



**614th Meeting of the Health Services Cost Review Commission  
December 13, 2023**

(The Commission will begin in public session at 11:30 am for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00pm)

**CLOSED SESSION  
11:30 am**

1. Discussion on Planning for Model Progression - Authority General Provisions Article, §3-103 and §3-104
2. Update on Administration of Model - Authority General Provisions Article, §3-103 and §3-104

**PUBLIC MEETING  
1:00 pm**

**Subjects of General Applicability**

1. Review of Minutes from the Public and Closed Meetings on December 13, 2023
2. Final Recommendation on Quality-Based Reimbursement Program for RY 2026
3. Draft Recommendation on PAU ED Program
4. Draft Recommendation on Traditional Medicare Performance Adjustment - CY 2024 Performance
5. Update on Annual Filing Redesign Process
6. Policy Update and Discussion
  - a. Model Monitoring
  - b. ED Wait Time Background & Emergency Department Dramatic Improvement Effort (EDDIE) Update

**Specific Matters**

7. Docket Status – Cases Closed

2627A John Hopkins Health System  
2628A John Hopkins Health System

2629A John Hopkins Health System  
2637A John Hopkins Health System  
2638A John Hopkins Health System  
2639A John Hopkins Health System

8. Docket Status – Cases Open

2631 Tidal Health Peninsula

9. Hearing and Meeting Schedule





maryland  
**health services**  
cost review commission

# Final Recommendations for Updating the Quality-Based Reimbursement Program for Rate Year 2026

December 13, 2023

This document contains the staff final recommendations for updating the Quality-Based Reimbursement Program for RY 2026.

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## LIST OF ABBREVIATIONS

|              |                                                                                                                                                             |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APR DRG      | All Patient Refined Diagnosis Related Group                                                                                                                 |
| CDC          | Centers for Disease Control & Prevention                                                                                                                    |
| CAUTI        | Catheter-associated urinary tract infection                                                                                                                 |
| CCDE         | Core Clinical Data Elements (for digital hybrid measures)                                                                                                   |
| CDIF         | Clostridium Difficile Infection                                                                                                                             |
| CLABSI       | Central Line-Associated Bloodstream Infection                                                                                                               |
| CMS          | Centers for Medicare & Medicaid Services                                                                                                                    |
| DRG          | Diagnosis-Related Group                                                                                                                                     |
| eQCM         | Electronic Clinical Quality Measure                                                                                                                         |
| ED           | Emergency Department                                                                                                                                        |
| ED-1 Measure | Emergency Department Arrival to Departure for Admitted Patients                                                                                             |
| ED-2 Measure | Time of Order to Admit until Time of Admission for ED Patients                                                                                              |
| EDDIE        | Emergency Department Dramatic Improvement Effort                                                                                                            |
| FFY          | Federal Fiscal Year                                                                                                                                         |
| HCAHPS       | Hospital Consumer Assessment of Healthcare Providers and Systems                                                                                            |
| HSCRC        | Health Services Cost Review Commission                                                                                                                      |
| LOS          | Length of Stay                                                                                                                                              |
| MIEMSS       | Maryland Institute for Emergency Medical Services Systems                                                                                                   |
| MRSA         | Methicillin-Resistant Staphylococcus Aureus                                                                                                                 |
| NHSN         | National Health Safety Network                                                                                                                              |
| PQI          | Prevention Quality Indicators                                                                                                                               |
| QBR          | Quality-Based Reimbursement                                                                                                                                 |
| RY           | Maryland HSCRC Rate Year (Coincides with State Fiscal Year (SFY) July-Jun; signifies the timeframe in which the rewards and/or penalties would be assessed) |
| SIR          | Standardized Infection Ratio                                                                                                                                |
| SSI          | Surgical Site Infection                                                                                                                                     |
| TFU          | Timely Follow Up after Acute Exacerbation of a Chronic Condition                                                                                            |
| THA/TKA      | Total Hip and Knee Arthroplasty Risk Standardized Complication Rate                                                                                         |
| VBP          | Value-Based Purchasing                                                                                                                                      |

## POLICY OVERVIEW

| Policy Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Policy Solution                                                                                                                                                                                               | Effect on Hospitals                                                                                                                                     | Effect on Payers/ Consumers                                                                                                                                                                                                                                                | Effect on Health Equity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The quality programs operated by the Health Services Cost Review Commission, including the Quality-Based Reimbursement (QBR) program, are intended to ensure that any incentives to constrain hospital expenditures under the Total Cost of Care Model do not result in declining quality of care. Thus, HSCRC's quality programs reward quality improvements and achievements that reinforce the incentives of the Total Cost of Care Model, while guarding against unintended consequences and penalizing poor performance. | The QBR program is one of several pay-for-performance quality initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value within a global budget framework. | The QBR policy currently holds 2 percent of hospital inpatient revenue at-risk for Person and Community Engagement, Safety, and Clinical Care outcomes. | This policy ensures that the quality of care provided to consumers is reflected in the rate structure of a hospital's overall global budget. The HSCRC quality programs are all-payer in nature and so improve quality for all patients that receive care at the hospital. | Quality programs that reward hospitals for the better of attainment or improvement (QBR and RRIP) better allow the policies to target improvements in hospitals that serve a high proportion of under-resourced patients. The Health Equity Workgroup (HEW) analyzed the Medicare Timely Follow-Up (TFU) measure and found disparities by race, dual-status, and Area Deprivation, and thus is proposing an addition of a disparity gap improvement metric for TFU. Going forward, HSCRC staff will continue to analyze disparities and propose incentives for reducing them in the program. |

## RECOMMENDATIONS

This document puts forth the RY 2026 Quality-Based Reimbursement (QBR) final policy recommendations. Staff has and will continue vetting these recommendations with the Performance Measurement Workgroup (PMWG) and also greatly benefits from feedback provided by Commissioners and other stakeholders on draft recommendations and longer-term priorities.

Final Recommendations for RY 2026 QBR Program:

1. Modify Domain Weighting as follows for determining hospitals' overall performance scores:
  - Person and Community Engagement (PCE) - 60 percent (+10%), Safety (NHSN measures) - 30 percent (-5%), Clinical Care - 10 percent (-5%).
    - a. Within the PCE domain:
      - i. Increase domain weight to 60 percent to accommodate new measures.
      - ii. Decrease the weight on HCAHPS top-box; maintain weight on consistency linear measures.
      - iii. Continue to include Medicare and Medicaid Timely Follow-Up (TFU) rates and add TFU Disparity Gap measure weighted at 10 percent.
      - iv. Add an ED wait time measure weighted at 10 percent.
    - b. Within the Safety domain:

- i. Reduce overall domain weight from 35 to 30 percent to be closer to the CMS VBP program weight of 25 percent.
    - c. Within the Clinical Care domain:
      - i. Remove THA-TKA measure and reduce domain weight by 5 percent.
      - ii. Continue to include the inpatient mortality measure in the program.
      - iii. Add the all-payer, all-cause 30-Day Mortality measure.
      - iv. Split the domain weight between the two mortality measures.
2. Develop the following monitoring reports to track hospital performance:
  - a. Timely Follow-Up for Behavioral Health
  - b. Sepsis Dashboard: Sepsis mortality, Sep-1 measure—Early Management Bundle, Severe Sepsis/Septic Shock
3. Continue implementing the HCAHPS improvement framework with key stakeholders.
  - a. Explore statewide adoption of added question(s) to the survey linked to best practice with evidence that implementation improves HCAHPS scores.
  - b. Address emergency department length of stay/hospital throughput issues as strategy to improve HCAHPS
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements for hybrid measures;
5. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent) and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.
  - a. Retrospectively evaluate 41 percent cut point using more recent data to calculate national average score for RY25 and RY26
  - b. Based on more analyses on the impact of pre-COVID performance standards on national hospital performance, adjust the RY24 QBR cut point to 0.32.

## INTRODUCTION

Maryland hospitals are funded under a population-based revenue system with a fixed annual revenue cap set by the Maryland Health Services Cost Review Commission (HSCRC or Commission) under the All-Payer Model agreement with the Centers for Medicare & Medicaid Services (CMS) beginning in 2014, and continuing under the current Total Cost of Care (TCOC) Model agreement, which took effect in 2019. Under the global budget system, hospitals are incentivized to shift services to the most appropriate care setting and simultaneously have revenue at risk in Maryland's unique, all-payer, pay-for-performance quality programs; this allows hospitals to keep any savings they earn via better patient experiences, reduced hospital-acquired infections, or other improvements in care. Maryland systematically revises its quality and value-based payment programs to better achieve the state's overarching goals: more efficient, higher quality care, and improved population health. It is important that the Commission ensure that any incentives to constrain hospital expenditures do not result in declining quality of care. Thus, the Commission's quality programs reward quality improvements and achievements that reinforce the incentives of the global budget system, while guarding against unintended consequences and penalizing poor performance.

The Quality-Based Reimbursement (QBR) program is one of several quality pay-for-performance initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value over time. The program currently holds 2 percent of hospital revenue at-risk for performance by hospitals on patient experience, clinical care, and safety. Based on RY 2024 preliminary QBR performance results, with the exception of one hospital, all hospitals are receiving a penalty under the program. HSCRC staff is retrospectively evaluating the reward/penalty scale for the performance period to determine if an adjustment is needed based on impacts of COVID on the Nation and Maryland. For purposes of the RY 2026 QBR Policy, staff vetted the updated policy with the Performance Measurement Workgroup (PMWG), the standing advisory group that meets monthly to discuss Quality policies.

Under the TCOC Model, Maryland must request exemptions each year from CMS hospital pay-for-performance programs, e.g., the Value Based Purchasing (VBP) program for which QBR is the state analog. CMS assesses and grants these exemptions based on a report showing that Maryland's results continue to meet or surpass those of the nation. However, in the CMS response to HSCRC's FY 2023 VBP exemption request, they once again noted Maryland's lagging performance in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Person and Community Engagement (PCE) domain compared to national standards; they also highlighted the need to implement a strategic plan outlining our approach for HCAHPS improvement and the need for continued improvement in population health and health equity. HSCRC has submitted our exemption request for FY



2024 with responses to the issues raised by CMS in last year's exemption approval; staff is awaiting CMS' response.

Additionally, with the onset of the TCOC Model Agreement, each program was overhauled to ensure they support the goals of the Model. For the QBR policy, the overhaul was completed during 2021, which entailed an extensive stakeholder engagement effort to address CMS and other stakeholders' concerns.<sup>1</sup> This policy includes updates on the QBR redesign and additional recommended changes to strengthen the incentives and focus the program on specific areas of concern for Maryland. Figure 1 provides QBR updates by domain and measure for RY 2026 and future program years.

**Figure 1. QBR Updates**

| Domain/ Measure                               | RY 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Future program years                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Person and Community Engagement domain</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                              |
| <b>HCAHPS</b>                                 | <ul style="list-style-type: none"> <li>Continue to weight HCAHPS top box scores more heavily than the CMS VBP program; evaluate efficacy of including HCAHPS linear scores in next 1-2 years.</li> <li>Use HCAHPS patient level data from the Maryland Health Care Commission (MHCC) for additional analytics, including on disparities, and hospital improvement</li> <li>Plan for statewide adoption of added question(s) to the survey linked to best practice with evidence that implementation improves HCAHPS scores</li> </ul> | <ul style="list-style-type: none"> <li>Continue to use HCAHPS patient-level data from the MHCC for additional analytics, including on disparities, and hospital improvement.</li> <li>Continue working with stakeholders to facilitate more sharing of best practices</li> <li>Adopt additional question(s) in the payment program after CY 2024.</li> </ul> |
| <b>Emergency department (ED) wait times</b>   | <ul style="list-style-type: none"> <li>Collect ED wait time measures and promote performance improvement through the EDDIE project</li> <li>Potentially adopt an ED wait time/length of stay measure in the PCE domain given its correlation with patient experience</li> </ul>                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Continue to evaluate ED length of stay measures, including eQMs, and use of the QBR program to incentivize improvement</li> <li>Collaborate with CMS on ED boarding measures</li> </ul>                                                                                                                               |
| <b>Follow-up measure</b>                      | <ul style="list-style-type: none"> <li>Continue to include the TFU measure for Medicaid, which was added in the RY 2025 program</li> <li>Implement a TFU disparity measure beginning with Medicare to reduce disparities and support achievement of the SIHIS goal for Timely Follow-up</li> <li>Explore behavioral health data sources and ways to monitor follow up following a hospitalization for behavioral health</li> </ul>                                                                                                    | <ul style="list-style-type: none"> <li>Evaluate the ongoing TFU rates for Medicare, as well as the disparity gap measure, to ensure SIHIS goal is met</li> <li>Monitor impact on TFU for Medicaid</li> <li>Consider adding a measure that includes / behavioral health to the QBR Program in RY 2026</li> </ul>                                              |
| <b>Safety domain</b>                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                              |

<sup>1</sup> See the RY 2024 QBR policy for additional information on the findings from the QBR Redesign.

| Domain/ Measure                                                 | RY 2026                                                                                                                                                                                                                                                               | Future program years                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CDC National Health Safety Network</b>                       | <ul style="list-style-type: none"> <li>In light of the work group's findings that demonstrate that Maryland is on par with national performance, consider reducing weight to align with the national VBP Program; focus on improvement on current measures</li> </ul> | <ul style="list-style-type: none"> <li>Continue to analyze Maryland trends compared to national performance.</li> <li>Explore working with CDC to add more innovative and less burdensome "digital" measures.</li> </ul>                                                                     |
| <b>Clinical Care domain</b>                                     |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                              |
| <b>30-day mortality</b>                                         | <ul style="list-style-type: none"> <li>Maintain IP mortality measure but also phase in the 30-day all-cause, all-payer measure (i.e., include both measures)</li> </ul>                                                                                               | <ul style="list-style-type: none"> <li>Evaluate weight on mortality in program</li> <li>Monitor the Medicare a hybrid measure using the digital measures infrastructure</li> <li>Plan for implementation of an all-payer hybrid measure using the digital measures infrastructure</li> </ul> |
| <b>Total hip arthroplasty/total knee arthroplasty (THA/TKA)</b> | <ul style="list-style-type: none"> <li>Remove measure for QBR and monitor for RY2026</li> <li>Continue to explore options for expanding measurement of THA/TKA complications to all-payers and outpatient cases</li> </ul>                                            | <ul style="list-style-type: none"> <li>Continue to develop outpatient quality of care strategy using THA/TKA as exemplar</li> <li>Explore opportunities for Patient Reported Outcome Measures (PROMs)</li> </ul>                                                                             |

## BACKGROUND

### Overview of the QBR Program

The QBR Program, implemented in 2010, includes potential scaled penalties or rewards of up to 2 percent of inpatient revenue. The QBR program assesses hospital performance against national standards for measures included in the CMS VBP program and Maryland-specific standards for other measures unique to our all-payer system. Figure 2 compares RY 2025 QBR measures and domain weights to those used in the VBP Program.

**Figure 2. RY 2025 QBR measures and domain weights compared Proposed RY 2026 measures and domain weights, and to the CMS VBP Program**

| Domain               | Maryland RY 2025 QBR domain weights and measures                                        | Maryland Proposed RY 2026 QBR domain weights and measures                                                                                | CMS VBP domain weights and measures                                                                   |
|----------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Clinical Care</b> | <b>15 percent</b><br>Two measures: All-cause inpatient mortality; THA/TKA complications | <b>10 percent (-5 percent)</b><br>Two measures: all-cause, all-condition inpatient mortality; all-cause, all-condition 30-day mortality. | <b>25 percent</b><br>Five measures: Four condition-specific mortality measures; THA/TKA complications |

| Domain                                 | Maryland RY 2025 QBR domain weights and measures                                                                                                         | Maryland Proposed RY 2026 QBR domain weights and measures                                                                                                                                   | CMS VBP domain weights and measures                                 |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>Person and Community Engagement</b> | <b>50 percent</b><br>Nine measures: Eight HCAHPS categories top box score and consistency, and linear score (four categories); TFU (Medicare, Medicaid). | <b>60 percent (+10%)</b><br>10 measures: Eight HCAHPS categories top box score and consistency, linear score (four categories); TFU (Medicare, Medicaid, disparities) improvement); ED LOS. | <b>25 percent</b><br>Eight HCAHPS measures top box score.           |
| <b>Safety</b>                          | <b>35 percent</b><br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90                                  | <b>30 percent (-5%)</b><br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90                                                               | <b>25 percent</b><br>Five measures: CDC NHSN HAI measures           |
| <b>Efficiency</b>                      | n.a.                                                                                                                                                     | n.a.                                                                                                                                                                                        | <b>25 percent</b><br>One measure: Medicare spending per beneficiary |

For the FY 2025 QBR program, with the selected measures from above, the QBR Program assesses hospital performance based on the national or state threshold (50th percentile of hospital performance) and benchmark (mean of the top decile). Each measure is assigned a score of zero to ten points, then the points are summed and divided by the total number of available points, and weighted by the domain weight. Thus, a total score of 0 percent means that performance on all measures is below the performance threshold and has not improved, whereas a total score of 100 percent means performance on all measures is at or better than the mean of the top decile (about the 95th percentile). This scoring method is the same as that used for the national VBP Program. But unlike the VBP Program, which ranks all hospitals relative to one another and assesses rewards and penalties to hospitals in a revenue neutral manner retrospectively based on the distribution of final scores, the QBR Program uses a preset scale to determine each hospital's revenue adjustment and is not necessarily revenue neutral. This gives Maryland hospitals predictability and an incentive to work together to achieve high quality of care, instead of competing with one another for better rank.

Historically, Maryland hospitals have low scores on the QBR program in part due to HCAHPS performance. In order to ensure Maryland hospitals are not rewarded for subpar performance, the preset revenue adjustment scale ranges from 0 to 80 percent, regardless of the score of the highest-performing hospital in the state (i.e. the scale is not relative to Maryland performance so that poor performance compared to the Nation is not rewarded). The cut-point at which a hospital earns rewards or receives a

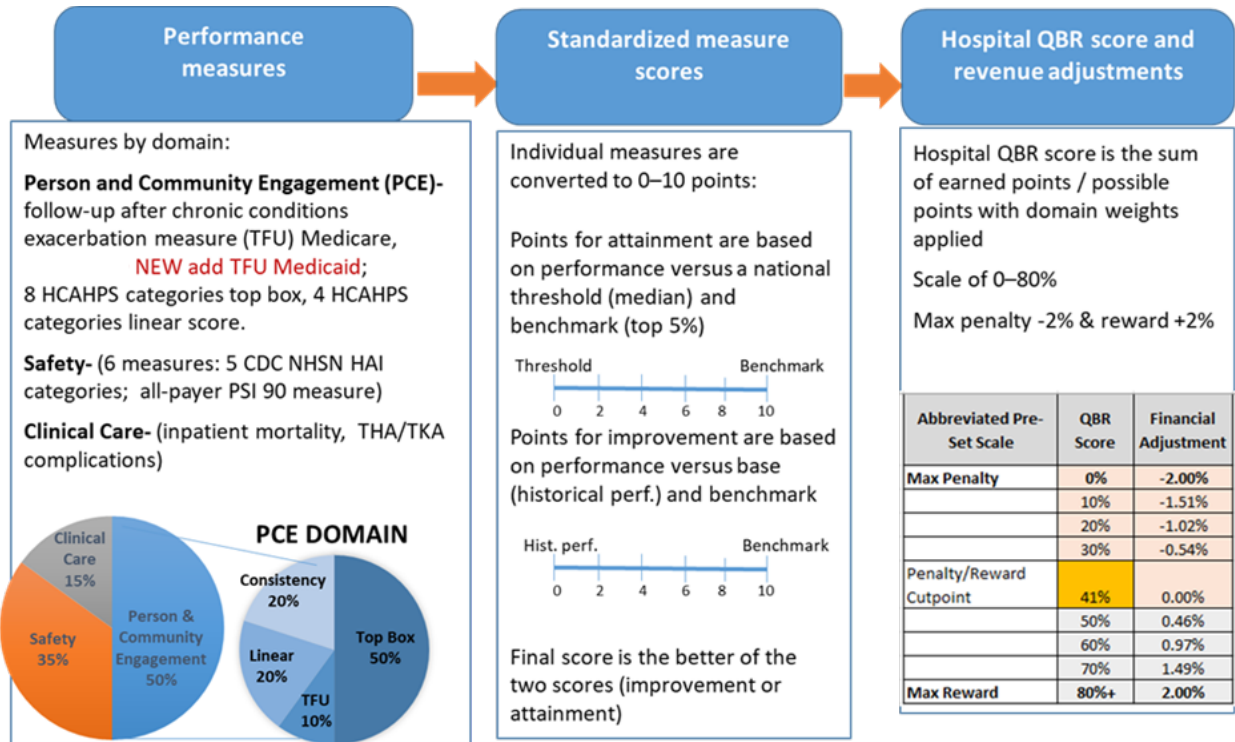
penalty has been based on an analysis of the national VBP Program scores. For RY 2024 and RY 2025, federal fiscal years 2016–2021 were used to calculate the average national score using Maryland QBR domain weights (without the Efficiency domain). This resulted in a cut-point around 41 percent (range of scores was from 38.5 to 42.7). However, due to the COVID PHE the RY 2024 and RY 2025 policies both indicate that the cut point will be reassessed retrospectively with more recent national data. While this is inconsistent with the guiding principle to provide hospitals with a way to monitor revenue adjustments during the performance year, it protects Maryland hospitals from excessive penalties due to changes in performance post-COVID compared to national hospitals. The RY 2026 policy will also provide recommendations for the RY 2024 final cut point based on more recent analyses, however, for RY 2026 the staff will continue to use the 41 percent cut point but agree to reassess this cut point with more recent data in the future. Given performance standards are now post-COVID, staff believes scores may be higher in RY 2026 than in RYs 2024 or RY 2025.

As a recap, the method for calculating hospital QBR scores and associated inpatient revenue adjustments has remained essentially unchanged since RY 2019. It involves:

1. Assessing performance on each measure in the domain.
2. Standardizing measure scores relative to performance standards.
3. Calculating the total points a hospital earned divided by the total possible points for each domain.
4. Finalizing the total hospital QBR score (0 to 100 percent) by weighting the domains, based on the overall percentage or importance the HSCRC placed on each domain.
5. Converting the total hospital QBR scores into revenue adjustments using the preset scale (range of 0 to 80 percent).

This method is shown in Figure 3.

**Figure 3. RY 2025 QBR Policy Methodology Overview**



Appendix A contains more background and technical details about the QBR and VBP Programs.

Appendix B contains the by-hospital QBR results for RY 2024 with the 32 percent cut point. Due to the recent degradation seen in National performance, staff proposes a 32 percent cut point for RY24. With a 32 percent cut point, 34 hospitals will be penalized and 7 will be rewarded; statewide net penalties amount to about \$67.5 million across the 34 hospitals that will be penalized while the 7 that will be rewarded would receive about \$3.6 million. These statewide results are similar to those awarded prior to COVID.

## Assessment

The purpose of this section is to present an assessment, using the most current data available, of Maryland’s performance on measures used in the QBR program, compared to the Nation when national data is available. In addition, staff is proposing to add several new measures to the QBR program and to modify the measure and domain weights. The rationale for new measures is discussed in each section and the domain and measure weights are discussed at the end. Finally, this policy provides the modeling with options for Commissioner consideration.

## Person and Community Engagement Domain

The Person and Community Engagement domain currently measures performance using the HCAHPS patient survey and two measures of timely follow-up (TFU) after discharge for an acute exacerbation of a chronic condition (one measure for Medicare fee-for-service (FFS) and one measure for Medicaid beneficiaries). This domain currently accounts for 50 percent of the overall QBR score; however, staff is recommending the weight for this domain be increased to 60 percent to account for the addition of two proposed measures. The proposed measures, with rationale for inclusion, are a TFU disparity gap metric and a measure of emergency department length of stay (i.e., wait times).

### *Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)*

The HCAHPS survey is a standardized, publicly reported survey that measures patient's perceptions of their hospital experience. In keeping with the national VBP Program, the QBR Program scores hospitals using top box scores (e.g., the percent of respondents who indicate the highest performance category) to calculate improvement and attainment points (0-10), and counts the points for whichever is highest, across the following HCAHPS domains: (1) communication with nurses, (2) communication with doctors, (3) responsiveness of hospital staff, (4) communication about medicine, (5) hospital cleanliness and quietness, (6) discharge information, (7) a composite care transition measure, and (8) overall hospital rating. The QBR Program also scores hospitals separately on consistency<sup>2</sup>; a range of 0-21 consistency points are awarded by comparing a hospital's HCAHPS survey lowest performing measure rates during the performance period to all hospitals' HCAHPS survey measure rates from a baseline period. In RY 2024, HCAHPS linear scores were added as 20% of the PCE domain (i.e., 10 percent of overall QBR score) for the following domains: the nurse communication, doctor communication, responsiveness of staff, and care transition. The addition of the linear measures is designed to further incent focus on HCAHPS by providing credit for improvements along the continuum and not just improvements in top box scores. Based on stakeholder feedback to draft policy, HSCRC staff recommends continuing the linear measures for RY 2026 at the current weight. Staff will assess if adding the linear measures helps improve top-box scores over the next 1-2 years. If top box scores do not improve, the staff will recommend reducing the weight or removing the linear measures in future rate years.

CMS Care Compare data on HCAHPS top box and linear performance through 6/30/22 reveal the following, as illustrated in Figures 4 and 5 below:

- Both the Nation and Maryland declined slightly from the base to the performance periods on top

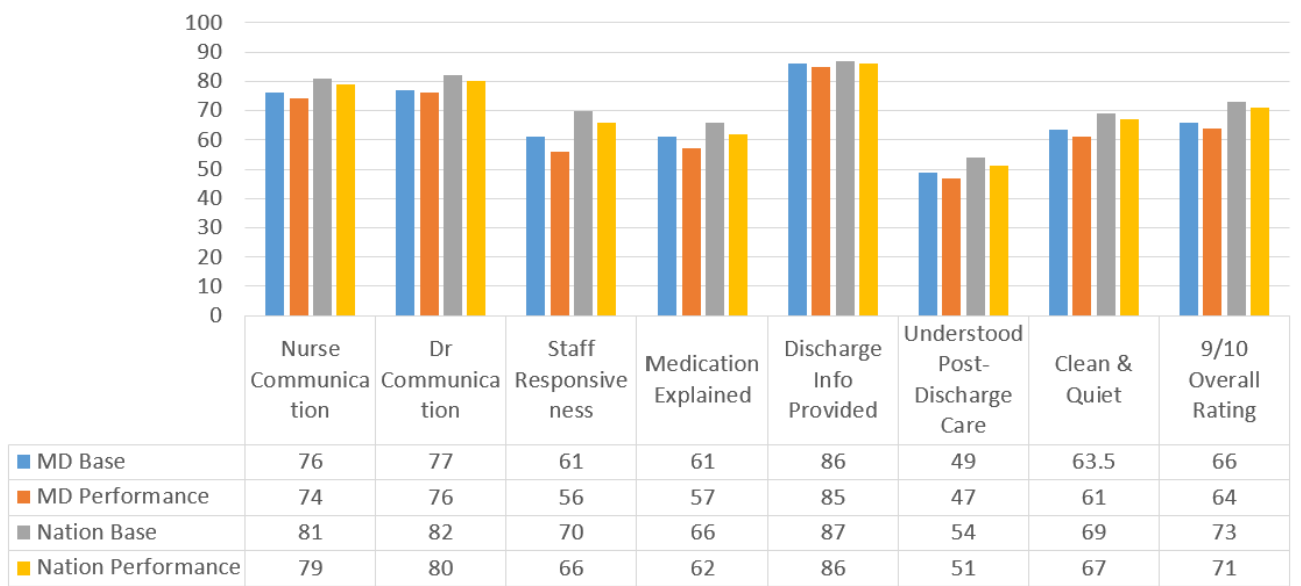
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<sup>2</sup> For more information on the national VBP Program's performance standards, please see <https://qualitynet.cms.gov/inpatient/hvbp/performance>.

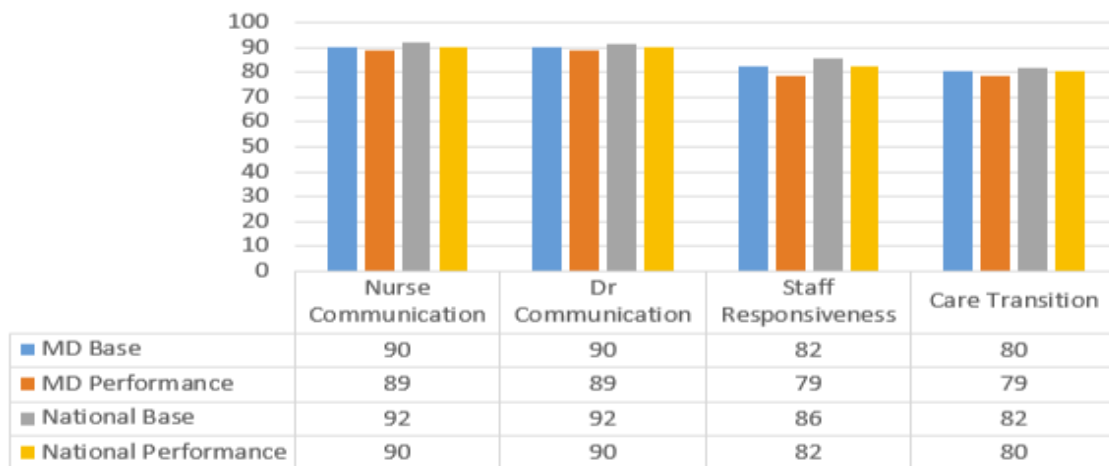
box and linear scores for all of the HCAHPS categories.

- For “ Discharge Information Provided”, Maryland and the Nation performed most similarly on top box scores.
- For both top box and linear scores, Maryland lags behind the Nation in the base and the performance periods.

**Figure 4. Top Box HCAHPS Results: Maryland Compared to the Nation , CY 2019 vs 7/1/21-6/30/22**



**Figure 5. Linear Measure, Maryland Compared to the Nation, CY 2019 vs 7/1/21-6/30/22**



In addition to the CMS data, MHCC has analyzed patient-level HCAHPS data submitted by hospitals for the 2021 Q3 to 2022 Q2 time period and found the following:

- 33,134 surveys were included in the data set
- White respondents are more highly represented than black or other respondent categories relative to their proportion in Maryland's population from the 2020 Census.
- When collapsing "would recommend" categories into two, "No" = Definitely No/Probably No - 2,263 (7%), and "Yes" = Definitely Yes/Probably Yes - 30,871 (93%):
  - Maryland responses are similar to those of the Nation.
  - More black respondents than expected indicated the "No" category.
- For the responses by service line in Maryland, there were 4,760 surveys within the Maternity service line comprising 15% of the total with the following results:
  - Black respondents are relatively more highly represented in the Maternity service line compared with the Medical and Surgical service lines.
    - For "would recommend", there were significantly more "No" reported by black patients than expected.
    - For the Overall Rating, there were significantly more "6 or lower" reported by black patients than expected

For additional details on the MHCC analysis see the HCAHPS Improvement Framework in Appendix C.

### *HCAHPS Improvement Framework*

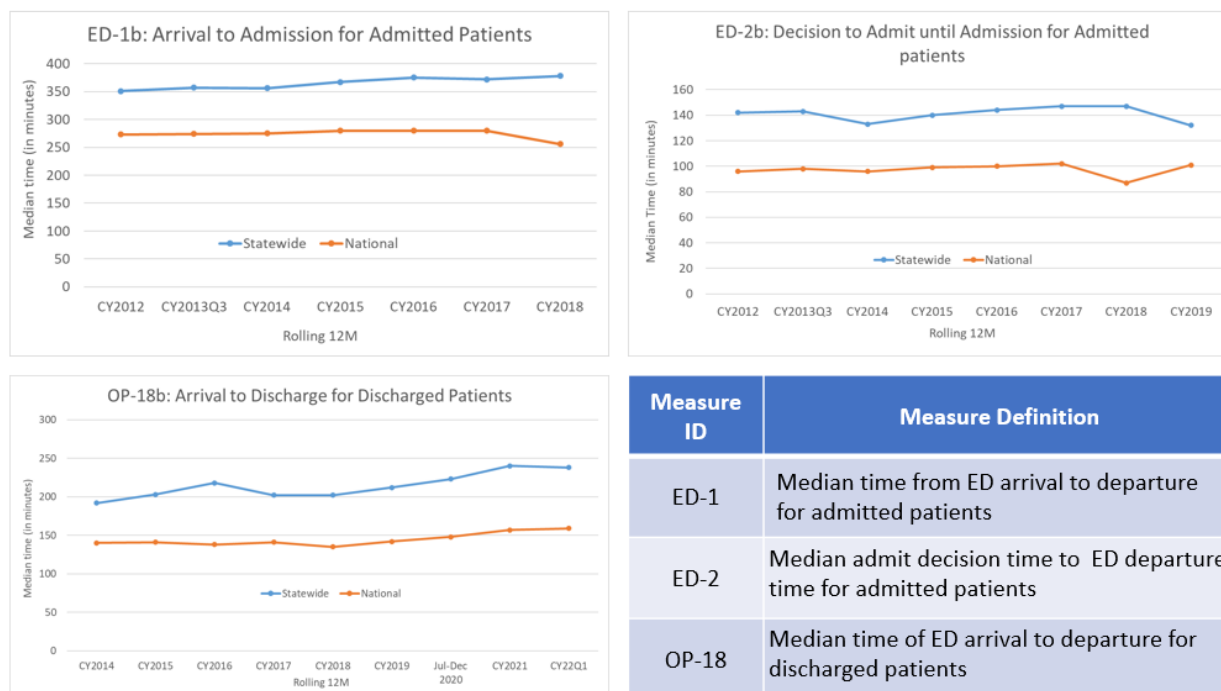
One important area CMS has identified in feedback to the Commission is the need for targeting improvement in HCAHPS in the Person and Community Engagement domain. CMS has recommended that the State consider implementing a State-wide HCAHPS performance improvement initiative that leverages input from providers, industry experts, and other stakeholders to develop future improvement goals. Further, CMS noted they are looking for the State to further develop these strategies and commit to creating a framework for setting HCAHPS performance improvement goals for future performance years. Key components of the HCAHPS improvement framework include administrative leadership accountability, data analysis and data sharing (including disparities in findings), and hospital adoption and sharing of best practices, detailed in Appendix C. Based on Maryland's overall lagged HCAHPS performance and MHCC's analysis, it will be important to focus on disparities in HCAHPS results; staff will examine disparities, for example, in the maternity service line for HCAHPS and other related process and outcome measures. Given the correlation between patient experience and ED length of stay, the framework also discusses the Emergency Department Dramatic Improvement Effort (EDDIE) among the best practices.



## Emergency Department Length of Stay

ED length of stay (LOS)—i.e., wait times—has been a significant concern in Maryland, predating Maryland’s adoption of hospital global budgets instituted in 2014,<sup>3</sup> with multiple underlying causes and potential negative impacts (e.g., poorer patient experience, quality, care outcomes). Publicly available data on CMS Care Compare reveals Maryland’s poor performance compared to the Nation on both inpatient and outpatient ED measures (i.e., higher wait times for both those admitted to the inpatient hospital and those discharged home), as shown in Figure 6.

**Figure 6. Emergency Department Performance on CMS ED Wait Time Measures**



Concerns about unfavorable ED throughput data have been shared by many Maryland stakeholders, including the HSCRC, the MHCC, payers, consumers, emergency department and other physicians, hospitals, the Maryland Institute of Emergency Medical Services Systems, and the Maryland General Assembly, with ten legislatively mandated reports on the topic issued between 1994 and 2022. Historically, the HSCRC has taken several steps to address emergency department length of stay concerns as listed in Appendix D. However, in the past few years, the COVID public health emergency and its effects on inflation and labor have had particularly significant negative impacts on hospitals and

<sup>3</sup> Under alternative payment models, such as hospital global budgets or other hospital capitated models, some stakeholders have voiced concerns that there may be an incentive to reduce resources that lead to ED throughput issues.

other care settings that patients may use after receiving hospital care (e.g., nursing homes), further exacerbating pressures on emergency departments.

Currently there are several initiatives implemented or under consideration to address this ongoing patient safety and experience concern. The use of an ED LOS measure in the QBR payment program is one policy under consideration to leverage incentives for hospital performance improvement and underscore the regulatory importance of the issue for patient care. The QBR incentive should be a mutually reinforcing part of a holistic strategy to address ED LOS and hospital throughput issues. In general, ED staff supports including inpatient wait time measures to address the issue of ED boarding and hospital throughput. Furthermore, an expert commentary on ED boarding and the global budget system discussed the inclusion of QBR payment incentive previously and added recommended re-adoption of this measure:

“Although the first effort at including an ED boarding metric in HSCRC’s QBR program was short-lived, the inclusion of such a metric should be reconsidered. Several possible explanations exist for the lack of improvement in ED boarding despite previous inclusion of the ED-2b metric in Maryland’s QBR program. Most simply, shifting hospital operations and workflow is a difficult process that requires time. Second, given public notice of CMS’s proposed rule change, hospital executives had a diminished incentive to react to a quality metric that they perceived as transient. Lastly, the financial penalties tied to excessive ED-2b times may have simply been too small to matter. The solution to all these potential issues may be similar. A meaningful financial incentive tied to ED boarding metrics that is implemented on a long-term basis is highly likely to encourage hospital innovation to optimize patient access to emergency services”.<sup>4</sup>

Below we discuss the history of ED LOS measures in QBR, provide an overview of the other initiatives to address ED LOS and hospital throughput, and provide recommendations to readopt an ED wait time measure in QBR to complement the other ED initiatives designed to improve quality of patient care.

### **History of ED Wait Times in QBR**

The HSCRC staff proposed and implemented for two years inclusion of ED LOS measures in the QBR program. In RY 2020 (CY 2018 measurement period), the QBR Program introduced the use of the two CMS inpatient ED wait time measures (chart abstracted measures: ED-1 and ED-2) as part of the QBR Person and Community Engagement (PCE) domain because of the correlation between ED wait times and HCAHPS performance (also in the PCE domain and on which the state also performs poorly). CMS retired ED-1 after CY 2018 and ED-2 after CY 2019 necessitating both measures’ removal from the QBR

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<sup>4</sup> Stryckman, B., Kuhn, D., Gingold, D., Fischer, K., Gatz, J.D., Schenkel, S., Browne, B. Balancing Efficiency and Access: Discouraging Emergency Department Boarding in a Global Budget System, *Western Journal of Emergency Medicine*, Volume 22, No. 5: September 2021.

program after only two years. Overall, ED LOS improved (i.e., ED LOS time went down) for more than half the hospitals

More recently, staff collaborated with CRISP and their contractor to collect an electronic Clinical Quality measure (eCQM) of ED-2 for CYs 2022 and 2023 but this measure has been subsequently retired by CMS as well. CMMI has considered maintaining this measure, but it has not yet made a formal decision and it is too late into the CY to implement for CY2024. While staff is still exploring whether the eCQM could be maintained in the future, this will not be feasible to implement in CY 2024. Furthermore, initial analyses of the ED2 eCQM found that there are a significant number of hospitalizations (>50,000 statewide) that are dropped from the measure due to an exclusion for stays where the patient spends more than one hour in observation care. Currently HSCRC staff is in discussions with CMMI about this measure and ED boarding measures in general and hope that in the future the eCQM infrastructure can be used to collect ED length of stay. In the meantime, staff is also exploring other ways to collect this data including adding additional time stamps to the monthly case-mix data and/or use of EDDIE measures submitted to the HSCRC directly by hospitals and MIEMSS.

To decide on the direction for CY2024/R2026, the Commission will need to consider the ED length of stay measurement options outlined below, as well as other initiatives underway to address this issue in CY 2024.

### **Additional Initiatives: Emergency Department Dramatic Improvement Effort (EDDIE)**

In June of 2023, Commissioner Joshi convened HSCRC, MIEMSS, MHA, and MDH to propose the EDDIE project with the goal of reducing the time patients spent in the emergency department, and pushed the HSCRC staff and MHA to begin this project immediately (i.e., not wait until next policy year) given the importance of this issue. The EDDIE project focuses on short-term, rapid-cycle improvement in ED patient experience by collecting and publicly reporting on ED performance data, and fostering a quality improvement process to address those metrics.

Specifically, the HSCRC has asked hospitals to submit data on measures that mirror the ED-1 and OP-18 CMS measures on a monthly basis starting in July 2023. An excel reporting template has been provided to hospitals, along with a memo that contains reporting instructions and high level specifications. The HSCRC has requested that the measures submitted be stratified by behavioral health based on initial ICD codes. Additionally, the HSCRC has developed a reporting process by which MIEMSS will provide monthly reporting on EMS turnaround times by hospital. This will provide hospital accountability for improving efficiency in handoffs by EMS personnel, which will in turn improve EMS unit availability and decrease response times.

To support this work, MHA has begun convening hospitals to set aim statements and provide on-going learning sessions to share best practices and design rapid cycle tests of change. The HSCRC and MIEMSS are supporting this work by collecting and publicly reporting hospital ED wait times at monthly Commission meetings. The intent is that Commission monitoring of timely ED performance data will bring on-going attention to this issue through public reporting, provide an opportunity for the Commission to recognize and learn from high performers, and to track the hospitals performance improvement efforts relative to their aim statements.

### **Additional Initiatives: ED Potentially Avoidable Utilization**

In CY 2021, Commissioners asked staff to evaluate expansion of potentially avoidable utilization (PAU) to emergency department utilization. Staff recommendations initially focused on high volume and low acuity chief complaint encounters (e.g., ear pain, dental problems) based on analysis of 2.4M ED observations with triage ratings. With workgroup/stakeholder vetting, this project was re-focused on multi-visit patients in the ED with >3 ED visits (statewide) in a 12-month period. A hospital monitoring program with reporting through CRISP has been established in CY 2023, with plans to consider a payment policy for CY 2024. A draft ED PAU policy will be presented at the December 2023 commission meeting.

### **Additional Initiatives: Legislative Workgroup**

As alluded to earlier, in early 2023, the Maryland General Assembly passed legislation establishing the Task Force on Reducing Emergency Department Wait Times to study best practices for reducing emergency department wait times; and requiring the Task Force to report its findings and recommendations to the Governor and the General Assembly by January 1, 2024. In response, MHA, with co-chair Dr. Ted Ted Delbridge, executive director of Maryland Institute for Emergency Medical Services Systems (MIEMSS), are leading a multi-stakeholder work group, the Hospital Throughput Work Group, aimed at making recommendations to improve the patient journey in Maryland.

Members include hospital representatives, legislators, the HSCRC, the MHCC, the state Department of Health, patient advocates and emergency department and behavioral health providers. The Task Force is charged with making legislative, regulatory and/or policy recommendations in a report due to Maryland General Assembly committees by Jan. 1, 2024. The HSCRC staff is an active participant in the Task Force and believe that inclusion of an ED length of stay measure in QBR will be consistent with any policy recommendations designed to improve ED length of stay and hospital throughput (i.e., a payment incentive should bolster performance improvement and not hinder other policy recommendations).

Appendix D provides a picture of these various initiatives and how they can be mutually reinforcing.

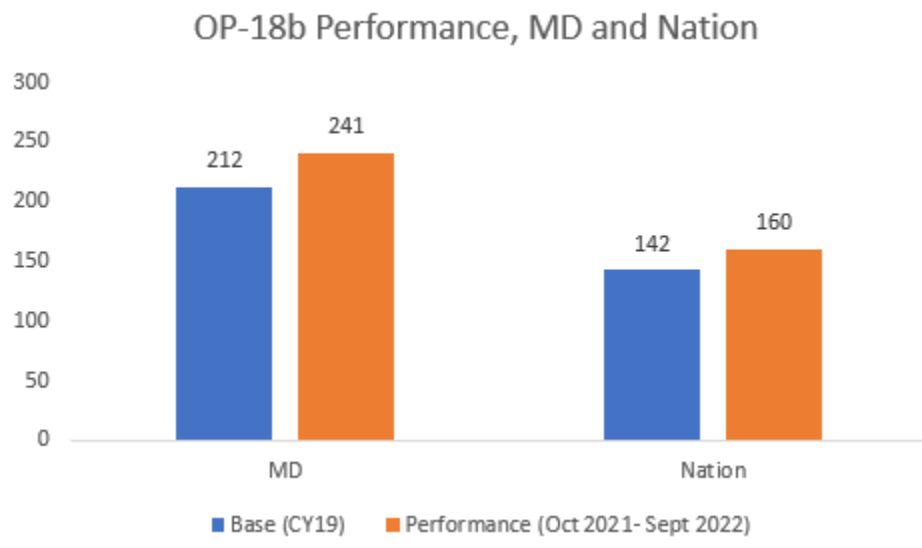
## **RY 2026 QBR Options for ED Length of Stay**

Given the measurement concerns and ongoing activities, this final policy provides three options for Commission consideration in regard to recommendations for RY2026.

**Option 1:** Delay implementation of an ED length of stay measure for admitted patients for one year so that staff can finalize measure development and selection either through addition of timestamps to case mix data, by improving and auditing ED1 submissions through EDDIE, or refinement of an ED measure through the eCQM collection process. Adoption of any new data elements in case mix would require some lead time (at least 6 months) for hospitals to adjust their data submission processes to accommodate the change.

**Option 2:** Approve inclusion of an existing ED measure for CY 2024. The options for existing measures would be OP-18 from Care Compare, which measures length of stay for non-admitted patients, or the EMS turnaround time measure. Figure 7 compares the base to the performance period used for modeling inclusion of ED length of stay. It shows the Nation and Maryland have both seen increases in their wait times; however, Maryland performs worse than the Nation and saw a larger increase in wait times. While ED length of stay for non-admitted patients has historically been correlated with ED length of stay for admitted patients and accounts for around 80 percent of all ED visits, some stakeholders have expressed that the hospital throughput issue for admitted patients is what really needs to be addressed to improve ED length of stay for all patients. Furthermore, OP-18 from Care Compare is not reported until about 9 months after the end of the performance period and is based on a sample of patients discharged from the ED. As for the EMS turnaround time, some stakeholders have raised concerns about the consistency and accuracy of this measure across jurisdictions. While staff believes this measure is accurate enough for use, it focuses on a narrow set of patients who are arriving at the hospital via ambulance.

**Figure 7. Maryland and National Performance on ED Wait Times for Discharged Patients**



**Option 3:** Approve inclusion of ED-1 like measure in RY 2026 QBR program, which will be finalized during CY 2024 and will not require additional Commission approval. The measure would use case mix data, the EDDIE submission process, and/or eCQM infrastructure. While not customary, staff would contend that the hospitals are familiar with the measures and submitting the data already on the candidate measure options and do not need to know the *exact* measure(s) to be selected beyond understanding they will be held accountable for the length of stay for the majority of, or for all patients admitted to the hospital. Since hospitals should be working on performance improvement in CY 2024, inclusion of an ED length of stay measure should reinforce and provide financial rewards to support the performance improvement initiatives. As stated above in Option 1, adoption of any new data elements in case mix would require some lead time (at least 6 months) for hospitals to adjust their data submission collection processes to accommodate the change but could be retrospectively reported for previous years if the data elements existed in the EHR.

