.

Table A.1-2.5. Related and Competing Measures

Criterion	Related and/or Competing Measure(s)	Rationale

5. Related and Competing	• CBE #0684
	• CBE #0138
	• CBE #0139
	• CBE #1717
	• CBE #2510
		• The developers noted that it was unable to identify any CBE-endorsed measures for SNFs focused on capturing several types of severe infections attributable to the SNF setting in one composite score.
		  ◦ For example, although the measures Percent of Residents with a Urinary Tract Infection (Long-Stay) (CBE ID#0684), National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infections (CBE ID #0138), NHSN Central Line-Associated Bloodstream Infections (CBE ID #0139), and NHSN Facility-Wide Inpatient Hospital-onset Clostridium Difficile Infection (CBE ID #1717) are CBE endorsed and all report on specific types of infections, they do not provide an overall HAI rate and are not specific to hospitalizations or the SNF setting.
		  ◦ Additionally, although the Skilled Nursing Facility 30-Day All-Cause Readmission measure (SNFRM) (CBE ID #2510), the Potentially Preventable 30-Day Post-Discharge Readmission measure for SNF QRP, and the Skilled Nursing Facility Within-Stay Potentially Preventable Readmission (SNF WS PPR) measure for the SNF VBP are all specific to the SNF setting, they are not solely focused on infections.
		• The committee raised no concerns or questions about the related measures.

Table A.1-2.6. Standing Committee Recommendation for Endorsement

Committee Endorsement Recommendation	Total Votes	Rationale
Recommended for Endorsement	• Total Votes-17; Yes-15; No-2 (15/17 – 88.2%, Pass)	• The committee recommended the measure for endorsement.

Table A.1-2.7. Public and Member Comment

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary
Supportive comments	• Two	*Pre-evaluation* • Two comments, both in support of the measure's relevance and appropriateness. *Post-evaluation* • None.

CONSENSUS STANDARDS APPROVAL COMMITTEE (CSAC) EVALUATION

Table A.1-2.8. CSAC Endorsement Decision

CSAC Endorsement Decision	Total Votes	Rationale
Endorsed	• Total Votes-11; Yes-11; No-0 (11/11 – 100%, Pass)	• Unanimous approval to endorse the measure via a consent calendar.

APPEALS BOARD EVALUATION

Table A.1-2.9. Appeals

Appeal Received (Yes/No)	Appellant Organization	Summary of Appeal and Its Review
No	• N/A	• N/A

CBE #3746 Avoid Hospitalization After Release with a Misdiagnosis (Avoid H.A.R.M.-ED Stroke/Dizziness)

Staff Assessment | Specifications

Numerator Statement: The number of ED treat-and-release index visit discharges during the performance period that are followed within 30 days by an inpatient hospital admission to any hospital that ends in a primary discharge diagnosis of stroke.

Denominator Statement: Patients treated and released from the ED with a primary discharge diagnosis code of "benign dizziness."

Exclusions: Not applicable.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Ambulatory Care: ED

Type of Measure: Outcome

Data Source: Claims

Measure Steward: Johns Hopkins Armstrong Institute for Patient Safety and Quality

STANDING COMMITTEE EVALUATION

Table A.1-3.1. Importance to Measure and Report (MUST PASS)

Criterion	Total Votes	Rationale
1a. Evidence	• Total Votes-15; Pass-14; No Pass-1 (14/15 – 93.3%, Pass)	• In its review of the evidence, the committee considered the logic model for the measure and the systematic reviews supporting the measure. • The committee sought clarification from the developer regarding the rationale for choosing the target population, how this outcome is defined, and the epidemiologic inference of stroke risk in this population. The developer responded, stating the measure is looking at patients whose dizziness was misattributed to inner ear disease or benign dizziness, and taking the difference of observed minus expected. By conducting internal analyses of stroke hospitalizations and looking back 30 days the rate of dizziness or headache discharges in the prior 30 days has an exponential curve the closer to the hospitalization day. The developer concluded that what is happening is a strong temporal association between having been diagnosed with benign dizziness or benign headaches, and then being readmitted to the hospital with a stroke. • The committee did not have any further questions and passed the measure on evidence.
1b. Performance Gap	• Total Votes-15; H-6; M-8; L-1; I-0 (14/15 – 93.3%, Pass)	• Moving to gap, the committee did not raise any major concerns, recognizing a gap in care exists, and passed the measure on performance gap.