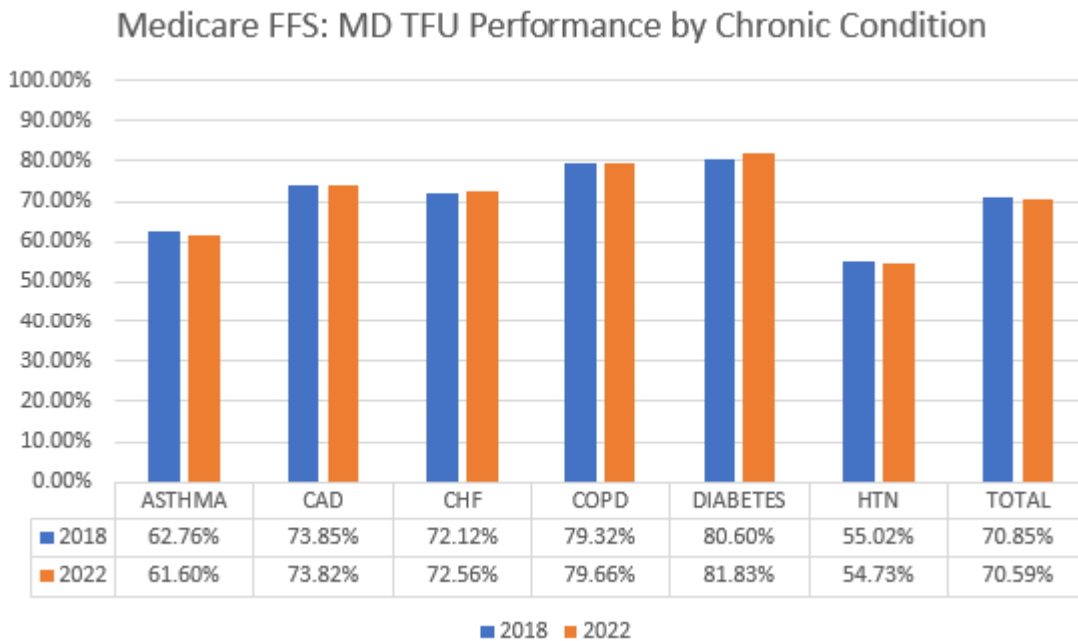
### *Timely Follow-Up After Discharge*

On March 17, 2021, CMS approved Maryland’s proposed SIHIS, which included a National Quality Forum-endorsed health plan measure of timely follow-up (TFU) after an acute exacerbation of a chronic condition in the Care Transition domain. The SIHIS goal is to achieve a 75 percent TFU rate for Medicare FFS beneficiaries across the six specified conditions and respective time frames. To hold hospitals accountable for meeting this goal, the HSCRC introduced this measure for Medicare beneficiaries into the RY 2023 QBR Program within the Person and Community Engagement domain and recommends continuing it in the RY2026 QBR program. The measure assesses the percentage of ED visits, observation stays, and inpatient admissions for one of six conditions in which a follow-up was received within the time frame recommended by clinical practice:

- Hypertension (follow-up within seven days)
- Asthma (follow-up within 14 days)
- Heart failure (follow-up within 14 days)
- Coronary artery disease (follow-up within 14 days)
- Chronic obstructive pulmonary disease (follow-up within 30 days)
- Diabetes (follow-up within 30 days)

Figure 8 shows Maryland’s performance over time for each chronic condition and all conditions combined within the Medicare population. For all conditions, there was a slight drop in Medicare rates from in 2018 to 2022 (70.85% to 70.59%); however, there was a slight increase seen from 2021 to 2022 (70.07% to 70.59%). The largest drop in follow-up from 2018 to 2022 was for Asthma (-0.26%) and HTN (-0.53%). For CAD, CHF, diabetes, and hypertension there were slight increases in timely follow-up.

**Figure 8. Medicare FFS: Maryland Timely Follow-Up by Condition**



Note: Maryland numbers are claims-based and built on the Claim and Claim Line Feed with a four-month runout. CAD = coronary artery disease, CCW = Chronic Conditions Data Warehouse; CHF = coronary heart failure; COPD = chronic obstructive pulmonary disease; HTN = hypertension.

While some stakeholders have raised concerns around the follow-up times by condition, it is important to note that Maryland and the Nation are being measured on the same timeframes and the expectation is not 100 percent follow-up. Figure 9 shows the annual performance on the total TFU measure for Maryland and the Nation (national data is based on the Chronic Condition Warehouse 5 percent sample).

Comparing 2018 to 2022, the Nation has seen a 0.66% increase and Maryland has seen a 0.37% decrease in timely follow-up rates; however, Maryland still performs about 4.5% better than the Nation in 2022. Also, the Nation saw a decrease in timely follow-up rates comparing 2021 to 2022, while Maryland saw improvement.

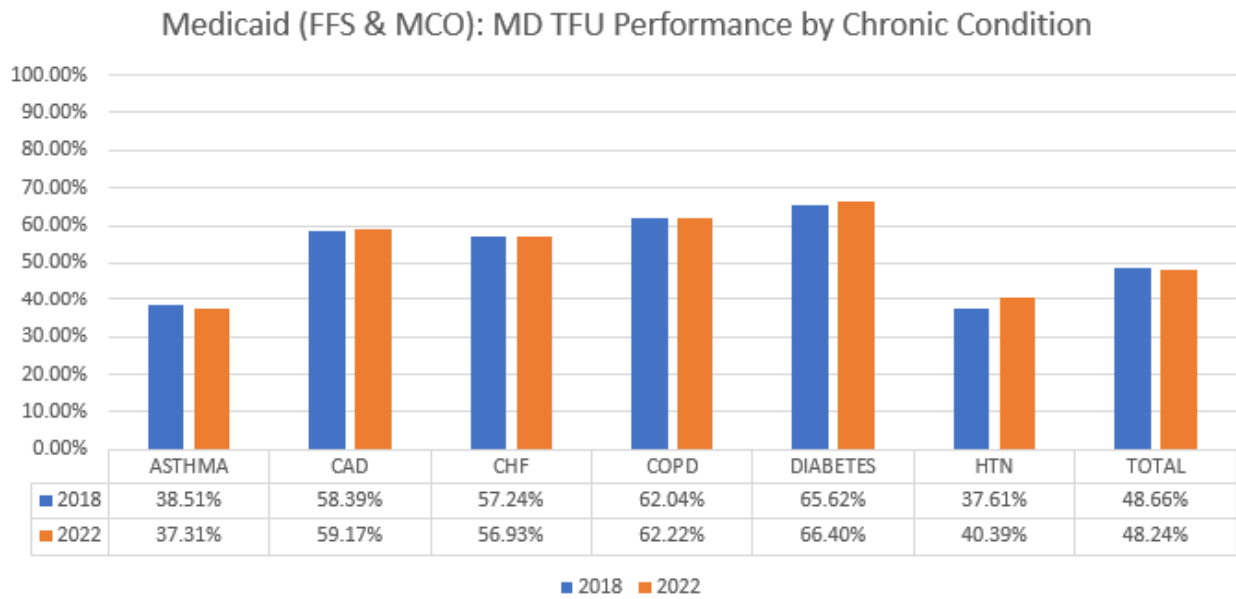
**Figure 9. Medicare-only: Timely Follow-Up across All Conditions**

| <b>TFU Rates</b> | <b>CY2018</b> | <b>CY2019</b> | <b>CY2020</b> | <b>CY2021</b> | <b>CY2022</b> |
|------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Maryland</b>  | <b>70.85%</b> | <b>71.45%</b> | <b>67.90%</b> | <b>70.07%</b> | <b>70.59%</b> |
| <b>US</b>        | <b>66.82%</b> | <b>69.00%</b> | <b>64.75%</b> | <b>67.68%</b> | <b>67.26%</b> |

As part of the SIHIS proposal, it was noted that staff would explore expanding the timely follow-up rates for chronic conditions to other payers and adding follow-up after a hospitalization for behavioral health. In Calendar Year 2022, staff worked with CRISP and Maryland Medicaid to provide hospitals monthly Medicaid Timely Follow-Up reports on the CRS portal. In RY 2025, the HSCRC introduced the Medicaid Timely Follow-Up measure into the QBR program within the Person and Community Engagement domain and recommend continuing it in the RY2026 QBR program weighted the same as the Medicare measure but assessed separately. Figure 10 shows Maryland's performance over time for each chronic condition and all conditions combined for Medicaid patients.



**Figure 10. Maryland Medicaid Timely Follow-Up by Condition**



Staff is continuing to work to understand the Medicare and Medicaid behavioral health data to create a Timely Follow-Up monitoring report for Behavioral Health.

### *Disparities in Timely Follow-Up*

In the Summer of CY 2022, staff convened a Health Equity Workgroup which stratified Maryland’s quality measures by social demographic factors to glean disparities. For the QBR program, staff stratified the Timely Follow-Up measure by race, dual-eligibility status, and Area Deprivation Index (ADI). Results of this stratification analysis are below in Figures 11, 12, and 13, but overall the analysis found disparities on all three factors. For example, Figure 11 indicates that Blacks have a 58 percent higher odds of not receiving follow-up compared to Whites. Similar trends were seen where duals and those with higher area deprivation had a higher odds of not receiving follow-up (Figures 12 and 13).

Figure 11. Odds Ratio of No Follow-Up by Race

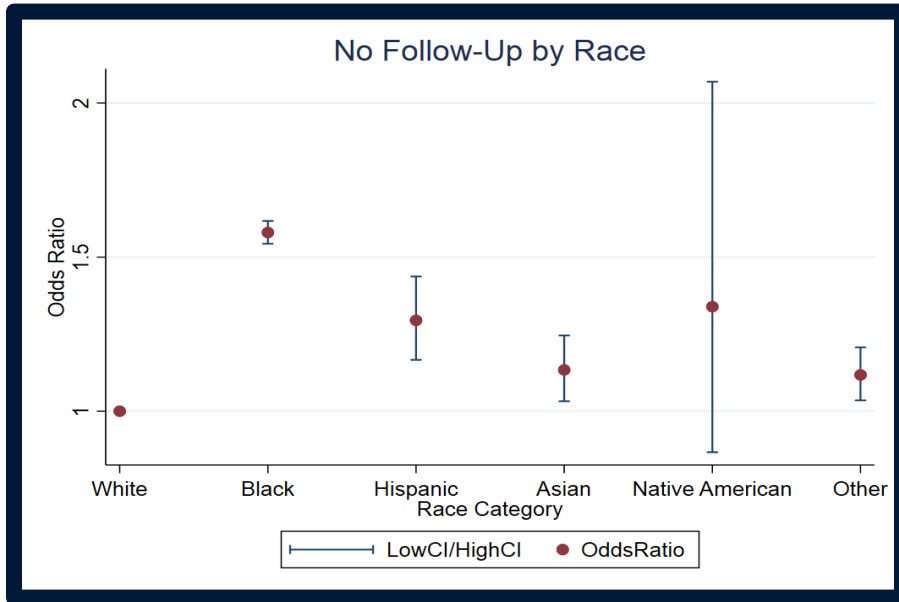
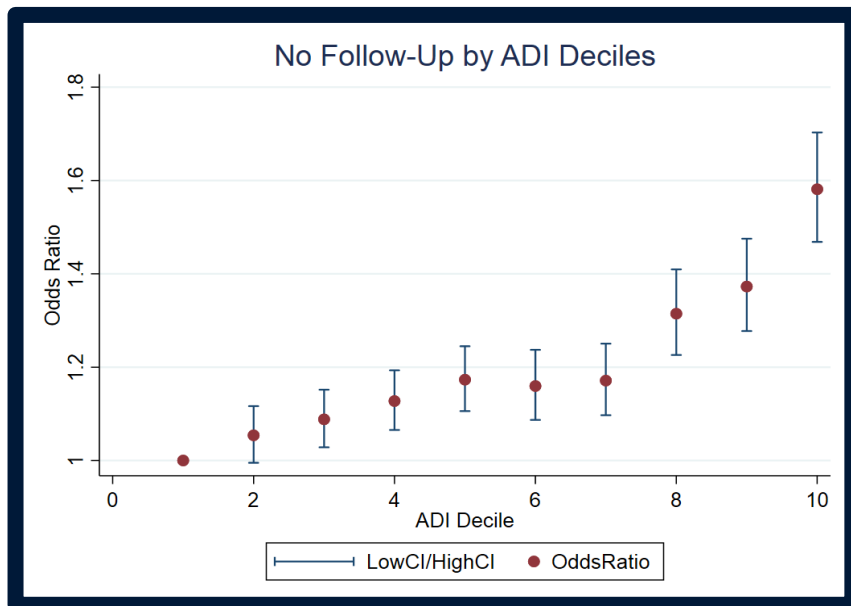
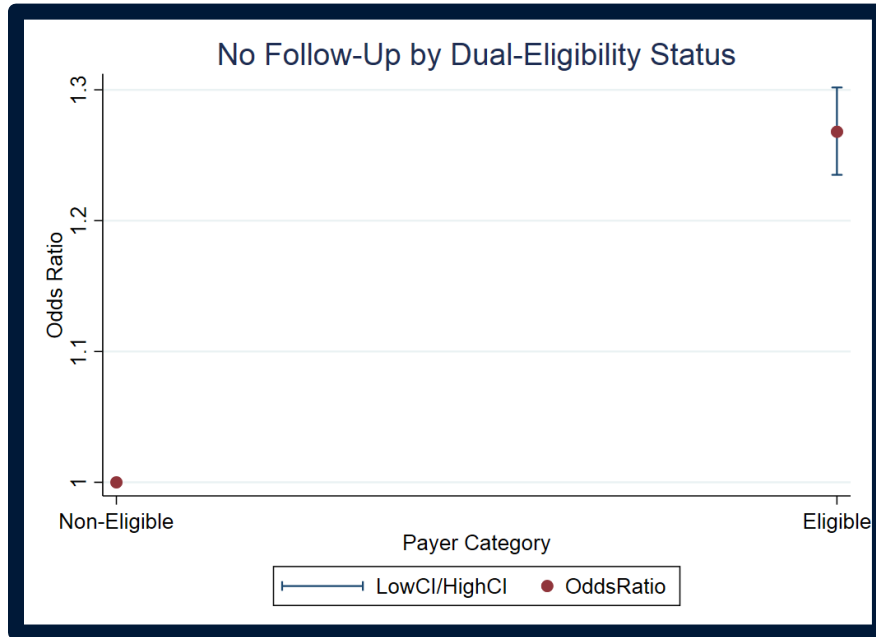


Figure 12. Odds Ratio of No Follow-Up by ADI Decile



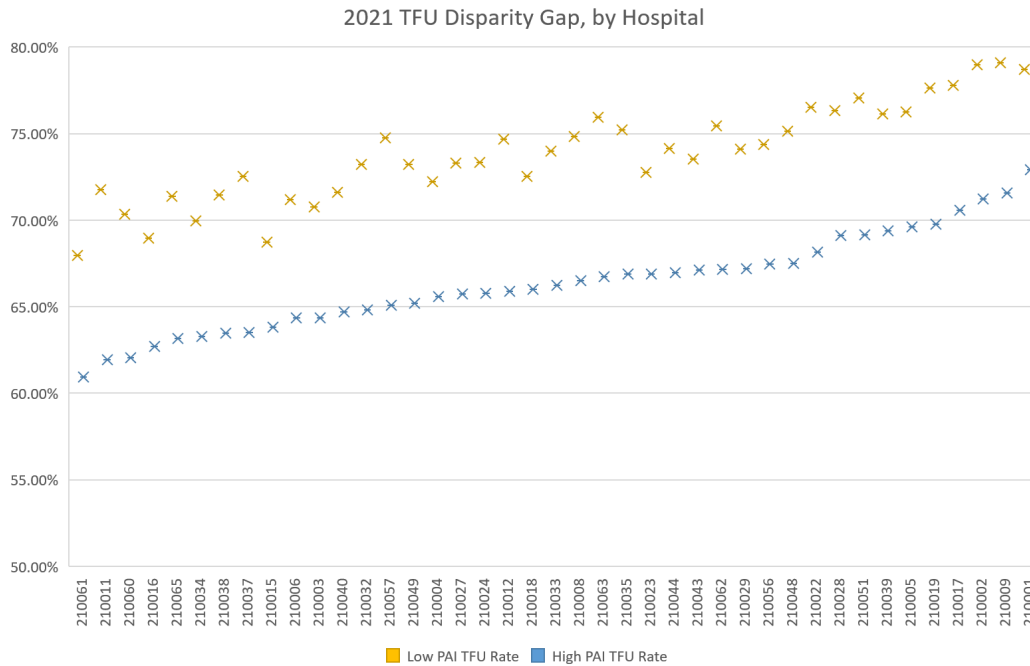
**Figure 13. Odds Ratio of No Follow-Up by Dual-Eligibility Status**



Given that the state did not meet the 2021 Year 3 Milestone SIHIS Target and the overwhelming evidence of disparities in this measure, HSCRC staff has developed a timely-follow up disparity gap metric that is similar to the readmissions disparity gap measure. The timely follow-up disparity gap metric takes the patient-level social exposures of race, dual eligibility status, and ADI and estimates the association between these social exposures and the likelihood of receiving a follow-up in the recommended timeframe. Based on this analysis, a TFU Patient Adversity Index score (TFU PAI) is assigned to each patient and hospitals are then assessed on the TFU rate for low and high PAI patients (i.e., the within-hospital disparity gap is the difference between these rates). The performance metric for RY 2026 would be the change in the TFU disparity gap from 2018 to 2024. Staff modeled the TFU disparity gap improvement using CY 2018 to CY 2021 and proposes to use this data to set the standards for improvement in the disparity gap for RY 2026.

Figure 14 shows the TFU disparity gaps by hospital in CY 2021. The median gap between low and high PAI patients is 7.55% percent, with a range of 4.91%-9.84% percent indicating all hospitals have a gap and there is some variation across hospitals.

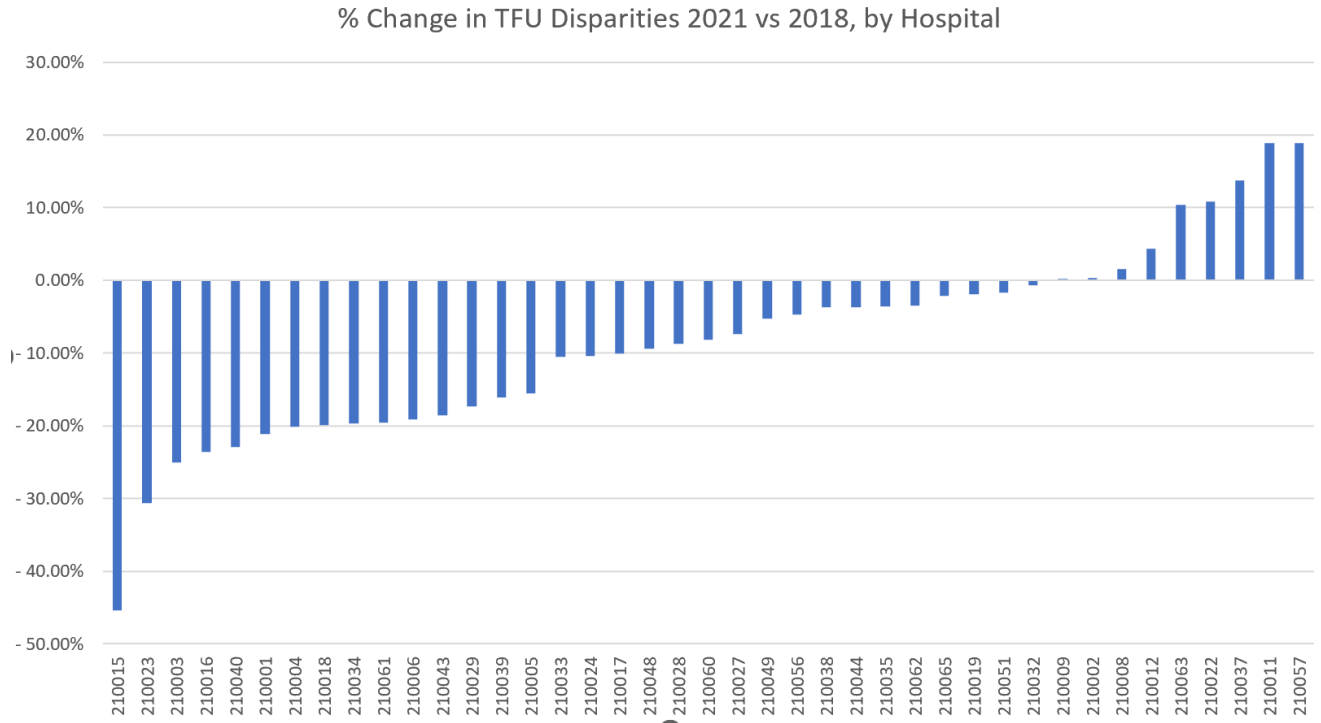
**Figure 14. By Hospital TFU Disparity Gap, CY 2021**



As illustrated in Figure 15 below, most (32) hospitals saw progress in the reduction of disparities in timely follow-up in 2021 compared to 2018. Nine hospitals saw increases in their disparities with two hospitals seeing almost 20% increases. To incentivize hospitals to improve on the disparities experienced by their patients, HSCRC is proposing to add this measure to the QBR program, specifically in the PCE domain. This differs from our readmission disparity gap policy where there is a stand-alone incentive on disparity reductions; however, staff proposed this approach for simplicity since QBR already has multiple measures (unlike RRIP that only had one). Staff is also recommending increasing the weight of the PCE domain to accommodate the TFU disparity measure and the ED length of stay measure (see section below on measure and domain weighting). Because the overall goal is improvement and the performance metric is percent change over time, this measure will be assessed using the attainment methodology (i.e., we will not be measuring whether there was improvement on the change in the disparity gap). However, as stated above, staff proposes to use the change in the TFU disparity gap from 2018 to 2021, to prospectively set the attainment standards. Based on this approach, the threshold to begin receiving rewards will be a 30% reduction and the benchmark to earn full rewards at a 50% reduction<sup>5</sup>. The threshold and benchmark were calculated as the median percent and average for the top 10th percentile of performers respectively, on the change in disparities from CY 2018 to CY 2021 (consistent with how VBP calculates other performance standards).

<sup>5</sup> The performance standards were rounded for ease of reporting.

**Figure 15. By Hospital Improvements in TFU Disparity Gap, 2018 vs 2021**



## Safety Domain

The QBR Safety domain contains five measures from six CDC NHSN HAI categories and the AHRQ Patient Safety Index Composite (PSI-90).<sup>6</sup> This domain has been weighted at 35 percent of the total QBR score; however, for RY 2026 staff is proposing to lower the weight to 25 percent (this is the weight in the CMS VBP program). For the FY 2026 VBP program, CMS is adding the Sepsis and Septic Shock Management Bundle (SEP-1), a measure that has been publicly reported on Care Compare since July 2018. However, as discussed below, staff is proposing to not adopt this measure in the QBR program based on stakeholder input, inclusion of sepsis mortality in QBR, and Maryland performance on sepsis. Another difference between the VBP and QBR safety domain is that QBR has maintained the use of the AHRQ PSI measure rather than moving this measure to a standalone complications program, i.e., the MHAC program. While the Safety Domain will remain in the QBR program for RY 2026, this change may be reconsidered for future years.

<sup>6</sup> For use in the QBR Program, as well as the VBP program, the SSI Hysterectomy and SSI Colon measures are combined.

## CDC NHSN HAI Measures

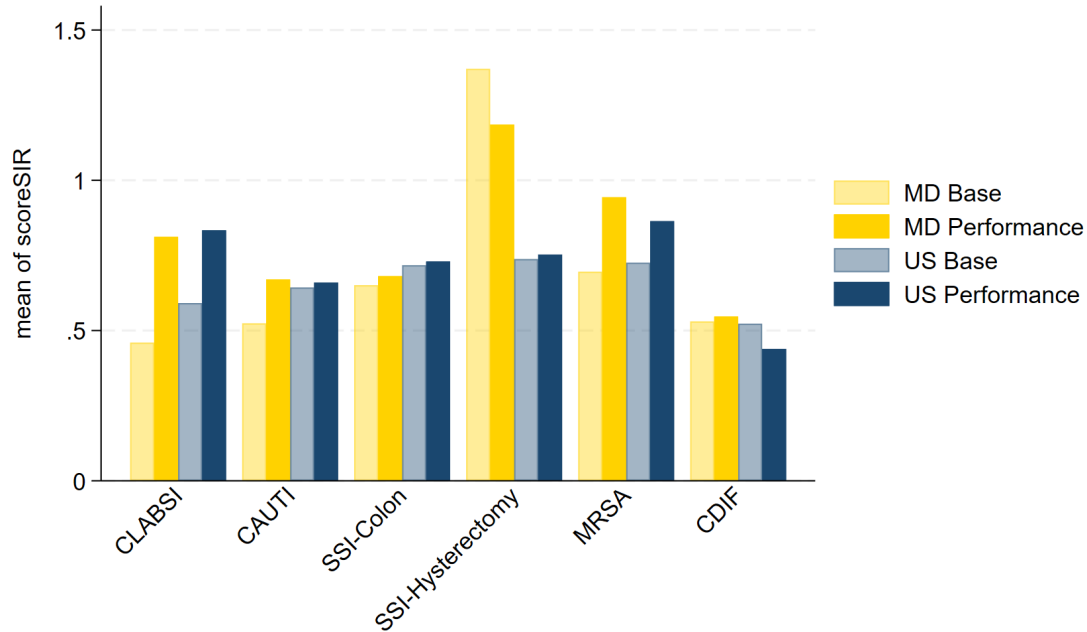
The CDC's National Healthcare Safety Network (NHSN) tracks healthcare-associated infections such as central-line associated bloodstream infections and catheter-associated urinary tract infections. Both Maryland and the Nation have seen increases in HAIs during CY 2020 and CY 2021 largely related to the COVID 19 pandemic, as was discussed in previous policies, and supported by peer reviewed research.<sup>7</sup>

CMS Care Compare has updated the Healthcare Associated Infection Standardized Infection Ratio (SIR) data tables for the Nation and by state through September 2022. Figure 16 below shows how Maryland performs relative to the nation, and how performance has changed over time for both Maryland and the nation. For the most recent time period, Maryland's performance is similar to that of the Nation on CLABSI and CAUTI, worse (higher SIRs) on SSI-hysterectomy, MRSA and CDIF, and slightly better on SSI-Colon. Nationally the SIRs got worse from the base period for CLABSI and MRSA, remained similar for CAUTI, SSI-Colon, SSI-hysterectomy, and improved for CDIF. In Maryland, the SIRs got worse from the base period for CLABSI, CAUTI, and MRSA, remained similar for SSI-Colon and CDIF, and improved for SSI-hysterectomy. Despite this performance, staff is recommending reducing the weight of the Safety domain and thus each of the NHSN measures. See [RY2023](#) QBR policy for additional discussion of NHSN surveillance bias concerns and assessment of Maryland performance.

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<sup>7</sup> Lastinger, L., Alvarez, C., Kofman, A., Konnor, R., Kuhar, D., Nkwata, A., . . . Dudeck, M. (2022). Continued increases in the incidence of healthcare-associated infection (HAI) during the second year of the coronavirus disease 2019 (COVID-19) pandemic. *Infection Control & Hospital Epidemiology*, 1-5. doi:10.1017/ice.2022.116

**Figure 16. NHSN SIR Values for CY19 compared to Q4 CY21-Q3 CY22, Maryland versus the nation.**



### Patient Safety Index (PSI-90)

The Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators were developed<sup>8</sup> and released in 2003 to help assess the quality and safety of care for adults in the hospital. PSI-90 focuses on a subset of ten AHRQ-specified PSIs of in-hospital complications and adverse events following surgeries, procedures, and childbirth. The PMWG noted previously that CMS removed the PSI-90 measure from the VBP program in FY 2024 but retained the measure in the Hospital Acquired Conditions Reduction Program. Since Maryland does not have PSI-90 in the MHAC program, staff has recommended retaining the measure in the QBR program.

As illustrated in Figure 17 below, for CY 2022 compared with FY 2021 (July 2020-June 2021), Maryland's statewide performance is as follows:

- On the overall PSI 90 composite measure, the State has improved.
- The State has **improved** with lower rates in 2022 on the following PSIs:

<sup>8</sup> AHRQ contracted with the University of California, San Francisco, Stanford University Evidence-based Practice Center, and the University of California Davis for development. For additional information: [https://www.qualityindicators.ahrq.gov/Modules/psi\\_resources.aspx](https://www.qualityindicators.ahrq.gov/Modules/psi_resources.aspx)

- 09 Perioperative Hemorrhage or Hematoma Rate and 14 Postoperative Wound Dehiscence Rate
- 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate.
- 11 Postoperative Respiratory Failure Rate
- 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate
- 13 Postoperative Sepsis Rate
- 14 Postoperative Wound Dehiscence Rate
- The State has **neither improved or worsened** on the following PSIs:
  - 06 Iatrogenic Pneumothorax Rate
  - 08 In-Hospital Fall With Hip Fracture Rate .
- The State has **worsened** with higher rates on the following PSIs:
  - 03 Pressure Ulcer Rate (slight increase)
  - 15 Abdominopelvic Accidental Puncture or Laceration Rate

**Figure 17. Maryland Statewide All-Payer Performance on PSI-90 and Component Indicators, CY 2022 Compared to FY 2021 (July 2020-June 2021)**

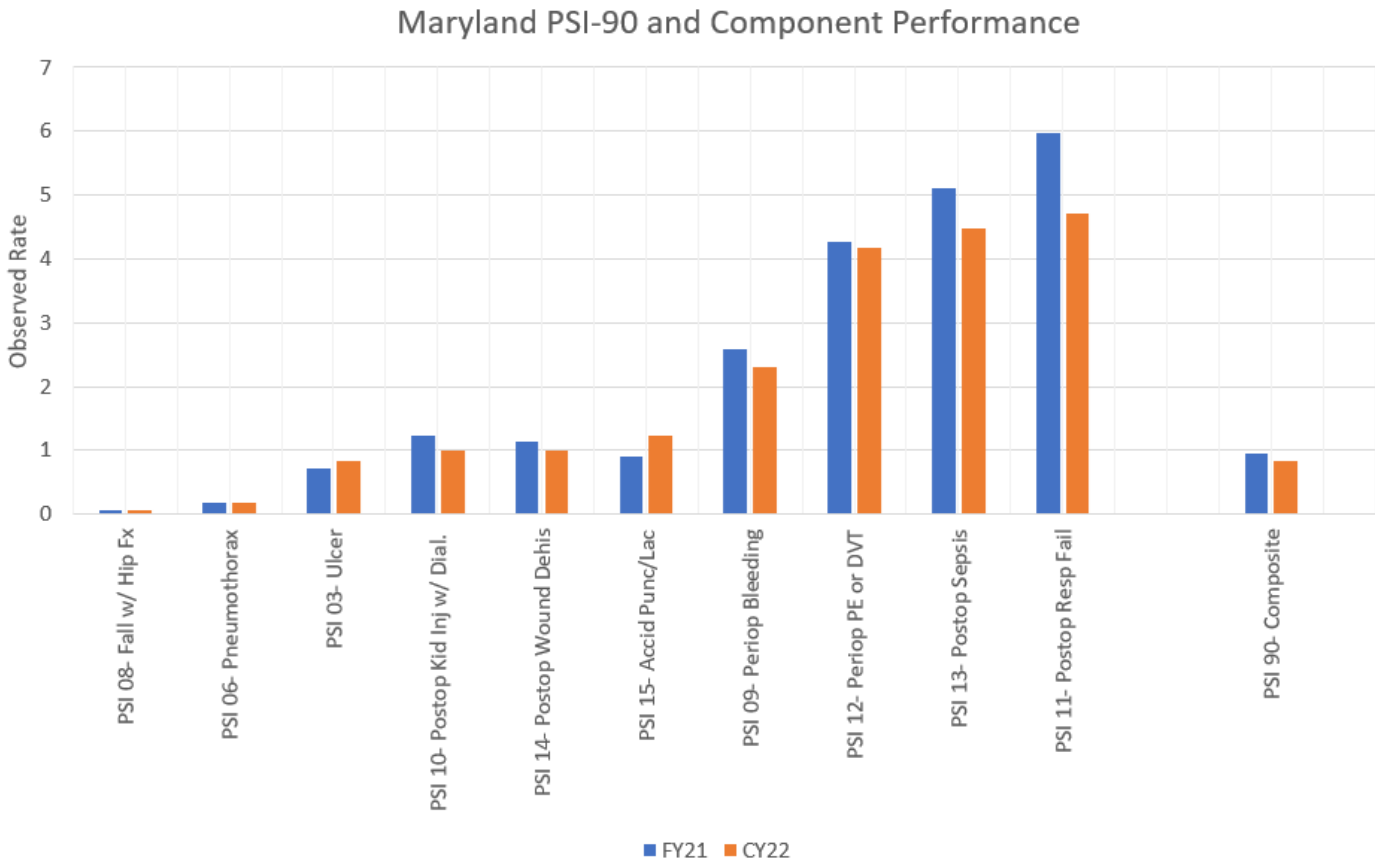
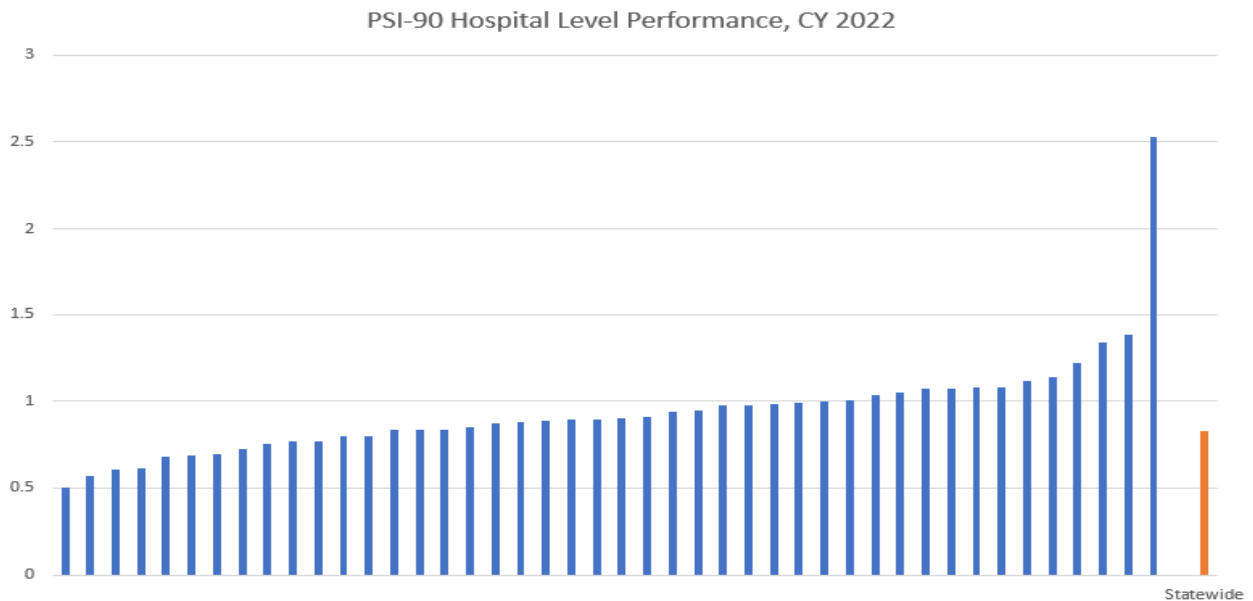




Figure 18 below illustrates the hospital-level performance on the all-payer PSI-90 composite measure for CY 2022; consistent with last year, the variation in performance by hospital suggests there may be opportunity for improvement on this measure.

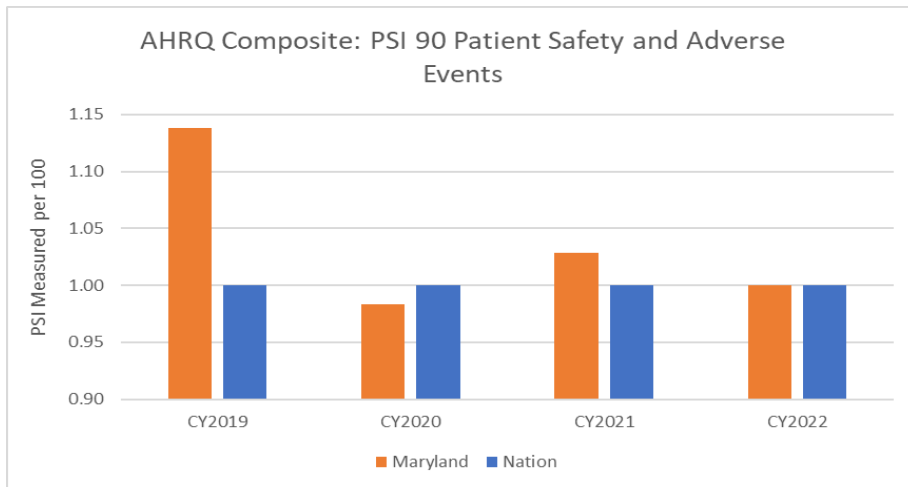
**Figure 18. PSI-90 Hospital-Level Performance, CY 2022<sup>9</sup>**



The Agency for Research and Quality publishes all-payer risk-adjusted PSI 90 data by state and for the Nation using the hospital Healthcare Cost and Utilization Project (HCUP) data; as Figure 19 below, Maryland performs on par with the Nation based on the most currently available CY 2022 data.

<sup>9</sup> Levindale Hospital performs the worst on the PSI-90 measure; their results are driven by poor performance on pressure ulcers. Given they have a longer length of stay than most acute care hospitals, they need to focus on quality improvement for pressure ulcers.

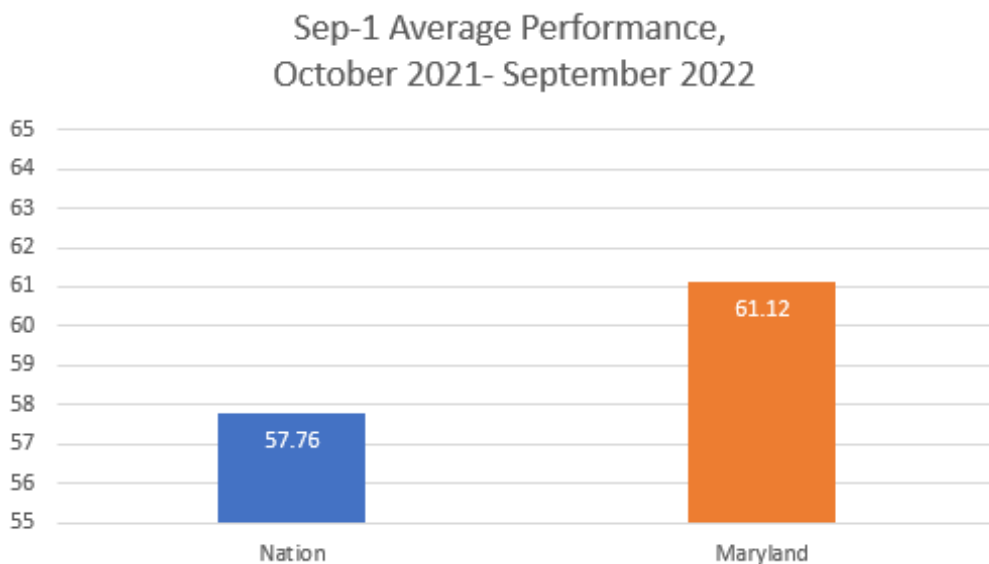
**Figure 19. Maryland vs. National Performance on PSI 90 Composite Measure, CY 19-CY 22<sup>10</sup>**



**New VBP Measure: Sep-1 measure—Early Management Bundle, Severe Sepsis/Septic Shock**

As noted previously, Medicare is adopting the Sep-1 measure into the VBP program in FY 2026. As illustrated in Figure 20 below, Maryland performs favorably on the Sep-1 measure compared to the nation.

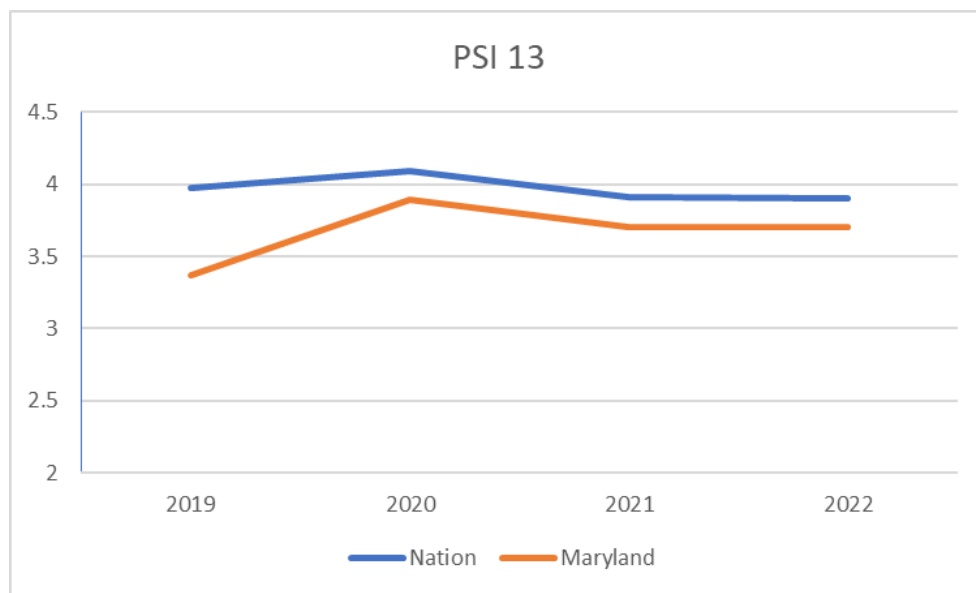
**Figure 20. Maryland vs. the Nation, Sep-1 Early Management Bundle Measure**



<sup>10</sup> Data provided by MHCC used for the Maryland Hospital Performance Guide published on the MHCC website.

There are opposing views on the SEP-1 measure adoption for payment. On one hand, some providers have voiced concerns that it mandates an inflexible “one size fits all” therapeutic approach for sepsis that lacks a sufficient level of evidence for the highly diverse group of patients it is directed at.<sup>11</sup> On the other hand, because of its emphasis on timing, an opposing perspective is that the SEP-1 measure is lifesaving and long supported by the Sepsis Alliance.<sup>12</sup> In contrast with the CMS VBP program, the QBR program has retained the PSI 90 composite measure in the Safety domain with PSI 13 Postoperative Sepsis included as one of the 10 measures in the PSI 90 composite. On PSI 13, Maryland has improved from FY 2021 to CY 2022 as noted in the PSI 90 section above; as shown in Figure 21 below, Maryland has performed consistently favorably compared to the Nation from CY 2019-2022.

**Figure 21. PSI 13 Postoperative Sepsis, Maryland vs. the Nation 2019-2022**



The PMWG stakeholders discussed the Sep-1 bundle measure and also voiced concerns about its universal applicability and efficacy for all patients identified with sepsis in the hospital based on the definitions used in the measure. Stakeholders also noted that unlike nationally, Maryland’s inpatient mortality measure applies to all causes and all conditions, including sepsis, which likely has an impact on sepsis performance. Given the concerns about the sepsis bundle process measure and Maryland’s

<sup>11</sup> Wang J, Strich JR, Applefeld WN, Sun J, Cui X, Natanson C, Eichacker PQ. Driving blind: instituting SEP-1 without high quality outcomes data. *J Thorac Dis.* 2020 Feb;12(Suppl 1):S22-S36. doi: 10.21037/jtd.2019.12.100. Erratum in: *J Thorac Dis.* 2021 Jun;13(6):3932-3933. PMID: 32148923; PMCID: PMC7024755.

<sup>12</sup>Sepsis Alliance: Found at: <https://www.sepsis.org/news/sep-1-update-inclusion-in-hospital-value-based-purchasing-program-is-a-victory-for-patients/>; last accessed, 10/10/2023.

favorable performance on sepsis-related outcome measures, staff is proposing to not adopt the Sepsis bundle measure at this time. However, staff supports the development of a sepsis dashboard, which includes the Sep-1 process measure along with other existing outcome measures such as postoperative sepsis complications and mortality, for continued monitoring of sepsis performance in Maryland. If performance deteriorates or concerns with the sepsis bundle measure are addressed, staff will reconsider its inclusion in QBR for future years.

## Clinical Care Domain

This domain, weighted at 15 percent of the QBR score, currently includes:

- Inpatient, all-payer, all-condition mortality measure
- Inpatient Medicare Total Hip Arthroplasty-Total Knee Arthroplasty (THA/TKA) Complications measure. This is also used by the CMS VBP program.

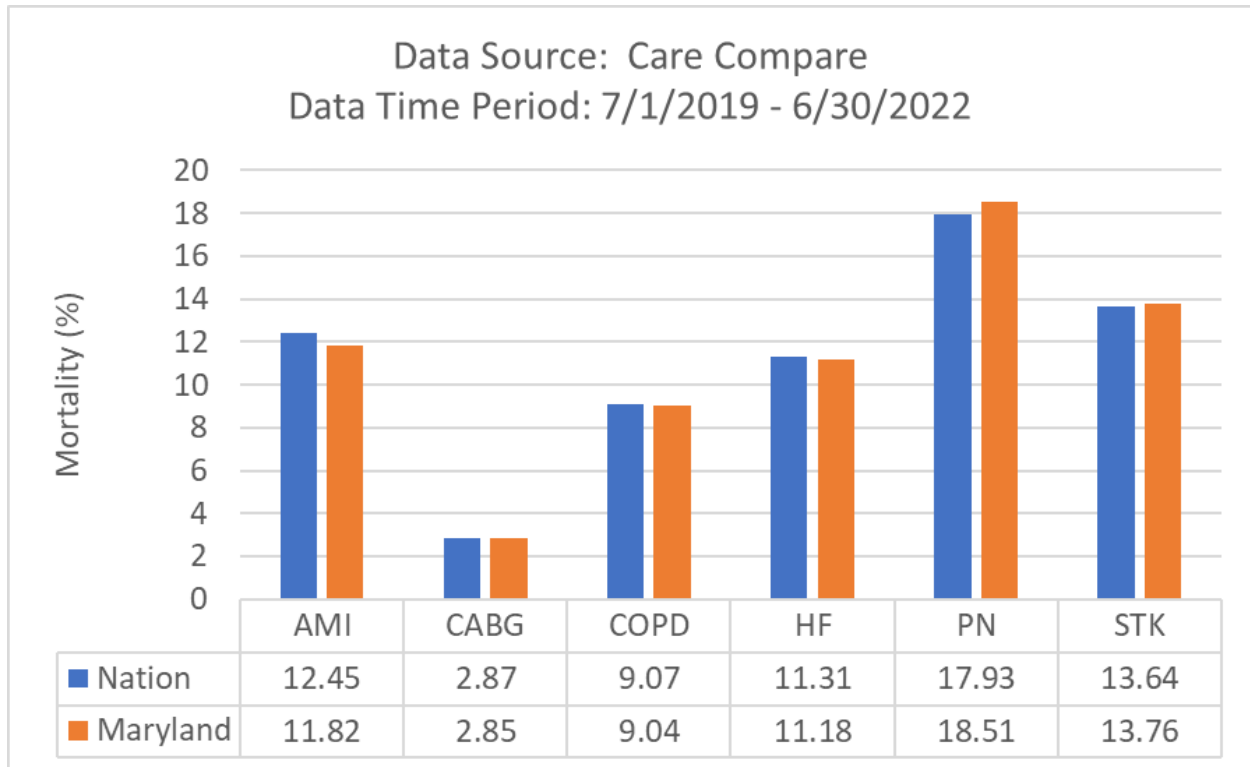
Of note, Maryland's QBR mortality measure currently differs from the CMS VBP Program that uses four condition-specific, 30-day mortality measures for Medicare beneficiaries. Medicare also monitors two additional 30-day mortality measures for Coronary Artery Bypass Graft (CABG) and Stroke (STK). The HSCRC has developed an all-payer, all-cause 30 day mortality measure and staff recommends adopting this measure into the QBR program for RY 2026.

## Mortality

### *CMS 30-Day Condition-Specific Mortality Measures*

Based on the most recently available data through June of 2022, Maryland performs on par or better than the Nation on five out of six of the condition specific mortality measures. Specifically, Maryland performs better than the Nation on AMI, CABG, COPD, HF, and STK but worse on pneumonia (Figure 22). It should be noted that this data was impacted by the COVID PHE and that the first 6 months of CY 2020 was excluded from the three-year measure (i.e., the measurement period was shorter than normal).

**Figure 22. Maryland vs. National Hospital Performance on CMS Condition-Specific Mortality Measures**

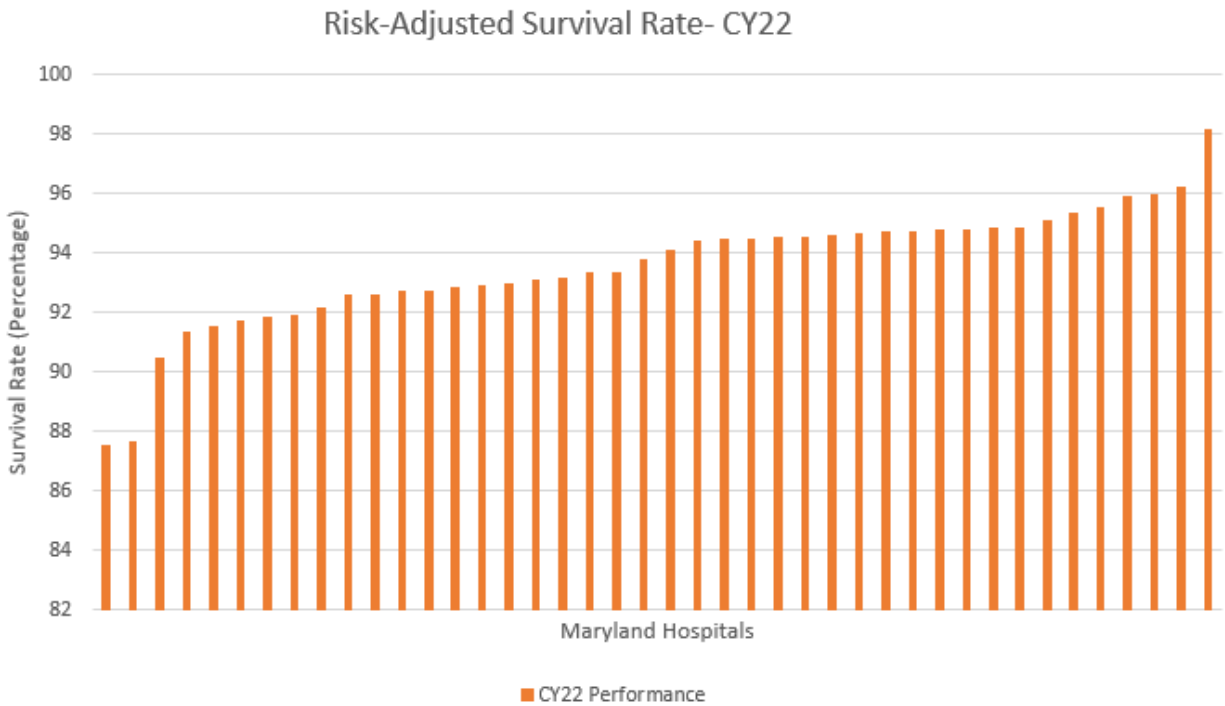


***QBR Inpatient, All-payer, All-condition Mortality measure***

For the QBR all-payer inpatient mortality measure, which assesses hospital services where 80 percent of the mortalities occur (80% DRG exclusion), statewide survival rate decreased during the COVID PHE from 94.86% in CY 2019 to 93.55% in the CY 2022 performance period. These mortality results were derived with a modified risk-adjustment model - COVID status during admission and percent of patients at the hospital with COVID to the CY 2021 were added regression to better account for COVIDs impact on mortality. As illustrated in Figure 23 below, there are two hospitals that appear to have lower survival rates, whereas most perform above 90 percent.<sup>13</sup>

<sup>13</sup> The lowest performing hospital is Ft. Washington followed by Atlantic General.

**Figure 23. Maryland Hospital Performance, CY 2022 QBR Inpatient All Condition, All Payer Mortality Measure**

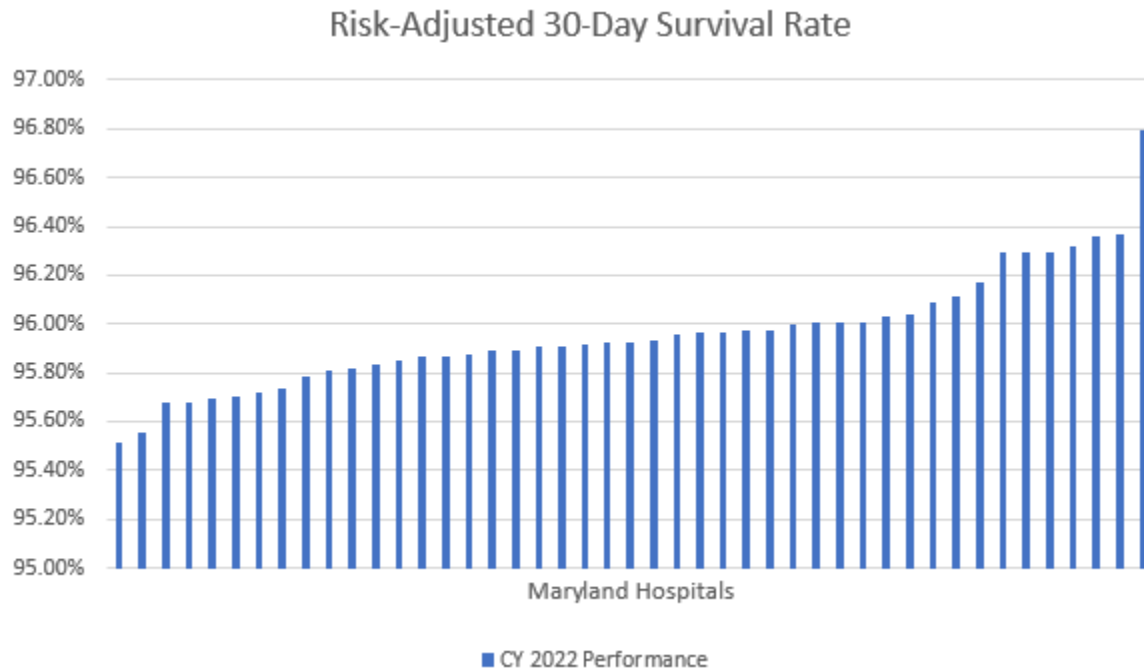


***New 30-Day Inpatient, All-payer, All-condition Mortality Measure***

HSCRC began reporting the 30-day, all-payer, all-condition, all-cause mortality measure to hospitals through the CRISP portal in CY 2023. The measure was developed by Mathematica based on the CMS 30-day all-payer, all-cause mortality measure and adapted for use of all-payer, APR DRG patient-level data. Staff believes that expansion to a 30-day measure in the payment program better captures and incentivizes the quality of care delivered by a hospital, expanding beyond the wall of the hospital. Staff is recommending the addition of the 30-day, all-payer, all-condition, all-cause mortality measure for the 2026 QBR program. In CY 2022, as shown in Figure 24 below, survival rates range from 95.2 percent to 96.8 percent. While staff believes that expansion to a 30-day measure will better capture the quality of care delivered by hospitals, this measure was not strongly correlated with the inpatient measure. Based on PMWG discussion in October, for RY 2026 staff agrees to split the mortality weight equally between the all-payer, all-cause, inpatient and 30-day mortality measures. In future years staff will further examine the correlation between inpatient and 30-day mortality and decide whether to fully move to the 30-day measure or maintain both measures if the inpatient measure is capturing different patients based on the 80 percent DRG selection. In the future staff may want to explore whether there is sufficient weight on mortality overall, given the significance of this outcome and because it is how we are assessing sepsis

performance (as opposed to adding Sepsis bundle measure).

**Figure 24. Maryland Hospital Performance, CY 2022 30-Day, All Cause All Condition, All Payer Mortality Measure**

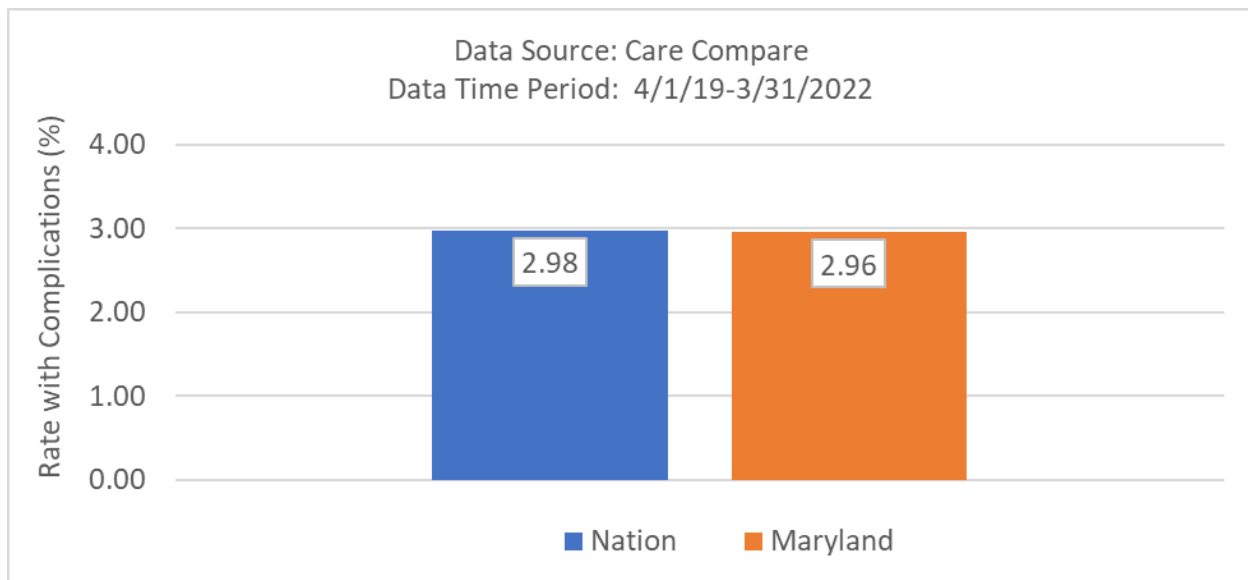


Last, as part of the digital measures initiative, staff plans to consider transitioning from the fully claims-based measure to the hybrid 30-day mortality measure (claims plus Core Clinical Data Elements) in the future. In order to do this on an all-payer basis, electronic health record (EHR) vendors will need to be able to adapt measures specifically for Maryland’s all-payer measurement environment, a difficult undertaking according to hospitals and EHR vendors providing feedback to staff.

### *Hip and Knee Arthroplasty Complications*

For the hip and knee complication rate measure based on the most recent data available on Care Compare, Figure 25 illustrates that, based on analysis of the weighted average rates for Maryland and the Nation, Maryland performed on par with the Nation.

**Figure 25. Maryland THA/TKA Measure Performance Compared to the Nation, 4/1/19-3/31/2022**



Since this measure currently includes only Medicare inpatients, stakeholders of the PMWG have voiced support for expanding this measure to the commercial population and for inpatient and outpatient settings when feasible. Commission staff has had discussions over the last few years with the PMWG and other stakeholders on strategies for inclusion of outpatient measures in the program; going forward, Commission staff will continue to work with the PMWG and other stakeholders on building a multiyear, multipronged, broad strategy in this area. Specifically, for a THA/TKA measure, staff and stakeholders have begun to explore approaches to adapting CMS's current claims-based inpatient THA/TKA measure to the all-payer population, and the feasibility, validity and reliability of specifying the eCQM version of the measure at the hospital level. Further in the future, staff and stakeholders should explore the feasibility of developing an infrastructure to collect and use a hospital-level patient-reported outcome performance measure (PRO-PM) for elective primary THA/TKA procedures. For additional specific details on the options for THA/TKA outpatient and all-payer measure adoption or adaptation, please see the Quality Based Reimbursement [RY 2024 Policy](#). However, based on stakeholder feedback, staff is proposing to remove this measure until it can be expanded to address all-payers and/or outpatient procedures.

## Digital Measures Near-Term Reporting Requirements

In CY 2021 Maryland implemented a statewide infrastructure and required all acute hospitals to report to HSCRC electronic Clinical Quality Measures (eCQM) measures beginning in CY 2022, with planned expansion to other digital measures going forward. The reporting requirements are more aggressive than the national CMS requirements as Maryland believes early adoption and migration to the digital data and measures will constitute less burden for hospitals and provide greater opportunity for the state and



hospitals to measure and improve quality. Figure 26 below illustrates the Maryland and CMS reporting requirements for eQMs. Staff notes that, in alignment with the State’s goals to improve on maternal health and the SIHIS goal to reduce Severe Maternal Morbidity, the HSCRC required submission of the Severe Obstetric Complications measure beginning in CY 2022, a year ahead of CMS’ requirement for hospitals to submit this eQm; through data/information sharing, staff will continue collaboration with the Maryland’s Dept of Health on this important population health improvement priority.

**Figure 26. CMS-Maryland CY 2023-CY 2024 Anticipated eQm Reporting Requirements**

| Reporting Period/ payment determination | CMS Measures                                                                                                                                                                                                                                                                                                                                              | Maryland Measures                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CY 2024/<br>FY 2026                     | <p>Three self-selected eQMs;<br/>Three required eQMs</p> <ul style="list-style-type: none"> <li>-Safe Use of Opioids</li> <li>-Cesarean Birth</li> <li>-Severe Obstetric Complications</li> </ul> <p>Clinical data elements for two hybrid measures</p> <ul style="list-style-type: none"> <li>-30-day mortality</li> <li>-30-day readmissions</li> </ul> | <p>Two self-selected eQMs;<br/>Required eQMs-</p> <ul style="list-style-type: none"> <li>-Safe Opioids</li> <li>-hypoglycemia</li> <li>-hyperglycemia</li> <li>-Cesarean Birth</li> <li>-Severe Obstetric complications</li> </ul> <p>Clinical data elements for two hybrid measures</p> <ul style="list-style-type: none"> <li>-30-day mortality</li> <li>-30-day readmissions</li> </ul> |

In addition to the eQm reporting requirements, Maryland will also utilize the established infrastructure to collect 30-day Hospital Wide Readmission (HWR) and Hospital Wide Mortality (HWM) hybrid measures required as of July 1, 2023. The State notes that subsequent transition to and adoption of an all-payer hybrid HWM measure will allow for its use in the QBR program.

## Domain and Measure Weighting

In the draft recommendation, the staff proposed to modify the domain and measure weights for RY 2026 to improve the saliency of new measures, e.g., ED Wait Times, Disparities in Timely Followup. While the Performance Measurement Workgroup expressed reservations about revising QBR weighting prior to a larger assessment of all at-risk quality assessments, staff proposed incremental adjustments to ensure ED wait times and other new measures yield performance improvement. Based on Commissioner discussion and stakeholder feedback (see Stakeholder Feedback section below for additional details), staff modeled several different scenarios for consideration.

## Discontinuation of THA-TKA Complication Measure

As discussed in the stakeholder feedback section below, staff concurs with the proposal to remove THA-TKA since many of these procedures have moved to the outpatient space such that the remaining patients are often sicker. In fact, the commission had already approved a modification to the hospitals assessed on this measure that took into account case-mix changes and removed UMMS from being assessed on performance. While the state tends to perform better than the nation on average for this measure, most hospitals had worse performance in the performance period consistent with the idea that the patients remaining are sicker and more likely to have complications. Thus, removal of this measure generally increases overall QBR scores, with the state mean score increasing by about 3 percentage points. All subsequent models presented do not include the THA-TKA measure.

## Models for Discussion

Figure 27 provides a description of the different models that are presented for discussion. The models presented are for current policy (Model 1), draft recommendation staff proposal (Model 2), modified staff recommendation (Model 3), and an option without ED LOS (Model 4) - all models exclude the THA-TKA measure.

Model 3, the modified staff recommendation that is being put forth for Commissioner consideration, has the PCE domain at 60 percent but takes 5 percent from the THA-TKA and 5 percent from Safety domain (as opposed to 10 percent from Safety, as was outlined in the draft recommendation). This model responds partially to concerns about reducing the Safety domain and keeps the mortality measures in total to the same 10 percent weight (there had been no discussion on increasing mortality when discussing removal of THA-TKA measure). This model also removes 5 percent from the HCAHPS top-box scores instead of the HCAHPS linear scores in recognition of stakeholder feedback on continuing to give partial credit for linear HCAHPS improvements. Despite the high weight on HCAHPS top box, there has not been significant improvement and reduction in the weight on HCAHPS top box also allows us to have 10 percent of the QBR score on ED LOS, which we believe is a root cause of lower patient experience scores. While staff recognizes this does not address concerns that the ED LOS should be weighted higher than it was in the draft recommendation (this proposal maintains it at 10 percent of QBR score), staff thinks this weight is appropriate given the measure is either going to be focused on outpatient ED wait times only (i.e., OP18, as is used in the modeling) or be developed during the performance period (i.e., want to be conservative given the measure will be underdevelopment). In future years, stakeholders could consider increasing the weight of the ED LOS measure through shifting weight from other measures or an increase in overall revenue at-risk under QBR as suggested by CareFirst in

their stakeholder comment letter. However, at this time the staff thinks this is a reasonable approach for QBR and further believes that this level of incentive in combination with other interventions underway (i.e., EDDIE, legislative task force) or policies under-consideration (ED PAU) signals a strong commitment to address this important issue. Model 3 also increases the weight on TFU from 5 percent under the current policy to 10 percent split across the three TFU measures. The increase in weighting is to make each measure more salient (i.e., Medicare TFU, Medicaid TFU, and Medicare TFU disparity gap) and recognizes the state is not on track to meet the SIHIS goal for CY 2023. Model 4 does not change domain weights from current policy, retains 5 percent on TFU but across all three measures, and does not include ED LOS.

**Figure 27. Description of Models (Percents are out of total QBR score)**

| Model   | Model Description                                            | PCE/Safety /Clinical care Weight | Linear HCAHPS Weight | TFU Disparity? | ED LOS? | 30-Day Mortality? Weight? |
|---------|--------------------------------------------------------------|----------------------------------|----------------------|----------------|---------|---------------------------|
| Model 1 | Current policy without THA-TKA measure (15% on IP Mortality) | 50%/35%/15%                      | 10% of QBR           | No             | No      | No                        |
| Model 2 | Draft recommendation without THA-TKA                         | 60%/25%/15%                      | 5%                   | Yes            | Yes     | Yes/7.5%                  |
| Model 3 | Modified Staff Recommendation                                | 60%/30%/10%                      | 10%                  | Yes            | Yes     | Yes/5%                    |
| Model 4 | Optional Model based on Stakeholder Input                    | 50%/35%/15%                      | 10%                  | Yes            | No      | Yes/7.5%                  |

Figure 28 provides statewide descriptive statistics for each of the models including average score, median score, and interquartile range. Appendix E has by hospital results, including estimated revenue adjustments, for each of the models. For ED LOS the OP18 measure was used for the modeling. Model 3 (the modified staff recommendation) results in the lowest scores and highest penalties reflecting the poor performance on ED LOS. Furthermore the revenue adjustments were calculated using the 41 percent cut point. If this was modified to the suggested cut point for RY24 (see below) of 32 percent, the statewide revenue adjustment would drop from \$103M to \$69M, in line with historical revenue adjustments for QBR.

**Figure 28. Descriptive Statistics of Modeling Options**

| Statewide Descriptive Statistics              | Model 1: Current policy without THA-TKA measure | Model 2: Draft recommendation without THA-TKA | Model 3: Modified Staff Recommendation | Model 4: Optional Model Maintaining current domain weights but adding TFU disparity gap, 30-day mortality, but removing ED LOS |
|-----------------------------------------------|-------------------------------------------------|-----------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Mean Score                                    | 24.03%                                          | 23.10%                                        | 22.17%                                 | 24.69%                                                                                                                         |
| Median Score                                  | 22.58%                                          | 22.17%                                        | 21.34%                                 | 23.42%                                                                                                                         |
| Interquartile Range                           | 12.48%                                          | 8.73%                                         | 8.05%                                  | 8.99%                                                                                                                          |
| Highest Score                                 | 51.25%                                          | 42.48%                                        | 43.90%                                 | 48.29%                                                                                                                         |
| Lowest Score                                  | 12.08%                                          | 11.09%                                        | 11.00%                                 | 13.25%                                                                                                                         |
| Statewide Net Estimated Revenue Adjustment \$ | -\$94,566,196                                   | -\$94,794,228                                 | -\$103,161,409                         | -\$86,460,754                                                                                                                  |
| Statewide Estimated Revenue Adjustment %      | -0.84%                                          | -0.84%                                        | -0.92%                                 | -0.77%                                                                                                                         |

### Revenue Adjustment Methodology

The revenue adjustments for QBR are calculated using a preset scale so that hospitals can prospectively and concurrently track financial performance in quality programs. In addition to determining the range of the scale, the cut point for penalties and rewards needs to be set such that it does not reward the highest performing Maryland hospitals for performance that is subpar compared to the nation. However, establishing this cut point prospectively has become more difficult to do over the course of the COVID-19 PHE. As mentioned previously, quality of care declined over the COVID-PHE in Maryland and Nationally. Thus, both the RY 2024 and RY 2025 policies indicated that the cut point would be reassessed retrospectively with more recent national data. While this is inconsistent with the guiding principle to provide hospitals with a way to monitor revenue adjustments during the performance year, it protects Maryland hospitals from excessive penalties due to changes in performance post-COVID compared to national hospitals. Below is a discussion of the more recent analyses and a proposed new cut point for RY2024, as well as updates and recommendations for RY2025 and RY2026.

#### RY2024 Final Cut Point Recommendation

The cut point at which a hospital earns rewards or receives a penalty has been based on an analysis of the national VBP Program scores. For RY 2024 and RY 2025, federal fiscal years 2016–2021 were used to calculate the average national score using Maryland QBR domain weights (without the Efficiency domain). This resulted in a cut-point around 41 percent (range of scores was from 38.5 to 42.7). To assess whether this cut point fairly assesses Maryland hospital performance relative to the nation, staff attempted to repeat this analysis with more recent data. While the exact analysis could not be conducted because there are no more recent VBP scores, the VBP measure data is available on Care Compare. For measures unique to Maryland (i.e., not available for national hospitals on Care Compare) the median

Maryland points were used for all hospitals. This analysis was conducted for FY2022 and repeated for FY2021 (where we did have VBP scores to see how the results compared using this method to the method that reweighted domains). Currently staff is proposing a 32 percent cut point (see additional discussion in stakeholder feedback section on this).

### R<sub>Y</sub>2025 Update

As with R<sub>Y</sub> 2024, staff will reassess the current preset scale for R<sub>Y</sub> 2025 as was indicated in the policy. Similar considerations will be examined as was done for R<sub>Y</sub>2024; however, it should be noted that the performance standards for R<sub>Y</sub>2025 are post-COVID and thus the base periods are reflective of worse patient experience and quality of care. This could increase improvement points for performance that returns to pre-pandemic levels. Providing rewards or lower penalties for returning to pre-pandemic performance may be questionable. Thus further discussion is needed amongst stakeholders once data is available to determine the best way to adjust the R<sub>Y</sub> 2025 scaling.

### R<sub>Y</sub>2026 Revenue Adjustment Scale

For this policy, staff believes it is still important to have a preset method for taking scores and converting those scores to revenue adjustments on a prospective basis despite the concerns discussed above. Thus for R<sub>Y</sub> 2026, staff proposes to maintain the 0-80 percent scale where rewards start for those who score greater than 41 percent. As was done for R<sub>Y</sub> 2024 and will be done for R<sub>Y</sub> 2025, staff will retrospectively assess the cut point with more recent data. However, unlike with R<sub>Y</sub>2024, the staff believes QBR scores may be on the rise since the performance standards are now set during the post-COVID time period. Thus, the cut point could decrease or increase with this retrospective assessment. As with R<sub>Y</sub>2024, staff will not use a single year of data to determine the cut point. Thus staff proposes to maintain the current scale, but determine if the cut point needs to be amended once we have more recent complete data. If staff determines the cut point needs to be amended, we will report this to the Commission.

## STAKEHOLDER FEEDBACK AND RESPONSES

Comments to the Draft R<sub>Y</sub> 2026 QBR Recommendation were offered by Commissioners, PMWG Members and comment letters from hospital and payer stakeholders; letters were submitted to the Commission from Adventist HealthCare, CareFirst BCBS, Johns Hopkins Health System (JHHS), the Maryland Hospital Association (MHA), MedStar Health, and University of Maryland Medical System (UMMS). Commenters varied in their support of the proposed changes and direction in the draft policy. Feedback and staff responses by topic are summarized below.

### ***Emergency Department Length of Stay (ED LOS) Measure***

Commissioners, PMWG Members and comment letters provided input with opposing perspectives on ED LOS measures and timing of adoption into the QBR program. A list of specific proposed approaches is provided below.

- Select Option 1 (delay implementation of an ED Length of Stay measure for admitted patients for one year) to allow for time to investigate root causes and finalize the development and selection of the appropriate measure(s) (Adventist Health, JHHS).
- Select Option 2 (approve inclusion of an existing ED measure), specifically include the OP-18 Care Compare validated measure in QBR for CY 2024, and continue to develop and finalize a measure for admitted patients (UMMS, MHA). Additionally, UMMS noted concerns about hospitals self-reporting a non-standardized measure and recommends developing a standardized measure for inpatients that would be implemented and supersede OP 18 in RY 2027. MHA supports implementation of reward only for CY 2024/RY 2026, noting that hospitals are still developing their improvement strategies and should not be subject to financial penalties as this severely compromises the resources necessary to invest in these and other critical improvement efforts.
- Select Option 3 (include a measure for inpatients in CY 2024 to be finalized), as it aligns with one of the highest priority quality concerns of the State, and is a key driver of patient experience (MedStar, CareFirst). Commissioner Joshi supported including an inpatient measure and adding an outpatient OP 18-like measure for CY 2024. Carefirst recommends increasing the QBR weighting to 3 percent and have 1 percent allocated for ED LOS.

#### **Staff Response:**

Staff continues to support providing incentives in the upcoming performance year to improve on ED LOS given Maryland's sustained poor performance and because prolonged wait times at the ED are associated with increased morbidity and mortality, as well as decreased patient satisfaction. Specifically, staff recommends implementing Option 3, which calls for an inpatient measure to be finalized in CY 2024, because staff is concerned that a) the current limited risk profile of the QBR program (2 percent of inpatient revenue at risk) is not sufficient to accommodate two ED measures, among other new measures, due to saliency concerns and b) focus on non-admitted patients only (OP-18) will not necessarily improve comprehensive hospital throughput and may lead to unintended consequences (e.g., increases in premature or negligent discharges). Staff notes that all hospitals have reported ED1-like and OP 18-like measures since June as part of the EDDIE project. Staff is in agreement about concerns raised with using measures dependent on self-reported data, but staff proposes to refine and finalize the measure(s) being reported, streamline the submission process, and perform audits of the data if the

Commission approves Option 3. Finally, staff is appreciative of CareFirst's bold recommendation to increase the overall revenue at risk to the QBR program, thereby allowing ED LOS measures to become more salient. Ultimately, staff's recommendations are anchored/limited by the federal analog to the QBR program, namely the Value Based Purchasing program which limits risk to 2 percent of inpatient revenue. However, if the Commissioners judge that ED LOS requires greater attention than staff's current proposal, staff agrees that increasing the revenue at risk under the QBR program to 3 percent of inpatient revenue will create greater saliency and will allow for a more comprehensive ED LOS measure set, inclusive of OP 18.

### ***SEP-1: Early Management Bundle, Severe Sepsis/Septic Shock***

Comments were mixed on this measure. Some Commissioners support the inclusion of this process of care measure. Comments from PMWG Members and in letters submitted by UMMS and MedStar voiced support for excluding the measure, highlighting that SEP-1 remains a contentious metric in the medical literature, with concerns raised about its potential to drive antibiotic overuse, and that the measure does not fully represent updated sepsis treatment standards that may distract from optimal clinical care of sepsis patients. A joint statement from the Infectious Diseases Society of America, the Society of Hospital Medicine, and the American College of Emergency Physicians (plus multiple other organizations) that raises the same concerns was also submitted with the MedStar letter. Furthermore, the comment letters point out that the Sep-1 process measure is recommended to avoid sepsis related mortality, which is included as an outcome in the QBR program as part of the all-cause, all condition mortality measures.

#### **Staff Response:**

Staff presented Maryland's performance on the Sep-1 measure, which shows that Maryland outperforms the nation in this process measure, and notes the inclusion of sepsis patients in the inpatient mortality measure (i.e., the outcome associated with the Sep-1 bundle is in payment, unlike in CMS VBP) ensures that any backsliding in the Sep-1 measure will likely be identified by the State's comprehensive mortality measure. Staff additionally notes that the clinical concerns raised by hospital and Infectious Disease stakeholders about the measure definitions supports further evaluating the merits of this measure. Thus, staff continues to support monitoring of the Sep-1 measure as well as sepsis mortality rates in a sepsis dashboard with regular reports provided to hospitals and the Commission. Staff also notes that not including the measure may help with concerns about the need to limit measures in the program in order to maintain/improve saliency.

### ***Timely Follow-up (TFU) Disparity Gap Metric***

MedStar, UMMS, and MHA support inclusion of the TFU disparity measure in the QBR program. However, UMMS and MHA recommended adopting it with a reward only approach for CY 2024 similar to the readmissions disparity incentive. MHA noted the measure alignment with the TFU improvement SIHIS goals. Other comments (JHHS) disagreed with the inclusion of this measure, citing the need for a public health plan to improve access to healthcare for those patients that have structural socio-economic barriers to care.

**Staff Response:**

Staff presented the data that clearly demonstrates disparities in TFU for Medicare patients with high patient adversity. Staff asserts that this measure, which is a component of the Statewide Health Improvement Strategy, provides an important link between hospitals and primary care, and notes that the patient conditions in the measure overlap with many of the PQI measures, so these measures may be mutually reinforcing. Further, staff believes that readmissions, which is an outcome measure, and timely follow up, which is a process measure, do not necessarily need to follow the same measurement incentive arc that UMMS and MHA advocated for, as addressing disparities in process measures should be easier to intervene upon. Moreover, hospitals are ideally positioned to put forth and execute Community Benefits or other plans with goals of improving access to healthcare for those patients they serve that have structural socio-economic barriers to care. Staff continues to support inclusion of the TFU Gap measure in the PCE Domain weighted at 5% within the Domain.

***Total Hip/Total Knee Arthroplasty (THA/TKA) Complication Metric***

Comments were generally supportive of removing this measure in RY 2026 with UMMS submitting comments recommending its exclusion based on migration of the vast majority of these procedures to non-inpatient settings. PMWG Member Stephen Michaels, orthopedic surgeon from MedStar, concurred with removing this measure; another PMWG member voiced concern about potential unintended consequences of not holding hospitals accountable for avoidable complications using this measure.

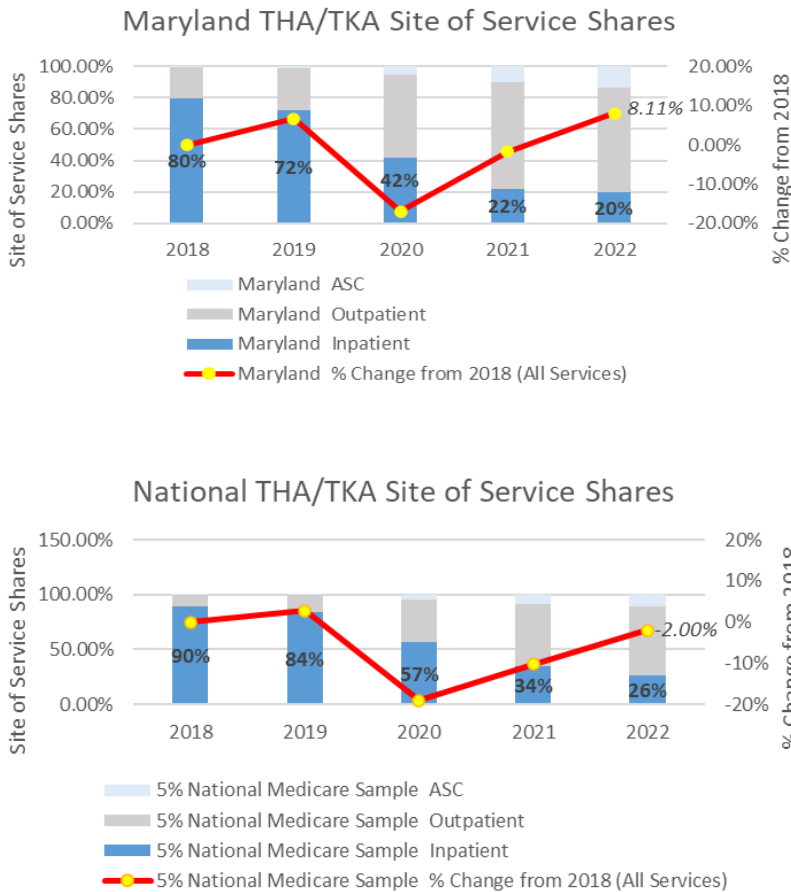
**Staff Response:**

Staff conducted an analysis of place of service trends for THA/TKA procedures from 2018-2022 using the Medicare Chronic Conditions Data Warehouse (CCW) national 5 percent sample and Maryland's full Medicare claims data set. As illustrated in the graphs in Figure 29 below, there has been a large shift between 2018 and 2022 in the percentage of THA/TKA procedures performed in inpatient settings, 80 percent down to 20 percent in Maryland, and 90 percent down to 26 percent nationally. These site of service changes (inpatient to outpatient and outpatient to ambulatory surgery centers) began accelerating in 2020, when total hip and knee procedures were down roughly 20 percent from the levels experienced



in 2018 (both nationally and in Maryland); the inpatient shares went down further as total volumes returned in 2023 to similar levels experience in 2018, suggesting this is a permanent site of service change. Staff adds that work has begun on exploring options for measuring complications in the hospital outpatient setting. Based upon these findings and work underway, staff supports the proposal to move the THA/TKA complication measure to monitoring in Maryland.

**Figure 29. Maryland Vs Nation, THA/TKA Site of Service Changes, 2018-2022**



**All Cause, All Condition 30-day Mortality Measure**

Stakeholder input was mixed on this measure. JHHS comments do not support including this measure in RY 2026it, noting it needs a full year of monitoring and more development, and that it is not nationally vetted through such bodies as the National Quality Forum (NQF). Alternatively, MedStar, MHA and UMMS comments support inclusion of the measure, noting its relevance and supporting its phased in use by adding it to the inpatient mortality measure.

**Staff Response:**

With our waivers from national quality programs under our Model, the State has been able to innovate and adopt/adapt measures that support our Statewide goals and include patients regardless of payer; examples of these measures include the all-cause, all-condition Inpatient Mortality measure and the TFU measures. Staff has worked with a contractor, Mathematica, to develop the 30 mortality measure beginning in 2018 with the work first referenced in the RY 2021 QBR policy. The foundation of the measure adapted to Maryland's all-payer population is the claims-based Hospital-Wide (All-Condition, All-Procedure) Risk-Standardized Mortality (HWM) Measure developed in 2016 by Yale New Haven Health Services Corporation – Center for Outcomes Research & Evaluation (YNHHSC/CORE) under contract with CMS. Subsequently, CMS working with the Yale group developed a hybrid version of the HWM measure that incorporates claims and EHR Core Clinical Data Elements (CCDE). Of note, from the March 2023 Hybrid Measure Methodology report, the Hybrid HWM measure uses the same concept, cohort, outcome and claims-based risk adjustment variables as the Claims-only HWM measure, and there is no conceptual reason that the results from the Claims-only HWM measure would be substantially dissimilar to results from the Hybrid HWM Measure. Finally, as the published methodology reports both outline, the claims-based HWM and Hybrid HWM measures had favorable findings with thorough validity and reliability testing.

Regarding the importance of this measure, the March 2023 report on the hybrid HWM measure notes that:

*Mortality is an unwanted outcome for the overwhelming majority of patients admitted to US hospitals. Although mortality within 30 days of hospitalization is uncommon, this outcome provides a concrete signal of care quality across conditions and procedures when assessed among appropriate patients. It captures the result of care processes, such as peri-operative management protocols, and the impact of both optimal care and adverse events resulting from medical care.*

Staff continues to support adoption of the 30-day All Condition All Payer Mortality measure.

### **Overall Number of Measures**

Several hospital representatives voiced their concerns about the proposal to increase the number of measures in the program at the PMWG meeting and in comment letters, as did some Commissioners in the November meeting, noting that it dilutes the ability to provide sufficient financial weight with adequate incentives or hinders hospitals' abilities to focus on and improve in a few important priority areas such as clinical and patient safety outcomes or ED LOS. Further, MHA supports adding additional measures only if measures are removed but notes they had insufficient time to vet specific measure removal proposals with hospitals.

**Staff Response:**

Staff appreciates the concerns about the number of measures in the QBR program and potential impact on the saliency of the financial incentives. Staff notes that our ability to maintain waivers from the national quality-based payment programs is contingent upon the State meeting or exceeding the cost and quality outcomes of the national programs. It is important to retain and emphasize national measures in QBR, in particular where Maryland under-performs or performs on par with the nation (HCAHPS, Healthcare Associated Infections, ED LOS). In addition, staff believes the TCOC Model quality programs should leverage incentives to improve performance on important clinical and safety outcomes (Patient Safety Indicators, Mortality) as well as measures that will drive performance in areas that are stated goals of the State (Timely Follow-up, Timely Follow-up Disparities Gap). Therefore, staff maintains its position on proposing the addition of ED LOS, TFU disparity, and 30 Day all-payer HWM measure, and on monitoring the THA/TKA complications and SEP-1 measures. Additional discussion on maintaining saliency with the addition of new measures will be discussed in the section below.

***Proposed Domain and Measure Weights***

Stakeholder input for program weighting was quite varied:

- PMWG Members and the comment letters from UMMS, MedStar, JHHS and MHA expressed their continued concern about the relative heavy weighting of the PCE domain at 50 percent compared to the national VBP program at 25 percent , also noting their opposition to the proposed increase in the domain weight to 60 percent by removing 10 percent from the Safety domain to accommodate the proposed new PCE domain measures.
- JHHS and MHA support maintaining or increasing (not decreasing) the weight on the Linear HCAHPS measure to provide better, less punitive, incentives to improve.
- MedStar supports shifting weight within the PCE domain to accommodate the new TFU Disparity Gap and ED LOS measures, effectively decreasing weight on the HCAHPS Top Box measure.
- UMMS supports capping the TFU measures together at 5%, more in line with the weighting of the mortality and safety measures.
- Various Commissioners and the CareFirst letter raised concerns about underweighting the ED LOS measure, with CareFirst specifically recommending to increase the revenue at risk for QBR to 3%, with a third of the weight allocated to ED LOS.

**Staff Response:**

Staff acknowledges and appreciates the various opposing positions and rationales for making adjustments to the proposed domain and measure weights. Staff continues to support the higher weight

of 60 percent on the PCE Domain in light of Maryland’s long-standing under-performance on HCAHPS, CMS’ related ongoing concerns with patient satisfaction, and the proposed addition of two new measures (ED LOS and Timely Follow-up Disparity Measure), which would have limited saliency if the domain weight was maintained at 50 percent. Staff, however, have modified the final recommendation to maintain the same weight on the Linear HCAHPS measure that was utilized in the RY 2025 program, in line with JHHS’ and MHA’s comment letter, because the experimental incentive to reward incremental improvements below HCAHPS top box has not been assessed long enough.

To effectuate the increase to the PCE domain, staff continues to support reducing the Safety Domain. However, staff is modifying their original suggestion based on stakeholder concerns. In the current modified staff recommendation, the safety domain would be reduced from 35 percent to 30 percent. Finally, because staff is recommending removing from THA/TKA from payment policy, staff recommends either redistributing this weight to the inpatient and 30-Day All Condition, All Mortality Measures or moving this 5 percent to the PCE domain to increase the weight on ED LOS and/or TFU. Figure 30 provides the QBR domain and measure weights for the four models proposed previously in this recommendation.

**Figure 30. Domain and Measure Weights for Modeling Options**

| <b>RY2026 Proposed Weighting (2% total at-risk)</b> | <b>Model 1: Current Policy w/o THA-TKA</b> | <b>Model 2: Draft Recommendation w/o THA-TKA</b> | <b>Model 3: Modified Staff Recommendation</b> | <b>Model 4: No Weight Changes w/o THA-TKA or ED LOS</b> |
|-----------------------------------------------------|--------------------------------------------|--------------------------------------------------|-----------------------------------------------|---------------------------------------------------------|
| <b>PCE Domain</b>                                   | 50.0%                                      | 60%                                              | 60%                                           | 50%                                                     |
| HCAHPS TopBox (8)                                   | 25.0%                                      | 25.0%                                            | 20%                                           | 25.0%                                                   |
| HCAHPS Consistency                                  | 10.0%                                      | 10.0%                                            | 10%                                           | 10.0%                                                   |
| HCAHPS Linear (4)                                   | 10.0%                                      | 5.0%                                             | 10%                                           | 10.0%                                                   |
| ED Wait Times                                       | 0.0%                                       | 10.0%                                            | 10%                                           | 0.0%                                                    |
| TFU Medicare                                        | 2.5%                                       | 3.3%                                             | 3.3%                                          | 1.7%                                                    |
| TFU Medicare Disparity Gap                          | 0.0%                                       | 3.3%                                             | 3.3%                                          | 1.7%                                                    |
| TFU Medicaid                                        | 2.5%                                       | 3.3%                                             | 3.3%                                          | 1.7%                                                    |
|                                                     |                                            |                                                  |                                               |                                                         |
| <b>Clinical Care Domain</b>                         | <b>15%</b>                                 | <b>15%</b>                                       | <b>10%</b>                                    | <b>15%</b>                                              |
| IP Mortality                                        | 15.0%                                      | 7.5%                                             | 5%                                            | 7.5%                                                    |
| 30-Day Mortality                                    | 0.0%                                       | 7.5%                                             | 5%                                            | 7.5%                                                    |
| THA/TKA                                             | 0.0%                                       | 0.0%                                             | 0%                                            | 0%                                                      |
|                                                     |                                            |                                                  |                                               |                                                         |
| <b>Safety Domain</b>                                | <b>35%</b>                                 | <b>25%</b>                                       | <b>30%</b>                                    | <b>35%</b>                                              |
| CAUTI                                               | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |
| C. Diff                                             | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |
| SSI (2)                                             | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |
| CLABSI                                              | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |
| MRSA                                                | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |
| PSI 90 (10)                                         | 5.8%                                       | 4.2%                                             | 5%                                            | 5.8%                                                    |

### **QBR Revenue Scale Reward/Penalty Cut Point**

Stakeholder input was mixed on the proposed retrospective adjustment to the reward/penalty cut point for RY 2024 QBR, specifically reducing the cut point from 0.41 to 0.32:

- Adventist HealthCare supports staff's proposed cut point of 0.32 and notes it aligns with national performance levels.
- UMMS supports setting the cut point at 0.26 to align with current national performance and to accommodate the evolving healthcare landscape, (especially in light of the COVID-19 pandemic.) and support the prospective payment model.
- MHA supports a cut point that uses a multi-year average that weights the most recent national performance (0.23) higher than federal fiscal year 2021 performance (0.35), noting this is a more appropriate comparison for Maryland hospital performance for the RY24 performance period. Using a geometric mean, MHA suggests a cut point for RY 2024 of 0.28.

### **Staff Response:**

To inform our recommendations, staff analyzed Maryland's change in performance compared to the Nation on measures used in the VBP program or measured by CMS in 2019 compared to 2022, and also modeled revenue adjustments using various reward/penalty cut points to assess face validity. The measures analysis found that the State under-performs on balance compared to the Nation in 2019 and 2022, both the State and the Nation declined in performance with COVID and Maryland has made limited progress on bridging the MD-US gap. See Figure 31 below. Additionally, based on the revenue adjustment cut point analysis results, setting the cut point using or more heavily weighting post-COVID performance (i.e., the 26% or 28% cut points recommended by UMMS and MHA respectively), the percent of rewards earned would be higher compared to the rewards earned prior to COVID; staff believes these higher rewards are unwarranted given that Maryland performance continues to be worse than the Nation (6 out of 21 measures Maryland fares better) and for most measures has not improved relative to the nation (11 out of 21 measures Maryland deteriorated relative to the nation). RY 2024 modeled cut point options with associated revenue adjustments are illustrated in Figure 32 below. Staff continues to support a cut point of 32%.