Table A.1-3.2. Scientific Acceptability of Measure Properties (MUST PASS)

Criterion	Total Votes	Rationale
2a. Reliability	• Total Votes-15; H-3; M-12; L-0; I-0 (15/15 – 100%, Pass)	• The committee did not have any concerns with the reliability testing and passed the measure on this criterion.
2b. Validity	• Total Votes-15; H-0; M-14; L-1; I-0 (14/15 – 93.3%, Pass)	• The committee considered the empirical validity testing of the data elements. Because only data element validity testing was conducted, the committee acknowledged that the highest possible rating was "moderate" for this criterion. • One committee member inquired about the accuracy of diagnosis, considering these patients would possibly require a highly specialized consult to appropriately diagnose stroke. However, this may be a challenge within a general ED visit. • The developer responded, citing evidence provided within the measure submission, which found that with two 6-hour training sessions, emergency physicians can be accurate in their diagnosis. The developer further stated that bedside eye movement-based tests are what ED physicians can perform, and magnetic resonance imaging (MRI) should follow in patients who are at risk, based on the eye movement exams. • Raising no additional concerns, the committee passed the measure on validity.

Table A.1-3.3. Feasibility

Criterion	Total Votes	Rationale
3. Feasibility	• Total Votes-15; H-8; M-7; L-0; I-0 (15/15 – 100%, Pass)	• The committee raised no major concerns and questions and passed the measure on feasibility.

Table A.1-3.4. Use and Usability (USE IS MUST PASS FOR MAINTENANCE MEASURES)

Criterion	Total Votes	Rationale
4a. Use	• Total Votes-15; Pass-14; No Pass-1 (14/15 – 93.3%, Pass)	• The committee did not have any major concerns with use and passed the measure on this criterion.

Criterion	Total Votes	Rationale
4b. Usability	• Total Votes-15; H-2; M-11; L-2; I-0 (13/15 – 86.7%, Pass)	• The committee discussed the potential for unintended consequences related to publicly reporting misdiagnosis information for hospitals and what that impact may have on public use of these facilities. Additionally, the committee considered whether this measure may lead to MRI overuse and the potential for misuse of codes to perform more favorably on the measure. • The developer responded, explaining that gaming of a measure is a concern for any quality measure, and the bedside eye movement assessments could reduce the risk of MRI overuse. • Following discussion, the committee passed the measure on usability.

Table A.1-3.5. Related and Competing Measures

Criterion	Related and/or Competing Measure(s)	Rationale
5. Related and Competing	• None	• The developer did not disclose any related and competing measures besides CBE #0965, which is one of the measure components.

Table A.1-3.6. Standing Committee Recommendation for Endorsement

Committee Endorsement Recommendation	Total Votes	Rationale
Recommended for Endorsement	• Total Votes-15; Yes-12; No-3 (12/15 – 80%, Pass)	• Overall, the committee voted to recommend the measure for endorsement.

Table A.1-3.7. Public and Member Comment

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary

Supportive comments	• 22	*Pre-evaluation*
		• Ten comments were in support of the measure due to its relevance and value for emergency departments and frontline providers, its potential impact on diagnostic accuracy for frequently misdiagnosed patients, and overall improvements for early diagnosis of stroke.
		
		Post-evaluation
		• Twelve comments expressed support for the measure.
		  ○ Amongst these 12 supportive comments were personal stories from patients, caregivers, and patient advocates who have experienced harm due to diagnostic error, including misdiagnosis of dizziness.
		  ○ Several of the 12 supportive comments also underscored the importance of improving diagnostic error in the U.S., and until there is a better understanding of current diagnostic performance in this area, it will be difficult for the U.S. health care system to prioritize interventions for improvement.

Non-supportive comments	• Two	*Pre-evaluation* • None *Post-evaluation* • Two non-supportive comments were received about this measure. The commenters acknowledged the importance of timely diagnosis of conditions with high morbidity and mortality; however, the commenters questioned whether the measure's required steps and testing procedures will lead to improved patient outcomes and care. • They emphasized the need for measures to have modifiable processes linked to meaningful clinical outcomes. For instance, the specific processes mentioned—the eye exam and even the MRI—are not clearly shown to improve the 30-day risk of stroke (outcome) or functioning (the real outcome). • The commenters also raised concern with the absence of broader data demonstrating the measure's clinical utility and cautioned against creating new practice guidelines based on limited data, particularly from a select setting. • Lastly, one of the commenters posited that the largest issue impacting patient safety in the ED is ED overcrowding caused by hospital overcrowding. Focusing on the system issues driving this problem will have a broader, more wide-ranging impact on patient safety in the ED setting.

CONSENSUS STANDARDS APPROVAL COMMITTEE (CSAC) EVALUATION

Table A.1-3.8. CSAC Endorsement Decision

CSAC Endorsement Decision	Total Votes	Rationale
Endorsed	• Total Votes-11; Yes-11; No-0 (11/11 – 100%, Pass)	• Unanimous approval to endorse the measure via a consent calendar.

APPEALS BOARD EVALUATION

Table A.1-3.9. Appeals

Appeal Received (Yes/No)	Appellant Organization	Summary of Appeal and Its Review
No	• N/A	• N/A

CBE #3749e Diagnostic Delay of Venous Thromboembolism (DOVE) in Primary Care

Staff Assessment | Specifications

Numerator Statement: The subset of the denominator where the patient's VTE diagnosis occurs greater than 24 hours following a primary care visit (within 30 days).

Denominator Statement: All adult patients (age 18 years and older) presenting in primary care with VTE-related symptoms, who are subsequently diagnosed with VTE following a primary care visit (within 30 days).

Exclusions: This eCQM excludes patients who received hospice or palliative care within 90 days of the eligible VTE event.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician/Group Practice; Integrated Health System

Setting of Care: Outpatient Care

Type of Measure: Intermediate Clinical Outcome

Data Source: Electronic Health Records

Measure Steward: Brigham and Women's Hospital

STANDING COMMITTEE EVALUATION

Table A.1-4.1 Importance to Measure and Report (MUST PASS)

Criterion	Total Votes	Rationale
1a. Evidence	• Total Votes-14; H-0; M-13; L-0; I-1 (13/14 – 92.9%, Pass)	• The committee noted the evidence provided for this measure was not related to suitability of the measure as an appropriate method of reducing diagnostic delay. • However, the committee acknowledged VTE is associated with deleterious health outcomes, including pulmonary embolism, thromboembolic pulmonary hypertension, post-thrombotic syndrome, and death. • Furthermore, effective diagnostic methods exist, but symptoms of VTE can be non-specific and many cases are not diagnosed. Thus, the committee passed the measure on evidence.
1b. Performance Gap	• Total Votes-14; H-3; M-11; L-0; I-0 (14/14 – 100%, Pass)	• No concerns were raised related to performance gap, and the committee passed the measure on this criterion.

Table A.1-4.2. Scientific Acceptability of Measure Properties (MUST PASS)

Criterion	Total Votes	Rationale
2a. Reliability	• Total Votes-14; H-0, M-13; L-0; I-1 (13/14 – 92.9%, Pass)	• The committee acknowledged the developer conducted reliability testing at both the data element (i.e., person/encounter) and measure score level (i.e., accountable entity). • However, the developer only reported measure score testing at the clinician group/practice level and did not conduct score-level testing at the integrated delivery system level. • Therefore, the committee recognized the highest possible rating for reliability was "moderate." • The committee did not have any concerns with the data element testing and passed the measure on reliability.
2b. Validity	• Total Votes-14; H-0; M-11; L-2; I-1 (11/14 – 78.6%, Pass)	• During discussions of validity, the developer was asked to further clarify whether exclusion of hospice or palliative care patients within 6 months of a VTE event. • The developer responded, noting the impact to the measure was minimal as these patients made up 0.08% of the measure. • The committee also recognized that because the developer conducted a split-half analysis of the measure score, which is a test of reliability, the highest possible rating for validity was "moderate," based on the data element testing. • The committee did not have any major concerns and passed the measure on validity.