Figure 31. National Measures FY 2024 Base and Performance, MD- US

| Measure                                             | Maryland (MD) Base | Nation (US) Base | MD Performance | US Performance | MD Performance Relative to US (Base Period) | MD Performance Relative to US (Performance Period) | Percent Change in Indexed Performance | Longitudinal Assessment (1 = Better than Nation, 2 = Worse than the Nation but Reduced Gap by more than 2%, 3 = Worse than Nation but Did Not Reduce Gap by at least 2%) |    |
|-----------------------------------------------------|--------------------|------------------|----------------|----------------|---------------------------------------------|----------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
|                                                     |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| <b>PCE Domain</b>                                   |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| <i>Lower than 1 indicates Worse than the Nation</i> |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| Clean/Quiet                                         | 63.50              | 69.00            | 61.00          | 67.00          | 0.92                                        | 0.91                                               | -1.09%                                | 3.00                                                                                                                                                                     |    |
| Nurse Communication                                 | 76.00              | 81.00            | 74.00          | 79.00          | 0.94                                        | 0.94                                               | 0.00%                                 | 3.00                                                                                                                                                                     |    |
| Dr Communication                                    | 77.00              | 82.00            | 76.00          | 79.00          | 0.94                                        | 0.96                                               | 2.13%                                 | 2.00                                                                                                                                                                     |    |
| Responsiveness                                      | 61.00              | 70.00            | 56.00          | 65.00          | 0.87                                        | 0.86                                               | -1.15%                                | 3.00                                                                                                                                                                     |    |
| Medicine Communication                              | 61.00              | 66.00            | 56.00          | 61.00          | 0.92                                        | 0.92                                               | 0.00%                                 | 3.00                                                                                                                                                                     |    |
| Discharge Info                                      | 86.00              | 87.00            | 84.00          | 86.00          | 0.99                                        | 0.98                                               | -1.01%                                | 3.00                                                                                                                                                                     |    |
| Care Transitions                                    | 49.00              | 54.00            | 47.00          | 51.00          | 0.91                                        | 0.92                                               | 1.10%                                 | 3.00                                                                                                                                                                     |    |
| Overall Rating                                      | 66.00              | 73.00            | 64.00          | 70.00          | 0.90                                        | 0.91                                               | 1.11%                                 | 3.00                                                                                                                                                                     |    |
| <b>Safety Domain</b>                                |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| CLABSI                                              | 0.46               | 0.59             | 0.81           | 0.83           | 1.29                                        | 1.03                                               | -20.16%                               | 1.00                                                                                                                                                                     |    |
| CAUTI                                               | 0.52               | 0.64             | 0.67           | 0.66           | 1.23                                        | 0.99                                               | -19.51%                               | 3.00                                                                                                                                                                     |    |
| SSI Colon                                           | 0.65               | 0.72             | 0.68           | 0.73           | 1.10                                        | 1.07                                               | -2.73%                                | 1.00                                                                                                                                                                     |    |
| SSI Hyst                                            | 1.37               | 0.74             | 1.19           | 0.75           | 0.54                                        | 0.64                                               | 18.52%                                | 2.00                                                                                                                                                                     |    |
| MRSA                                                | 0.70               | 0.73             | 0.94           | 0.86           | 1.04                                        | 0.92                                               | -11.54%                               | 3.00                                                                                                                                                                     |    |
| C Diff                                              | 0.53               | 0.52             | 0.55           | 0.44           | 0.99                                        | 0.80                                               | -19.19%                               | 3.00                                                                                                                                                                     |    |
| <b>Clinical Care Domain</b>                         |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| THATKA                                              | 2.50               | 2.60             | 3.10           | 3.20           | 0.96                                        | 0.97                                               | 1.04%                                 | 3.00                                                                                                                                                                     |    |
| <b>Condition Specific 30-Day Mortality</b>          |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |    |
| MORT_30_AMI                                         | 13.18              | 13.20            | 12.04          | 12.60          | 1.00                                        | 1.05                                               | 5.00%                                 | 1.00                                                                                                                                                                     |    |
| MORT_30_CABG                                        | 2.75               | 3.10             | 2.70           | 2.90           | 1.13                                        | 1.07                                               | -5.31%                                | 1.00                                                                                                                                                                     |    |
| MORT_30_COPD                                        | 11.75              | 8.30             | 8.84           | 9.20           | 0.71                                        | 1.04                                               | 46.48%                                | 1.00                                                                                                                                                                     |    |
| MORT_30_HF                                          | 12.18              | 11.70            | 11.39          | 11.80          | 0.96                                        | 1.04                                               | 8.33%                                 | 1.00                                                                                                                                                                     |    |
| MORT_30_PN                                          | 14.28              | 15.70            | 18.36          | 18.20          | 1.10                                        | 0.99                                               | -10.00%                               | 3.00                                                                                                                                                                     |    |
| MORT_30_STK                                         | 13.46              | 14.30            | 13.84          | 13.90          | 1.06                                        | 1.00                                               | -5.66%                                | 3.00                                                                                                                                                                     |    |
|                                                     |                    |                  |                |                |                                             |                                                    | Did not Change Relative to the Nation | 2                                                                                                                                                                        | 6  |
|                                                     |                    |                  |                |                |                                             |                                                    | Improved Relative to the Nation       | 8                                                                                                                                                                        | 2  |
|                                                     |                    |                  |                |                |                                             |                                                    | Worsened Relative to the Nation       | 11                                                                                                                                                                       | 13 |
|                                                     |                    |                  |                |                |                                             |                                                    | Total                                 | 21                                                                                                                                                                       | 21 |

**Figure 32. RY 2024 Revenue Adjustments with Cut Point Options**

| R24 QBR Cut Point Comparison                | Current Cut Point | Pre-COVID (RY21) Cut Point | Proposed Cut Point (Staff) | Proposed Cut Point (MHA) | Proposed Cut Point (UMMS) |
|---------------------------------------------|-------------------|----------------------------|----------------------------|--------------------------|---------------------------|
|                                             | 41%               | 41%                        | 32%                        | 28%                      | 26%                       |
| # of hospitals penalized                    | 40                | 29                         | 34                         | 32                       | 29                        |
| # of hospitals rewarded                     | 1                 | 13                         | 7                          | 9                        | 12                        |
| % revenue penalties                         | \$ (97,990,365)   | \$ (52,193,879)            | \$ (67,548,058)            | \$ (53,198,127)          | \$ (44,753,205)           |
| % revenue rewards                           | \$ 91,892         | \$ 2,733,702               | \$ 3,676,109               | \$ 7,849,824             | \$ 9,774,881              |
| \$ revenue penalties                        | -0.87%            | -0.52%                     | -0.60%                     | -0.47%                   | -0.40%                    |
| \$ revenue rewards                          | 0.00%             | 0.03%                      | 0.03%                      | 0.07%                    | 0.09%                     |
| \$ Net Adjustments (Not Inflation Adjusted) | \$ (97,898,473)   | \$ (49,460,177)            | \$ (63,871,949)            | \$ (45,348,303)          | \$ (34,978,324)           |
| % Net Adjustments                           | -0.87%            | -0.49%                     | -0.57%                     | -0.40%                   | -0.31%                    |

**Digital Measures**

JHHS supports the move towards automated measures and the inclusion of clinical data in electronic Clinical Quality Measures (eCQMs). They propose that the eCQMs used for Maryland’s programs are from the CMS-used measures and that they are implemented in a way that reduces the need to utilize significant information technology (IT) resources while hospitals are still recovering from post-pandemic changes.

**Staff Response:**

Staff appreciates the comments in support of continued movement to digital measures and specifically eCQMs. With regard to choosing only CMS-used measures for implementation to reduce the use of IT resources, staff notes that where possible, a tenet of our quality programs is to apply the measures to eligible patients regardless of the payer. For example, we require reporting of Hybrid Hospital Wide Readmission (HWR) and Hospital Wide Mortality (HWM) measures beginning with July 2023 discharges but these measures are currently specified for only Medicare patients. In addition to using claims to calculate the measure results, these Hybrid measures have the benefit of including Core Clinical Data Elements (CCDE) from the Electronic Health Record (EHR) used for additional risk adjustment of the measure results. Staff has signaled to hospitals our intent in the future to request the same data using the same measure logic specified for the Hybrid HWR and HWM measures from EHRs for patients ages 18-64. Staff believes these important outcome measures should be applied to all patients with the benefit of the CCDE data and additional risk adjustment of the results.



## FINAL RECOMMENDATIONS FOR RY 2026 QBR PROGRAM

6. Modify Domain Weighting as follows for determining hospitals' overall performance scores:  
Person and Community Engagement (PCE) - 60 percent (+10%), Safety (NHSN measures) - 30 percent (-5%), Clinical Care - 10 percent (-5%).
  - a. Within the PCE domain:
    - i. Increase domain weight to 60 percent to accommodate new measures.
    - ii. Decrease the weight on HCAHPS top-box; maintain weight on consistency linear measures.
    - iii. Continue to include Medicare and Medicaid Timely Follow-Up (TFU) rates and add TFU Disparity Gap measure weighted at 10 percent.
    - iv. Add an ED wait time measure weighted at 10 percent.
  - b. Within the Safety domain:
    - i. Reduce overall domain weight from 35 to 30 percent to be closer to the CMS VBP program weight of 25 percent.
  - c. Within the Clinical Care domain:
    - i. Remove THA-TKA measure and reduce domain weight by 5 percent.
    - ii. Continue to include the inpatient mortality measure in the program.
    - iii. Add the all-payer, all-cause 30-Day Mortality measure.
    - iv. Split the domain weight between the two mortality measures.
7. Develop the following monitoring reports to track hospital performance::
  - a. Timely Follow-Up for Behavioral Health
  - b. Sepsis Dashboard: Sepsis mortality, Sep-1 measure—Early Management Bundle, Severe Sepsis/Septic Shock
8. Continue implementing the HCAHPS improvement framework with key stakeholders.
  - a. Explore statewide adoption of added question(s) to the survey linked to best practice with evidence that implementation improves HCAHPS scores.
  - b. Address emergency department length of stay/hospital throughput issues as strategy to improve HCAHPS
9. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements for hybrid measures;
10. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent) and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.
  - a. Retrospectively evaluate 41 percent cut point using more recent data to calculate national average score for RY25 and RY26
  - b. Based on more analyses on the impact of pre-COVID performance standards on national hospital performance, adjust the RY24 QBR cut point to 0.32.

## APPENDIX A: QBR PROGRAM BACKGROUND

Maryland's QBR Program, in place since July 2009, uses measures that are similar to those in the federal Medicare VBP Program, under which all other states have operated since October 2012. Similar to the VBP Program, the QBR Program currently measures performance in Clinical Care, Safety, and Person and Community Engagement domains, which comprise 15 percent, 35 percent, and 50 percent of a hospital's total QBR score, respectively. For the Safety and Person and Community Engagement domains, which constitute the largest share of a hospital's overall QBR score (85 percent), performance standards are the same as those established in the national VBP Program. The Clinical Care Domain, in contrast, uses a Maryland-specific mortality measure and benchmarks. In effect, Maryland's QBR Program, despite not having a prescribed national goal, reflects Maryland's rankings relative to the Nation by using national VBP benchmarks for the majority of the overall QBR score.

In addition to structuring two of the three domains of the QBR Program to correspond to the federal VBP Program, the HSCRC has increasingly emphasized performance relative to the Nation through benchmarking, domain weighting, and scaling decisions. For example, beginning in RY 2015, the QBR Program began using national benchmarks to assess performance for the Person and Community Engagement and Safety domains. Subsequently, the RY 2017 QBR policy increased the weighting of the Person and Community Engagement domain, which was measured by the national HCAHPS survey instrument to 50 percent. The weighting was increased to raise incentives for HCAHPS improvement, as Maryland has consistently lagged behind the Nation on these measures. In RY 2020, ED-1b and ED-2b wait time measures for admitted patients were added to this domain, with the domain weight remaining at 50 percent. In RY 2021, the domain weight remained constant, but the ED-1b measure was removed from the program. For RY 2022, ED-2b was removed from QBR because CMS no longer required submission of the measure for the Inpatient Quality Reporting Program.

The QBR domains and weights have remained constant from RY2023 to RY2025; modifications are proposed for RY 2026. Although the QBR Program has many similarities to the federal Medicare VBP Program, it does differ because Maryland's unique model agreements and autonomous position allow the state to be innovative and progressive. Figure 1 below illustrates the QBR RY2025 measurement domains and weights compared with what is proposed for RY 2026 and the National VBP program.

**Figure 1. RY 2025 and Proposed RY 2026 QBR measures and domain weights compared with those used in the VBP Program**

| Domain                                 | Maryland RY 2025 QBR domain weights and measures                                                                                                     | Maryland Proposed RY 2026 QBR domain weights and measures                                                                                                                                  | CMS VBP domain weights and measures                                                                   |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Clinical Care</b>                   | <b>15 percent</b><br>Two measures: All-cause inpatient mortality; THA/TKA complications                                                              | <b>1 percent (no change)</b><br>Three measures: all-cause, all-condition inpatient mortality; all-cause, all-condition 30-day mortality,                                                   | <b>25 percent</b><br>Five measures: Four condition-specific mortality measures; THA/TKA complications |
| <b>Person and Community Engagement</b> | <b>50 percent</b><br>Nine measures: Eight HCAHPS categories top box score and consistency, and four categories linear score; TFU Medicare, Medicaid. | <b>60 percent (+10%)</b><br>10 measures: Eight HCAHPS categories top box score and consistency, and four categories linear score; TFU Medicare, Medicaid, disparities improvement; ED LOS. | <b>25 percent</b><br>Eight HCAHPS measures top box score.                                             |
| <b>Safety</b>                          | <b>35 percent</b><br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90                              | <b>25 percent (-10%)</b><br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90                                                             | <b>25 percent</b><br>Five measures: CDC NHSN HAI measures                                             |
| <b>Efficiency</b>                      | n.a.                                                                                                                                                 | n.a.                                                                                                                                                                                       | <b>25 percent</b><br>One measure: Medicare spending per beneficiary                                   |

Note: Details of CMS VBP measures can be found at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

The methodology for calculating hospital QBR scores and associated inpatient revenue adjustments has remained essentially unchanged since RY 2019. It involves (1) assessing performance on each measure in the domain; (2) standardizing measure scores relative to performance standards; (3) calculating the total points a hospital earned divided by the total possible points for each domain; (4) finalizing the total hospital QBR score (0–100 percent) by weighting the domains based on the overall percentage or importance the HSCRC has placed on each domain; and (5) converting the total hospital QBR scores into revenue adjustments, using a preset scale ranging from 0 to 80 percent.

### QBR program revenue at risk

The HSCRC sets aside a percentage of hospital inpatient revenue to be held “at risk” based on each hospital’s QBR Program performance. Hospital performance scores are translated into rewards and penalties in a process called scaling.<sup>14</sup> Rewards (positive scaled amounts) or penalties (negative scaled

<sup>14</sup> Scaling refers to the differential allocation of a predetermined portion of base-regulated hospital inpatient revenue based on an assessment of hospital performance.

amounts) are then applied to each hospital's update factor for the rate year. The rewards or penalties are applied on a one-time basis and are not considered permanent revenue. The HSCRC previously approved scaling a maximum reward of 2 percent and a penalty of 2 percent of the total approved base revenue for inpatients across all hospitals.

HSCRC staff has worked with stakeholders over the last several years to align the QBR measures, thresholds, benchmark values, time lag periods, and amount of revenue at risk with those used by the CMS VBP Program, where feasible,<sup>15</sup> enabling the HSCRC to use data submitted directly to CMS. Maryland implemented an efficiency measure outside of the QBR Program, based on potentially avoidable utilization (PAU). The PAU savings adjustment to hospital rates is based on the costs of potentially avoidable admissions, as measured by the Agency for Healthcare Research and Quality's Prevention Quality Indicators and avoidable readmissions. HSCRC staff will continue to work with key stakeholders to develop updates to efficiency measure that incorporate population-based cost outcomes.

### QBR score calculation

QBR scores are evaluated by comparing a hospital's performance rate to its base period rate, as well as to the threshold (which is the median, or 50<sup>th</sup> percentile, of all hospitals' performance during the baseline period) and the benchmark (which is the mean of the top decile, or roughly the 95<sup>th</sup> percentile, during the baseline period).

**Attainment points:** During the performance period, attainment points are awarded by comparing a hospital's rates with the threshold and the benchmark. With the exception of the Maryland mortality measure and ED wait time measures, the benchmarks and thresholds are the same as those used by CMS for the VBP Program measures.<sup>16</sup> For each measure, a hospital that has a rate at or above the benchmark receives 10 attainment points. A hospital that has a rate below the attainment threshold receives 0 attainment points. A hospital that has a rate at or above the attainment threshold and below the benchmark receives 1–9 attainment points.

**Improvement points:** Improvement points are awarded by comparing a hospital's rates during the performance period to the hospital's rates from the baseline period. A hospital that has a rate at or above the attainment benchmark receives 9 improvement points. A hospital that has a rate at or below the baseline period rate receives 0 improvement points. A hospital that has a rate between the baseline period rate and the attainment benchmark receives 0–9 improvement points.

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<sup>15</sup> VBP measure specifications can be found at [www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html).

<sup>16</sup> One exception is the ED wait time measures. For these measures, attainment points are not calculated; instead, the full 10 points are awarded to hospitals at or below (more efficient) than the national medians for their respective volume categories in the performance period.

**Consistency points:** Consistency points are awarded only in the HCAHPS measure in the Experience of Care domain. The purpose of these points is to reward hospitals that have scores above the national 50<sup>th</sup> percentile in all eight HCAHPS dimensions. If they do, they receive the full 20 points. If they do not, the dimension for which the hospital received the lowest score is compared to the range between the national 0 percentile (floor) and the 50<sup>th</sup> percentile (threshold) and is awarded points proportionately.

**Domain denominator adjustments:** In certain instances, QBR measures will be excluded from the QBR Program for individual hospitals. Hospitals are exempt from measurement for any of the NHSN Safety measures for which there is less than one predicted case in the performance period. If a hospital is exempt from an NHSN measure, its Safety domain score denominator is reduced from 50 to 40 possible points. If it is exempt from two measures, the Safety domain score denominator would be 30 possible points. Hospitals must have at least two of five Safety measures to be included in the Safety domain.

**Domain scores:** The better of the attainment score and improvement score for each measure is used to determine the measure points for each measure. The measure points are then summed and divided by the total possible points in each domain and multiplied by 100.

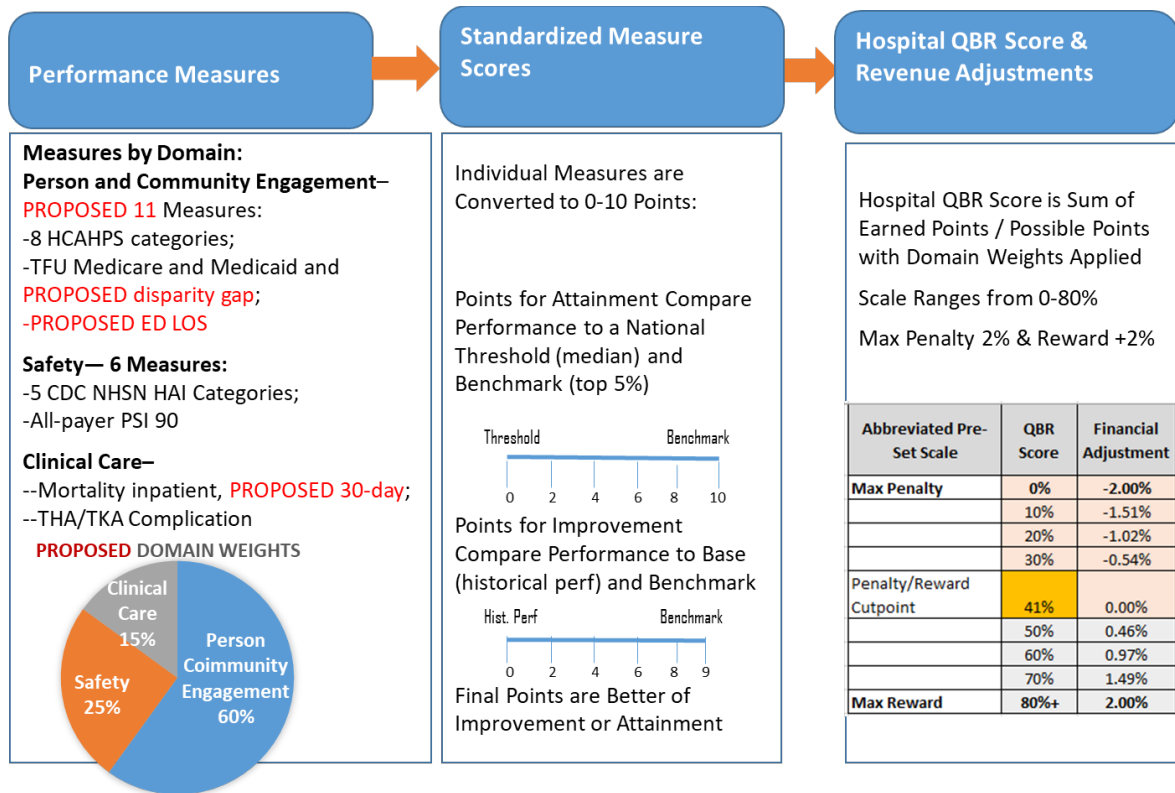
**Total performance score:** The total performance score is computed by multiplying the domain scores by their specified weights and then adding those totals together. The total performance score is then translated into a reward or penalty that is applied to hospital revenue.

## **RY 2023-RY 2026 Updates to the QBR Program**

For RY 2023, the HSCRC did not make fundamental changes to the QBR Program's methodology but implemented the addition of the Follow-Up After Acute Exacerbation of Chronic Conditions measure and PSI-90 composite measures. The methodology remained unchanged from RY 2023-2025.

Figure 2 shows the steps for converting measure scores to standardized scores for each measure, and then to rewards and penalties based on total scores earned, reflecting the updates proposed for RY 2026.

**Figure 2. Process for calculating RY 2026 QBR scores, and Proposed updates for RY 2026**



**PSI 90 measure (adopted beginning RY 2023)**

Newly adopted in RY 2023, the Patient Safety Indicator composite measure was developed by the Agency for Healthcare Research and Quality in 2003.<sup>17</sup> CMS first adopted the composite measure in the VBP program in FFY 2015 and removed the measure in FY 2019-FY 2022 due to operational constraints from the International Classification of Diseases, Tenth Revision (ICD-10) transition. The HSCRC had used the ICD-9 version of this measure in the QBR program but applied it to Maryland’s all-payer population. CMS adopted the updated NQF endorsed ICD-10 version of the measure (Medicare only) that is used beginning with the FY 2023 Hospital VBP program<sup>18</sup>, and also adopted by the QBR program (all-payer version) in RY 2023.

AHRQ’s specified PSI uses include:

- Assess, monitor, track, and improve the safety of inpatient care

<sup>17</sup> Source: <https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/TechSpecs/PSI%2090%20Patient%20Safety%20and%20Adverse%20Events%20Composite.pdf>.

<sup>18</sup> For more information on the measure removal and adoption, reference the [FY 2018 IPPS/LTCH PPS final rule](#) (82 FR 38242-38244) and (82 FR 38251-38256).

- Comparative public reporting, trending, and pay-for-performance initiatives
- Identify potentially avoidable complications that result from a patient's exposure to the health care system
- Detect potential safety problems that occur during a patient's hospital stay

The discharge weighted average of the observed-to-expected ratios for the following subset of AHRQ's PSIs comprise the PSI-90 composite measure:

- PSI 03 Pressure Ulcer Rate
- PSI 06 Iatrogenic Pneumothorax Rate
- PSI 08 In-Hospital Fall With Hip Fracture Rate
- PSII 09 Perioperative Hemorrhage or Hematoma Rate
- PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate
- PSI 11 Postoperative Respiratory Failure Rate
- PSI 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate
- PSI 13 Postoperative Sepsis Rate
- PSI 14 Postoperative Wound Dehiscence Rate
- PSI 15 Abdominopelvic Accidental Puncture or Laceration Rate

PSI 90 combines the smoothed (empirical Bayes shrinkage) indirectly standardized morbidity ratios (observed/expected ratios) from selected Patient Safety Indicators. The weights of the individual component indicators are based on two concepts: the volume of the adverse event and the harm associated with the adverse event. The volume weights were calculated based on the number of safety-related events for the component indicators in the all-payer reference population. The harm weights were calculated by multiplying empirical estimates of the probability of excess harms associated with each patient safety event by the corresponding utility weights (1–disutility). Disutility is the measure of the severity of the adverse events associated with each harm (for example, the outcome severity or the least-preferred states from the patient perspective).

The PSI 90 measure scores are converted to program scores, as described in the QBR Score Calculation section of this appendix.

### ***Follow-Up After Acute Exacerbation for Chronic Conditions (adopted for RY 2023)***

Newly proposed for RY 2023, this measure was developed by IMPAQ on behalf of CMS.<sup>19</sup> Technical details for calculating measure scores are provided below.

**Measure full title:** Timely Follow-Up After Acute Exacerbations of Chronic Conditions

**Measure steward:** IMPAQ International

**Description of measure:** The percentage of issuer-product-level acute events requiring an ED visit or hospitalization for one of the following six chronic conditions: hypertension, asthma, heart failure, coronary artery disease, chronic obstructive pulmonary disease, or diabetes mellitus (Type I or Type II), where follow-up was received within the time frame recommended by clinical practice guidelines in a non-emergency outpatient setting.

**Unit of analysis:** Issuer-by-product

**Numerator statement:** The numerator is the sum of the issuer-product-level denominator events (ED visits, observation hospital stays, or inpatient hospital stays) for acute exacerbation of the following six conditions in which follow-up was received within the time frame recommended by clinical practice guidelines:

1. Hypertension: Within 7 days of the date of discharge
2. Asthma: Within 14 days of the date of discharge
3. HF: Within 14 days of the date of discharge
4. Coronary artery disease: Within 14 days of the date of discharge
5. Chronic obstructive pulmonary disease: Within 30 days of the date of discharge
6. Diabetes: Within 30 days of the date of discharge

**Numerator details:** This measure is defined at the issuer-by-product level, meaning that results are aggregated for each qualified insurance issuer and for each product. A product is defined as a discrete package of health insurance coverage benefits that issuers offer in the context of a particular network type, such as health maintenance organization, preferred provider organization, exclusive provider organization, point of service, or indemnity. Issuers are broadly defined as health insurance providers who participate in the Federally Facilitated Marketplaces and health insurance contracts offered in the Medicare Advantage market.

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<sup>19</sup> Source: <https://impagint.com/measure-information-timely-follow-after-acute-exacerbations-chronic-conditions>



Timely follow-up is defined as a claim for the same patient after the discharge date for the acute event that (1) is a non-emergency outpatient visit and (2) has a Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding System (HCPCS) code indicating a visit that constitutes appropriate follow-up, as defined by clinical guidelines and clinical coding experts. The follow-up visit may be an office or telehealth visit and takes place in certain chronic care or transitional care management settings. The visit must occur within the condition-specific time frame to be considered timely and for the conditions specified in the numerator. For a list of individual codes, please see the data dictionary.<sup>20</sup>

The time frames for a follow-up visit for each of the six chronic conditions are based on evidence-based clinical practice guidelines, as laid out in the evidence form.

**Denominator statement:** The denominator is the sum of the acute events—that is, the issuer-product-level acute exacerbations that require an ED visit, observation stay, or inpatient stay—for any of the six conditions listed above (hypertension, asthma, heart failure, coronary artery disease, chronic obstructive pulmonary disease, or diabetes).

**Denominator details:** Acute events are defined as either an ED visit, observation stay, or inpatient stay. If a patient is discharged and another claim begins for the same condition on the same day or the following day, the claims are considered to be part of one continuous acute event. In this case, the discharge date of the last claim is the beginning of the follow-up interval. The final claim of the acute event must be a discharge to community.

An acute event is assigned to [condition] if:

1. The primary diagnosis is a sufficient code for [condition].

OR

2. The primary diagnosis is a related code for [condition] AND at least one additional diagnosis is a sufficient code for [condition].
  - If the event has two or more conditions with a related code as the primary diagnosis and a sufficient code in additional diagnosis positions, **assign the event to the condition with a sufficient code appearing in the “highest” (closest to the primary) diagnosis position.**

If the visits that make up an acute event are assigned different conditions, the event is assigned the condition that occurs last in the sequence. Following this methodology, only one condition is recorded in the denominator per acute event.

**Denominator exclusions:** The measure excludes events with:

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<sup>20</sup> Please see <https://impagint.com/measure-information-timely-follow-after-acute-exacerbations-chronic-conditions>.

1. Subsequent acute events that occur two days after the prior discharge but still during the follow-up interval of the prior event for the same reason; to prevent double-counting, the denominator will include only the first acute event
2. Acute events after which the patient does not have continuous enrollment for 30 days in the same product
3. Acute events in which the discharge status of the last claim is not “to community” (“left against medical advice” is not a discharge to community)
4. Acute events for which the calendar year ends before the follow-up window ends (for example, acute asthma events ending less than 14 days before December 31)
5. Acute events in which the patient enters a skilled nursing facility, non-acute care, or hospice care during the follow-up interval

**Measure scoring:**

1. Denominator events are identified by hospitalization, observation, and ED events with appropriate codes (that is, codes identifying an acute exacerbation of one of the six included chronic conditions).
2. Exclusions are applied to the population from Step 1 to produce the eligible patient population (that is, the count of all qualifying events) for the measure.
3. For each qualifying event, the claims are examined to determine whether they include a subsequent code that satisfies the follow-up requirement for that event (for example, whether a diabetes event received follow-up within the appropriate time frame for diabetes, from an appropriate provider). Each event for which the follow-up requirement was satisfied is counted as one in the numerator. Each event for which the follow-up requirement was not satisfied is counted as zero in the numerator.
4. The percentage score is calculated as the numerator divided by the denominator.

**Measure-scoring logic:** Following the National Quality Forum’s guideline, we use **opportunity-based weighting** to calculate the follow-up measure. This means each condition is weighted by the sum of acute exacerbations that require either an ED visit or an observation or inpatient stay for all of the six conditions that occur, as reflected in the logic below.

$$[\text{NUM}(\text{ASM}) + \text{NUM}(\text{CAD}) + \text{NUM}(\text{HF}) + \text{NUM}(\text{COPD}) + \text{NUM}(\text{DIAB}) + \text{NUM}(\text{HTN})] / [\text{DENOM}(\text{ASM}) + \text{DENOM}(\text{CAD}) + \text{DENOM}(\text{HF}) + \text{DENOM}(\text{COPD}) + \text{DENOM}(\text{DIAB}) + \text{DENOM}(\text{HTN})]$$

Although the development team designed the measure to aggregate each condition score in the manner described above into a single overall score, programs may choose to also calculate individual scores for

each chronic condition when implementing the measure. Individual measure scores would be calculated by dividing the condition-specific numerator by the condition-specific denominator, as in the example for heart failure:  $\text{NUM}(\text{HF}) / \text{DENOM}(\text{HF})$ .

The follow-up measure scores are converted to QBR scores, as described in the QBR Score Calculation section above.

## Digital Quality Measures Infrastructure: CMS Roadmap

Maryland is an early adopter of digital measure reporting and has established beginning in CY 2022 statewide infrastructure and reporting requirements, initially for monitoring; Maryland envisions transitioning to the use of digital measures in the QBR program as well as other quality-based payment programs when digital measurement has had sufficient development and implementation is feasible.

Over the past decade, CMS has led efforts to advance the use of data from electronic health records (EHRs) to enhance and expand quality measurement. However, accessing clinical patient data from EHRs for the purpose of quality reporting remains relatively burdensome. Additionally, CMS's current approach to quality measurement does not easily incorporate emerging digital data sources such as patient-reported outcomes (PROs) and patient-generated health data (PGHD). There is a need to streamline the approach to data standardization, collection, exchange, calculation, and reporting to fully leverage clinical and patient-centered information for measurement, quality improvement, and learning.

Advancements in the interoperability of healthcare data from EHRs create an opportunity to dramatically improve quality measurement systems and realize creation of a learning health system. In 2020, the Department of Health and Human Services (HHS) finalized interoperability requirements in CMS's Interoperability and Patient Access final rule and in the Office of the National Coordinator for Health Information and Technology's (ONC's) 21st Century Cures Act final rule. Driven by the Cures Act's goal of "complete access, exchange, and use of all electronically accessible health information," these changes will greatly expand the availability of standardized, readily accessible data for measurement. Most important, CMS's and ONC's interoperability rules and policies require specified healthcare providers and health plans to make a defined set of patient information available to authorized users (patients, other providers, other plans) with no special effort using Fast Healthcare Interoperability Resources (FHIR®) application programming interfaces (APIs). The scope of required patient data and standards that support them will evolve over time, starting with data specified in the United States Core Data for Interoperability (USCDI) Version 1, structured according to the Health Level Seven International (HL7®) FHIR US Core Implementation Guide (US Core IG).

Maryland, like CMS, believes that in the future, interoperability of EHR and other digital health data can fuel a revolution in healthcare delivery and advance Measure Calculation Tools to leverage data beyond just EHRs and across settings and providers. CMS has outlined a roadmap to transition from the current

environment to a learning health system powered by advanced analytics applied to all digital health data to optimize patient safety, outcomes, and experience.<sup>21</sup>

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<sup>21</sup> Please see full details on CMS Digital Quality Measurement Strategic Roadmap: [https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap\\_032822.pdf](https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf), last accessed 8/9/2022.

**QBR RY 2026 timeline: base and performance periods; financial impact**

| <b>PROPOSED Quality Based Reimbursement (QBR) Program Rate Year 2026 Base and Performance Periods</b> |                                              |       |       |       |                                                            |       |                                                          |       |       |       |       |       |                                                                  |       |       |       |       |       |       |       |       |       |  |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------|-------|-------|-------|------------------------------------------------------------|-------|----------------------------------------------------------|-------|-------|-------|-------|-------|------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| <i>Rate Year<br/>(Maryland<br/>Fiscal Year)</i>                                                       | Q3-21                                        | Q4-21 | Q1-22 | Q2-22 | Q3-22                                                      | Q4-22 | Q1-23                                                    | Q2-23 | Q3-23 | Q4-23 | Q1-24 | Q2-24 | Q3-24                                                            | Q4-24 | Q1-25 | Q2-25 | Q3-25 | Q4-25 | Q1-26 | Q2-26 | Q3-26 | Q4-26 |  |
| <i>Calendar Year</i>                                                                                  | Q1-21                                        | Q2-21 | Q3-21 | Q4-21 | Q1-22                                                      | Q2-22 | Q3-22                                                    | Q4-22 | Q1-23 | Q2-23 | Q3-23 | Q4-23 | Q1-24                                                            | Q2-24 | Q3-24 | Q4-24 | Q1-25 | Q2-25 | Q3-25 | Q4-25 | Q1-26 | Q2-26 |  |
|                                                                                                       |                                              |       |       |       | Base Period: CMS Hospital Compare (HCAHPS , NHSN measures) |       |                                                          |       |       |       |       |       |                                                                  |       |       |       |       |       |       |       |       |       |  |
|                                                                                                       |                                              |       |       |       |                                                            |       |                                                          |       |       |       |       |       | Performance Period: CMS Hospital Compare (HCAHPS, NHSN measures) |       |       |       |       |       |       |       |       |       |  |
|                                                                                                       |                                              |       |       |       |                                                            |       | Base Period: QBR Maryland Mortality, PSI-90, TFU, ED LOS |       |       |       |       |       |                                                                  |       |       |       |       |       |       |       |       |       |  |
|                                                                                                       |                                              |       |       |       |                                                            |       |                                                          |       |       |       |       |       | Performance Period: Maryland Mortality, PSI-90, TFU, ED LOS      |       |       |       |       |       |       |       |       |       |  |
|                                                                                                       | Hospital Compare THA/TKA Performance Period* |       |       |       |                                                            |       |                                                          |       |       |       |       |       |                                                                  |       |       |       |       |       |       |       |       |       |  |

*Rate Year Impacted by QBR Results*

## APPENDIX B: RY 2024 QBR PERFORMANCE BY HOSPITAL

Cut Point = 32%

| HOSPID | HOSPITAL NAME           | FY23 Estimated Permanent Inpatient Revenue* | RY 2024 Final | % Revenue Impact | \$ Revenue Impact    |
|--------|-------------------------|---------------------------------------------|---------------|------------------|----------------------|
| 210001 | MERITUS                 | \$ 236,441,777                              | 15.73%        | -1.02%           | -\$2,411,706         |
| 210002 | UNIVERSITY OF MARYLAND  | \$1,419,452,964                             | 20.10%        | -0.74%           | -\$10,503,952        |
| 210003 | PRINCE GEORGE           | \$ 282,004,743                              | 12.71%        | -1.21%           | -\$3,412,257         |
| 210004 | HOLY CROSS              | \$ 397,412,083                              | 14.17%        | -1.11%           | -\$4,411,274         |
| 210005 | FREDERICK MEMORIAL      | \$ 255,798,612                              | 21.44%        | -0.66%           | -\$1,688,271         |
| 210006 | HARFORD                 | \$ 68,386,364                               | 31.44%        | -0.04%           | -\$27,355            |
| 210008 | MERCY                   | \$ 216,769,130                              | 23.33%        | -0.54%           | -\$1,170,553         |
| 210009 | JOHNS HOPKINS           | \$1,702,715,898                             | 35.15%        | 0.13%            | \$2,213,531          |
| 210011 | ST. AGNES               | \$ 233,444,507                              | 23.08%        | -0.56%           | -\$1,307,289         |
| 210012 | SINAI                   | \$ 515,384,553                              | 16.67%        | -0.96%           | -\$4,947,692         |
| 210015 | FRANKLIN SQUARE         | \$ 338,396,055                              | 14.17%        | -1.11%           | -\$3,756,196         |
| 210016 | WASHINGTON ADVENTIST    | \$ 225,684,639                              | 22.73%        | -0.58%           | -\$1,308,971         |
| 210017 | GARRETT COUNTY          | \$ 25,525,538                               | 47.98%        | 0.67%            | \$171,021            |
| 210018 | MONTGOMERY GENERAL      | \$ 88,807,087                               | 15.00%        | -1.06%           | -\$941,355           |
| 210019 | PENINSULA REGIONAL      | \$ 308,473,682                              | 24.42%        | -0.47%           | -\$1,449,826         |
| 210022 | SUBURBAN                | \$ 227,224,802                              | 20.79%        | -0.70%           | -\$1,590,574         |
| 210023 | ANNE ARUNDEL            | \$ 385,505,885                              | 15.63%        | -1.02%           | -\$3,932,160         |
| 210024 | UNION MEMORIAL          | \$ 283,598,962                              | 37.69%        | 0.24%            | \$680,638            |
| 210027 | WESTERN MARYLAND        | \$ 190,230,034                              | 19.17%        | -0.80%           | -\$1,521,840         |
| 210028 | ST. MARY                | \$ 98,242,476                               | 36.75%        | 0.20%            | \$196,485            |
| 210029 | HOPKINS BAYVIEW MED CT  | \$ 455,171,792                              | 17.08%        | -0.93%           | -\$4,233,098         |
| 210032 | UNION HOSPITAL OF CECIL | \$ 90,564,569                               | 18.40%        | -0.85%           | -\$769,799           |
| 210033 | CARROLL COUNTY          | \$ 157,367,331                              | 26.83%        | -0.32%           | -\$503,575           |
| 210034 | HARBOR                  | \$ 129,425,148                              | 26.83%        | -0.32%           | -\$414,160           |
| 210035 | CHARLES REGIONAL        | \$ 98,358,514                               | 23.31%        | -0.54%           | -\$531,136           |
| 210037 | EASTON                  | \$ 119,931,603                              | 14.25%        | -1.11%           | -\$1,331,241         |
| 210038 | UMMC MIDTOWN            | \$ 137,864,557                              | 14.56%        | -1.09%           | -\$1,502,724         |
| 210039 | CALVERT                 | \$ 82,099,977                               | 37.63%        | 0.23%            | \$188,830            |
| 210040 | NORTHWEST               | \$ 157,220,825                              | 25.33%        | -0.42%           | -\$660,327           |
| 210043 | BALTIMORE WASHINGTON    | \$ 326,459,954                              | 25.02%        | -0.44%           | -\$1,436,424         |
| 210044 | G.B.M.C.                | \$ 254,895,213                              | 22.50%        | -0.59%           | -\$1,503,882         |
| 210048 | HOWARD COUNTY           | \$ 214,071,732                              | 20.56%        | -0.72%           | -\$1,541,316         |
| 210049 | UPPER CHESAPEAKE HEAL   | \$ 201,124,139                              | 19.08%        | -0.81%           | -\$1,629,106         |
| 210051 | DOCTORS COMMUNITY       | \$ 176,421,777                              | 30.50%        | -0.09%           | -\$158,780           |
| 210056 | GOOD SAMARITAN          | \$ 191,497,544                              | 32.75%        | 0.03%            | \$57,449             |
| 210057 | SHADY GROVE             | \$ 321,044,393                              | 10.58%        | -1.34%           | -\$4,301,995         |
| 210060 | FT. WASHINGTON          | \$ 31,642,518                               | 11.80%        | -1.26%           | -\$398,696           |
| 210061 | ATLANTIC GENERAL        | \$ 45,367,141                               | 27.75%        | -0.27%           | -\$122,491           |
| 210062 | SOUTHERN MARYLAND       | \$ 196,475,930                              | 22.58%        | -0.59%           | -\$1,159,208         |
| 210063 | UM ST. JOSEPH           | \$ 280,257,927                              | 33.44%        | 0.06%            | \$168,155            |
| 210065 | HC-GERMANTOWN           | \$ 79,412,195                               | 12.50%        | -1.22%           | -\$968,829           |
|        |                         |                                             |               |                  |                      |
|        | <b>Statewide Total</b>  | <b>\$11,246,174,568</b>                     |               |                  | <b>-\$63,871,949</b> |

## APPENDIX C. HCAHPS IMPROVEMENT FRAMEWORK

### Administrative Leadership Accountability:

Working with MHCC, HSCRC has identified key staff at each hospital accountable for HCAHPS survey administration, data analysis, and improvement. HSCRC has engaged these hospital contacts in activities established under the HCAHPS improvement framework, including sharing of data and best practices.

***Timeline Status:*** HSCRC began communications with key HCAHPS hospital contacts early in 2023 and will continue to communicate on an ongoing basis with these contacts regarding options for improving best practices, results of data analysis, and potential new incentives or measures targeted at improving HCAHPS (e.g., adding ED wait time measures back to the payment program).

### Data Analysis and Data Sharing:

HSCRC is working with MHCC on HCAHPS data analysis using the newly obtained patient level data. As discussed in this Appendix below, the analysis includes hospital performance by patient-specific demographic factors that may be contributing to hospital-specific trends or that indicate disparities in performance.

### **MHCC Patient Level HCAHPS Analysis Results**

Starting in CY 2022, MHCC requires that Maryland hospitals submit patient level HCAHPS data to them directly. This investment in data investment was implemented by the state to address the ongoing HCAHPS performance concerns, with a focus on identifying disparities on HCAHPS ratings by patient demographics and service lines. MHCC has begun analyzing patient level data of 33,134 surveys collected from 2021 Q3 to 2022 Q2. The findings of their analysis are summarized in the MHCC slides presented at the PMWG March 2023 presentation:

- White respondents are more highly represented than black or other respondent categories relative to their proportion in Maryland's population from the 2020 Census.
- When collapsing "would recommend" categories into two, "No" = Definitely No/Probably No - 2,263 (7%), and "Yes" = Definitely Yes/Probably Yes - 30,871 (93%):
  - Maryland responses are similar to those of the Nation.
  - More black respondents than expected indicated the "No" category.
- When collapsing overall ratings into three categories: (1). 6 or lower, (2).7 or 8, and (3). 9 or 10:
  - Maryland responses are lower in the 9 or 10 category than the Nation.



- There are relatively fewer white respondents and more black respondents in the 6 or lower category.
- For the responses by service line in Maryland, there were 4,760 surveys within the Maternity service line comprising 15% of the total, 17,475 surveys within Medical comprising 54% of the total, and 10,285 surveys within Surgical comprising 32% of the total. As illustrated in the MHCC presentation slides below:
  - Black respondents are relatively more highly represented in the Maternity service line compared with the Medical and Surgical service lines.
  - There are significant differences between black and non-black respondents for the Maternity service line:
    - For “would recommend”, there were significantly more “No” reported by black patients than expected.
    - For the Overall Rating, there were significantly more “6 or lower” reported by black patients than expected.

***Timeline Status:*** HSCRC conducts ongoing analysis on HCAHPS top box and linear scores and will continue to do this work going forward using the patient level data in collaboration with MHCC. HCAHPS data submission began in Q3 CY 2021. MHCC has analyzed the initial year of patient-level HCAHPS data hospitals have submitted (CY 2021 Q3-CY 2022 Q2). These results have been shared with the hospitals and will be further discussed with stakeholders as future policies to advance health equity for patient experience are considered. Additionally, HSCRC is in the process of surveying hospitals on any additional questions beyond the standard they are asking patients based on best practices.

**Hospital Adoption and Sharing of Best Practices:**

HSCRC has begun collaborations with representatives from the organizations listed below to explore options that have promise for disseminating best practices among hospitals.

**Maryland Hospital Association-** HSCRC believes that MHA is an important stakeholder for convening hospitals and facilitating sharing of best practices, similar to work they conducted in 2018 and 2019. Further, they have resources such as the Maryland Healthcare Education Institute (MHEI) subsidiary and the Maryland Patient Safety Center (MPSC) partnership that may be helpful in these efforts. In ongoing discussions with MHA, they have indicated their commitment to supporting hospitals’ efforts to improve on HCAHPS.

**Qlarant**– Qlarant is the QIN-QIO working with Maryland hospitals on Person and Family Engagement (PFE), which should improve patient experience. In a Performance Measurement Workgroup presentation, Qlarant advised that hospitals can choose to participate in the Hospital Quality Improvement Contract and access support from American Institutes for Research<sup>22</sup> (AIR) to implement five learning modules:

- PFE 1: Preadmission Planning Checklist
- PFE 2: Discharge Planning Checklist
- PFE 3: Shift Change Huddles and bedside reporting
- PFE 4: Designated PFE Leader
- PFE 5: Person Family Advisory Committee (PFAC) or representatives on hospital committees

HSCRC believes that improvement in PFE has potential to improve HCAHPS scores. HSCRC will continue to consider options to encourage hospitals to participate in PFE training. The HSCRC also continues to discuss with Qlarant how to align hospital quality improvement efforts across the State. Qlarant participates in the PMWG meetings to help provide input on resources for hospital quality improvement. In the October 2023 PMWG meeting, AIR presented on the potential for engagement for patient and family advisors to improve HCAHPS.

**Press Ganey**– The HSCRC staff has reached out to Press Ganey, the largest HCAHPS survey vendor, to discuss Maryland performance and disparities in HCAHPS performance. In these discussions, representatives noted that hospital HCAHPS scores nationally show similar trends to those in Maryland with regard to lower minority response rates, lower scores during and post-COVID, and lower scores among black patients in the maternity service line. Additionally, in discussing best practices, Press Ganey emphasized the importance of HCAHPS performance and the CMS position on HCAHPS:

“Patient experience surveys sometimes are mistaken for customer satisfaction surveys. Patient experience surveys focus on how patients experienced or perceived key aspects of their care, not how satisfied they were with their care. Patient experience surveys focus on asking patients whether or how often they experienced critical aspects of health care, including communication with their doctors, understanding their medication instructions, and the coordination of their healthcare needs. They do not focus on amenities.”

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<sup>22</sup>Person and Family Engagement Implementation Guides for Hospitals, found at: <https://hqic-library.ipro.org/2021/12/20/person-and-family-engagement-implementation-guides-for-hospitals/>

Additional materials shared by Press Ganey after these discussions supports providers' abilities to improve patient experience after adopting best practices.<sup>23</sup> Specifically, they have shown that when hospitals ask about receipt of a best practice and stratify results, those who report receiving the best practice have higher HCAHPS scores than those who do not report receiving the service within the same hospital. This highlights differential patient experience within hospitals that can be addressed through greater fidelity to best practices. The information shared by Press Ganey provides options for the Commission to require hospitals to add a limited number of key questions to their HCAHPS surveys that ask about best practices such as hourly rounding, and reporting the responses to the questions along with correlations with higher overall HCAHPS scores as part of the patient level data submitted to MHCC; such reporting should also be stratified by discreet patient population groups to help identify disparities.