Table A.1-4.3. Feasibility

Criterion	Total Votes	Rationale
3. Feasibility	• Total Votes-14; H-6; M-8; L-0; I-0 (14/14 – 100%, Pass)	• When discussing feasibility, the committee sought clarification on any upfront costs or implementation burdens related to the natural language processing (NLP) algorithm used by the measure. The developer shared this algorithm can be used for free without a license and implementation burden is minimal. The committee therefore passed the measure on feasibility.

Table A.1-4.4. Use and Usability (USE IS MUST PASS FOR MAINTENANCE MEASURES)

Criterion	Total Votes	Rationale
4a. Use	• Total Votes-14; Pass-14; No Pass-0 (14/14 – 100%, Pass)	• The committee had no major concerns with respect to the measure's planned use within the Merit-based Incentive Payment System (MIPS) and passed the measure on the use criterion.

Criterion	Total Votes	Rationale
4b. Usability	• Total Votes-14; H-2; M-11; L-0; I-1 (13/14 – 92.9%, Pass)	• Moving to usability, the committee considered the potential for increased use of diagnostic imaging and ED overcrowding as an unintended consequence. • The developer responded, emphasizing the need to drive the DOVE rate down, as providers should not be missing timely VTE diagnoses, and tests, such as D-dimer tests, should only be used when suspicion is low. • The committee did not have any additional concerns and passed the measure on usability.

Table A.1-4.5. Related and Competing Measures

Criterion	Related and/or Competing Measure(s)	Rationale
5. Related and Competing	• None	• The developer did not disclose any related and competing measures besides CBE #0965, which is one of the measure components.

Table A.1-4.6. Standing Committee Recommendation for Endorsement

Committee Endorsement Recommendation	Total Votes	Rationale
Recommended for Endorsement	• Total Votes-14; Yes-13; No-1 (13/14 – 92.9%, Pass)	• Overall, the committee voted to recommend the measure for initial endorsement.

Table A.1-4.7. Public and Member Comment

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary
Supportive comments	• None	N/A
Non-supportive comments	• None	N/A

CONSENSUS STANDARDS APPROVAL COMMITTEE (CSAC) EVALUATION

Table A.1-4.8. CSAC Endorsement Decision

CSAC Endorsement Decision	Total Votes	Rationale
Endorsed	• Total Votes-11; Yes-11; No-0 (11/11 – 100%, Pass)	• Unanimous approval to endorse the measure via a consent calendar.

APPEALS BOARD EVALUATION

Table A.1-4.9. Appeals

Appeal Received (Yes/No)	Appellant Organization	Summary of Appeal and Its Review
No	• N/A	• N/A

A.2 Measure Approved for Trial Use

CBE #3687e Severe Obstetric Complications

Staff Assessment | Specifications

Numerator Statement: Inpatient hospitalizations for patients with severe obstetric complications including severe maternal morbidity diagnoses, severe maternal morbidity procedures, discharge disposition = expired.

Denominator Statement: Inpatient hospitalizations for patients delivering stillborn or live birth with >= 20 weeks, 0 days gestation completed.

Exclusions: Patients with confirmed diagnosis of COVID with COVID-related respiratory condition or patients with confirmed diagnosis of COVID with COVID-related respiratory procedure.

Adjustment/Stratification: Statistical risk model

Level of Analysis: Facility

Setting of Care: Inpatient/Hospital

Type of Measure: Outcome; Electronic Clinical Quality Measure

Data Source: Electronic Health data; Electronic Health Records

Measure Steward: The Joint Commission

STANDING COMMITTEE EVALUATION

Table A.2-1.1. Importance to Measure and Report (MUST PASS)

Criterion	Total Votes	Rationale
1a. Evidence	• Total Votes-16; Pass-16; No Pass-0 (16/16 – 100%, Pass)	• The committee questioned the differences in the age ranges between what was included in the evidence and the broader age range of the measure's target population. • The developer responded, stating this measure is designed to be as inclusive as possible of all deliveries, and that is why there is no exclusion based on age. However, age is one of the risk-adjusted factors. • The committee did not have any further concerns and passed the measure passed on evidence.
1b. Performance Gap	• Total Votes-16; H-11; M-5; L-0; I-0 (16/16 – 100%, Pass)	• Moving to performance gap, the committee recognized there is a gap in care and the measure is stratified by social determinants of health (SDOH) factors, such as race, to avoid the potential of widening disparities. • The committee suggested the developer also consider additional SDOH risk factors, such as housing status, etc., in the future. • The committee passed the measure on gap.