***Timeline Status:*** HSCRC will continue working through 2024 and beyond with Qlarant/AIR, Press Ganey, MHA, hospitals, and others to share best practices and strengthen incentives for hospitals to improve on HCAHPS; this will include encouraging hospitals to employ better patient and family engagement strategies, and recommending the statewide addition of HCAHPS questions that are based on best practices with evidence of HCAHPS improvement.

**Hospital Emergency Department Dramatic Improvement Effort (EDDIE)-** Staff notes previous analytic findings and literature reviews show evidence of linkage of extended ED lengths of stay with lower HCAHPS scores as well as patient safety concerns. To address these issues, staff has worked collaboratively with key stakeholders over the last several months to develop and implement the EDDIE project and complementary incentives for use in the QBR policy; these efforts are described more fully below. However staff has invested time and effort on these initiatives as we believe they will impact HCAHPS scores.

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<sup>23</sup> Study showing the impact of hourly rounding on Press Ganey inpatient measures as well as HCAHPS measures: [http://www.theinstituteforinnovation.org/sites/default/files/public/resources/inspiring-innovation-stories\\_patient-report-of-hourly-rounding\\_final.pdf](http://www.theinstituteforinnovation.org/sites/default/files/public/resources/inspiring-innovation-stories_patient-report-of-hourly-rounding_final.pdf)  
Bibliography about the impact of rounding: [http://www.theinstituteforinnovation.org/sites/default/files/public/resources/Hourly-Rounds\\_Apr2018.pdf](http://www.theinstituteforinnovation.org/sites/default/files/public/resources/Hourly-Rounds_Apr2018.pdf)  
Publicly available training slide deck from Advent Health. Of note, slide 41 shows their bullseye charts that they used across their system to show the impact of rounding on HCAHPS measures. [https://www.adventhealth.com/sites/default/files/assets/AHCentralFloridaNorth\\_PatientExperiencePresentation.pdf](https://www.adventhealth.com/sites/default/files/assets/AHCentralFloridaNorth_PatientExperiencePresentation.pdf)



# Maryland HCAHPS Exploratory Data

PERFORMANCE MEASUREMENT WORKGROUP MEETING

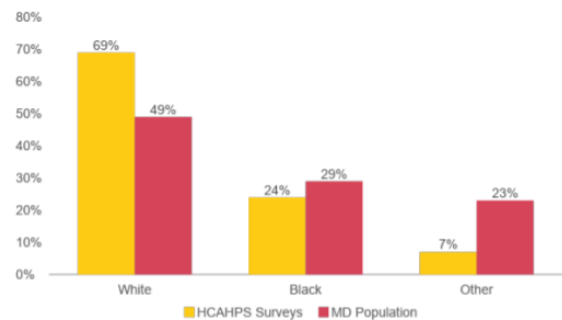
MARCH 2023



## Background

- ▶ MHCC began requiring detailed level HCAHPS data starting January 2022 (Q3 2021 discharges)
  - ▶ Joint memo with HSCRC
- ▶ Allows for more detailed analysis into race, ethnicity, service line, etc.
  - ▶ More timely
- ▶ More targeted approaches for quality improvement (e.g., populations, domains, etc)

- ▶ Q3 2021 – Q2 2022 (33,134 surveys)
- ▶ MD population data from 2020 Census

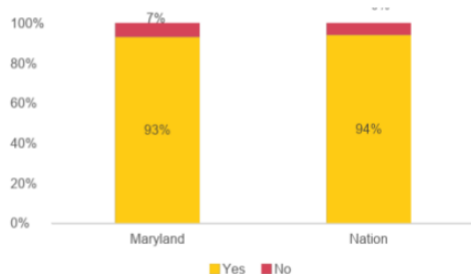




# Would Recommend

- Collapsed Scores
- Denominator – 33,134
  - No = *Definitely No/Probably No* - 2,263 (7%)
  - Yes = *Definitely Yes/Probably Yes* - 30,871 (93%)

- Chi-square test shows marginal differences in Recommendation (Yes/No) between races in MD data
  - More blacks report “No” than expected



|       | Yes (93%) | No (7%) |
|-------|-----------|---------|
| White | 70%       | 67%     |
| Black | 24%       | 27%     |
| Other | 7%        | 7%      |

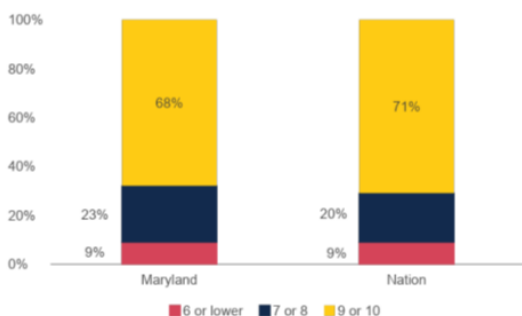
National data: Q2 2021-Q1 2022



# Overall Rating

- Collapsed Ratings 1-10
- Denominator – 33,134
  - 6 or lower – 3,121 (9%)
  - 7 or 8 – 7,458 (23%)
  - 9 or 10 – 22,555 (68%)

- Chi-square test shows marginal differences in Overall Rating between races
  - Fewer white, more black in the 6 or lower category



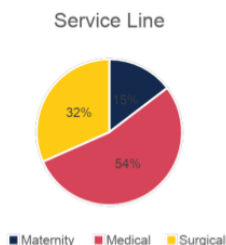
|       | 6 or lower (9%) | 7 or 8 (23%) | 9 or 10 (68%) |
|-------|-----------------|--------------|---------------|
| White | 67%             | 70%          | 70%           |
| Black | 26%             | 23%          | 24%           |
| Other | 7%              | 7%           | 6%            |

National data: Q2 2021-Q1 2022



# Service Lines

- ▶ Denominator – 32,520
  - ▶ Maternity – 4,760 (15%)
  - ▶ Medical – 17,475 (54%)
  - ▶ Surgical – 10,285 (32%)
- ▶ Black & Other is higher in the maternity service line than medical and surgical



|       | Maternity (15%) | Medical (54%) | Surgical (32%) |
|-------|-----------------|---------------|----------------|
| White | 56%             | 69%           | 75%            |
| Black | 31%             | 25%           | 20%            |
| Other | 14%             | 5%            | 5%             |



# Maternity Service Line – Black Women

- ▶ Denominator – 4,760
  - ▶ Black – 1,456 (31%)
  - ▶ Other – 3,304 (69%)
- ▶ Significant differences between black and other races
  - ▶ Would Recommend – Significantly more “No” reported by black women than expected
  - ▶ Overall Rating – Significantly more “6 or lower” reported by black women than expected

|           | Would Recommend |         |
|-----------|-----------------|---------|
|           | Yes (96%)       | No (4%) |
| Black     | 30%             | 49%     |
| Non-Black | 70%             | 51%     |

|           | Overall Rating  |              |               |
|-----------|-----------------|--------------|---------------|
|           | 6 or lower (7%) | 7 or 8 (24%) | 9 or 10 (70%) |
| Black     | 47%             | 32%          | 28%           |
| Non-Black | 53%             | 68%          | 72%           |

## APPENDIX D: HSCRC EFFORTS TO ADDRESS EMERGENCY DEPARTMENT LENGTH OF STAY

Figure 3. HSCRC Historic Efforts to Address Extended ED Lengths of Stay

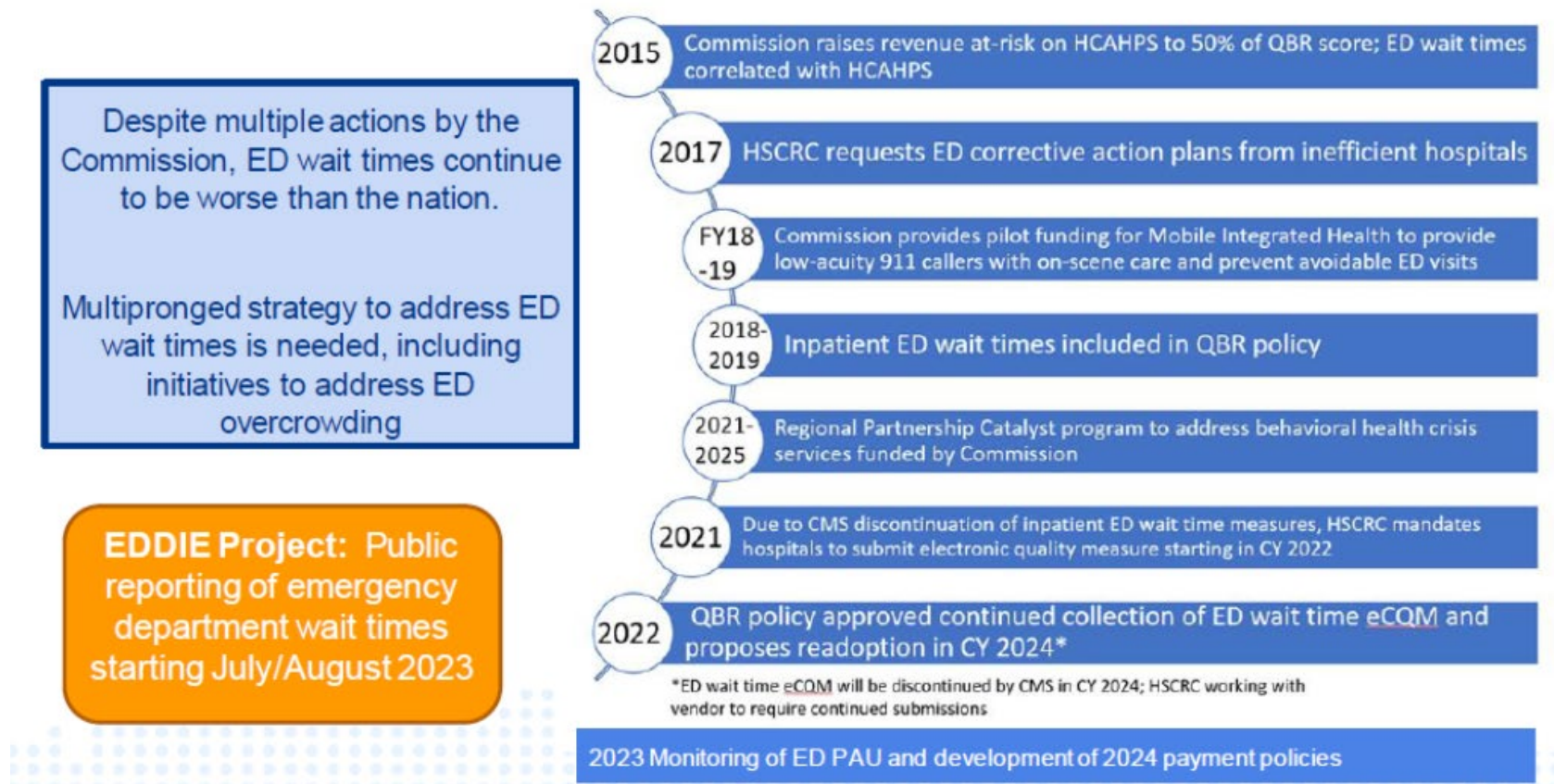
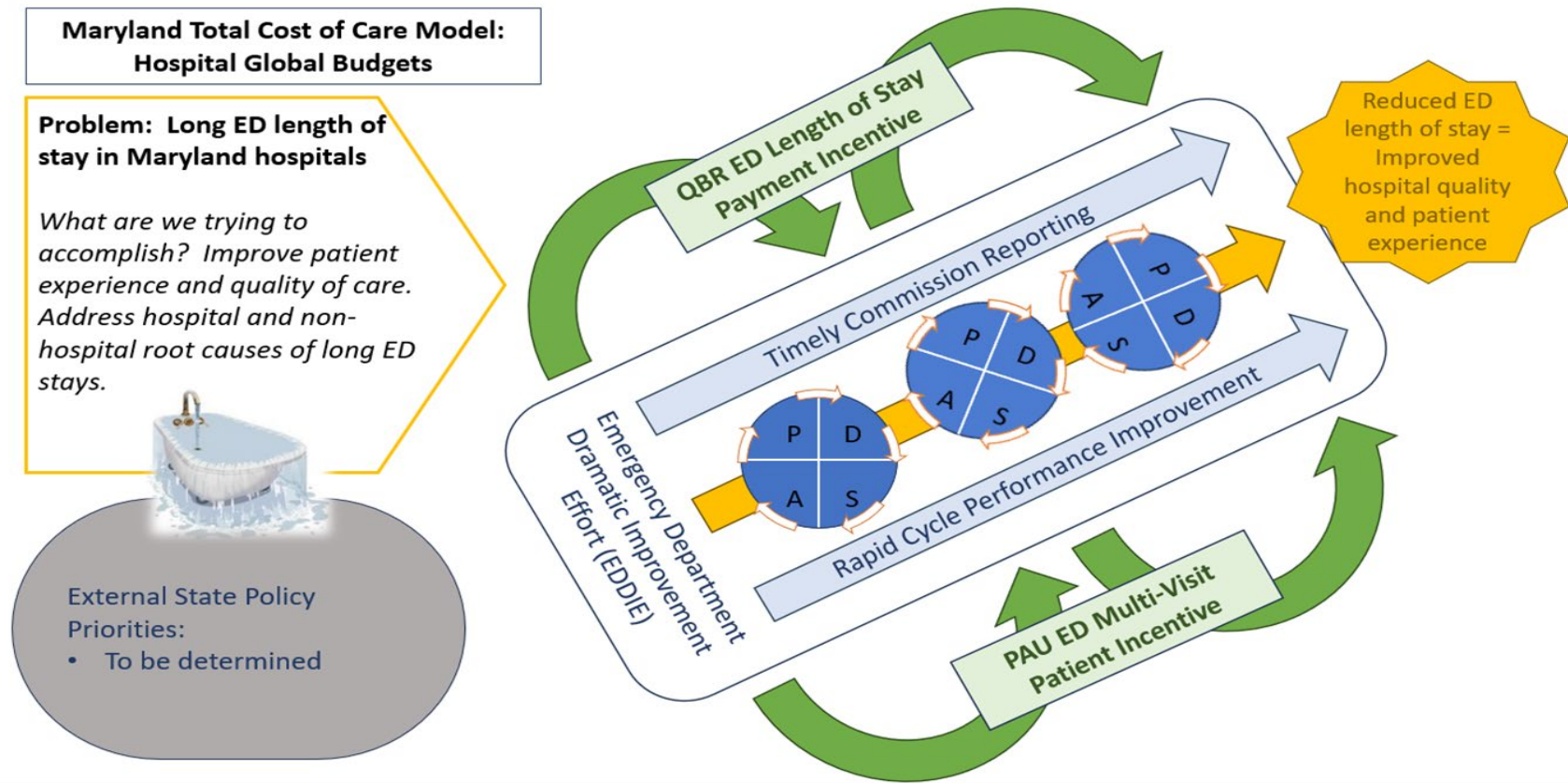


Figure 4. EDDIE Plan-Do-Study-Act Cycles and Pay-for-Performance Incentives





## APPENDIX E. MODELING RESULTS BY HOSPITAL

| Hospital ID | Hospital Name            | Model 1     |                    | Model 2     |                    | Model 3     |                    | Model 4     |                    |
|-------------|--------------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|
|             |                          | Total Score | Revenue Adjustment | Total Score | Revenue Adjustment | Total Score | Revenue Adjustment | Total Score | Revenue Adjustment |
| 210001      | Meritus                  | 15.98%      | -\$2,884,590       | 17.73%      | -\$2,671,792       | 18.59%      | -\$2,577,215       | 15.39%      | -\$2,955,522       |
| 210002      | UMMS- UMMC               | 20.11%      | -\$14,478,420      | 22.14%      | -\$13,058,967      | 20.00%      | -\$14,478,420      | 24.61%      | -\$11,355,624      |
| 210003      | UMMS- Capital Region     | 12.46%      | -\$3,919,866       | 14.84%      | -\$3,609,661       | 14.42%      | -\$3,666,062       | 15.79%      | -\$3,468,658       |
| 210004      | Trinity - Holy Cross     | 13.17%      | -\$5,404,804       | 11.75%      | -\$5,682,993       | 12.67%      | -\$5,484,287       | 13.25%      | -\$5,365,063       |
| 210005      | Frederick                | 23.19%      | -\$2,225,448       | 21.27%      | -\$2,455,667       | 19.09%      | -\$2,737,045       | 19.60%      | -\$2,660,306       |
| 210006      | UMMS- Harford            | 32.19%      | -\$294,061         | 27.11%      | -\$465,027         | 27.67%      | -\$444,511         | 27.52%      | -\$451,350         |
| 210008      | Mercy                    | 24.33%      | -\$1,755,830       | 22.17%      | -\$1,994,276       | 21.50%      | -\$2,059,307       | 25.83%      | -\$1,604,092       |
| 210009      | JHH- Johns Hopkins       | 33.40%      | -\$6,300,049       | 33.69%      | -\$6,129,777       | 30.84%      | -\$8,513,579       | 35.81%      | -\$4,256,790       |
| 210011      | Saint Agnes              | 27.08%      | -\$1,587,423       | 24.00%      | -\$1,937,589       | 20.34%      | -\$2,357,790       | 24.50%      | -\$1,867,556       |
| 210012      | Lifebridge- Sinai        | 18.67%      | -\$5,617,692       | 17.08%      | -\$6,029,999       | 16.00%      | -\$6,287,692       | 19.42%      | -\$5,411,538       |
| 210015      | MedStar- Franklin Square | 17.17%      | -\$3,925,394       | 20.83%      | -\$3,316,281       | 18.00%      | -\$3,790,036       | 20.17%      | -\$3,451,640       |
| 210016      | Adventist- White Oak     | 23.23%      | -\$1,963,456       | 25.40%      | -\$1,715,203       | 24.75%      | -\$1,782,909       | 27.23%      | -\$1,512,087       |
| 210017      | Garrett                  | 51.25%      | \$135,285          | 42.48%      | \$20,420           | 43.90%      | \$38,288           | 48.29%      | \$94,444           |
| 210018      | MedStar- Montgomery      | 15.25%      | -\$1,118,969       | 17.00%      | -\$1,039,043       | 18.00%      | -\$994,639         | 19.00%      | -\$950,236         |
| 210019      | Tidal- Peninsula         | 22.67%      | -\$2,745,416       | 21.08%      | -\$2,992,195       | 22.00%      | -\$2,868,805       | 23.42%      | -\$2,652,874       |
| 210022      | JHH- Suburban            | 20.54%      | -\$2,272,248       | 22.88%      | -\$1,999,578       | 22.17%      | -\$2,090,468       | 23.37%      | -\$1,954,133       |
| 210023      | Luminis- Anne Arundel    | 15.88%      | -\$4,741,722       | 19.88%      | -\$3,970,711       | 19.51%      | -\$4,047,812       | 18.63%      | -\$4,202,014       |
| 210024      | MedStar- Union Mem       | 39.19%      | -\$255,239         | 32.90%      | -\$1,134,396       | 30.83%      | -\$1,417,995       | 37.86%      | -\$425,398         |
| 210027      | Western Maryland         | 20.67%      | -\$1,883,277       | 18.92%      | -\$2,054,484       | 19.84%      | -\$1,959,369       | 20.58%      | -\$1,902,300       |
| 210028      | MedStar- St. Mary's      | 42.50%      | \$78,594           | 37.76%      | -\$157,188         | 35.51%      | -\$265,255         | 41.75%      | \$39,297           |
| 210029      | JHH- Bayview             | 18.33%      | -\$5,052,407       | 21.75%      | -\$4,278,615       | 18.34%      | -\$5,052,407       | 21.75%      | -\$4,278,615       |
| 210032      | ChristianaCare, Union    | 18.40%      | -\$996,210         | 18.50%      | -\$996,210         | 19.20%      | -\$959,984         | 22.90%      | -\$796,968         |
| 210033      | Lifebridge- Carroll      | 29.83%      | -\$849,784         | 28.30%      | -\$975,677         | 28.26%      | -\$975,677         | 28.08%      | -\$991,414         |
| 210034      | MedStar- Harbor          | 26.33%      | -\$931,861         | 24.38%      | -\$1,048,344       | 21.09%      | -\$1,255,424       | 25.50%      | -\$983,631         |
| 210035      | UMMS- Charles            | 21.82%      | -\$924,570         | 21.02%      | -\$954,078         | 21.84%      | -\$914,734         | 22.48%      | -\$885,227         |
| 210037      | UMMS- Easton             | 15.00%      | -\$1,523,131       | 14.09%      | -\$1,571,104       | 14.34%      | -\$1,559,111       | 16.42%      | -\$1,439,179       |
| 210038      | UMMS- Midtown            | 13.57%      | -\$1,847,385       | 17.27%      | -\$1,599,229       | 14.84%      | -\$1,764,666       | 17.73%      | -\$1,571,656       |
| 210039      | Calvert                  | 40.13%      | -\$32,840          | 37.97%      | -\$123,150         | 35.84%      | -\$205,250         | 38.54%      | -\$98,520          |
| 210040      | Lifebridge- Northwest    | 28.08%      | -\$990,491         | 24.25%      | -\$1,289,211       | 23.84%      | -\$1,320,655       | 26.75%      | -\$1,100,546       |
| 210043      | UMMS- BWMC               | 28.27%      | -\$2,024,052       | 27.95%      | -\$2,089,344       | 25.59%      | -\$2,448,450       | 26.93%      | -\$2,252,574       |
| 210044      | GBMC                     | 25.50%      | -\$1,937,204       | 24.00%      | -\$2,115,630       | 22.00%      | -\$2,370,525       | 25.75%      | -\$1,886,225       |
| 210048      | JHH- Howard County       | 19.32%      | -\$2,269,160       | 22.57%      | -\$1,926,646       | 18.75%      | -\$2,333,382       | 21.56%      | -\$2,033,681       |
| 210049      | UMMS- Upper Chesapeake   | 22.08%      | -\$1,850,342       | 23.01%      | -\$1,769,892       | 21.34%      | -\$1,930,792       | 17.50%      | -\$2,312,928       |
| 210051      | Luminis- Doctors         | 34.00%      | -\$599,834         | 31.25%      | -\$846,825         | 29.50%      | -\$987,962         | 36.25%      | -\$405,770         |
| 210056      | MedStar- Good Sam        | 32.50%      | -\$785,140         | 26.59%      | -\$1,340,483       | 24.84%      | -\$1,512,831       | 30.92%      | -\$938,338         |
| 210057      | Adventist- Shady Grove   | 12.08%      | -\$4,526,726       | 12.58%      | -\$4,462,517       | 11.17%      | -\$4,687,248       | 13.42%      | -\$4,334,099       |
| 210060      | Adventist-Ft. Washington | 12.60%      | -\$439,831         | 11.09%      | -\$461,981         | 11.67%      | -\$452,488         | 13.75%      | -\$420,845         |
| 210061      | Atlantic General         | 27.00%      | -\$308,497         | 24.84%      | -\$358,400         | 26.84%      | -\$313,033         | 28.17%      | -\$285,813         |
| 210062      | MedStar- Southern MD     | 22.58%      | -\$1,768,283       | 20.17%      | -\$2,004,054       | 22.00%      | -\$1,827,226       | 26.33%      | -\$1,414,627       |
| 210063      | UMMS- St. Joe            | 36.19%      | -\$644,593         | 33.44%      | -\$1,036,954       | 31.25%      | -\$1,345,238       | 36.19%      | -\$644,593         |
| 210065      | Germantown               | 12.50%      | -\$1,103,830       | 11.25%      | -\$1,151,477       | 11.00%      | -\$1,159,418       | 13.25%      | -\$1,072,065       |

## HSCRC Hospital Quality Based Reimbursement Program

The Quality-Based Reimbursement (QBR) program is one of several quality pay-for-performance initiatives implemented by HSCRC that provide incentives for Maryland hospitals to improve and maintain high-quality patient care and value over time. The main purposes of the QBR program are to: ensure quality of hospital care in Maryland across multiple domains of quality; demonstrate our TCOC Model contractual obligation to meet or exceed the quality and cost outcomes of the Medicare Value Based Purchasing (VBP) program through reasonable alignment of the two programs; and, provide payment incentives to address/support achievement of state-specific priorities and goals through innovations in measurement areas and incentive design. In tandem with other quality programs and global budgets, QBR is important for ensuring high quality hospital care and signaling to hospitals areas of concern.

The QBR-VBP alignment includes use of comprehensive measurement domains of Person and Community Engagement (PCE), Safety, and Clinical Care, which includes a balanced complement of patient experience surveys, process assessments, and outcome measures consistent with quality measurement best practice. Beginning with the All-Payer Model in 2014 and through the TCOC Model to date, Maryland has submitted requests annually to CMS and received exemption from the CMS VBP program; feedback from CMS has consistently identified the PCE domain as needing additional focus to target improvement.

Continued exemptions from the national program under the Model agreements has afforded Maryland leeway and opportunity to:

- Hold 2 percent of *all-payer* inpatient revenue at risk for performance under the program, substantially more than the 2 percent of *Medicare* inpatient revenue at risk under VBP;
- Adjust measures and domains to emphasize areas of needed improvement and incorporate all-payer measures (e.g., increase PCE domain weight to address Maryland's under-performance);
- Prospectively set the program reward/penalty scale allowing hospitals to better track their progress as opposed to the VBP approach to relatively rank hospitals after the performance period; and,
- Depart from the VBP approach of revenue neutrality for the program, allowing all hospitals the possibility to earn rewards.

Maryland's exemption from VBP has also allowed for measure use in the QBR program that aligns with state-specific priorities. The current QBR program, for example, has measures of Timely Follow-Up (TFU) for Medicare and Medicaid to improve care coordination between hospital and ambulatory care for patients with chronic conditions and support the established Domain 2 State Integrated Healthcare Improvement Strategy (SIHIS) goal of Care Transformation Across the System. QBR also assesses performance on an all-payer, all-condition inpatient mortality measure. Maryland also has the option to incentivize lower ED LOS, target disparities in Timely Follow up, and to choose to monitor measures such as the Sep-1 process measure and the THA/TKA complications measure rather than include them.

Under Maryland's Model, there is opportunity for the QBR program as well as the Readmissions Reduction Incentive Program, the Maryland Hospital Acquired Conditions program, and the Potentially Avoidable Utilization program to leverage and align with national measurement initiatives as well as identify and support State improvement priorities, goals and needs.

# Stakeholder Feedback and Responses

Comments to the Draft RY 2026 QBR Recommendation were offered by Commissioners, PMWG Members and comment letters from hospital and payer stakeholders; letters were submitted to the Commission from Adventist HealthCare, CareFirst BCBS, Johns Hopkins Health System (JHHS), the Maryland Hospital Association (MHA), MedStar Health, and University of Maryland Medical System (UMMS). Commenters varied in their support of the proposed changes and direction in the draft policy. Feedback and staff responses by topic are summarized below.

## ***Emergency Department Length of Stay (ED LOS) Measure***

Commissioners, PMWG Members and comment letters provided input with opposing perspectives on ED LOS measures and timing of adoption into the QBR program. A list of specific proposed approaches is provided below.

- Select Option 1 (delay implementation of an ED Length of Stay measure for admitted patients for one year) to allow for time to investigate root causes and finalize the development and selection of the appropriate measure(s) (Adventist Health, JHHS).
- Select Option 2 (approve inclusion of an existing ED measure), specifically include the OP-18 Care Compare validated measure in QBR for CY 2024, and continue to develop and finalize a measure for admitted patients (UMMS, MHA). Additionally, UMMS noted concerns about hospitals self-reporting a non-standardized measure and recommends developing a standardized measure for inpatients that would be implemented and supersede OP 18 in RY 2027. MHA supports implementation of reward only for CY 2024/RY 2026, noting that hospitals are still developing their improvement strategies and should not be subject to financial penalties as this severely compromises the resources necessary to invest in these and other critical improvement efforts.
- Select Option 3 (include a measure for inpatients in CY 2024 to be finalized), as it aligns with one of the highest priority quality concerns of the State, and is a key driver of patient experience (MedStar, CareFirst). Commissioner Joshi supported including an inpatient measure and adding an outpatient OP 18-like measure for CY 2024. Carefirst recommends to increase the QBR weighting to 3 percent and have 1 percent allocated for ED LOS.

## **Staff Response:**

Staff continues to support providing incentives in the upcoming performance year to improve on ED LOS given Maryland's sustained poor performance and because prolonged wait times at the ED are

associated with increased morbidity and mortality, as well as decreased patient satisfaction.<sup>1</sup> Specifically, staff recommends implementing Option 3, which calls for an inpatient measure to be finalized in CY 2024, because staff is concerned that a) the current limited risk profile of the QBR program (2 percent of inpatient revenue at risk) is not sufficient to accommodate two ED measures, among other new measures, due to saliency concerns and b) focus on non-admitted patients only (OP-18) will not necessarily improve comprehensive hospital throughput and may lead to unintended consequences (e.g., increases in premature or negligent discharges). Staff notes that all hospitals have reported ED1-like and OP 18-like measures since June as part of the EDDIE project. Staff is in agreement about concerns raised with using measures dependent on self-reported data, but staff proposes to refine and finalize the measure(s) being reported, streamline the submission process, and perform audits of the data if the Commission approves Option 3. Finally, staff is appreciative of CareFirst's bold recommendation to increase the overall revenue at risk to the QBR program, thereby allowing ED LOS measures to become more salient. Ultimately, staff's recommendations are anchored/limited by the federal analog to the QBR program, namely the Value Based Purchasing program which limits risk to 2 percent of inpatient revenue. However, if the Commissioners judge that ED LOS requires greater attention than staff's current proposal, staff agrees that increasing the revenue at risk under the QBR program to 3 percent of inpatient revenue will create greater saliency and will allow for a more comprehensive ED LOS measure set, inclusive of OP 18.

FROM QBR RY 2024 APPROVED POLICY ON ED WAIT TIMES.

To ensure fairness in performance assessment Maryland hospitals are compared to national peer groups based on ED volume. Stakeholders have also voiced concern about whether the measures should be risk adjusted for occupancy. Staff analysis of 2019 data do indicate that ED visit volume and occupancy are both statistically significantly associated with ED-2b in univariate regression analyses ( $p < .05$ ). However, after controlling for ED volume, occupancy is no longer statistically significant. Based on this analysis, hospitals with greater volumes should be given a higher time threshold, and staff also suggested considering continuous volume adjustment in the future.

### ***SEP-1: Early Management Bundle, Severe Sepsis/Septic Shock***

Comments were mixed on this measure. Some Commissioners support the inclusion of this process of care measure. Comments from PMWG Members and in letters submitted by UMMS and MedStar voiced support for excluding the measure, highlighting that SEP-1 remains a contentious metric in the medical literature, with concerns raised about its potential to drive antibiotic overuse, and that the measure does not fully represent updated sepsis treatment standards that may distract from optimal clinical care of

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<sup>1</sup> Sartini M, Carbone A, Demartini A, Giribone L, Oliva M, Spagnolo AM, Cremonesi P, Canale F, Cristina ML. Overcrowding in Emergency Department: Causes, Consequences, and Solutions-A Narrative Review. *Healthcare (Basel)*. 2022 Aug 25;10(9):1625. doi: 10.3390/healthcare10091625. PMID: 36141237; PMCID: PMC9498666.

sepsis patients. A joint statement from the Infectious Diseases Society of America, the Society of Hospital Medicine, and the American College of Emergency Physicians (plus multiple other organizations) that raises the same concerns was also submitted with the MedStar letter. Furthermore, the comment letters point out that the Sep-1 process measure is recommended to avoid sepsis related mortality, which is included as an outcome in the QBR program as part of the all-cause, all condition mortality measures.

**Staff Response:**

Staff presented Maryland's performance on the Sep-1 measure, which shows that Maryland outperforms the nation in this process measure, and notes the inclusion of sepsis patients in the inpatient mortality measure (i.e., the outcome associated with the Sep-1 bundle is in payment, unlike in CMS VBP) ensures that any backsliding in the Sep-1 measure will likely be identified by the State's comprehensive mortality measure. Staff additionally notes that the clinical concerns raised by hospital and Infectious Disease stakeholders about the measure definitions supports further evaluating the merits of this measure. Thus, staff continues to support monitoring of the Sep-1 measure as well as sepsis mortality rates in a sepsis dashboard with regular reports provided to hospitals and the Commission. Staff also notes that not including the measure may help with concerns about the need to limit measures in the program in order to maintain/improve saliency.

***Timely Follow-up (TFU) Disparity Gap Metric***

MedStar, UMMS, and MHA support inclusion of the TFU disparity measure in the QBR program. However, UMMS and MHA recommended adopting it with a reward only approach for CY 2024 similar to the readmissions disparity incentive. MHA noted the measure alignment with the TFU improvement SIHIS goals. Other comments (JHHS) disagreed with the inclusion of this measure, citing the need for a public health plan to improve access to healthcare for those patients that have structural socio-economic barriers to care.

**Staff Response:**

Staff presented the data that clearly demonstrates disparities in TFU for Medicare patients with high patient adversity. Staff asserts that this measure, which is a component of the Statewide Health Improvement Strategy, provides an important link between hospitals and primary care, and notes that the patient conditions in the measure overlap with many of the PQI measures, so these measures may be mutually reinforcing. Further, staff believes that readmissions, which is an outcome measure, and timely follow up, which is a process measure, do not necessarily need to follow the same measurement incentive arc that UMMS and MHA advocated for, as addressing disparities in process measures should be easier to intervene upon. Moreover, hospitals are ideally positioned to put forth and execute Community Benefits or other plans with goals of improving access to healthcare for those patients they

serve that have structural socio-economic barriers to care. Staff continues to support inclusion of the TFU Gap measure in the PCE Domain weighted at 5% within the Domain.

***Total Hip/Total Knee Arthroplasty (THA/TKA) Complication Metric***

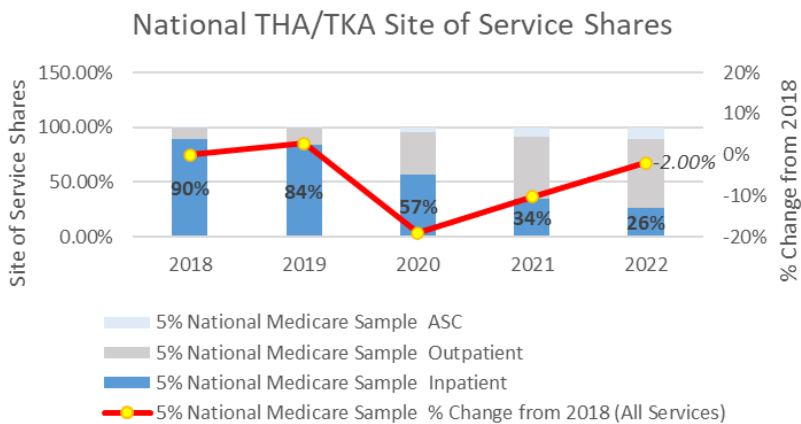
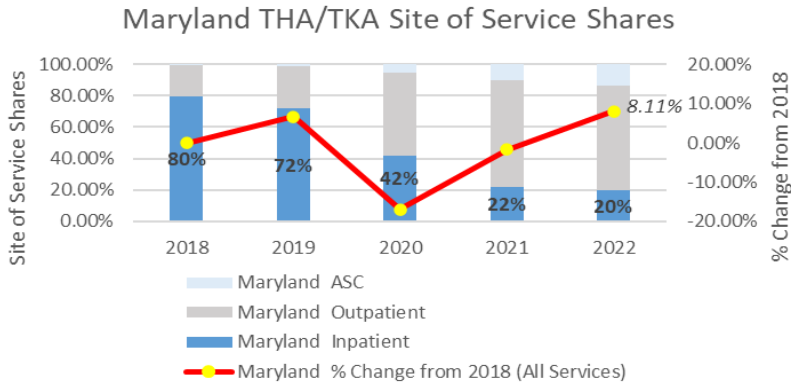
Comments were generally supportive of removing this measure in RY 2026 with UMMS submitting comments recommending its exclusion based on migration of the vast majority of these procedures to non-inpatient settings. PMWG Member Stephen Michaels, orthopedic surgeon from MedStar, concurred with removing this measure; another PMWG member voiced concern about potential unintended consequences of not holding hospitals accountable for avoidable complications using this measure.

**Staff Response:**

Staff conducted an analysis of place of service trends for THA/TKA procedures<sup>2</sup> from 2018-2022 using the Medicare Chronic Conditions Data Warehouse (CCW) national 5 percent sample and Maryland's full Medicare claims data set. As illustrated in the graphs in the figure below, there has been a large shift between 2018 and 2022 in the percentage of THA/TKA procedures performed in inpatient settings, 80 percent down to 20 percent in Maryland, and 90 percent down to 26 percent nationally. These site of service changes (inpatient to outpatient and outpatient to ambulatory surgery centers) began accelerating in 2020, when total hip and knee procedures were down roughly 20 percent from the levels experienced in 2018 (both nationally and in Maryland); the inpatient shares went down further as total volumes returned in 2023 to similar levels experience in 2018, suggesting this is a permanent site of service change. Staff adds that work has begun on exploring options for measuring complications in the hospital outpatient setting. Based upon these findings and work underway, staff supports the proposal to move the THA/TKA complication measure to monitoring in Maryland.

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<sup>2</sup> The procedures represent units of unique combinations of patients and dates of service. So the technical and professional are combined to create a count of 1 and surgeries that overlap for the same date and the same patient are counted once.



### **All Cause, All Condition 30-day Mortality Measure**

Stakeholder input was mixed on this measure. JHHS comments do not support including this measure in RY 2026, noting it needs a full year of monitoring and more development, and that it is not nationally vetted through such bodies as the National Quality Forum (NQF). Alternatively, MedStar, MHA and UMMS comments support inclusion of the measure, noting its relevance and supporting its phased in use by adding it to the inpatient mortality measure.

### **Staff Response:**

With our waivers from national quality programs under our Model, the State has been able to innovate and adopt/adapt measures that support our Statewide goals and include patients regardless of payer; examples of these measures include the all-cause, all-condition Inpatient Mortality measure and the TFU measures. Staff has worked with a contractor, Mathematica, to develop the 30 mortality measure beginning in 2018 with the work first referenced in the RY 2021 QBR policy. The foundation of the measure adapted to Maryland's all-payer population is the claims-based Hospital-Wide (All-Condition, All-

Procedure) Risk-Standardized Mortality (HWM) Measure<sup>3</sup> developed in 2016 by Yale New Haven Health Services Corporation – Center for Outcomes Research & Evaluation (YNHHSC/CORE) under contract with CMS. Subsequently, CMS working with the Yale group developed a hybrid version of the HWM measure that incorporates claims and EHR Core Clinical Data Elements (CCDE).<sup>4</sup> Of note, from the March 2023 Hybrid Measure Methodology report, the Hybrid HWM measure uses the same concept, cohort, outcome and claims-based risk adjustment variables as the Claims-only HWM measure, and there is no conceptual reason that the results from the Claims-only HWM measure would be substantially dissimilar to results from the Hybrid HWM Measure. Finally, as the published methodology reports both outline, the claims-based HWM and Hybrid HWM measures had favorable findings with thorough validity and reliability testing.

Regarding the importance of this measure, the March 2023 report on the hybrid HWM measure notes that:

*Mortality is an unwanted outcome for the overwhelming majority of patients admitted to US hospitals. Although mortality within 30 days of hospitalization is uncommon, this outcome provides a concrete signal of care quality across conditions and procedures when assessed among appropriate patients. It captures the result of care processes, such as peri-operative management protocols, and the impact of both optimal care and adverse events resulting from medical care.*

In addition, the report notes that:

*While condition- and procedure-specific initiatives to reduce mortality may broadly impact mortality rates across other conditions and procedures, there is likely more to be gained by a measure of hospital-wide mortality that can inform and encourage quality improvement efforts for patients not currently captured by existing CMS mortality measures.*

Maryland's HWM Measure spread of scores across hospitals was comparable to that of the Hybrid HWM Measure score in the 2023 report; it was calculated with 21 hospitals in the cohort, and showed a minimum of 3.98% to a maximum of 5.43%.

Staff continues to support adoption of the 30-day All Condition All Payer Mortality measure.

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<sup>3</sup> CMS HWM Measure Draft Methodology published in October, 2016 found at: [https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/mms/downloads/hospital-wide\\_all-condition\\_all-procedure\\_risk-standardized-mortality-measure\\_public-comment.pdf](https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/mms/downloads/hospital-wide_all-condition_all-procedure_risk-standardized-mortality-measure_public-comment.pdf), last accessed November 20, 2023.

<sup>4</sup> CMS Hybrid HWM Measure Methodology Report published March 2023 at: <https://www.cms.gov/files/document/hybrid-hospital-wide-all-condition-all-procedure-risk-standardized-mortality-measure-electronic.pdf>, last accessed November 20, 2023.



### ***Overall Number of Measures***

Several hospital representatives voiced their concerns about the proposal to increase the number of measures in the program at the PMWG meeting and in comment letters, as did some Commissioners in the November meeting, noting that it dilutes the ability to provide sufficient financial weight with adequate incentives or hinders hospitals' abilities to focus on and improve in a few important priority areas such as clinical and patient safety outcomes or ED LOS. Further, MHA supports adding additional measures only if measures are removed but notes they had insufficient time to vet specific measure removal proposals with hospitals.

#### **Staff Response:**

Staff appreciates the concerns about the number of measures in the QBR program and potential impact on the saliency of the financial incentives. Staff notes that our ability to maintain waivers from the national quality-based payment programs is contingent upon the State meeting or exceeding the cost and quality outcomes of the national programs. It is important to retain and emphasize national measures in QBR, in particular where Maryland under-performs or performs on par with the nation (HCAHPS, Healthcare Associated Infections, ED LOS). In addition, staff believes the TCOC Model quality programs should leverage incentives to improve performance on important clinical and safety outcomes (Patient Safety Indicators, Mortality) as well as measures that will drive performance in areas that are stated goals of the State (Timely Follow-up, Timely Follow-up Disparities Gap). Therefore, staff maintains its position on proposing the addition of ED LOS, TFU disparity, and 30 Day all-payer HWM measure, and on monitoring the THA/TKA complications and SEP-1 measures. Additional discussion on maintaining saliency with the addition of new measures will be discussed in the section below.

### ***Proposed Domain and Measure Weights***

Stakeholder input for program weighting was quite varied:.

- PMWG Members and the comment letters from UMMS, MedStar, JHHS and MHA expressed their continued concern about the relative heavy weighting of the PCE domain at 50 percent compared to the national VBP program at 25 percent ,<sup>5</sup> also noting their opposition to the proposed increase in the domain weight to 60 percent by removing 10 percent from the Safety domain to accommodate the proposed new PCE domain measures.

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<sup>5</sup> Since Maryland does not include an efficiency domain used by VBP, the weighting of the QBR program is spread across 3 rather than 4 domains, necessitating the increase of weights for some or all of the QBR domains compared to the VBP program. Each domain would be weighted 33.33 % if the weights were distributed similarly to the VBP program.

- JHHS and MHA support maintaining or increasing (not decreasing) the weight on the Linear HCAHPS measure to provide better, less punitive, incentives to improve.
- MedStar supports shifting weight within the PCE domain to accommodate the new TFU Disparity Gap and ED LOS measures, effectively decreasing weight on the HCAHPS Top Box measure,
- UMMS supports capping the TFU measures together at 5%, more in line with the weighting of the mortality and safety measures.
- 
- Various Commissioners and the CareFirst letter raised concerns about underweighting the ED LOS measure,, with CareFirst specifically recommending to increase the revenue at risk for QBR to 3%, with a third of the weight allocated to ED LOS.

**Staff Response:**

Staff acknowledges and appreciates the various opposing positions and rationales for making adjustments to the proposed domain and measure weights. Staff continues to support the higher weight of 60 percent on the PCE Domain in light of Maryland’s long-standing under-performance on HCAHPS, CMS’ related ongoing concerns with patient satisfaction, and the proposed addition of two new measures (ED LOS and Timely Follow-up Disparity Measure), which would have limited saliency if the domain weight was maintained at 50 percent. Staff, however, have modified the final recommendation to maintain the same weight on the Linear HCAHPS measure that was utilized in the RY 2025 program, in line with JHHS’ and MHA’s comment letter, because the experimental incentive to reward incremental improvements below HCAHPS top box has not been assessed long enough.

To effectuate the increase to the PCE domain, staff continue to support reducing the Safety Domain from 35 percent to 25 percent since that is the same domain weight allotted to national VBP program and Maryland performance on NHSN complication measures is on par with national performance. Additionally, there are some concerns about influence of surveillance in NHSN measures and the State already has a stand alone complications program (Maryland Hospital Acquired Complications Program). Finally, because staff are recommending removing from THA/TKA from payment policy, staff recommend redistributing this weight to the inpatient and 30-Day All Condition, All Mortality Measures.

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***QBR Revenue Scale Reward/Penalty Cut Point***

Stakeholder input was mixed on the proposed retrospective adjustment to the reward/penalty cut point retrospective adjustment from 0.41 to 0.32 for Rate Year 2024 with specific details provided below.

- Adventist HealthCare supports the proposed cut point of 0.32 and notes it aligns with national performance levels.
- UMMS supports setting the cut point at 0.26 to align with current national performance and to accommodate the evolving healthcare landscape (especially in light of the COVID-19 pandemic) and support the prospective payment model.
- MHA supports a cut point that uses a multi-year average that weights the most recent national performance (0.23) higher than federal fiscal year 2021 performance (0.35), noting this is a more appropriate comparison for Maryland hospital performance for the RY24 performance period. Using a geometric mean, MHA suggests a cut point for RY24 of 0.28.

**Staff Response:**

To inform our recommendations, staff analyzed Maryland's change in performance compared to the Nation on measure results used in the VBP program or measured by CMS in 2019 compared to 2022, and also modeled revenue adjustments using various reward/penalty cut points. The measures analysis found that the State under-performs on balance compared to the Nation in 2019 and 2022, both the State and the Nation declined in performance with COVID and Maryland has made little progress on bridging the MD-US gap. See Figure X below. Additionally, based on the revenue adjustment cut point analysis results, setting the cut point using or more heavily weighting post-COVID performance (i.e., the 26% or 28% cut points recommended by UMMS and MHA respectively), the percent of rewards earned would be higher compared to the rewards earned prior to COVID; staff believes this is unwarranted given that Maryland performance continues to be worse than the Nation. RY 2024 modeled cut point options with associated revenue adjustments are illustrated in Figure Y below. Staff continues to support a cut point of 32%.

Figure X. National Measures FY 2024 Base and Performance, MD- US

| Measure                                    | Maryland (MD) Base | Nation (US) Base | MD Performance | US Performance | MD Performance Relative to US (Base Period) | MD Performance Relative to US (Performance Period) | Percent Change in Indexed Performance | Longitudinal Assessment (1 = Better than Nation, 2 = Worse than the Nation but Reduced Gap by more than 2%, 3 = Worse than Nation but Did Not Reduce Gap by at least 2%) |
|--------------------------------------------|--------------------|------------------|----------------|----------------|---------------------------------------------|----------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |
| <b>PCE Domain</b>                          |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |
| Clean/Quiet                                | 63.5               | 69               | 61             | 67             | 0.92                                        | 0.91                                               | -1.09%                                | 3.00                                                                                                                                                                     |
| Nurse Communication                        | 76                 | 81               | 74             | 79             | 0.94                                        | 0.94                                               | 0.00%                                 | 3.00                                                                                                                                                                     |
| Dr. Communication                          | 77                 | 82               | 76             | 79             | 0.94                                        | 0.98                                               | 2.13%                                 | 2.00                                                                                                                                                                     |
| Responsiveness                             | 61                 | 70               | 56             | 65             | 0.87                                        | 0.86                                               | -1.15%                                | 3.00                                                                                                                                                                     |
| Medicine Communication                     | 61                 | 66               | 56             | 61             | 0.92                                        | 0.92                                               | 0.00%                                 | 3.00                                                                                                                                                                     |
| Discharge Info                             | 86                 | 87               | 84             | 86             | 0.99                                        | 0.98                                               | -1.01%                                | 3.00                                                                                                                                                                     |
| Care Transitions                           | 49                 | 54               | 47             | 51             | 0.91                                        | 0.92                                               | 1.10%                                 | 3.00                                                                                                                                                                     |
| Overall Rating                             | 66                 | 73               | 64             | 70             | 0.90                                        | 0.91                                               | 1.11%                                 | 3.00                                                                                                                                                                     |
| <b>Safety Domain</b>                       |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |
| CLABSI                                     | 0.46               | 0.5915           | 0.812          | 0.8335         | 1.29                                        | 1.03                                               | -20.16%                               | 1.00                                                                                                                                                                     |
| CAUTI                                      | 0.524              | 0.6435           | 0.67           | 0.66           | 1.23                                        | 0.99                                               | -19.51%                               | 3.00                                                                                                                                                                     |
| SSI Colon                                  | 0.661              | 0.7175           | 0.681          | 0.73           | 1.10                                        | 1.07                                               | -2.73%                                | 1.00                                                                                                                                                                     |
| SSI Hwt                                    | 1.371              | 0.738            | 1.1855         | 0.753          | 0.54                                        | 0.64                                               | 18.52%                                | 2.00                                                                                                                                                                     |
| MRSA                                       | 0.686              | 0.726            | 0.9435         | 0.864          | 1.04                                        | 0.92                                               | -11.54%                               | 3.00                                                                                                                                                                     |
| C Diff                                     | 0.5305             | 0.523            | 0.547          | 0.439          | 0.99                                        | 0.80                                               | -19.19%                               | 3.00                                                                                                                                                                     |
| <b>Clinical Care Domain</b>                |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |
| THA/TKA                                    | 2.5                | 2.6              | 3.1            | 3.2            | 0.96                                        | 0.97                                               | 1.04%                                 | 3.00                                                                                                                                                                     |
| <b>Condition Specific 30-Day Mortality</b> |                    |                  |                |                |                                             |                                                    |                                       |                                                                                                                                                                          |
| MORT_30_AMI                                | 13.18              | 13.2             | 12.04          | 12.6           | 1.00                                        | 1.05                                               | 5.00%                                 | 1.00                                                                                                                                                                     |
| MORT_30_CABG                               | 2.75               | 3.1              | 2.7            | 2.9            | 1.13                                        | 1.07                                               | -5.31%                                | 1.00                                                                                                                                                                     |
| MORT_30_COPD                               | 11.75              | 8.3              | 8.84           | 9.2            | 0.71                                        | 1.04                                               | 46.48%                                | 1.00                                                                                                                                                                     |
| MORT_30_HF                                 | 12.18              | 11.7             | 11.39          | 11.8           | 0.96                                        | 1.04                                               | 8.33%                                 | 1.00                                                                                                                                                                     |
| MORT_30_PN                                 | 14.28              | 15.7             | 16.36          | 18.2           | 1.10                                        | 0.99                                               | -10.00%                               | 3.00                                                                                                                                                                     |
| MORT_30_STK                                | 13.46              | 14.3             | 13.84          | 13.9           | 1.06                                        | 1.00                                               | -5.66%                                | 3.00                                                                                                                                                                     |
|                                            |                    |                  |                |                |                                             |                                                    |                                       | 2                                                                                                                                                                        |
| Did not Change R relative to the Nation    |                    |                  |                |                |                                             |                                                    |                                       | 8                                                                                                                                                                        |
| Improved R relative to the Nation          |                    |                  |                |                |                                             |                                                    |                                       | 11                                                                                                                                                                       |
| Worsened R relative to the Nation          |                    |                  |                |                |                                             |                                                    |                                       | 21 Total                                                                                                                                                                 |

Figure Y. RY 2024 Revenue Adjustments with Cut Point Options

| RY24 QBR Cut Point Comparison               | Current Cut Point | Pre-COVID (RY21) Cut Point | Proposed Cut Point (Staff) | Proposed Cut Point (MHA) | Proposed Cut Point (UMMS) |
|---------------------------------------------|-------------------|----------------------------|----------------------------|--------------------------|---------------------------|
|                                             | 41%               | 41%                        | 32%                        | 28%                      | 26%                       |
| # of hospitals penalized                    | 40                | 29                         | 34                         | 32                       | 29                        |
| # of hospitals rewarded                     | 1                 | 13                         | 7                          | 9                        | 12                        |
| % revenue penalties                         | \$ (97,990,365)   | \$ (52,193,879)            | \$ (67,548,058)            | \$ (53,198,127)          | \$ (44,753,205)           |
| % revenue rewards                           | \$ 91,892         | \$ 2,733,702               | \$ 3,676,109               | \$ 7,849,824             | \$ 9,774,881              |
| \$ revenue penalties                        | -0.87%            | -0.52%                     | -0.60%                     | -0.47%                   | -0.40%                    |
| \$ revenue rewards                          | 0.00%             | 0.03%                      | 0.03%                      | 0.07%                    | 0.09%                     |
| \$ Net Adjustments (Not Inflation Adjusted) | \$ (97,898,473)   | \$ (49,460,177)            | \$ (63,871,949)            | \$ (45,348,303)          | \$ (34,978,324)           |
| % Net Adjustments                           | -0.87%            | -0.49%                     | -0.57%                     | -0.40%                   | -0.31%                    |

### Digital Measures

JHHS supports the move towards automated measures and the inclusion of clinical data in electronic Clinical Quality Measures (eCQMs). They propose that the eCQMs used for Maryland's programs are from the CMS-used measures and that they are implemented in a way that reduces the need to utilize significant information technology (IT) resources while hospitals are still recovering from post-pandemic changes.

### Staff Response:

Staff appreciates the comments in support of continued movement to digital measures and specifically eCQMs. With regard to choosing only CMS-used measures for implementation to reduce the use of IT resources, staff notes that where possible, a tenet of our quality programs is to apply the measures to eligible patients regardless of the payer. For example, we require reporting of Hybrid Hospital Wide Readmission (HWR) and Hospital Wide Mortality (HWM) measures beginning with July 2023 discharges but these measures are currently specified for only Medicare patients. In addition to using claims to calculate the measure results, these Hybrid measures have the benefit of including Core Clinical Data Elements (CCDE) from the Electronic Health Record (EHR) used for additional risk adjustment of the measure results. Staff has signaled to hospitals our intent in the future to request the same data using the same measure logic specified for the Hybrid HWR and HWM measures from EHRs for patients ages 18-64. Staff believes these important outcome measures should be applied to all patients with the benefit of the CCDE data and additional risk adjustment of the results.



November 10, 2023

Joshua Sharfstein, MD  
Chairperson, Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Dr. Sharfstein,

On behalf of the Johns Hopkins Health System (JHHS), we appreciate the opportunity to provide input on the Quality-Based Reimbursement (QBR) RY 2026 draft recommendation.

Our comments are as follows:

*Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)*

Many safety measures, including patient experience, declined during the COVID-19 pandemic due to a variety of practice disruptions, staffing issues, supply issues, and facility access for families<sup>1</sup>. Several of these safety measures have subsequently improved, however the most recent Leapfrog Safety Grade results show that patient experience continues to worsen. There may be many reasons, including persistent staff shortages and staff burnout.

We suggest that improving patient experience outcomes would be better accomplished by offering incentives rather than financially penalizing hospitals that would greatly benefit from dedicating these resources to improve staffing, staff well-being and patient experience. Additionally, it is important to give credit and resources for hospitals as they improve and not just for achievement of top-box scores. As such, we do not favor over-weighting a poorly performing metric, or reducing the weight of the linear mean HCAHPS score which gives partial credit points for hospitals that are improving their scores, but not yet achieved top box ratings. Rewarding improvement and making funds available for additional improvement would incentivize hospitals to invest more in this domain.

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<sup>1</sup> (<https://www.hospitalsafetygrade.org/about-our-movement/newsroom/display/1199251>)

We suggest increasing the weight of the linear mean and reducing the weight of the top box scores. It may also be valuable to focus on the maternity service line as this was helpfully identified by HSCRC staff as an area of opportunity.

#### *Follow up after discharge*

While it seems intuitive that improving follow-up after discharge should reduce readmissions and multi-visit emergency room visits, it is important to note that this metric was endorsed by the National Quality Forum as a payer metric for patients who already have insurance and presumably have a clinical provider. It is unclear how hospitals can influence structural barriers to follow up after discharge due to already over-burdened primary care provider offices that already have very long wait times or lack of health insurance, or lack of off-hours access or geographic access, poverty or comorbid substance abuse issues. There may be important predictors such as provider availability, visit affordability due to consumer cost-sharing, comorbid disease burden, or social complexities that impact timely follow-up.

JHHS recommends further evidence-based research to understand patient and local environmental characteristics associated with obtaining timely follow-up care and its association with 30-day readmission. This information is important to ensure hospitals have the span of control to impact outcomes and that this measure has the intended consequence of reducing unnecessary Emergency Department (ED) utilization and improving the health of patients. Measuring disparities with follow-up after discharge will not be helpful without a public health plan to improve access to healthcare in those patients that have structural socio-economic barriers to care. We agree that reducing disparities in follow up care is an important priority and would like to see this in conjunction with the development of strengthened public health infrastructure in underserved communities.

We are also concerned about the clinical significance of the time frames proposed in the follow up after discharge metrics. In our random sample review of adult patients admitted with hypertension and asthma across JHHS, we found that many patients admitted to the emergency room with these conditions were having difficulties refilling their medication for a variety of reasons and did not seem to have clinical indication for follow up within 7 days or 14 days of discharge beyond needing refills. It is unclear if follow-up after discharge, especially for some clinical syndromes, improves clinical or healthcare utilization outcomes.

#### *Emergency Room Wait Time*

We appreciate the significant statewide efforts to evaluate the issues related to prolonged Emergency Department (ED) wait times and hospital throughput. We agree that this is a critical issue for patient experience as well as for patient safety. We support submission of hospital data to better understand the multifactorial issues that inform ED wait times. The staff recommendation outlines three options for ED wait times; with the goal of developing meaningful measures, we support staff's first option to delay implementation of an ED wait time measure into payment policies until there is further understanding of the issues and the modifiability of the proposed measures. Without understanding root causes, putting revenue at risk isn't going to drive change.

We further would like to partner with the HSCRC to assess infrastructure, payment and social determinants of health issues that inform ED wait times. Emergency Department utilization is the end-common pathway for all of the structural deficits in our healthcare system that occur outside of the hospital. ED wait times cannot be understood without broad data-based, contextual background.

#### *Mortality measure*

JHHS supports moving towards an all-payer 30-day mortality measure. Mortality is one of the most important end points to measure and includes outcomes from sepsis and other conditions that are not included in the CMS condition-specific measures. We support this all-payer 30-day mortality measure; however, we have concerns about prematurely including this nascent measure into the payment policy without sufficient validation. This is a new measure that is being developed in collaboration with consultants working with the HSCRC. This measure has not undergone NQF or other endorsement process like most newly developed federal measures would undergo. We are concerned that this measure seems to be included in the QBR program without a significant monitoring period for hospitals to validate the measure specifications or identify potential issues that may inadvertently impact the measure. The Centers for Medicare and Medicaid include new measures for reporting for at least a year before moving them to payment policy. We suggest that HSCRC and hospitals monitor the measure for a full year and work collectively to improve the validity and reliability of the measure before including it in payment policy, given that this is not an externally validated measure. Ensuring trust in the process of validating a new measure is essential for engagement of clinicians and hospitals for new measures.

#### *eCQM collaborations*

JHHS supports the move towards automated measures and the inclusion of clinical data in eCQMs. We would like to propose that the eCQMs used for Maryland's programs are from the CMS used measures and that they are implemented in a way that reduces the need to utilize significant information technology resources while hospitals are still recovering from post-pandemic changes.

#### *QBR general comments*

As the performance of hospitals has changed over time, we agree with reducing the breakpoint for the QBR program to better align with current post-pandemic performance.

We would also like to suggest that we limit the number of measures included in the QBR program. With ~20 measures in the QBR program, it becomes very difficult for any hospital to focus resources on specific initiatives for improvement even with inter-relatedness of several measures..

We appreciate the opportunity to comment on the draft recommendation for the Quality Based Reimbursement (QBR) RY 2026 policy. Please let us know if you have questions or would like further information on our feedback.



A handwritten signature in black ink, appearing to read 'Peter Hill', written in a cursive style.

Peter Hill, MD  
Senior Vice President Medical Affairs  
Johns Hopkins Health System

cc: Josh Sharfstein, MD, Chairman  
Nicki McCann, JD  
Adam Kane  
Joseph Antos, PhD

Maulik Joshi, DrPH  
James Elliott, MD  
Ricardo R. Johnson



November 14, 2023

Alyson Schuster, PhD, MPH, MBA  
Deputy Director, Quality Methodologies  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Dr. Schuster:

I extend my gratitude on behalf of the University of Maryland Medical System (UMMS) for the chance to contribute our insights to the Health Services Cost Review Commission's (HSCRC) Draft Recommendations for the Quality-Based Reimbursement Program (QBR) in Rate Year 2026. We wish to express our views on specific aspects of the draft recommendations:

**Emergency Department Length of Stay Metric**

Recommendation We propose incorporating OP-18b Median Time from ED Arrival to ED Departure for Discharged ED Patients into QBR. Simultaneously, we advocate developing a standardized metric, ED-2b Median Admit Decision Time to ED Departure for Admitted Patients, to supersede OP-18b in Rate Year 2027 QBR.

Rationale: While acknowledging the importance of addressing ED throughput, we highlight OP-18b's nine-month lag due to CMS reporting and its limited scope regarding admitted patients. Our suggestion, ED-2b, aligns better with Maryland's objectives of enhancing ED throughput for admitted patients, impacting patient experience for publicly reported inpatient metrics (HCAHPS).

**SEP-1: Early Management Bundle, Severe Sepsis/Septic Shock**

Recommendation: We recommend excluding the SEP-1 metric from the QBR program.

Rationale: Recognizing Maryland's commendable position in sepsis mortality, including SEP-1 appears redundant. Moreover, SEP-1 remains a contentious metric in medical literature, with concerns raised about its potential to drive antibiotic overuse and its lack of evidence-based definitions. Please note the appendix for references.

**Timely Follow-up (TFU) Disparity Gap Metric**

Recommendation: We recommend implementing the TFU Disparity Gap metric as a standalone, reward only metric.

Rationale: Consistent with historical practice, new metrics should undergo a monitoring-only status in their first year. Aligning with RRIP, adopting a reward-only approach for the TFU metric ensures a balanced and considered implementation.

### **Changes in Domain Weights**

**Recommendation:** We discourage adjusting domain weights, specifically decreasing the Safety domain weight by 10% and increasing the Person and Community Engagement domain by 10%.

#### **Rationale:**

The Safety domain, predominantly comprised of Hospital Acquired Infections, warrants sustained attention, especially given the increase in HAIs during the pandemic. We propose maintaining a larger weight on these safety metrics for appropriate emphasis.

In addition, we suggest capping the overall weight for TFU metrics at 5% to achieve a balanced representation alongside mortality and safety metrics.

### **Total Hip/Total Knee (THA/TKA) Complication Metric**

**Recommendation:** We recommend excluding the THA/TKA metric from QBR.

**Rationale:** The current THA/TKA metric is outdated and not reflective of contemporary hospital operations. With the majority of THA/TKA procedures now performed in ambulatory settings, removing this metric allows hospitals to focus on more relevant measures, such as 30-day mortality.

### **QBR Revenue Scale**

**Recommendation:** Set the QBR cut-point at a value less than 0.31 consistent with the Rate Year 2024 cut-point

**Rationale:** Aligning with current national performance, we recommend using a cut-point of 0.26, per the HSCRC draft recommendation. This adjustment accommodates the evolving healthcare landscape, especially in light of the COVID-19 pandemic, and supports a prospective payment model.

We appreciate the HSCRC's consideration of our recommendations. We look forward to continuing to work with the HSCRC to update the QBR program.

Sincerely,



Andrew N. Pollak, MD  
Senior Vice President and Chief Clinical Officer  
University of Maryland Medical System

cc: Joshua Sharfstein, MD, Chairman  
Adam Kane  
Joseph Antos, PhD  
James Elliott, MD

Maulik Joshi, DrPH  
Ricardo R. Johnson  
Nicki McCann, JD

## Appendix Citations for SEP-1

Clinical Infectious Diseases, Volume 72, Issue 4, 15 February 2021, Pages 541–552,  
<https://doi.org/10.1093/cid/ciaa059>

- *Infectious Diseases Society of America (IDSA and five additional endorsing societies) is concerned about SEP-1's potential to drive antibiotic overuse because it does not account for the high rate of sepsis overdiagnosis and encourages aggressive antibiotics for all patients with possible sepsis, regardless of the certainty of diagnosis or severity of illness*
- *IDSA is also concerned that SEP-1's complex "time zero" definition is not evidence-based and is prone to inter-observer variation*
- *Prompt empiric antibiotics are often appropriate for suspected sepsis without shock, but IDSA believes there is too much heterogeneity and difficulty defining this population, uncertainty about the presence of infection, and insufficient data on the necessity of immediate antibiotics to support a mandatory treatment standard for all patients in this category*
- *IDSA believes guidance on managing possible sepsis without shock is more appropriate for guidelines that can delineate the strengths and limitations of supporting evidence and allow clinicians discretion in applying specific recommendations to individual patients*

JAMA Netw Open. 2021;4(12):e2138596. doi:10.1001/jamanetworkopen.2021.38596

- *SEP-1 implementation was associated with an immediate increase in lactate testing rates, no change in already-increasing rates of broad-spectrum antibiotic use, and no change in the combined outcome of in-hospital death or discharge to hospice.*
- *These findings suggest SEP-1 was not associated with improved sepsis outcomes and that alternate approaches to preventing sepsis deaths in hospitals are needed*



November 15, 2023

Alyson Schuster  
Deputy Director, Quality Methodologies  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215

Dear Ms. Schuster,

Adventist HealthCare appreciates the opportunity to provide comments on the draft Quality-Based Reimbursement program for Rate Year 2026.

### **ED Length of Stay Metric**

While Adventist is aligned with the HSCRC and CMS's desire to reduce ED Length of Stay, we believe that the core systemic driver of longer ED wait-times in Maryland is a direct result of reduced bedded capacity in Maryland. Research by Dr. Peter Hill, senior vice president of Medical Affairs at Johns Hopkins Health System clearly links low beds per 1,000 residents and a higher occupancy percentage to longer ED wait times.

A clear example of this is White Oak Medical Center. When the facility was first sized as part of the CON process in 2013, the Claritas population projections resulted in a recommended 180 bed inpatient acute facility. At the request of HSCRC leadership at the time, the tower was reduced by an entire floor which represented a 16% or 28 bed reduction. Fast forward to 2022 and WOMC operates at 102% of its med/surg capacity due to ED boarders with some of the longest ED wait times in the state.

Additional physicians or nursing staff will not solve this logger jam. It is the absence of beds to place patients that makes it structurally impossible to significantly reduce ED wait times at WOMC.

Adventist is committed to high quality patient care and recommends that an ED Wait Time metric be measured to monitor and diagnose the root cause driver of this phenomenon in Maryland but reward and penalty policy should not be attached to this metric until a systemic root cause analysis has been completed.

Rushing payment policy without a clear understanding of the problem that needs to be fixed will not yield improved results. Rather, hospitals already struggling to provide safe patient care will be handicapped further by penalties.

### **QBR Cut Point**

Adventist supports the proposed changes to the QBR cut-point. We applaud Staff for aligning the Maryland quality based programs with CMS.



Adventist HealthCare appreciates the opportunity to collaboratively engage on this important topic and remains committed to further discussions aimed at fostering sustainable, high-quality healthcare delivery in Maryland.

Thank you for considering our perspectives and contributions.



Kristen Pulio  
Senior Vice President & CFO



Patsy McNeil, MD  
Senior Vice President & System CMO

Attachments: EMS Update Fall 2023



# EMS Update

# Hospital Bed Delays

Fall 2023

# Prior reports

## STATE AGENCY REPORTS TO MD GENERAL ASSEMBLY

Use of Maryland Hospital  
Emergency  
Departments: An Update  
and Recommended  
Strategies to Address  
Crowding (MHCC 2007)

Emergency Department  
Overcrowding Update  
(MIEMSS and HSCRC  
2019)

Joint Chairmen's Report  
on Emergency  
Department  
Overcrowding (MIEMSS  
and HSCRC 2017)

Behavioral Health  
Emergency Department  
Wait Times and Service  
Improvements in  
Maryland HSCRC 2022)







## GENERAL ASSEMBLY HOSPITAL THROUGHPUT WORK GROUP



MHA, with co-chair Dr. Ted Ted Delbridge, executive director of Maryland Institute for Emergency Medical Services Systems (MIEMSS), are leading a multistakeholder work group, the Hospital Throughput Work Group, aimed at making recommendations to improve the patient journey in Maryland.

Members include hospital representatives, legislators, the Health Services Cost Review Commission (HSCRC), the Maryland Health Care Commission (MHCC), the state Department of Health, patient advocates and emergency department and behavioral health providers. The Work Group is charged with making legislative, regulatory and/or policy recommendations in a report due to Maryland General Assembly committees by Jan. 1, 2024.

[General Assembly Hospital Throughput Work Group Roster](#)

For questions, contact [mha@mhaonline.org](mailto:mha@mhaonline.org).



### Upcoming Meetings

Thursday, September 14 | 1:00 pm - 4:00 pm

Wednesday, October 18 | 8:30 am - 11:30 am

Thursday, November 16 | 8:30 am - 11:30 am

Tuesday, December 12 | 1:00 pm - 4:00 pm

<https://www.mhaonline.org/transforming-health-care/healthy-hospitals-healthy-communities/hospital-throughput-resources/hospital-throughput-workgroup>

COMMENTARY

## Emergency Department Crowding: The Canary in the Health Care System

Gabor D. Kelen, MD, Richard Wolfe, MD, Gail D'Onofrio, MD, MS, Angela M. Mills, MD, Deborah Diercks, MD, Susan A. Stern, MD, Michael C. Wadman, MD, Peter E. Sokolove, MD  
DOI: 10.1056/CAT.21.0217

Emergency department crowding is a sentinel indicator of health system functioning. While often dismissed as mere inconvenience for patients, impact of ED crowding on avoidable patient morbidity and mortality is well documented but remains largely underappreciated. The physical and moral harm experienced by ED staff is also substantial. Often seen as a local ED problem, the cause of ED crowding is misaligned health care economics that pressures hospitals to maintain inefficient high inpatient census levels, often preferencing high-margin patients. The resultant back-up of admissions in the ED concentrates patient safety risks there. Few efforts (even well-meaning ones) address the economically driven root causes of ED crowding, i.e., the need to achieve minimal financial hospital margins. The key to a sustainable solution is to realign health care financing to allow hospitals to keep inpatient capacity below a critical threshold of 90%; beyond that, hospital throughput dynamics will inevitably lead to ED crowding.

## Balancing Efficiency and Access: Discouraging Emergency Department Boarding in a Global Budget System

**Benoit Stryckman, MA**

**Diane Kuhn, MD, PhD**

**Daniel B. Gingold, MD, MPH**

**Kyle R. Fischer, MD, MPH**

**J. David Gatz, MD**

**Stephen M. Schenkel, MD, MPP**

**Brian J. Browne, MD**

University of Maryland School of Medicine, Department of Emergency Medicine,  
Baltimore, Maryland

*Section Editor:* Christopher Kang, MD

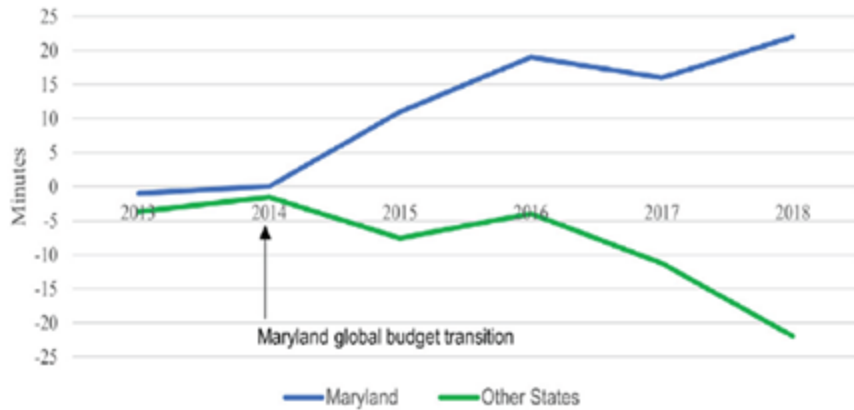
Submission history: Submitted January 26, 2021; Revision received N/A; Accepted May 12, 2021

Electronically published September 2, 2021

Full text available through open access at [http://escholarship.org/uc/uciem\\_westjem](http://escholarship.org/uc/uciem_westjem)

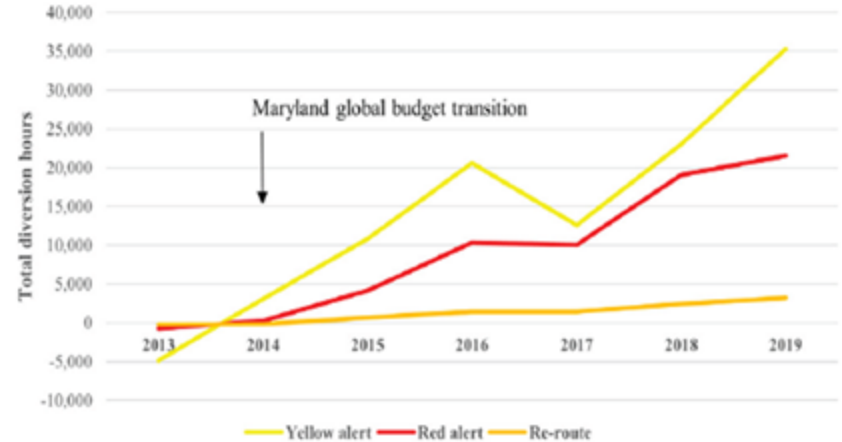
DOI: 10.5811/westjem.2021.5.51889

Reducing cost without sacrificing quality of patient care is an important yet challenging goal for healthcare professionals and policymakers alike. This challenge is at the forefront in the United States, where per capita healthcare costs are much higher than in similar countries around the world. The state of Maryland is unique in the hospital financing landscape due to its "capitation" payment system (also known as "global budget"), in which revenue for hospital-based services is set at the beginning of the year. Although Maryland's system has yielded many benefits, including reduced Medicare spending, it also has had unintentional adverse consequences. These consequences, such as increased emergency department boarding and ambulance diversion, constrain Maryland hospitals' ability to fulfill their role as emergency care providers and act as a safety net for vulnerable patient populations. In this article, we suggest policy remedies to mitigate the unintended consequences of Maryland's model that should also prove instructive for a variety of emerging alternative payment mechanisms. [West J Emerg Med. 2021;22(5)XXX-XXX.]



**Figure 1.** Cumulative absolute change in time from emergency department (ED) arrival to ED departure for admitted ED patients since 2013.

Note. Emergency department boarding was 367 minutes in Maryland and 295 minutes in all other states, in 2012. Source: Hospital Compare.<sup>9</sup>



**Figure 2.** Cumulative absolute change in ambulance diversion time by diversion type in Maryland since 2013.

Note. Diversion hours were yellow alert = 17,377, red alert = 7648, and re-route = 1396 in 2012.

Source: Maryland Institute for Emergency Medical Services Systems.<sup>13</sup>

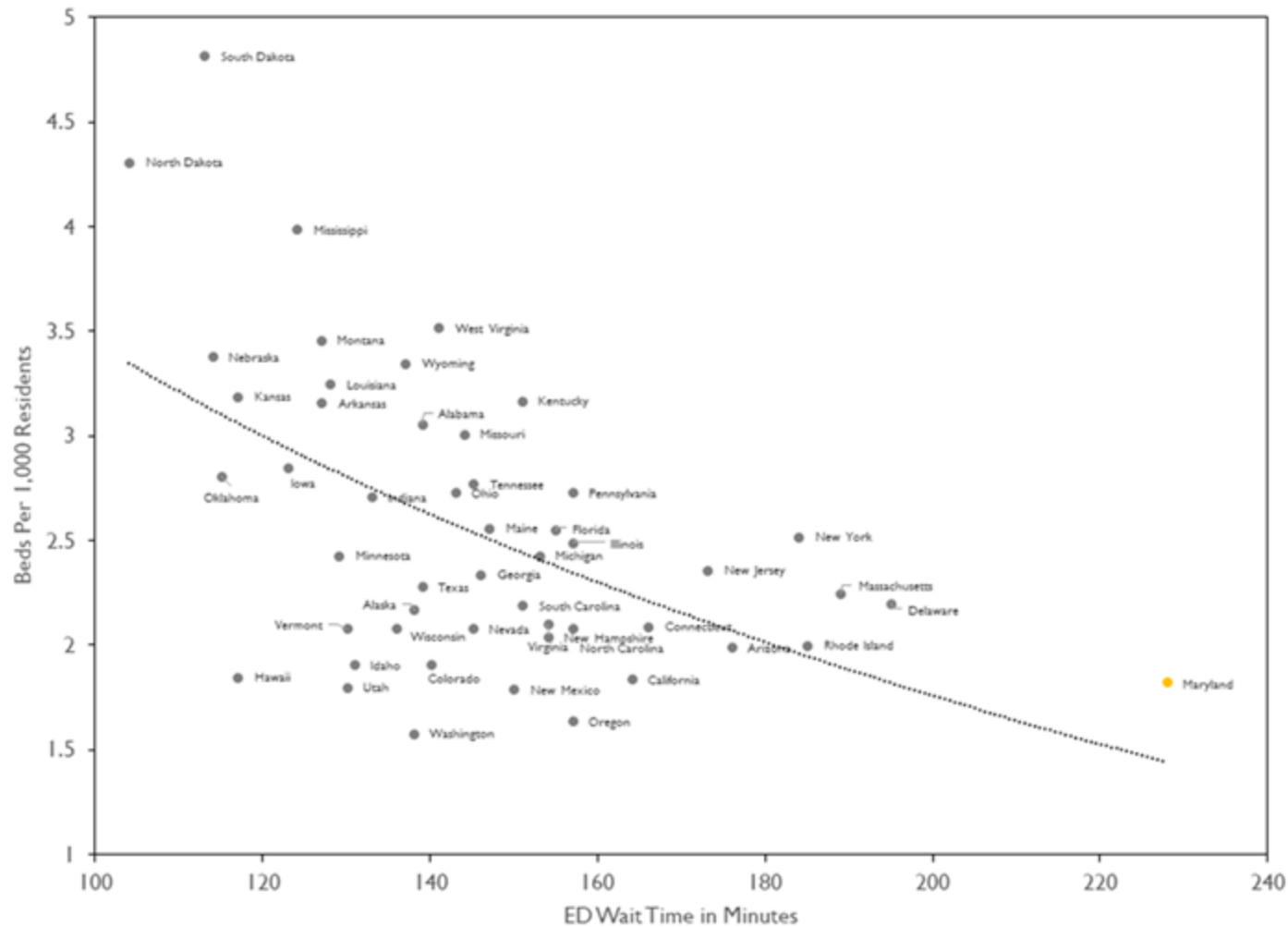
## Balancing Efficiency and Access: Discouraging Emergency Department Boarding in a Global Budget System

**Author(s):** Stryckman, Benoit; Kuhn, Diane; Gingold, Daniel B.; Fischer, Kyle R.; Gatz, J. David; Schenkel, Stephen M.; Browne, Brian J.

# Hospital beds per 1,000 population

<https://www.beckershospitalreview.com/rankings-and-ratings/states-ranked-by-hospital-beds-per-1-000-population-3.html>

1. South Dakota — 4.82 beds per 1,000 residents
2. District of Columbia — 4.7
3. North Dakota — 4.31
4. Mississippi — 3.99
5. West Virginia — 3.52
6. Montana — 3.46
7. Nebraska — 3.38
8. Wyoming — 3.35
9. Louisiana — 3.25
10. Kansas — 3.19
11. Kentucky — 3.17
12. Arkansas — 3.16
13. Alabama — 3.06
14. Missouri — 3.01
15. Iowa — 2.85
16. Oklahoma — 2.81
17. Tennessee — 2.77
18. Ohio — 2.73
- Pennsylvania — 2.73
19. Indiana — 2.71
20. Maine — 2.56
21. Florida — 2.55
22. New York — 2.52
23. Illinois — 2.49
24. Michigan — 2.43
- Minnesota — 2.43
25. New Jersey — 2.36
26. Georgia — 2.34
27. Texas — 2.28
28. Massachusetts — 2.25
29. Delaware — 2.2
30. South Carolina — 2.19
31. Alaska — 2.17
32. Virginia — 2.1
33. Connecticut — 2.09
34. Nevada — 2.08
- North Carolina — 2.08
- Vermont — 2.08
- Wisconsin — 2.08
35. New Hampshire — 2.04
36. Rhode Island — 2
37. Arizona — 1.99
38. Colorado — 1.91
- Idaho — 1.91
39. Hawaii — 1.85
40. California — 1.84
41. Maryland — 1.82
42. Utah — 1.8
43. New Mexico — 1.79
44. Oregon — 1.64
45. Washington — 1.58



# Hospital beds per 1,000 population

[https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs\\_hospital/documents/acute\\_care/chcf\\_acute\\_care\\_FY24%20Licensed%20Beds\\_20230717.pdf](https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_acute_care_FY24%20Licensed%20Beds_20230717.pdf)

| Hospital                                        | Acute Care Services |            |           |             |              |
|-------------------------------------------------|---------------------|------------|-----------|-------------|--------------|
|                                                 | MSGA                | Obstetric  | Pediatric | Psychiatric | Total        |
| Adventist HealthCare Shady Grove Medical Center | 172                 | 46         | 10        | 133         | 361          |
| Adventist HealthCare White Oak Medical Center   | 200                 | 26         | 0         | 0           | 226          |
| Holy Cross Germantown Hospital                  | 66                  | 16         | 0         | 6           | 88           |
| Holy Cross Hospital Silver Spring               | 249                 | 87         | 4         | 0           | 340          |
| MedStar Montgomery Medical Center               | 87                  | 11         | 2         | 14          | 114          |
| Suburban Hospital                               | 213                 | 0          | 3         | 24          | 240          |
| <b>MONTGOMERY COUNTY TOTAL</b>                  | <b>987</b>          | <b>186</b> | <b>19</b> | <b>177</b>  | <b>1,369</b> |

Montgomery County = 1.26





EDs have a gap-filling role for flaws in other levels of the healthcare system, being one of the only health care resources always available to individuals in need.

# Emergency Department Dramatic Improvement Effort (EDDIE) Overview

- Maryland has underperformed most other states on ED throughput measures since before the start of the All-Payer model
- EDDIE is a Commission-developed quality improvement initiative with two components:

## EDDIE: Improved ED Experience for Patients

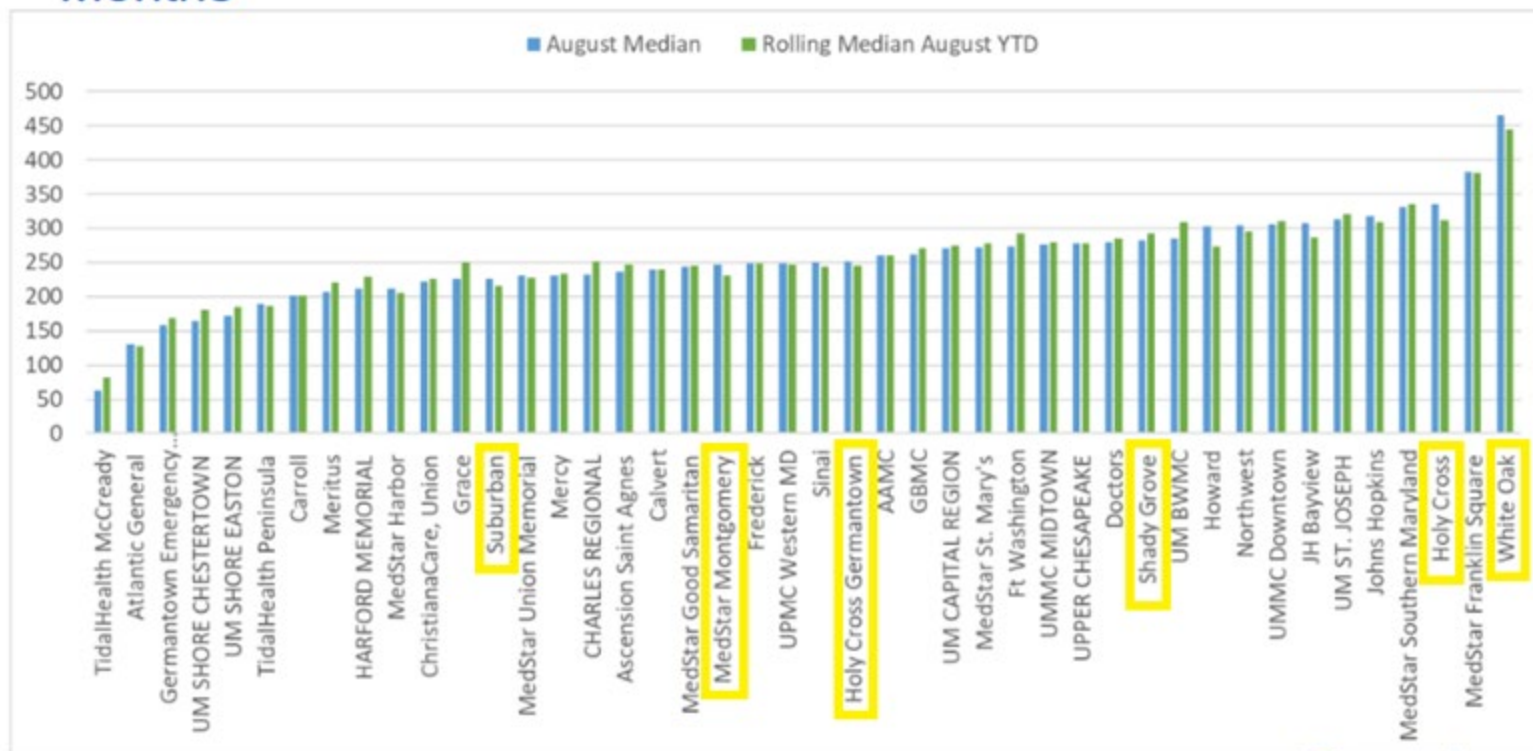
### Quality Improvement

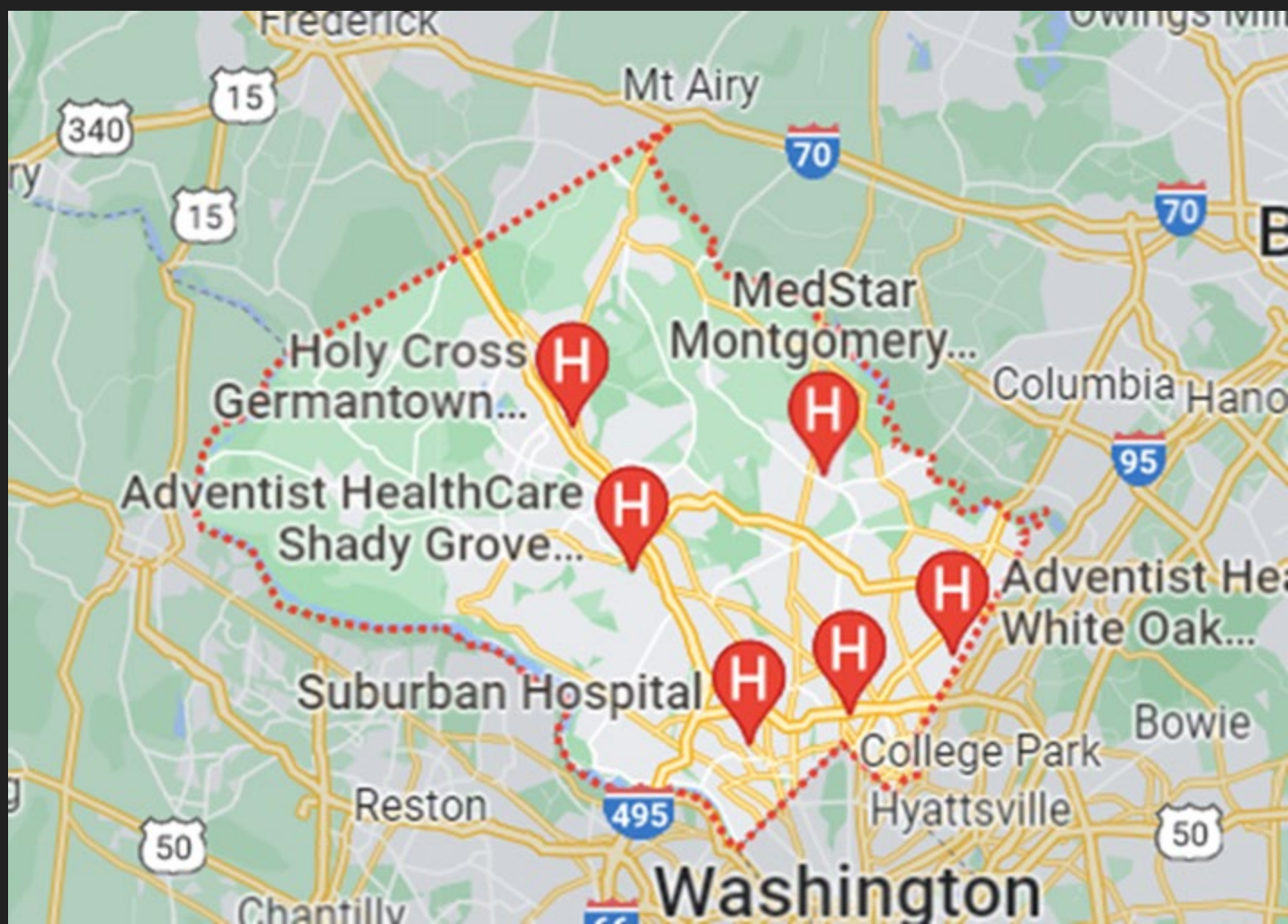
- Rapid cycle QI initiatives to meet hospital set goals related to ED wait times
- Learning collaborative
- Convened by MHA

### Commission Reporting

- Public reporting of monthly data for three measures
- Led by HSCRC and MIEMSS

# OP18a: ED Arrival to Discharge Time - Monthly and Rolling 12-Months



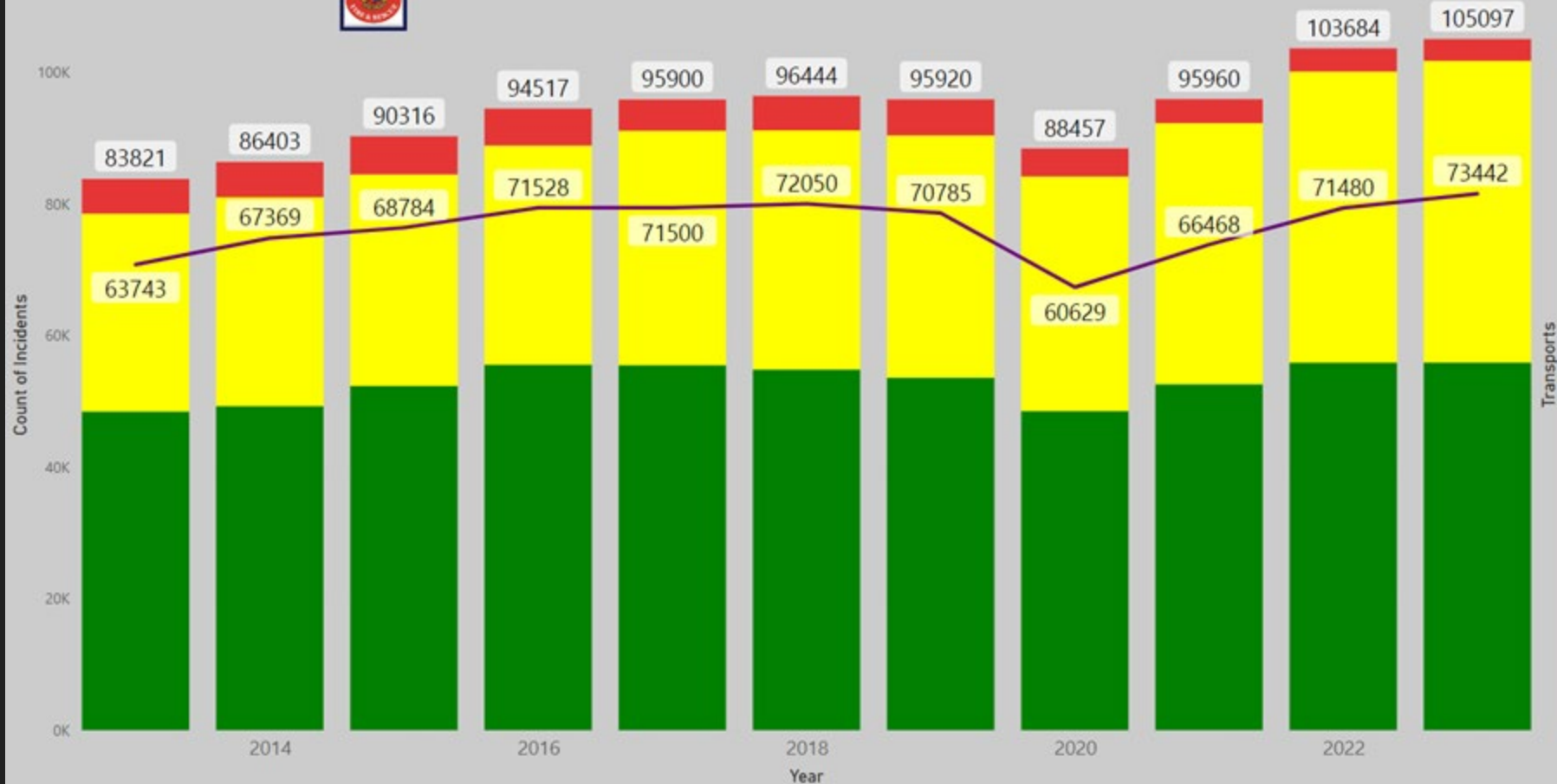


# EMS Call Types vs. Transports

● BLS ● ALS1 ● ALS2 ● Transports



*current CY figures are estimates based on activity to date*



## Why we care about hospital bed delays

1. There is zero productivity when an EMS unit is standing on a wall at an ED.
2. If unchecked, we will need more ambulances to meet community needs.
3. It decreases patient satisfaction.