Table A.2-1.2. Scientific Acceptability of Measure Properties (MUST PASS)

The scientific acceptability of measure properties was not discussed or voted on for measures under consideration for approval for trial use; a vote was taken on the measure specifications to ensure the specifications were clear and unambiguous and could be used to guide the implementation of the measure during the trial use period.

Criterion	Total Votes	Rationale
Reliability and Validity	• N/A	• Because this measure is being considered for trial use, reliability and validity information were not submitted. • Testing data will be required when the measure comes back to Battelle for endorsement consideration.

Table A.2-1.3. Feasibility

Criterion	Total Votes	Rationale
3. Feasibility	• Total Votes-16; H-3; M-12; L-1; I-0 (15/16 – 93.8%, Pass)	• The committee considered whether data element availability across different EHRs could limit the measure's feasibility when implemented in broader settings. • The developer commented that its approach to handling missing data includes multiple check points for data completeness, creating a missing data label to allow patients to stay in the model, and not analyzing any element with greater than 20% missingness in the model. • The committee then considered the initiation burden for this eCQM within smaller health care facilities with limited infrastructure. • The developer responded that the strategies it had put in place at current sites, including office hours and informational materials help to address implementation challenges. • The committee did not have any further questions and passed the measure on feasibility.

Table A.2-1.4. Use and Usability (USE IS MUST PASS FOR MAINTENANCE MEASURES)

Criterion	Total Votes	Rationale
4a. Use	• Total Votes-16; Pass-16; No Pass-0 (16/16 – 100%, Pass)	• Moving to use, the committee did not have any major concerns or questions and passed the measure on use.

Criterion	Total Votes	Rationale
4b. Usability	• Total Votes-16; H-2; M-13; L-0; I-1 (15/16 – 93.8%, Pass)	• The committee did not have any major concerns or questions and passed the measure on usability.

Table A.2-1.5. Related and Competing Measures

Criterion	Related and/or Competing Measure(s)	Rationale
5. Related and Competing	N/A	• Because this is a trial use measure, related and competing discussions were not held.

Table A.2-1.6. Standing Committee Recommendation for Trial Use

Committee Recommendation	Total Votes	Rationale
Recommended for Trial Use	• Total Votes-16; Yes-16; No-0 (16/16 – 100%, Pass)	• The committee recommended the measure for trial use.

Table A.2-1.7. Public and Member Comment

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary
Supportive comments	• One	*Pre-evaluation* • One comment supported the measure due to its potential for increasing the quality of care for maternal health and women's health. *Post-evaluation* • None

Supportive/Non-supportive Comments	Number of Comments Received	Comment Summary
Non-supportive comments	• Two	*Pre-evaluation* • Both comments requested for the removal of a COVID-19 exclusion and the inclusion of a specific numerator exclusion for transfusions to ensure appropriate SMM is identified without penalizing providers for non-pregnancy-related disorders. *Post-evaluation* • None

CONSENSUS STANDARDS APPROVAL COMMITTEE (CSAC) EVALUATION

Table A.2-1.8. CSAC Endorsement Decision

CSAC Endorsement Decision	Total Votes	Rationale
Approved for Trial Use	• Total Votes-11; Yes-11; No-0 (11/11 – 100%, Pass)	• Unanimous approval to endorse the measure via a consent calendar.

APPEALS BOARD EVALUATION

9. Appeals:

- Based on the prior consensus-based entity's process, only endorsed measures are eligible for any appeal. Approval for Trial Use carries no endorsement label until the measure is evaluated after the trial use period.

Appendix B: Patient Safety Standing Committee and Battelle Staff

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