## What I tell ED leadership

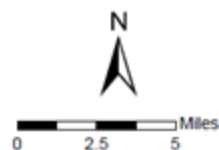
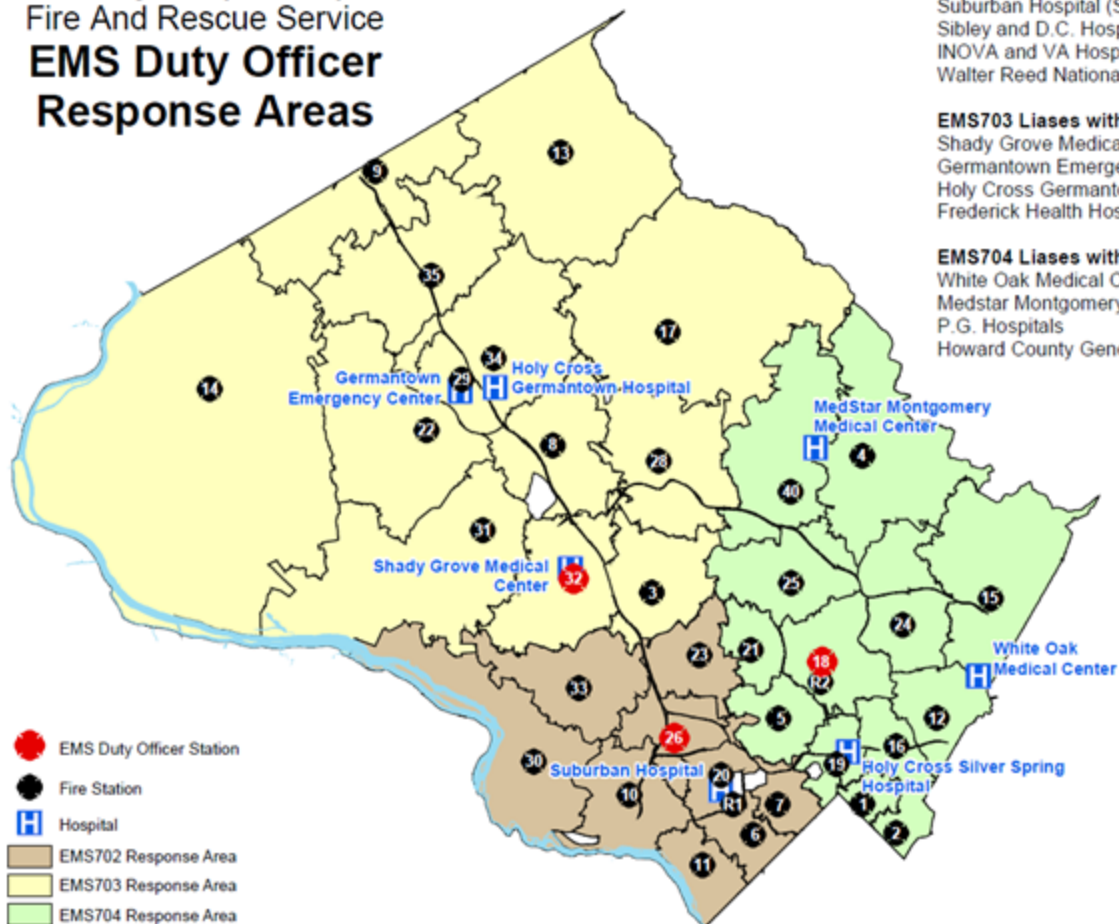
- We will not normalize extended wait times
- EMS crews will not act as surrogates for ED staff
- Send stable EMS patients out to the waiting room

Montgomery County  
Fire And Rescue Service  
**EMS Duty Officer  
Response Areas**

**EMS702 Liases with:**  
Holy Cross Silver Spring (HCH)  
Suburban Hospital (SUB)  
Sibley and D.C. Hospitals  
INOVA and VA Hospitals  
Walter Reed National Military Medical Center

**EMS703 Liases with:**  
Shady Grove Medical Center (SGMC)  
Germantown Emergency Center (GEC)  
Holy Cross Germantown Hospital (HCG)  
Frederick Health Hospital (FHH)

**EMS704 Liases with:**  
White Oak Medical Center (WOMC)  
Medstar Montgomery Medical Center (MMMC)  
P.G. Hospitals  
Howard County General Hospital



# EMS700 - Clinical Disposition Officer

1. To monitor EMS resources and hospital status
1. To make resource and clinical-based decisions that match each patient with the best available option





Doctors Community Hospital -

| Agency | Unit  | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|-------|----------------------|-----------|----------------------|-----------|
| PGC    | MD846 | 4/14/2022 6:18:42 PM | 16:07     | 4/14/2022 6:34:49 PM | 38:33     |

Holy Cross Germantown Hospital -

| Agency | Unit | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|------|----------------------|-----------|----------------------|-----------|
| MCFRS  | A708 | 4/14/2022 6:14:05 PM | 14:18     | 4/14/2022 6:28:23 PM | 44:59     |

Holy Cross Silver Spring Hospital -

| Agency | Unit | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|------|----------------------|-----------|----------------------|-----------|
| MCFRS  | A724 | 4/14/2022 6:01:02 PM | 18:52     | 4/14/2022 6:19:54 PM | 53:28     |

Laurel Regional Medical Center -

| Agency | Unit | Enroute              | (Elapsed) | Arrived | (Elapsed) |
|--------|------|----------------------|-----------|---------|-----------|
| PGC    | A831 | 4/14/2022 7:04:03 PM | 09:19     |         |           |

Medstar Montgomery Medical Center -

| Agency | Unit  | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|-------|----------------------|-----------|----------------------|-----------|
| MCFRS  | A742  | 4/14/2022 5:39:50 PM | 20:41     | 4/14/2022 6:00:31 PM | 72:51     |
| MCFRS  | A725B | 4/14/2022 6:46:04 PM | 27:18     |                      |           |

Medstar Washington Hospital Center -

| Agency | Unit   | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|--------|----------------------|-----------|----------------------|-----------|
| PGC    | A827   | 4/14/2022 4:52:44 PM | 20:39     | 4/14/2022 5:13:23 PM | 119:59    |
| PGC    | PA825B | 4/14/2022 5:13:56 PM | 39:56     | 4/14/2022 5:53:52 PM | 79:30     |
| PGC    | A832   | 4/14/2022 6:10:07 PM | 27:40     | 4/14/2022 6:37:47 PM | 35:35     |

Shady Grove Adventist Hospital -

| Agency | Unit  | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|-------|----------------------|-----------|----------------------|-----------|
| MCFRS  | A703  | 4/14/2022 5:53:19 PM | 12:26     | 4/14/2022 6:05:45 PM | 67:37     |
| MCFRS  | A703C | 4/14/2022 6:33:20 PM | 10:15     | 4/14/2022 6:43:35 PM | 29:47     |

Suburban Hospital -

| Agency | Unit | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|------|----------------------|-----------|----------------------|-----------|
| MCFRS  | A712 | 4/14/2022 6:28:27 PM | 15:19     | 4/14/2022 6:43:46 PM | 29:36     |
| MCFRS  | A710 | 4/14/2022 5:15:32 PM | 09:47     | 4/14/2022 5:25:19 PM | 108:03    |

White Oak Medical Center - 11890 Healing Way, Silver Spring, MD

| Agency | Unit | Enroute              | (Elapsed) | Arrived              | (Elapsed) |
|--------|------|----------------------|-----------|----------------------|-----------|
| PGC    | A812 | 4/14/2022 6:27:16 PM | 14:02     | 4/14/2022 6:41:18 PM | 32:04     |

MCFRS Hospital Transport Status Dashboard

4/14/2022 7:13:54 PM

Hide Zero Transport:

| All Hospitals                      | Enroute | Arrived | Elapsed - Avg | Elapsed - Max |
|------------------------------------|---------|---------|---------------|---------------|
| Doctors Community Hospital         | 0       | 1       | 00:38:33      | 00:38:33      |
| Holy Cross Germantown Hospital     | 0       | 1       | 00:44:59      | 00:44:59      |
| Holy Cross Silver Spring Hospital  | 0       | 1       | 00:53:28      | 00:53:28      |
| Laurel Regional Medical Center     | 1       | 0       |               |               |
| Medstar Montgomery Medical Center  | 1       | 1       | 01:12:51      | 01:12:51      |
| Medstar Washington Hospital Center | 0       | 3       | 01:18:21      | 01:59:59      |
| Shady Grove Adventist Hospital     | 0       | 2       | 00:48:42      | 01:07:37      |
| Suburban Hospital                  | 0       | 2       | 01:08:49      | 01:48:03      |
| White Oak Medical Center           | 0       | 1       | 00:32:04      | 00:32:04      |



Countywide Transport Cycle Time  
(75min)



36 Hospitals with 73 Units Statewide

Length of Stay

|                                                 |           |         |              |         |                  |
|-------------------------------------------------|-----------|---------|--------------|---------|------------------|
| CalvertHealth Medical Center - 266              | Red Alert | ReRoute | Yellow Alert | 1 Unit  | 91 minutes       |
| Capital Region Medical Center (UMCRH) - 260     | Red Alert | ReRoute | Yellow Alert | 3 Units | 11 - 207 minutes |
| Fort Washington Hospital - 522                  | Red Alert |         | Yellow Alert | 2 Units | 5 - 46 minutes   |
| George Washington University Hospital, DC - 335 |           |         |              | 1 Unit  | 7 minutes        |
| Germantown Emergency Center (Adventist) - 384   |           |         |              | 2 Units | 27 - 30 minutes  |
| Holy Cross Germantown Hospital - 444            |           |         | Yellow Alert | 1 Unit  | 39 minutes       |
| Holy Cross Hospital - 244                       |           |         | Yellow Alert | 2 Units | 39 - 85 minutes  |
| Montgomery Medical Center (MedStar) - 264       | Red Alert |         | Yellow Alert | 1 Unit  | 22 minutes       |
| Shady Grove Medical Center (Adventist) - 265    | Red Alert |         | Yellow Alert | 2 Units | 9 - 11 minutes   |
| Southern Maryland Hospital (MedStar) - 343      |           |         | Red Alert    | 6 Units | 8 - 99 minutes   |
| Suburban Hospital (JHM) - 249                   |           |         | Red Alert    | 3 Units | 4 - 40 minutes   |
| United Medical Center, DC - 316                 | Red Alert |         | Yellow Alert | 1 Unit  | 41 minutes       |
| Washington Hospital Center (MedStar), DC - 327  | Red Alert |         | Yellow Alert | 1 Unit  | 48 minutes       |
| White Oak Medical Center (Adventist) - 428      | Red Alert |         | Yellow Alert | 1 Unit  | 79 minutes       |

Yesterday 1:43 PM

(Resources Committed- Transport Units (25/43)) Time of alert: 2022-04-14 13:42. Number of events: 26, Trigger level: 25.

1:43 PM

(!) Click here to access current information on FirstWatch? website. This login is valid for 2 hours. Surge Plan Phase 3-Severe-30 Trans Units Comm Graphit S

2:23 PM

# Drop time >89 minutes

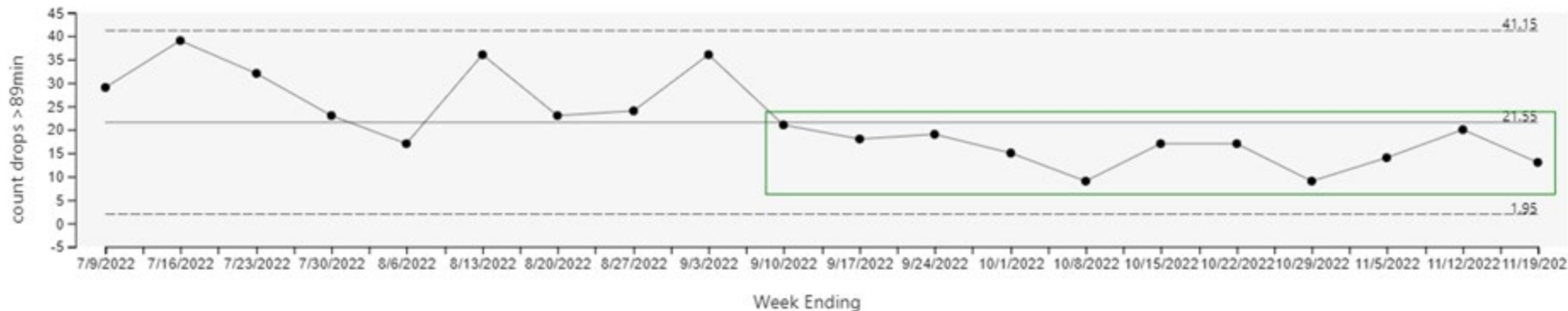
Thursday 8:10 PM  
(I) FIELD UPGRADE - CARDIAC ARREST (POL); Unit: M731; Hospital: SHADY GROVE ADVENTIST HOSP; TARR:Dec 1 2022 6:31:36 PM 8:10 PM

Thursday 10:22 PM  
(I) INTERFACILITY TRANSFER - BLS; Unit: M715; Hospital: WHITE OAK MEDICAL CENTER; TARR:Dec 1 2022 8:43:45 PM 10:22 PM

Thursday 11:34 PM  
(I) DECREASED LOC - ALS1; Unit: A702; Hospital: HOLY CROSS SILVER SPRING; TARR:Dec 1 2022 9:56:48 PM 11:34 PM

12:15 AM  
(I) DECREASED LOC - ALS1; Unit: A715; Hospital: WHITE OAK MEDICAL CENTER; TARR:Dec 1 2022 10:36:27 PM 12:15 AM

Drop times >89min per week



## ED Status Update

Results go directly to the Clinical Disposition Officer (EMS700). EMS700 voice or text at 240-243-7800 from 0700-2300.

Hospital \*

Please Select

ED Boarders \*

Open ICU Beds \*

Open ED Beds \*

ED Pace \*

Please Select

Notes

Include pediatric capability

Submit

| Hospital                   | CHATS data was last updated at<br>4:06:12 PM | <a href="#">Form Update</a> | Boarders | Open ICU | Open ED | ED pace             | Notes from ED                                                                                                                                                                                          |
|----------------------------|----------------------------------------------|-----------------------------|----------|----------|---------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Holy Cross - Silver Spring | Yellow                                       | 12/5/2022 11:23:59          | 10       | 1        | 0       | Very busy           |                                                                                                                                                                                                        |
| Holy Cross - Germantown    | Yellow                                       | 12/5/2022 14:14:36          | 9        | 1        | 0       | Busy but manageable | 7 Emergency Petitions                                                                                                                                                                                  |
| Medstar Montgomery         | Yellow & Red                                 | 12/5/2022 14:35:02          | 26       | 0        | 0       | Very busy           |                                                                                                                                                                                                        |
| Shady Grove                | Yellow & Red                                 | 12/5/2022 14:03:50          | 13       | 0        | 0       | Busy but manageable | 24 adult patients in waiting room.<br>Peds ED has 7 open beds.<br>Boarding multiple inpatient and psych patients.                                                                                      |
| Suburban                   | Red                                          | 12/5/2022 15:42:41          | 20       | 0        | 0       | Very busy           | Very busy, peds has 6 patients, waiting room has 12 patients, high acuity                                                                                                                              |
| White Oak                  | Yellow & Red                                 | 12/5/2022 8:34:29           | 38       | 0        | 0       | Very busy           | Very busy, 66 in the department, 4 hallway patient as we have no available beds. 4 ADMITTED patient in the WR. Awaiting beds. Extremely busy, no movement in the departments & imcu in the department. |
| GEC                        |                                              | 12/5/2022 15:22:07          | 3        | 0        | 1       | Busy but manageable |                                                                                                                                                                                                        |

# What the duty officer does about a hospital bed delay

- Build relationships before the crisis
- Prevent the problem from getting worse
- Protect the crew from being the bad guy
- Set respectful boundaries
- Collaborate on solutions
- Advocate for patient and crew
- Set a time bound limit with the charge nurse
- Escalate to me



# MCFRS Hospital Interface Report

For the month of:

August 2023

GEC

HCGH

HCSSH

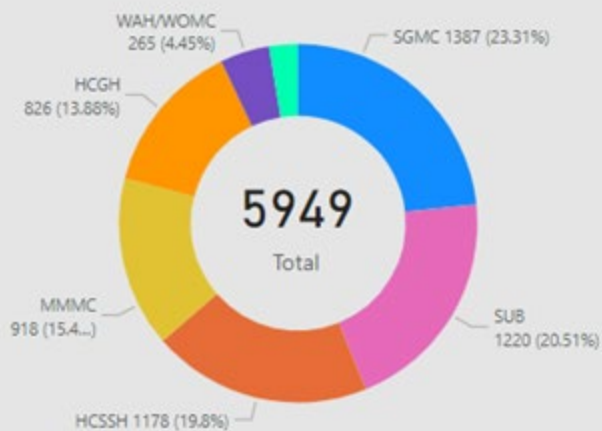
MMMC

SGMC

SUB

WAH/WOMC

## Patient Distribution



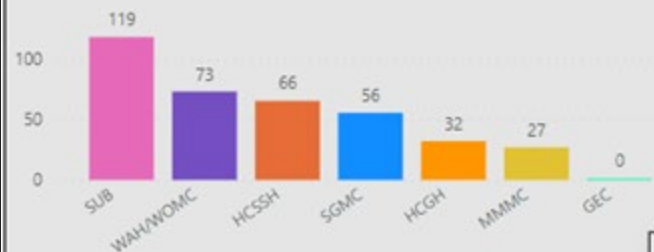
## 90PCTL Turnover Time (at hospital to off cot) in minutes (GOAL=25min)



## Count of patient turnovers >25 min



## Lost unit hours by hospital



## Unit productivity loss in dollars

**\$46,899.66**

Countywide Lost Unit Hours

**373**

Lost units

**0.52**

Lost UH = Turnover Time - 25min (only when TT > 25min)

● Volume ● Median Turnover Time ● 10 day Rolling Median





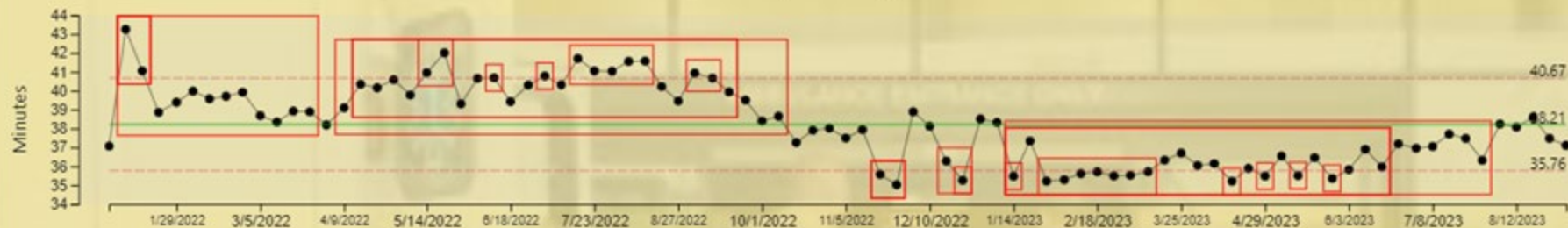
# Patient Drop Time

at hospital to unit in service (*eTimes.13 - eTimes.11*)

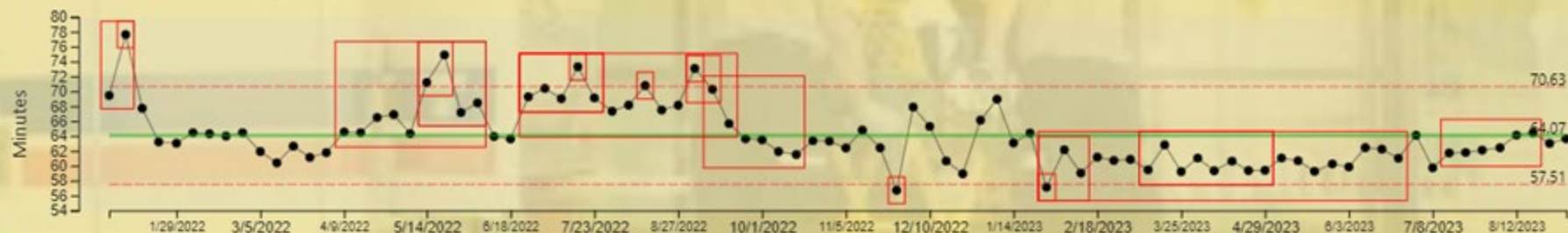
Goal = 40 minutes

|       |            |            |            |   |   |
|-------|------------|------------|------------|---|---|
| Day   | Battalion  |            |            |   |   |
| Week  | 1          | 2          | 3          | 4 | 5 |
| Month | Priority 1 | Priority 2 | Priority 3 |   |   |

### Median Drop Time by Week



### 90th Percentile Drop Time by Week







# Patient Cycle Time

unit dispatched to unit in service (*eTimes.13 - eTimes.03*)

Goal = 75 minutes

Day

Week

Month

Battalion

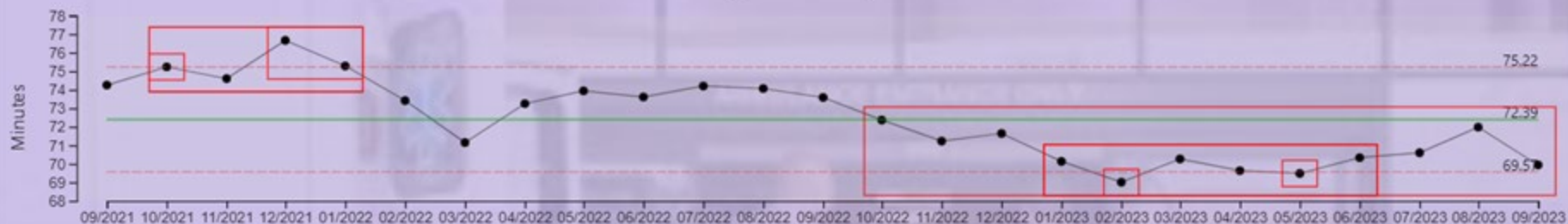
1 2 3 4 5

Priority 1

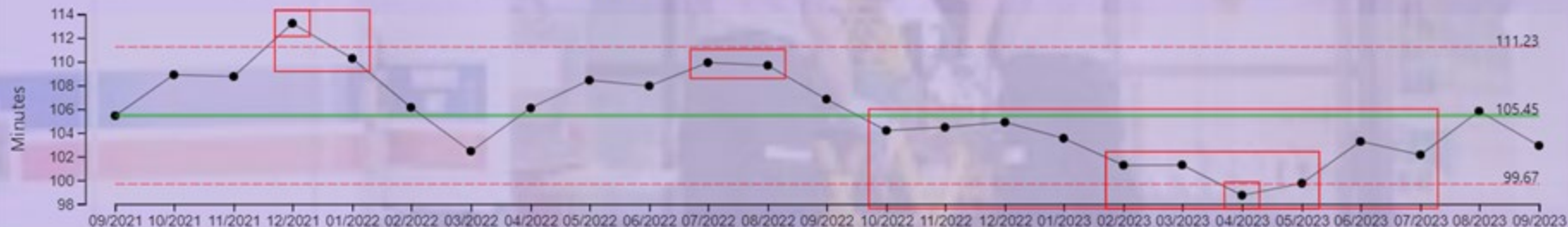
Priority 2

Priority 3

### Median Cycle Time by Month



### 90th Percentile Cycle Time by Month



# Our experiences

1. Alternative destinations

1. Treatment in place via telehealth

1. Opportunities...



**David Schwartz**  
Vice President  
Public Policy & Federal Affairs

**CareFirst BlueCross BlueShield**  
840 First Street, NE  
Washington, DC 20065  
Tel. 202-680-7433

November 16, 2023

Joshua Sharfstein, Chairman  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Chairman Sharfstein:

CareFirst BlueCross BlueShield (“CareFirst”) is grateful for the opportunity to comment on the Rate Year (RY) 2026 Quality-Based Reimbursement (QBR) draft policy recommendations. We remain aligned with the QBR program’s objective to maintain accountability for quality of care even as other policies under the Total Cost of Care (TCOC) Model seek to limit hospital cost growth. The QBR program rewards quality improvements while disincentivizing poor performance, a balanced approach we believe is in Marylanders’ best interest. While we support the program’s underlying philosophy, we believe there is room for improvement to elevate the quality of healthcare in Maryland.

Marylanders deserve the same access to care as other Americans. However, Maryland residents have long been subject to the longest emergency department (ED) wait times in the country. Recent data shows Maryland patients wait on average eight hours to receive ED care – and although this is an improvement from the previous average of 11 hours, we must do better. To ensure all stakeholders are accountable for improvement, we support the inclusion of an ED wait time measure in the QBR program.

The weight of the ED wait time measure should reflect the seriousness of the issue at hand. We believe that only allocating the three Timely Follow up (TFU) measures and the ED wait time measure 10 percent of the QBR score – just 0.2 percent of hospitals’ revenue – does not reflect a serious commitment to addressing this important issue. We must demonstrate to the people of Maryland as well as our federal and state partners we are seriously committed to improving their access to care and making reasonable ED wait times a reality in the state. In tandem with the reintroduction of an ED wait time measure to the QBR program, we recommend increasing the revenue at risk by one percentage point and making the ED wait time measure one third of the QBR score. Patients across the state, lawmakers, and the media alike are closely monitoring this issue and deserve an effective policy solution. Swift intervention is imperative, as this issue directly impacts patients’ experiences with the Maryland healthcare system.

Thank you again for the opportunity to comment on this important topic. We look forward to working alongside our provider and government partners to design a QBR policy that addresses the ongoing ED wait time crisis and best serves the people of Maryland.

Sincerely,

A handwritten signature in blue ink that reads "David Schwartz". The signature is written in a cursive, flowing style.

David Schwartz



MedStar Health

10980 Grantchester Way  
Columbia, MD 21044

MedStar Franklin Square Medical Center  
MedStar Good Samaritan Hospital  
MedStar Harbor Hospital  
MedStar Montgomery Medical Center  
MedStar Southern Maryland Hospital Center  
MedStar St. Mary's Hospital  
MedStar Union Memorial Hospital  
MedStar Georgetown University Hospital  
MedStar National Rehabilitation Network  
MedStar Washington Hospital Center

November 16, 2023

[MedStarHealth.org](https://www.MedStarHealth.org)

Jon Kromm  
Executive Director  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Mr. Kromm:

On behalf of the 7 MedStar Health Hospitals in Maryland, we would like to thank you for your ongoing partnership in advocating for the highest quality and highest value care for Marylanders. Our care teams are proud of the role we play in improving the health of our patients and communities and we appreciate all that the HSCRC does to advance this shared work.

We write today to provide our perspective on the RY26 Quality Based Reimbursement (QBR) Draft Policy as discussed at the November 15, 2023 HSCRC Performance Measurement Workgroup. We want to commend the HSCRC staff for the collaborative and careful approach they have taken toward refining QBR for the upcoming year. We would like to highlight several key considerations as we move toward finalizing the policy.

1. We feel strongly that SEP-1 should not be added to QBR. Our medical experts believe that SEP-1 is a clinically flawed measure that does not fully represent updated sepsis treatment standards and may distract from optimal clinical care of our sepsis patients. Please see the attached consensus statement from the Infectious Diseases Society of America, the Society of Hospital Medicine, and the American College of Emergency Physicians (plus multiple other organizations) that raises the same concerns. Since SEP-1 is a clinically flawed *process* measure, and we already include *outcomes* for septic patients in our HSCRC mortality measures, we do not believe that SEP-1 is the right measure to prioritize for addition to QBR.
2. We support the addition of the Medicaid Timely Follow Up Disparity measure and an ED throughput measure (ED2 or a similar measure focused on admitted patients) to the QBR Patient and Community Engagement (PCE) Domain. These measures are aligned with some of the highest priority quality concerns of the state (ie health equity and ED wait times). Likewise, ED wait times and access to post-acute care are key driver of patient experience.
3. We agree with the importance of ensuring that each measure included in QBR has sufficient weighting for it to be impactful. Based on discussions at the Performance Measurement Workgroup, we had anticipated the weighting for the new Medicaid TFU Disparity measure and ED throughput measure would be secured by shifting weight within the PCE domain (ie by decreasing weight from HCAHPS). We feel QBR policy already over-prioritizes Patient Experience in comparison to Safety and Clinical Outcomes. Further moving weight from the Safety Domain would exacerbate this. Hospital Acquired Infections (HAIs) and Patient Safety Indicators (PSIs) are among the most impactful and widely accepted hospital quality indicators we follow. They comprise the totality of the CMS-HAC program and CMS counts HAIs a second time in the Hospital Value Based Purchasing program. We feel strongly that the new measures in the PCE Domain should receive their weighting from HCAHPS. This would bring Maryland HCAHPS in closer alignment with the 25% weighting in the federal program -- a weighting that has proven to be a sufficient incentive at the national level to drive improvement. Likewise, this approach would reaffirm the importance of Patient Safety and Clinical Outcomes in the QBR program.

Thank you for your consideration of our perspective. Please let us know if we may provide further clarifications and/or if you would like to discuss with our team.

Sincerely,



Stephen R.T. Evans, MD  
Executive Vice President and CMO,  
MedStar Southern MedStar Health



Rollin J. (Terry) Fairbanks, MD  
SVP and Chief Quality & Safety  
Officer, MedStar Health



Jonathan Patrick, MD  
VP, Clinical Quality Performance,  
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# Improving Sepsis Outcomes in the Era of Pay-for-Performance and Electronic Quality Measures: A Joint IDSA/ACEP/PIDS/SHEA/SHM/SIDP Position Paper

Chanu Rhee,<sup>1,2,⊗</sup> Jeffrey R. Strich,<sup>3</sup> Kathleen Chiotos,<sup>4,a</sup> David C. Classen,<sup>5</sup> Sara E. Cosgrove,<sup>6,b</sup> Ron Greeno,<sup>7,c</sup> Emily L. Heil,<sup>8,d</sup> Sameer S. Kadri,<sup>3</sup> Andre C. Kalil,<sup>9</sup> David N. Gilbert,<sup>10</sup> Henry Masur,<sup>3</sup> Edward J. Septimus,<sup>1,11</sup> Daniel A. Sweeney,<sup>12</sup> Aisha Terry,<sup>13,e</sup> Dean L. Winslow,<sup>14</sup> Donald M. Yealy,<sup>15,e</sup> and Michael Klompas<sup>1,2,f</sup>

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The Centers for Medicare & Medicaid Services (CMS) introduced the Severe Sepsis/Septic Shock Management Bundle (SEP-1) as a pay-for-reporting measure in 2015 and is now planning to make it a pay-for-performance measure by incorporating it into the Hospital Value-Based Purchasing Program. This joint IDSA/ACEP/PIDS/SHEA/SHM/SIDP position paper highlights concerns with this change. Multiple studies indicate that SEP-1 implementation was associated with increased broad-spectrum antibiotic use, lactate measurements, and aggressive fluid resuscitation for patients with suspected sepsis but not with decreased mortality rates. Increased focus on SEP-1 risks further diverting attention and resources from more effective measures and comprehensive sepsis care. We recommend retiring SEP-1 rather than using it in a payment model and shifting instead to new sepsis metrics that focus on patient outcomes. CMS is developing a community-onset sepsis 30-day mortality electronic clinical quality measure (eCQM) that is an important step in this direction. The eCQM preliminarily identifies sepsis using systemic inflammatory response syndrome (SIRS) criteria, antibiotic administrations or diagnosis codes for infection or sepsis, and clinical indicators of acute organ dysfunction. We support the eCQM but recommend removing SIRS criteria and diagnosis codes to streamline implementation, decrease variability between hospitals, maintain vigilance for patients with sepsis but without SIRS, and avoid promoting antibiotic use in uninfected patients with SIRS. We further advocate for CMS to harmonize the eCQM with the Centers for Disease Control and Prevention's (CDC) Adult Sepsis Event surveillance metric to promote unity in federal measures, decrease reporting burden for hospitals, and facilitate shared prevention initiatives. These steps will result in a more robust measure that will encourage hospitals to pay more attention to the full breadth of sepsis care, stimulate new innovations in diagnosis and treatment, and ultimately bring us closer to our shared goal of improving outcomes for patients.

**Keywords.** sepsis; septic shock; SEP-1; quality measures; sepsis bundle.

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<sup>e</sup>A. T. and D. M. Y. are representatives of the American College of Emergency Physicians (ACEP).

<sup>f</sup>All other authors are representatives of the Infectious Diseases Society of America (IDSA).

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Sepsis is a major public health problem. More than 1.7 million adults receive hospital care for sepsis in the United States each year, with over 250 000 deaths and \$40 billion in Medicare expenditures [1, 2]. The burden of sepsis has appropriately spurred clinicians, hospitals, policy makers, and patient advocates to focus on improving sepsis care and outcomes.

The Centers for Medicare & Medicaid Services (CMS) Severe Sepsis/Septic Shock Management Bundle (SEP-1) is the most prominent national effort to improve sepsis care [3]. SEP-1 was implemented in 2015 as a pay-for-reporting measure (Box 1). Bundle compliance is “all-or-nothing,” and hospital SEP-1 compliance rates are publicly available. CMS is now proposing to make SEP-1 a pay-for-performance measure by

**Box 1. The CMS Severe Sepsis/Septic Shock Management Bundle (SEP-1).**

Severe Sepsis Bundle:

1. Measure lactate level within 3 h
2. Blood cultures (prior to antibiotics) within 3 h
3. Broad spectrum antibiotics within 3 h
4. Remeasure lactate if initial lactate elevated (>2.0 mmol/L) within 6 h

Septic Shock Bundle:

5. 30 cc/kg crystalloid bolus (normal saline or lactated ringers) within 3 h of hypotension, initial lactate  $\geq 4.0$  mmol/L, or clinician documentation of septic shock
6. Vasopressors to target mean arterial pressure  $\geq 65$  mmHg within 6 h if there is persistent hypotension after  $\geq 30$  cc/kg crystalloid bolus
7. Document repeat volume status and tissue perfusion assessment within 6 h:
  - Repeat focused exam: vital signs, cardiopulmonary, capillary refill, pulse and skin findings, OR
  - 2 of the following: Measure central venous pressure, central venous oxygen saturation, bedside cardiovascular ultrasound, or passive leg raise or fluid challenge

The SEP-1 measure is “all-or-nothing”: failure in any 1 bundle component means overall failure; no partial credit is given. Some bundle elements can be excluded if appropriate contraindications are explicitly documented in the medical record, eg, administering <30 cc/kg of crystalloid fluids due to concern for congestive heart failure and fluid overload.

incorporating it into the Hospital Value-Based Purchasing Program beginning in fiscal year 2026, raising the stakes associated with compliance [4]. Concomitantly, CMS is developing an electronic clinical quality measure (eCQM) to benchmark hospitals’ risk-adjusted sepsis mortality rates. Draft specifications for the Community-Onset Sepsis 30-day Mortality eCQM were released in June 2022 [5].

SEP-1 brought welcome attention to sepsis. Nonetheless, there is considerable controversy regarding the strength of evidence supporting its bundle elements, whether bundle compliance improves outcomes, and whether there are unintended consequences that offset its potential benefits [6–11]. In 2020, a consortium of professional societies led by the Infectious Diseases Society of America (IDSA) published a position paper outlining concerns with SEP-1 and recommending several revisions, the most important of which was removing severe sepsis from the measure and focusing solely on septic shock [6]. In part 1 of the current position paper, these societies provide an updated analysis and now recommend retiring SEP-1 based on recent studies that document its real-world impact in adults, and the risk of exacerbating

unintended consequences by shifting to pay-for-performance. In part 2, we outline our support for CMS’s plan to adopt an electronic outcomes-based sepsis measure while offering suggestions to improve its reliability, efficiency, and credibility.

**METHODS**

This position paper was created by members of a task force initially assembled by IDSA in 2018 and expanded in 2020 to include representation from ACEP, PIDS, SHEA, SHM, and SIDP. The group developed public comments in response to the SEP-1 re-endorsement by the National Quality Forum in 2021, CMS’s announcement in 2022 of their plan to transition SEP-1 to pay-for-performance, and CMS’s release of the draft specifications of eCQM in 2022. The group aggregated, updated, and refined all public comments and added additional insights to create this document. The position paper was then shared with society boards in March 2023 for endorsement.

**PART 1: REASONS TO RETIRE SEP-1 RATHER THAN MAKE IT A PAY-FOR-PERFORMANCE MEASURE****Real-world Evidence Indicates That SEP-1 Has Not Improved Patient Outcomes**

Several time-series analyses using detailed clinical data from hundreds of hospitals elucidate the real-world impact of SEP-1 on patient outcomes (Table 1) [12–15]. Rhee et al analyzed 117 150 patients admitted to 114 academic and community hospitals with suspected sepsis between 2013 and 2017 and found that SEP-1 implementation in October 2015 was associated with an immediate increase in lactate testing but no improvement in the combined outcome of hospital death or discharge to hospice [12]. These findings persisted in several sensitivity analyses including one limited to patients with suspected septic shock. Barbash et al evaluated 54 225 patients with suspected sepsis admitted via emergency departments to 11 hospitals affiliated with the University of Pittsburgh Medical Center between 2013 and 2017 and found that SEP-1 was associated with a 50% increase in lactate measurements and a 30% increase in 30 cc/kg intravenous fluid infusions within 3 hours but no change in hospital mortality or discharge to home [13]. Anderson et al analyzed all adults with or without sepsis (n = 701 055) admitted to 26 hospitals between 2014 and 2016 and found that all-cause mortality per 1000 patients decreased by 39% during the study period [14]. However, mortality rates decreased by 5% each month during the year prior to SEP-1 implementation and then declined 2% each month during the year following SEP-1 implementation, suggesting SEP-1 implementation was associated with a blunting of a pre-existing decreasing mortality trend. Furthermore, in a subgroup analysis of patients with suspected sepsis, there was no change in mortality associated with SEP-1 implementation; rather, there were increases in 30-day readmissions, infection relapses, and acute kidney injury.



**Table 1. Major Multicenter Time Series Analyses Assessing the Impact of SEP-1**

| Study               | Setting and Study Period                                                                              | Study Population                                                                                                                                                                                                                                                                                                        | Major Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rhee et al [12]     | 114 hospitals within the Cerner HealthFacts dataset, October 2013–December 2017                       | 117 510 adults admitted with suspected sepsis, defined as (1) blood culture drawn, (2) $\geq 2$ systemic inflammatory response syndrome criteria, and (3) acute organ dysfunction within 24 h of hospital arrival                                                                                                       | <ul style="list-style-type: none"> <li>• Immediate increase in lactate measurements within 24 h after SEP-1 implementation (55.1% to 76.7%, OR 1.34, 95% CI 1.04–1.74)</li> <li>• Increases in empiric anti-MRSA antibiotics during study period (19.8% in Q4-2013 to 26.3% Q4-2017) as well as anti-Pseudomonal beta-lactam antibiotics (27.7% to 40.5%); trends occurred independent of SEP-1 implementation</li> <li>• No change in short-term mortality rates (death or discharge to hospice): 20.4% vs 20.3% in post vs pre SEP-1 period</li> </ul>                                                                                                                                                                                                                                 |
| Barbash et al [13]  | 11 hospitals in the University of Pittsburgh Medical Center Health System, January 2013–December 2017 | 54 225 adults admitted from the ED with suspected sepsis, defined as (1) suspected infection (collection of a blood, urine, respiratory, or other body fluid culture) and (2) organ dysfunction ( $\geq 2$ SOFA score points) within 6 h of ED arrival                                                                  | <ul style="list-style-type: none"> <li>• 50% increase in lactate measurements within 3 h after SEP-1 implementation (70.2% observed rate vs 46.5% expected rate based on pre-SEP-1 trends)</li> <li>• 10% increase in broad-spectrum antibiotic use (49.8% observed vs 45.1% expected)</li> <li>• 30% increase in 30 cc/kg intravenous fluid boluses (13.2% observed vs 9.9% expected)</li> <li>• No change in trends for in-hospital mortality (absolute change: 0.1% [95% CI –.9%–1.1%]) or discharge to home</li> </ul>                                                                                                                                                                                                                                                               |
| Anderson et al [14] | 26 hospitals in 7 states, October 2014–October 2016                                                   | 701 055 adults admitted for $\geq 24$ h (with or without infection/sepsis); subgroup analysis among 31 013 patients with suspected sepsis, defined as $\geq 1$ blood culture collected and subsequent receipt of broad-spectrum antibiotics for $\geq 48$ –72 h (conducted in 10 hospitals reporting microbiology data) | <ul style="list-style-type: none"> <li>• 10% increase in antibiotic utilization in post-SEP-1 vs pre-SEP-1 periods (605 d of therapy/1000 patient days vs 546) and 24.4% increase in mean monthly days of therapy per 1000 patient-days over the study period</li> <li>• 5% monthly decline in all-cause mortality during SEP-1 preparation period, followed by 19% increase during transition to SEP-1 implementation and 2% monthly decline during SEP-1 implementation (change in monthly mortality slope risk ratio between SEP-1 preparation vs implementation periods: 1.04, 95% CI 1.01–1.07)</li> <li>• Among patients with suspected sepsis: no change in mortality rates but increase in 30-d readmissions, infection relapses within 30 d, and acute kidney injury</li> </ul> |
| Pakyz et al [15]    | 111 hospitals participating in Vizient, October 2014–June 2017                                        | 7.3 million hospitalized adults; subgroup analysis among 293 665 patients with sepsis discharge diagnosis codes                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Immediate 2.3% increase in broad-spectrum antibiotic use (<math>P = .038</math>) after SEP-1 implementation and 0.4% monthly increase in trend (<math>P = .027</math>) amongst all hospitalized patients</li> <li>• Significant level increase in use of all antibiotic categories following SEP-1 implementation for patients with sepsis</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                           |

Abbreviations: CI, confidence interval; ED, emergency department; MRSA, methicillin-resistant *Staphylococcus aureus*; OR, odds ratio; SEP-1, Severe Sepsis/Septic Shock Management Bundle; SOFA, Sequential Organ Failure Assessment.

Importantly, these 3 studies used slightly different definitions for suspected sepsis (detailed in Table 1), but all used objective clinical criteria (rather than diagnosis codes, which tend to be applied variably and only in patients ultimately confirmed to have sepsis) and all had similar findings. Convergent findings in different populations and data sets using a range of definitions support the conclusion that SEP-1 has not reduced sepsis mortality.

#### The SEP-1 Requirement to Administer Antibiotics to All Patients With Possible Sepsis Within 3 Hours Has Encouraged Unnecessary Antibiotic Use

The SEP-1 requirement to give antibiotics within 3 hours of sepsis onset pressures clinicians to act very quickly in all

settings in which sepsis may be present, regardless of illness severity, and even when considerable uncertainty about the presence of sepsis exists. The signs and symptoms of sepsis are neither sensitive nor specific. Many common non-infectious conditions can mimic the clinical presentation of sepsis (eg, cancer, heart failure, arrhythmias, adverse drug effects, toxidromes, drug withdrawal, thromboembolic disease, endocrine emergencies). Approximately one third of patients treated with antibacterial agents for possible sepsis are later found to have viral infections or non-infectious conditions [16, 17]. It is difficult to reliably differentiate between these conditions within the 3-hours permitted by SEP-1 before broad-spectrum antibiotics have to be given. This allows for the possibility that

the pressure created by SEP-1 has increased premature and unnecessary antibiotic prescribing.

The time-series analyses assessing the impact of SEP-1 implementation described in the previous section also provide data on its effect on antibiotic prescribing patterns (Table 1). In the study by Rhee et al, empiric anti-methicillin-resistant *Staphylococcus aureus* (MRSA) antibiotic use for patients with suspected sepsis increased by 25% between 2013 and 2017, whereas anti-Pseudomonal beta-lactam use increased by 45% [12]. This trend occurred independent of SEP-1 implementation, yet the magnitude of increase in broad-spectrum antibiotic use during this relatively short time period (starting shortly before the preliminary adoption of SEP-1 by CMS in early 2014) is highly concerning. In the study by Barbash et al, SEP-1 implementation was associated with a 10% increase in broad-spectrum antibiotic administration within 3 hours among patients with suspected sepsis relative to expected trends [13]. In the study by Anderson et al, there was a 24.5% increase in antibiotic use amongst all hospitalized patients between October 2014 and October 2016, including increases in anti-MRSA and anti-Pseudomonal antibiotics [14]. A separate analysis by Pakyz et al of 111 hospitals also found that SEP-1 roll-out was associated with a 2.3% immediate increase in antibiotics targeting multi-drug-resistant organisms among all hospitalized patients followed by additional 0.4% increases per month thereafter; they also observed a significant increase in the use of all antibiotic categories at the time of SEP-1 implementation amongst patients with sepsis diagnosis codes [15]. Thus, there are considerable data suggesting that SEP-1 has accelerated the use of broad-spectrum antibiotics. Some hospitals have decreased time-to-antibiotics without unduly increasing unnecessary treatments [18], but this occurred independent of SEP-1 and appears to be the exception rather than the rule given studies from other hospital groups showing increases in antibiotic utilization. Finally, although SEP-1 does not target children specifically, its impact on processes of care in hospitals caring for both adults and children may contribute to antibiotic overuse in pediatric patients.

The Surviving Sepsis Campaign (SSC) guidelines advise clinicians to tailor the urgency and breadth of antibiotics to their certainty of infection and patients' severity of illness (particularly the presence or absence of shock), in contrast to SEP-1's blanket 3-hour time-to-antibiotic goal for all patients with suspected sepsis [19, 20]. The SSC guidance notes that the urgency of antibiotics varies by severity of illness: short delays are associated with higher mortality rates in patients with septic shock but not in patients without shock [21–23]. The SSC's recommendation to administer antibiotics within 3 hours for possible but unconfirmed sepsis (vs 1 hour for possible septic shock) may still be overly aggressive given that several well-conducted studies show no difference in outcomes associated with intervals until antibiotics of 6 hours or longer for patients without

shock [23, 24]. However, we believe the framework of allowing clinicians seeing a patient with possible but unconfirmed sepsis without shock the time and freedom to gather additional data to confirm or refute infection (including laboratory tests, imaging, and observing response to non-infectious treatments) before initiating empiric antibiotics is a step in the right direction for all patients, including those ultimately diagnosed with sepsis and those with sepsis-mimicking conditions.

#### **Retrospective Analyses That Report SEP-1 Compliance Is Associated With Lower Mortality Rates Are Highly Confounded**

The primary study cited as evidence that SEP-1 lowers mortality is a retrospective comparison of outcomes for 122 870 Medicare patients who received SEP-1 compliant care matched to 122 870 patients who received non-compliant care between October 2015 and March 2017 conducted by Townsend et al [25]. This study reported that bundle compliance was associated with lower 30-day mortality (22% vs 27%) and median hospital length of stay (5 vs 6 days). This study has been used to assert that even if SEP-1 implementation has not yet clearly lowered sepsis mortality rates, doubling down on efforts to increase bundle compliance (ie, through pay-for-performance) will do so.

This study is unreliable, however, because patients who receive bundle-compliant care tend to be different compared to patients who receive non-compliant care. For example, patients with sepsis without shock have a much lower risk of death compared to patients with septic shock but are also more likely to receive bundle-compliant care because fewer steps are required to pass the measure for patients without shock [26, 27]. This key baseline difference between patients who received SEP-1 compliant versus non-compliant care was evident in the study by Townsend et al [25]. Despite using propensity score matching to improve covariate balance between groups, those who received non-compliant care were much more likely to have septic shock (25.0% vs 15.1%), including persistent hypotension (6.8% vs 3.8%) or lactate levels  $\geq 4.0$  mmol/L (17.3% vs 9.4%) (as reported in e-Table 10 of the Townsend paper [25]). This was true in the primary standard-matched analysis and in a secondary analysis that used more stringent matching criteria (septic shock: 19.3% vs 15.7%, persistent hypotension 5.8% vs 4.2%, lactate  $\geq 4.0$  mmol/L 12.5% vs 10.8%, e-Table 13) [25]. In a subgroup analysis restricted to patients with septic shock, a more apples-to-apples comparison, mortality rates for patients who received care that was compliant versus non-compliant with the SEP-1 6-hour bundle were similar (38.0% vs 35.3%,  $P = .326$  [Table 3 of the Townsend paper [25]]).

Additionally, younger and healthier patients tend to have clearer clinical presentations of sepsis (eg, fever, chills, rigors, productive cough), which ease diagnosis and management; conversely, older and more complicated patients (with greater

baseline risk of death) often present with more ambiguous syndromes that lead to delays in sepsis care and may have comorbidities that make clinicians more cautious about administering large volumes of fluids [26, 27]. Importantly, patients with ambiguous presentations are at substantially higher risk of mortality even after accounting for age, comorbidities, illness severity, and time-to-antibiotics [26, 27]. These important nuances are not captured in the data abstracted for SEP-1 and therefore were not included in the analysis used by Townsend et al [25]. Another important confounder is the timing of sepsis onset: patients who develop sepsis while hospitalized are less likely to receive bundle-compliant care but are generally more severely ill than patients with community-onset sepsis and have at least 2-fold higher mortality rates that clearly are not attributable to bundle compliance rates alone [27–29]. This too was not included in the analysis by Townsend et al. Tellingly, studies that have used more comprehensive data for risk adjustment, including presenting symptoms, detailed comorbidities, and community- versus hospital-onset sepsis have found no association between SEP-1 compliance and mortality [27, 30].

Finally, the study by Townsend et al only focused on Medicare beneficiaries discharged with sepsis diagnosis codes who met the specific SEP-1 time zero criteria. In practice, clinicians often do not know in real-time whether a patient has sepsis but nonetheless may feel compelled to treat for the possibility. Clinicians also frequently treat patients who fall outside Medicare eligibility features but suffer from sepsis or a mimic; these patient were also not included in in the analysis. As such, this study fails to consider the impact of the SEP-1 bundles on many patients, especially those ultimately diagnosed with non-infectious conditions. For this reason, the best insight into the real impact of SEP-1 comes from the time-series analyses described earlier that analyzed the real-world impact of SEP-1 implementation in complete populations with suspected sepsis, including those ultimately found to have something other than sepsis, using objective clinical criteria and thus minimizing ascertainment bias. These studies found no effect on mortality rates.

Some studies assessing mandated bundles outside of SEP-1 (eg, the New York State bundle) have reported that sepsis mortality rates declined following implementation [31–33]. One potential explanation is that the New York State regulations were more effective than SEP-1 because they combined structure (ie, developing and submitting sepsis screening and treatment protocols), process (publicly reporting 3- and 6-hour bundle data), and outcomes (publicly reporting risk-adjusted mortality). However, the true impact of the New York State regulations is difficult to assess because sepsis bundle roll-outs were accompanied by efforts to increase sepsis recognition. This typically leads to an ascertainment bias as clinicians diagnose more patients with sepsis over time, including patients

with milder syndromes and lower mortality rates, which in turn can give a misleading impression that bundles are lowering sepsis mortality rates [34].

#### **There Are No High-Quality Data Demonstrating That the 30 cc/kg Crystalloid Fluid Bolus Threshold or Repeat Lactate Measurements Reduce Sepsis Mortality**

Both the intravenous fluid bolus and repeat lactate requirements are common causes of SEP-1 compliance failures yet are supported by minimal data [11]. Two large observational studies, including approximately 50 000 patients with sepsis in New York State and 6000 patients in California, found no association between compliance with the fluid resuscitation bundle component and mortality [28, 35]. These results align with a multicenter randomized trial comparing liberal versus restrictive fluids for patients with septic shock that showed no difference in outcomes, further underscoring the lack of data to support a 1-size fits-all approach to fluid management [36]. A randomized trial also calls into question the value of serial lactate measures to guide fluid resuscitation for patients with septic shock: mortality rates were similar or lower among patients randomized to fluid resuscitation guided by physical exam (capillary refill time) versus serial lactate measurements [37]. Not surprisingly, the SSC Guidelines designated both these processes as “weak recommendations with low quality of evidence” [19]. Hospitals should not be denied payment and physicians deemed noncompliant for failing to follow non-evidence-based practices.

#### **Focus on SEP-1 Diverts Attention and Resources From More Effective Measures and Comprehensive Sepsis Care**

SEP-1 has had the unintended consequence of focusing hospitals’ and providers’ attention on bundle compliance and documentation to the exclusion of other aspects of comprehensive sepsis care. In many hospitals, considerable time is spent discussing ways to improve documentation (ie, for repeat volume status and perfusion exams or potential exclusions for the 30 cc/kg fluid bolus) for the sole purpose of improving SEP-1 compliance scores rather than identifying and implementing changes in care that are more likely to improve patient outcomes.

We agree that initial care matters, but improving sepsis outcomes necessitates close attention to the full spectrum of patient care in addition to the first few hours of resuscitation, particularly as patients with sepsis are often hospitalized for long periods and are at high risk for complications of hospital care. Other opportunities to improve care include speeding identification of causative pathogens and antibiotic susceptibilities, implementing processes to facilitate timely source control, optimizing antimicrobial dosing and administration regimens, encouraging timely antimicrobial de-escalation, minimizing sedation and delirium, using lung protective ventilation, preventing hospital-acquired infections, preventing pressure injuries, and improving rehabilitation programs [38].

**Table 2. Comparison of Definitions: CMS Community-Onset Sepsis 30-day Mortality Electronic Clinical Quality Measure (Draft Specifications) and CDC Adult Sepsis Event**

| CMS eCQM Community-Onset Sepsis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CDC Adult Sepsis Event                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Systemic Inflammatory Response Syndrome (SIRS) criteria ( $\geq 2$ of the following criteria within 6 h of presentation): <ul style="list-style-type: none"> <li>• Temperature <math>&gt;38</math> or <math>&lt;36^{\circ}\text{C}</math></li> <li>• Heart rate <math>&gt;90</math> beats/min</li> <li>• Respiratory rate <math>&gt;20</math> breaths/min</li> <li>• White blood cell count <math>&gt;12\,000</math> or <math>&lt;4000</math> cells/<math>\text{mm}^3</math></li> </ul>                                                                                                                                                                          | Not Used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Suspected infection (any one of the following criteria): <ul style="list-style-type: none"> <li>• ICD-10 diagnosis code for infection (of suspected bacterial origin) POA, or</li> <li>• ICD-10 diagnosis for sepsis POA, or</li> <li>• Administration of antibiotics within 30 h of presentation and continuation for <math>\geq 3</math> d or until discharge</li> </ul>                                                                                                                                                                                                                                                                                       | Presumed Serious Infection: <ul style="list-style-type: none"> <li>• Blood culture obtained (regardless of result), <i>and</i></li> <li>• Administration of antibiotics (including at least one parenteral antibiotic) within <math>\pm 2</math> d of blood culture day and continued for <math>\geq 4</math> d or until <math>\leq 1</math> d prior to death, discharge to another acute care hospital or hospice, or transition to comfort measures</li> </ul>                                                                                                                                                                                                                                                                                                |
| Organ dysfunction ( $\geq 1$ of the following criteria within 6 h of presentation, in the absence of an alternative explanation): <ul style="list-style-type: none"> <li>• Administration of vasopressors</li> <li>• MAP <math>&lt;65</math> mmHg or systolic blood pressure <math>&lt;90</math> mmHg</li> <li>• Initiation of mechanical ventilation</li> <li>• Creatinine <math>&gt;2.0</math> mg/dL (and at least 0.5 greater than, or 2x, baseline value)</li> <li>• Total bilirubin <math>&gt;2.0</math> mg/dL</li> <li>• Platelet count <math>&lt;100\,000/\text{mm}^3</math></li> <li>• INR <math>&gt;1.5</math> or aPTT <math>&gt;60</math> s</li> </ul> | Organ dysfunction ( $\geq 1$ of the following criteria within $\pm 2$ d of blood culture day): <ul style="list-style-type: none"> <li>• Initiation of vasopressors</li> <li>• Initiation of mechanical ventilation</li> <li>• Doubling in serum creatinine or decrease by <math>\geq 50\%</math> of estimated glomerular filtration rate relative to baseline (excluding patients with ICD-10 codes for end-stage kidney disease)</li> <li>• Total bilirubin <math>\geq 2.0</math> mg/dL and doubling from baseline</li> <li>• Platelet count <math>&lt;100\,000/\text{mm}^3</math> and <math>\geq 50\%</math> decline from baseline (baseline must be <math>\geq 100\,000/\text{mm}^3</math>)</li> <li>• Serum lactate <math>\geq 2.0</math> mmol/L</li> </ul> |

Abbreviations: aPTT, Activated Partial Thromboplastin Clotting Time; CDC, Centers for Disease Control and Prevention; CMS, Centers for Medicare & Medicaid Services; eCQM, electronic clinical quality measure; INR, international normalized ratio; MAP, mean arterial pressure; POA, present-on-admission.

The CMS proposal to shift SEP-1 from pay-for-reporting to pay-for-performance is a step backward in that healthcare systems will feel compelled to invest even more resources into the same limited set of processes that do not clearly improve outcomes. We believe that hospitals, clinicians, and patients will be best served by retiring SEP-1 and shifting to a measure focused on patient outcomes. This will encourage hospitals to pay more attention to the full breadth of sepsis care and stimulate further innovations in diagnosis and treatment. Hospitals could still choose to emphasize early resuscitation bundles based on internal assessments of gaps in care but they should not be forced to do so.

**PART 2: RECOMMENDATIONS TO IMPROVE THE eCQM SEPSIS MORTALITY MEASURE**

We support CMS’s plan to implement a risk-adjusted sepsis outcome measure. Although there are multiple patient-centered sepsis outcomes that could be candidates, we believe that a focus on mortality is the right place to start. We also applaud CMS’s plan to make the measure fully electronic, as this will improve efficiency, scalability, and objectivity compared to the current manual SEP-1 abstraction process which is highly resource-intensive and often variably applied [39–41].

The draft specification for the eCQM sepsis mortality measure identifies sepsis using three criteria (Table 2): (1) systemic inflammatory response syndrome (SIRS) criteria, defined using vital signs and white blood cell counts, (2) suspected infection, defined as antibiotic administrations *or* the use of

present-on-admission (POA) ICD-10 codes for sepsis or infection, and (3) acute organ dysfunction, defined using vital signs, administered medications, use of respiratory support, and laboratory tests. We recommend the following modifications to the eCQM strategy for identifying sepsis to improve its credibility, efficiency, and reliability while diminishing the risk of unintended consequences.

**Remove SIRS Criteria From the eCQM**

SIRS criteria are common and nonspecific. They are present in up to 50% of hospitalized patients at some point during their stay, most of whom do not have sepsis [42]. Another study found that 18% of ED patients met SIRS criteria, but only 26% of that group had an acute infection [43]. SIRS criteria are also insensitive; one in eight critically ill patients with sepsis do not meet SIRS criteria [44]. Limiting the eCQM to patients with SIRS criteria therefore risks both over-detection and under-detection of sepsis.

Anchoring the eCQM to SIRS also risks promoting overreliance on SIRS as a screening tool. Using an insensitive and non-specific trigger cannot drive improvements in care. Indeed, the evidence suggests SIRS-based alerts in the ED increase antibiotic use and *Clostridioides difficile* infections but do not improve mortality [45, 46]. SIRS-based prompts for sepsis recognition in the intensive care unit (ICU) or inpatient setting have also not improved patient outcomes in randomized trials [47–49]. These limitations of SIRS led to their exclusion from current international consensus criteria for sepsis (Sepsis-3) [50].

Including SIRS criteria also increases the eCQM's complexity and risks undermining comparability between hospitals. SIRS elements are prone to transient perturbations (heart rate, respiratory rate) that are variably recorded in the EHR or recorded in different ways in the EHR (eg, separate fields for temperature by axilla, mouth, rectum, bladder, etc.). This will likely lead to differences in the ways hospitals extract and curate SIRS criteria, introducing unnecessary additional variability between hospitals. Eliminating SIRS from the eCQM will simplify implementation, align CMS conceptually with Sepsis-3 criteria, decrease the risk of encouraging unnecessary antibiotics for patients with SIRS who are not infected, and prevent under-recognition of patients with sepsis but without SIRS.

#### **ICD-10 Codes Should Not Be Used to Identify Patients With Infection**

CMS proposed using antibiotic administrations or ICD-10 codes to identify patients with possible infection. Diagnosis codes will not increase sensitivity above antibiotic administrations since almost all meaningful bacterial infections are treated with antibiotics. A large medical record review-based study found that infection codes had a sensitivity of only 77% (95% confidence interval [CI] 75%–79%) for identifying infected patients [51]. Others report sensitivities below 50% for sepsis-specific codes [52].

Including diagnosis codes also risks introducing variability due to differences in code use amongst clinicians and between hospitals [53–55]. This is partly due to variability in the diagnosis of sepsis and partly due to differences in coding practices. One study asked intensivists to review 5 case vignettes describing patients with possible infection and organ dysfunction: 17% of respondents classified 1 case as sepsis, 28% deemed 2 of the 5 cases as sepsis, 33% classified 3 cases as sepsis, 19% flagged 4 cases as sepsis, and 3% thought all 5 patients had sepsis ( $\kappa$  0.29) [53]. Another study found that the median sensitivity of sepsis codes for clinical sepsis was 30% overall across 193 hospitals but ranged from 5% to 54% between hospitals [55]. Both diagnosis and coding practices for sepsis are changing over time and susceptible to both internal initiatives, such as quality improvement and sepsis awareness campaigns, and external pressures, such as changes in payment policies [1, 34, 56–59]. Lastly, present-on-admission codes are often inaccurate and variably applied across hospitals, especially when there are financial implications [60, 61].

#### **The eCQM Should Be Harmonized With CDC's Electronic Surveillance Metric to Develop a Shared Federal Sepsis Measure**

CDC invested considerable resources into developing and validating the Adult Sepsis Event (ASE) definition, an electronic surveillance metric modeled on the Sepsis-3 framework of infection with concurrent organ dysfunction but optimized for simplicity and reproducibility across institutions [62]. ASE defines suspected infection as a blood culture order and at least

4 days of new antibiotics (fewer if death or discharge occurs before 4 days). ASE defines organ dysfunction as initiation of vasopressors or mechanical ventilation, presence of an elevated blood lactate, or new changes in creatinine, total bilirubin, or platelet count. These organ dysfunction thresholds parallel the Sequential Organ Failure Assessment Score but eschew components that are inconsistently measured, documented, and stored in EHRs such as mental status, vasopressor doses, urine output, blood gas results, and fraction of inspired oxygen at the time of blood gas measurement. ASE does not include SIRS or diagnosis codes (see Table 2 for comparison of ASE vs draft eCQM criteria).

The ASE was developed to overcome the limitations of administrative data for sepsis surveillance and has been applied to hundreds of hospitals with diverse EHRs to estimate sepsis burden and characteristics [1, 63–68]. Studies show that ASE is more sensitive than sepsis diagnosis codes, has similarly high specificity, and is more reliable for assessing trends in sepsis incidence and mortality [1, 69]. ASE also can distinguish hospital-onset versus present-on-admission sepsis [29, 70], is strongly associated with poor outcomes [63, 71], and performs similarly in US and non-US hospitals [1, 63]. These key strengths of ASE make it well suited to serve as the basis for a national sepsis outcome measure in addition to an epidemiologic tool.

Despite its strengths, ASE can be updated and improved. The ASE infection criteria misses patients in whom blood cultures are not drawn and the elevated lactate criterion may distort temporal trends in hospitals that are checking lactates on more patients over time [51, 72]. Hypotension that does not require vasopressors and non-invasive respiratory support short of invasive mechanical ventilation were not included in ASE's organ dysfunction thresholds, in part because these data elements were not routinely available in many EHRs when ASE was first developed. With the current widespread adoption of Fast Health Interoperable Resources, including these important parameters is now feasible [73].

We encourage CMS and CDC to continue to collaborate on developing a single, harmonized measure based on the insights of both of their sepsis metric development teams. Harmonizing sepsis criteria across federal agencies will promote unity, increase credibility and efficiency, and facilitate shared prevention initiatives.

#### **CONCLUSION**

CMS has brought welcome attention to sepsis but SEP-1 itself has not catalyzed better clinical outcomes. We suggest retiring SEP-1 rather than using it in a payment model and support shifting to CMS's planned eCQM sepsis mortality measure. We further advocate removing SIRS criteria and diagnosis codes for infection from the eCQM and harmonizing it with

CDC's ASE definition. These steps will result in a more robust measure that all stakeholders can embrace and bring us closer to our shared goal of improving outcomes for all patients.

## Notes

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Maryland  
Hospital Association

November 16, 2023

Alyson Schuster, Ph.D.  
Deputy Director, Quality Methodologies  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Dr. Schuster:

We appreciate the opportunity to comment on the Health Services Cost Review Commission's (HSCRC) *Draft Recommendations for the Quality-Based Reimbursement (QBR) Program for Rate Year (RY) 2026*. We appreciate the opportunity to collaborate with staff and others around the state to shape the policy in the best interest of high-quality care for all Marylanders.

We have significant concerns with several of the staff recommendations and outline those below. Additionally, while we understand staff's commitment to following a strict process for transparent public discussion and a comment period, we believe the expansive nature of the policy recommendations and the proposed inclusion of a new and untested measure raises concern for the risk of unintended consequences and a lack of time to diligently process the proposals.

## **PERSON AND COMMUNITY ENGAGEMENT (PCE) DOMAIN**

### **Domain Weighting**

We oppose the increased weighting of the PCE domain from 50% to 60% to accommodate new measures. Without guiding principles for improvement, increased weighting in the PCE domain furthers the long-standing view that the QBR program has become increasingly punitive. Additionally, increasing the number of measures in the domain dilutes the value of each measure and hospitals' ability to narrow focus on quality improvement. We recommend removing existing measures if new measures must be added. We currently have not identified specific measures for removal, as we have not had the time to process this with members. Similarly, we oppose reducing the weight of four linear Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS) measures from 20% to 10% to accommodate new measures. Linear measures were included to bolster top-box HCAHPS improvement. The proposal to halve the weight will reduce the value of this approach. We agree with staff that further assessment is needed over the next one-to-two years to determine whether the linear measures help improve top-box scores.



### **Timely Follow-Up Disparity Gap**

We support the inclusion of the Timely Follow-Up for Medicare Disparity Gap measure. Ensuring that we meet our Statewide Integrated Health Improvement Strategy goals and targets is critical for the success of our Model and meeting the Centers for Medicare and Medicaid Services' (CMS) expectations. However, we strongly urge this measure to be initially implemented as a reward-only policy. This would offer an opportunity to evaluate the metrics and incentives and make any policy revisions or enhancements. Like the readmissions disparity component—also reward-only and created using the patient adversity index—we anticipate a reward-only approach will successfully drive desired results.

### **Emergency Department Length of Stay**

We support the inclusion of an emergency department (ED) wait time measure in QBR as a reward-only policy. We recognize the necessity of addressing the issue of ED wait times and hospital throughput, which is why we are currently engaged in several comprehensive statewide efforts to address this issue systemically. We expect these efforts will offer insights into longer-term solutions, which may or may not relate to a payment policy measure in QBR. Staff has indicated that more time is needed to develop specific measure options to include in a payment policy, thus we strongly oppose hospitals being at risk for financial penalties related to untested and currently undeveloped approaches. Further, a reward-only policy allows hospitals who have made investments in ED LOS improvement to be recognized if those investments have begun to drive improvement. Conversely, hospitals that are still developing successful approaches for addressing ED LOS and hospital throughput issues, should not be subject to financial penalties as this severely compromises the resources necessary to invest in these and other critical improvement efforts. Typically, the HSCRC has agreed to monitor measures for up to a year prior to implementation in a payment policy, allowing time for evaluation, refinements, and analysis. Additionally, we recommend staff adopt the OP-18 measure, as it is a validated CMS measure, and there is national data available for benchmarking. Staff acknowledged a preference for the ED-1 EDDIE measure. However, the concern with this measure is that the data is unaudited and is significantly more challenging to improve year-over-year. Assuming the measure selected for the RY26 policy would be supplanted by the ED-2 electronic clinical quality measure in the future, measures that OP-18, should be considered for this “interim” period.

### **SAFETY DOMAIN**

MHA opposes the recommendation to reduce the overall domain weight from 35% to 25%. We suggest maintaining the current weighting to avoid jeopardizing hospitals' performance given that Maryland's trajectory is improving relative to the nation. Furthermore, reduced weighting does not correspondingly reduce hospitals' burden of focusing on an increased number of measures.

## CLINICAL CARE DOMAIN

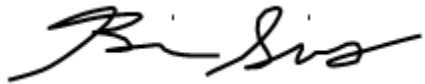
We support the recommendation to add the all-payer, all-cause 30-Day Mortality measure and split the domain weight between the inpatient and 30-day measure. Phasing in the measure is reasonable, and as a guiding principle of the HSCRC Hospital Quality Program, aligning with CMS' Value-Based Purchasing Program where feasible is appropriate.

## RY2024 CUT POINT

We appreciate HSCRC staff's plans to retrospectively adjust the RY 2024 QBR reward/penalty threshold, or cut-point, to reflect national performance, which has significantly declined since the original cut-point (41%) was created. We recommend staff consider a cut point that uses a multi-year average that weights the most recent national performance (23%) higher than federal fiscal year 2021 performance (35%), as this is a more appropriate comparison for Maryland hospital performance for the RY24 performance period. Using a geometric mean, we suggest a cut point for RY24 of 28%.

We look forward to continuing to work with the Commission on this and future policies.

Sincerely,



Brian Sims  
Vice President, Quality & Equity

cc: Joshua Sharfstein, M.D., Chairman  
Joseph Antos, Ph.D., Vice Chairman  
James N. Elliott, M.D.  
Ricardo. R. Johnson

Maulik Joshi, DrPH  
Adam Kane, Esq.  
Nikki McCann, JD  
Jonathan Kromm, Ph.D., Executive Director

**Draft Recommendations for Establishing  
the Emergency Department Potentially Avoidable  
Utilization Program for  
Rate Year 2026**

November 29, 2023

Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215  
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This document contains the draft staff recommendations for establishing a pay-for-performance incentive for the Emergency Department Potentially Avoidable Utilization Measure for RY 2026. Comments on the draft policy may be submitted by email to [hsrc.quality@maryland.gov](mailto:hsrc.quality@maryland.gov) and are due by 5:00 pm, December 20, 2023.

## EXECUTIVE SUMMARY

This document puts forth a draft recommendation for a new Emergency Department Potentially Avoidable Utilization policy, focused on providing all-payer incentives for hospitals to develop alternative care pathways for the most frequent emergency department (ED) visitors.

### Draft Recommendations for Rate Year 2026 Emergency Department Potentially Avoidable Utilization Program

1. Implement a Rate Year 2026 pay-for-performance policy incentivizing reduction in ED visits by multi-visit patients (MVPs) on a reward-only and improvement-only basis
2. Set Calendar Year 2023 as the base year.
3. Establish the threshold for performance reward at 5% improvement.
4. Reward hospitals for improvement as follows:
  - a. Calendar Year 2024 improvement of 5-20%: 0.125% of total revenue
  - b. Calendar Year 2024 improvement of >20%: 0.25% of total revenue
5. Develop reporting to assess health disparities

## INTRODUCTION

In Calendar Year 2021, the Commission asked staff to begin development of a policy providing hospital payment incentives for reduction of avoidable ED utilization. The rationale for addressing ED utilization includes concerns about cost, volume, and impact on emergency department patient experience. Nationally, avoidable ED visits are estimated to account for 19.6% of ED encounters and \$64.4 billion in costs.<sup>1</sup> ED volume is also recognized as a driver of extended ED length of stay,<sup>2</sup> which is an important consideration given that Maryland hospitals have some of the longest ED length of stay averages in the nation.

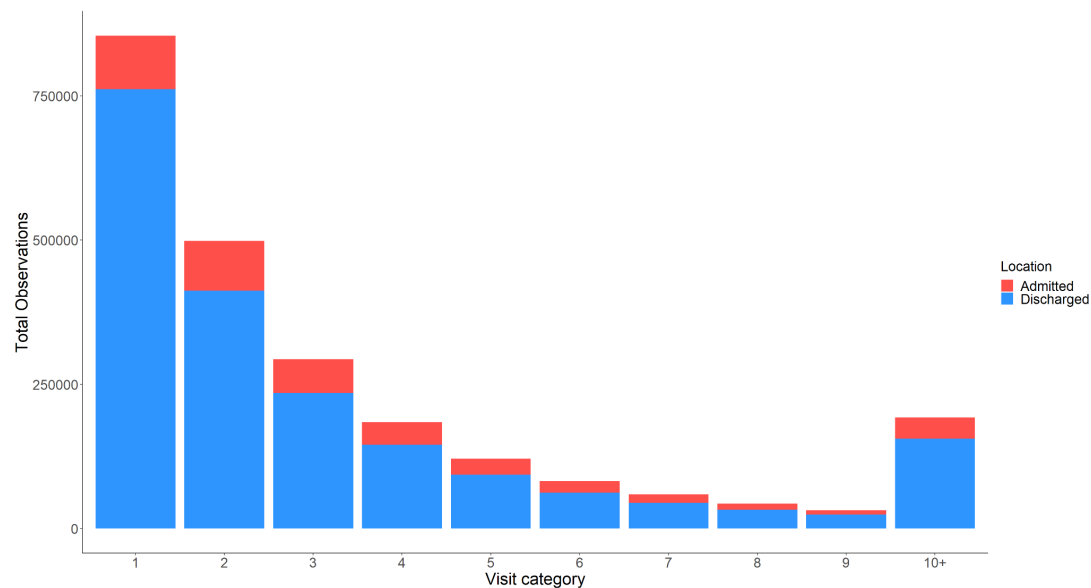
In Calendar Year 2022, staff convened a work group composed of emergency medicine clinicians, hospital representatives and other stakeholders to consider policy options. The group considered a wide variety of policies before concluding that focusing on multi-visit patients would provide hospitals with a well-defined patient population that, due to their frequent presence in the hospital, could be readily targeted with programs offering more effective alternatives to ED care. Participants also took note of several studies detailing successful interventions on multi-visit patients.<sup>3-5</sup>

## BACKGROUND

To understand the visit volume and cost related to MVPs, staff analyzed inpatient and outpatient casemix data across several years. MVPs were defined as those patients with four or more ED visits in a calendar year. This definition, which has been used commonly in the health services research literature, includes both visits that result in an inpatient admission and those that result in a discharge from the ED.

The analysis found that in 2019 MVPs accounted for 30% of all ED visits, and 32% of ED charges. MVP utilization in 2019 totaled \$326 million. The majority of MVP visits resulted in discharge from the ED, which is consistent with the pattern seen in visits by patients who are not MVPs.

**Figure 1: ED visit volume by count of visits by patient in CY 2019**

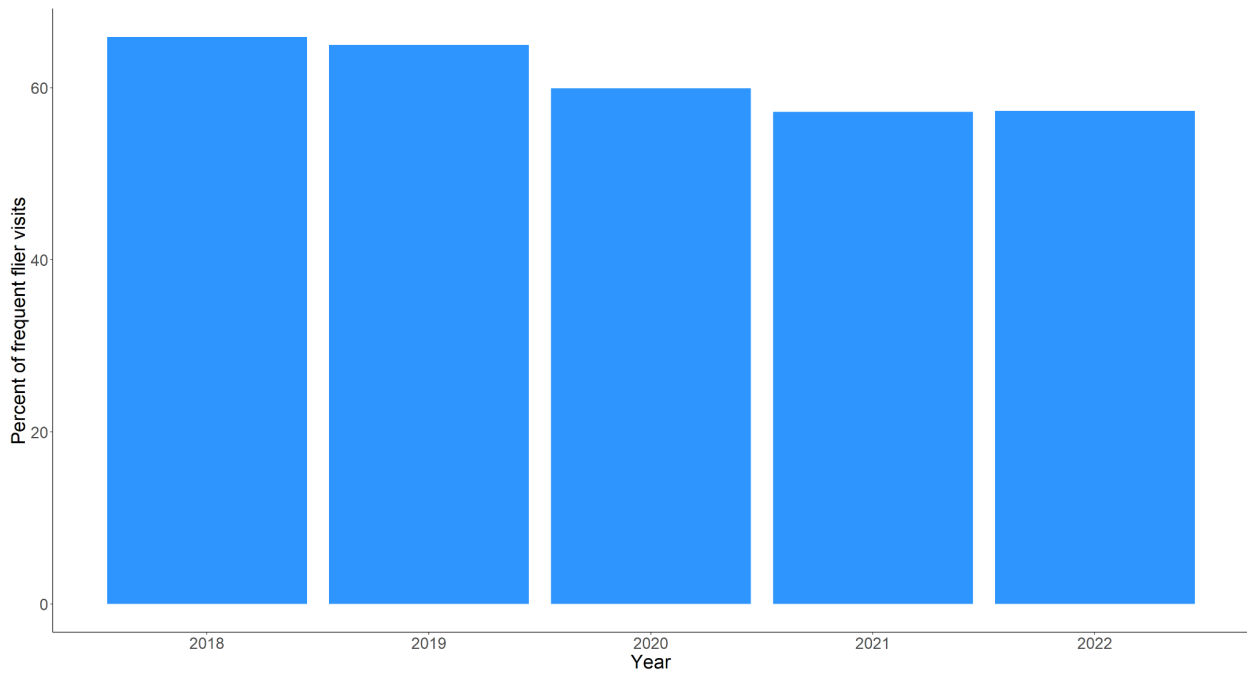


The analysis found that more than 45% of MVPs in 2019 received all of their ED care from a single hospital. The vast majority of MVPs visited one or two hospitals during the year for all of their ED care. When those visits involved multiple hospitals, those hospitals tended to be within the same healthcare system.

Additionally, the analysis found that 67% of MVP visits involved patients with at least one behavioral diagnosis. Behavioral issues also represented the leading principal diagnosis. Other

common principal diagnoses include low-acuity conditions such as back pain, sprains and strains, and other minor injuries. This point is further illustrated by a staff analysis of outpatient MVP visits that found most were assigned triage values indicating lower acuity conditions (Figure 2).

**Figure 2: Outpatient ED visit volume with lower acuity (ESI 3,4,5) triage status by year**



Finally, the analysis indicated that there is minimal overlap between visits addressed by the current Potentially Avoidable Utilization (PAU) program and the proposed Emergency Department Potentially Avoidable Utilization (ED-PAU) program, both of which include in part and whole, respectively, Prevention Quality Indicators (PQI) that are administered by the Agency for Healthcare Research and Quality (AHRQ). The PAU incentive applies to inpatient stays, and thus excludes roughly four out of five ED visits, because those patients are discharged from the ED without admission. Of the MVPs admitted to the hospital, slightly more than a third meet the PQI specifications in the PAU program. Thus, the Commission can be confident that addressing MVPs will not create incentives that duplicate or compete with those in the existing PAU program.

## MEASUREMENT

The goal of the MVP policy is to reduce avoidable ED volume by encouraging hospitals to provide MVPs with more appropriate care pathways, including those focused on behavioral health, end of life care and social needs.

The measurement approach used by the monitoring program used the following definitions.

- **Denominator:** ED claims at a given hospital with a discharge date occurring during the measurement period.
- **Numerator:** Claims in the denominator associated with a patient who has four or more such claims, at any hospital, in the measurement period.

Staff considered an alternate measure definition that would focus on the number of MVPs, rather than the number of visits by MVPs, at a given hospital. However, this would incentivize programs that focus on moving patients across the threshold from four visits to three, leaving significant unmet need among the patients with the highest number of visits. Structuring the policy to focus on visits, rather than patients, encourages hospitals to build programs that target all patients in the MVP population.

Staff also considered whether the MVP criteria should include only visits at the hospital under measurement, or visits across all hospitals. Some hospitals indicated that it would be challenging to identify MVPs other than those who exclusively visit their facility. However, analysis completed by staff suggest that MVPs who visit more than one hospital typically visit other hospitals in the same healthcare system. Thus, system-wide EHR systems can identify patients who are at risk of being included in the MVP measure and flag them for intervention even when they visit multiple hospitals. Leveraging CRISP data can identify such patients when some visits occur outside a given healthcare system. Given these data-sharing features, structuring the policy to focus only on MVPs within a single hospital would needlessly limit the impact of the incentive.

## PAYMENT DETAILS

Because the MVP program represents quality measurement in a new domain, and because constraining ED utilization poses the risk of unintended consequences, staff proposes beginning the program with an improvement-only, reward-only payment approach. This will allow staff to

monitor the program for unintended consequences, evaluate improvement under the initial payment structure in conjunction with assessment of other ED programs, and propose changes as necessary at the end of CY 2024.

Staff also considered the relationship between ED-PAU and the Marketshift and Efficiency policies. Performance under the current PAU program is intentionally excluded from the Marketshift methodology in order to ensure that the incentives do not work at cross purposes. If PAU volume was included in Marketshift, hospitals could potentially see funding shifted to another hospital if PAU increased at that facility but decreased at their own, thus offsetting any reward under the MVP program. To avoid this dynamic, staff recommend carving out of the Marketshift methodology ED services associated with MVPs.

The Efficiency policy has a variety of interactions with the existing PAU methodology. Staff will further explore how to incorporate ED PAU into Efficiency in future workgroup discussions.

## **FUTURE UPDATES**

Staff will produce monitoring reports stratifying MVP status and performance at the hospital level by race, payer, gender, Area Deprivation Index, and age group in an effort to prevent the MVP program from furthering existing healthcare disparities.

## **Draft Recommendations for Rate Year 2025 Emergency Department Potentially Avoidable Utilization Program**

1. Implement a Rate Year 2026 pay-for-performance policy incentivizing reduction in MVP visits on a reward-only and improvement-only basis
2. Set Calendar Year 2023 as the base year.
3. Establish the threshold for performance reward at 5% improvement.
4. Reward hospitals for improvement as follows:
  - a. Calendar Year 2024 improvement of 5-20%: 0.125% of total revenue
  - b. Calendar Year 2024 improvement of >20%: 0.25% of total revenue
5. Develop reporting to assess health disparities



## Appendix I: References

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maryland  
**health services**  
cost review commission

# Medicare Performance Adjustment Calendar Year 2024

## Draft Recommendation

December 2023

This document contains the staff draft recommendations for the Medicare Performance Adjustment for Calendar Year 2024. Comment letters on this draft recommendation are due by COB Wednesday, December 27, 2023, and may be submitted to [lynne.diven@maryland.gov](mailto:lynne.diven@maryland.gov).

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## Recommendations For CY 2024 MPA Policy

Staff recommend the following incremental revisions to the Medicare Performance Adjustment (MPA) policy for calendar year 2024 (CY2024) to align with State and federal policy directives:

1. Increase the maximum at risk under the traditional MPA to 2%
2. Implement the population health quality measure adopted by the Commission into the MPA quality score as outlined in last year’s final MPA recommendation.
3. Institute a “CTI Buy-out” that allows hospitals to eliminate the downside risk on the traditional MPA, effective with the second program year (Fiscal Year 2023) based on the ratio of the unique beneficiaries covered by their CTIs to the beneficiaries attributed to the hospital under the Traditional MPA.

In 2021, Staff completed a major policy review of the MPA. As a result of the review, the Commission revised the attribution algorithm and the methodology for calculating the rewards / penalties under the MPA. During the review, stakeholders emphasized that the MPA policy had changed numerous times and stressed the need for consistency in the future. Correspondingly, Staff recommend keeping the majority of the MPA unchanged. However, Staff are recommending the limited changes described above to keep the MPA aligned with other State and federal policymaking. The following discussion provides rationale and detail on each of these recommendations.

In addition, Staff recommend the following revision to the Medicare Performance Adjustment Framework (MPA Framework) approved by the Commission in October 2019:

1. Cap the downside risk of a hospital under the CTI program to 2.5% of total Medicare Payments and redistribute additional risk across all hospitals to maintain the overall savings neutrality in the program.

The following discussion provides rationale for this recommendation.

## Policy Overview

| Policy Objective                                                                                     | Policy Solution                                                                          | Effect on Hospitals                                                                                                | Effect on Payers/Consumers                                                                             | Effect on Health Equity                                                                   |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| The Total Cost of Care (TCOC) Model Agreement requires the State of Maryland to implement a Medicare | This MPA recommendation fulfills the requirements to determine an MPA policy for CY 2024 | The MPA policy serves to hold hospitals accountable for Medicare total cost of care performance. As such, hospital | This policy does not affect the rates paid by payers. The MPA policy incentivizes the hospital to make | This policy holds hospitals accountable for cost and quality of Medicare beneficiaries in |

|                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                        |                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Performance Adjustment (MPA) for Maryland hospitals each year. The State is required to (1) Attribute 95 percent of all Maryland Medicare beneficiaries to some Maryland hospital; (2) Compare the TCOC of attributed Medicare beneficiaries to some benchmark; and (3) Determine a payment adjustment based on the difference between the hospitals actual attributed TCOC and the benchmark.</p> | <p>and makes incremental improvements to the current policy and to the related MPA Framework.</p> | <p>Medicare payments are adjusted according to their performance on total cost of care. Improving the policy improves the alignment between hospital efforts and financial rewards. These adjustments are a discount on the amount paid by CMS and not on the amount charged by the hospital. In other words, this policy does not change the GBR or any other rate-setting policy that the HSCRC employs and – uniquely – is applied only on a Medicare basis.</p> | <p>investments that improve health outcomes for Marylanders in their service area.</p> | <p>the hospital's service area. Focusing resources to improve total cost of care provides the opportunity to focus the hospital on addressing community health needs, which can lower total cost of care.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Introduction to MPA Policies

The Medicare Performance Adjustment (MPA) is a required element for the Total Cost of Care Model and is designed to increase the hospital's individual accountability for total cost of care (TCOC) in Maryland. Under the Model, hospitals bear substantial TCOC risk in the aggregate. However, for the most part, the TCOC is managed on a statewide basis by the HSCRC through its GBR policies. The MPA was intended to increase a hospital's individual accountability for the TCOC of Marylanders in their service area.

The MPA includes three “components”: (a) a Traditional Component, which holds hospitals accountable for the Medicare total cost of care (TCOC) of an attributed patient population, (b) a Reconciliation Component, which rewards hospitals for the care redesign interventions and (c) a Savings Component that allows the Commission to adjust hospital rates to achieve the Medicare Total Cost of Care Model (the Model) savings targets.

The Traditional Component is governed via annual updates to the MPA policy adopted by the Commission. This document represents the update for Calendar Year 2024 (also known as MPA Year 6). The Efficiency and Savings Component are governed via the MPA Framework. The recommendation to cap CTI risk at 2.5% is a change to the Reconciliation Component and is the first change in the MPA Framework related to the Reconciliation Component since it was adopted. This policy does not relate to the Savings Component. These three components are added together and applied to the amount that Medicare pays each respective hospital. The MPA is applied as a discount to inflator to the amount that Medicare pays on each claim submitted by the hospital.

## Recommendations Related to the MPA Traditional Component

### Recap of Current Program

The following recaps the traditional MPA as it was implemented for Calendar Year 2023, it is included as a reference. The approaches described were adopted incrementally in the Calendar Year 2021, 2022 and 2023 MPA policies, and those policies remain in effect except where changes are specifically denoted in the next section.

The first step in the process is to attribute beneficiaries to hospitals. The Model requires 95% of beneficiaries be attributed to hospitals under the MPA. The current attribution is as follows:

1. Hospitals, except Academic Medical Centers (AMCs) are attributed the costs and beneficiaries in zip codes that comprise 60% of their volume. AMCs are assigned all zip codes for Baltimore City for their geographic attribution. Beneficiaries in zip codes claimed by more than one hospital are allocated according to the hospital's share of equivalent case-mix adjusted discharges (ECMADs) for inpatient and outpatient discharges among hospitals claiming that zip code. ECMADs are calculated from Medicare FFS claims for Calendar Year 2019. ECMADs are also used in calculating the volumes in the 60% test.
2. Zip codes not assigned to any hospital under step 1 are assigned to the hospital with the plurality of Medicare FFS ECMADs in that zip code, if it does not exceed a 30-minute drive-time from the hospital's PSA.
3. Zip codes still unassigned will be attributed to the nearest hospital based on drive-time.
4. A second layer is added for AMCs. AMCs are also attributed where beneficiaries with a CMI of greater than 1.5 and who receive services from the AMC are attributed to the AMC as well as to the hospital under the standard attribution. The AMC outcome becomes a blend of this approach and the standard geographic approach.

The MPA then penalizes or rewards hospitals based on their attributed TCOC. Hospitals are rewarded if the TCOC growth of their attributed population is less than national growth. Beginning in 2021, the HSCRC scaled the growth rate target for hospitals based on how expensive that hospital's service area is during the baseline period relative to other geographic areas elsewhere in the nation. This policy is intended to ensure that hospitals which are expensive relative to their peers bear the burden of meeting the Medicare savings targets, while hospitals that are already efficient relative to their peers bear proportionally less of the burden. The TCOC growth rate adjustments are shown in Table 1 below.

*Table 1: Scaled Growth Rate Adjustment*

| Hospital Performance vs. Benchmark                            | TCOC Growth Rate Adjustment |
|---------------------------------------------------------------|-----------------------------|
| 1 <sup>st</sup> Quintile (-15% to + 1% Relative to Benchmark) | 0.00%                       |
| 2 <sup>nd</sup> Quintile (+1% to +10% Relative to Benchmark)  | -0.25%                      |
| 3 <sup>rd</sup> Quintile (+10% to +15% Relative to Benchmark) | -0.50%                      |
| 4 <sup>th</sup> Quintile (+15% to +21% Relative to Benchmark) | -0.75%                      |
| 5 <sup>th</sup> Quintile (+21% to +28% Relative to Benchmark) | -1.00%                      |

Historically, hospitals were required to beat the national TCOC growth rate each year. But in 2021, the HSCRC changed the way that the TCOC is calculated for hospitals. The HSCRC will trend the hospital's baseline TCOC forward based on the national growth rate and the TCOC adjustment factors. This was intended to create more predictability for hospitals. A hospital can now predict what their target will be two or three years out. An example of the methodology to calculate the TCOC targets is shown in Table 2 below. This example covers 2019 to 2021, for each additional year another year of trend similar to item C in Table 2 is added. Each additional year is also adjusted for the Growth Adjustment Factor (item D in Table 2).

*Table 2: Calculation of the MPA Targets*

| Variable                      | Source                                                       |
|-------------------------------|--------------------------------------------------------------|
| A = 2019 TCOC                 | Calculation from attributed beneficiaries                    |
| B = 2020 National TCOC Growth | Input from national data                                     |
| C = 2021 National TCOC Growth | Input from national data (assumed to be 3% in example below) |

| D = Growth Rate Adjustment Factor  | From Growth Rate Table (applies to 2021 and all subsequent years) |                         |           |                 |                 |
|------------------------------------|-------------------------------------------------------------------|-------------------------|-----------|-----------------|-----------------|
| E = MPA TCOC Target                | $A \times (1 + B) \times (1 + C - D) = E$                         |                         |           |                 |                 |
| Example Calculation of MPA Targets |                                                                   |                         |           |                 |                 |
| Hospital                           | Quintile                                                          | Target Growth Rate      | 2019 TCOC | 2020 MPA Target | 2021 MPA Target |
| Hospital A                         | 1                                                                 | $3\% - 0.00\% = 3.00\%$ | \$11,650  | \$12,000        | \$12,359        |
| Hospital B                         | 2                                                                 | $3\% - 0.25\% = 2.75\%$ | \$11,193  | \$11,529        | \$11,846        |
| Hospital C                         | 3                                                                 | $3\% - 0.50\% = 2.50\%$ | \$11,169  | \$11,504        | \$11,792        |
| Hospital D                         | 4                                                                 | $3\% - 0.75\% = 2.25\%$ | \$11,204  | \$11,540        | \$11,800        |
| Hospital E                         | 5                                                                 | $3\% - 1.00\% = 2.00\%$ | \$10,750  | \$11,073        | \$11,294        |

The hospital is rewarded or penalized based on how their actual TCOC compares with their TCOC target. Through last year the rewards and penalties were scaled such that the maximum reward or penalty was 1% which will be achieved at a 3% performance level (the recommendation advanced later in this proposal is to increase this to 2% and 6%). Essentially, each percentage point by which the hospital exceeds its TCOC benchmark results in a reward or penalty equal to one-third of the percentage. An example of the hospital's rewards/penalties is shown in the table below.

*Table 3: Example of MPA Reward & Penalty Calculations (excluding quality adjustments)*

| Variable                             | Input                              |
|--------------------------------------|------------------------------------|
| E = MPA Target                       | See previous section               |
| F = 2021 MPA Performance             | Calculation                        |
| G = Percent Difference from Target   | $(E - F) / E$                      |
| H = MPA Reward or Penalty            | $(G / 3\%) \times 1\%$             |
| I = Revenue at Risk Cap              | Greater / lesser of H and + / - 1% |
| Example MPA Performance Calculations |                                    |



| Hospital   | MPA Target | MPA Performance | % Difference | Reward (Penalty) |
|------------|------------|-----------------|--------------|------------------|
| Hospital A | \$12,359   | \$12,235        | -1.00%       | 0.30%            |
| Hospital B | \$11,846   | \$11,941        | 0.80%        | -0.30%           |
| Hospital C | \$11,792   | \$11,556        | -2.00%       | 0.70%            |
| Hospital D | \$11,800   | \$12,154        | 3.00%        | -1.00%           |
| Hospital E | \$11,294   | \$11,859        | 5.00%        | -1.00%           |

In addition, the agreement with CMS requires that a quality adjustment be applied that reflects hospital quality outcomes, this is in addition to the revenue-at-risk for Total Cost of Care. These quality adjustments are derived from those in the Commission’s all-payor Readmission Reductions Incentive Program (RRIP) and Maryland Hospital Acquired Conditions (MHAC) program. Revisions to the quality adjustment for CY2024 are outlined below.

## Recommended Revisions to the traditional MPA

### Increase Maximum Revenue-at-Risk

Staff recommends increasing the amount of revenue-at-risk for Total Cost of Care performance under the Traditional MPA to  $\pm 2\%$ . Increasing the revenue at risk under the MPA has been a stated goal of the Center for Medicare and Medicaid Services (CMS) for the last two years. In their approval of the current year MPA dated January 18, 2023, CMS noted “As stated in the MPA PY 2022 CMS response letter issued October 10, 2021, CMS expects the State to increase the revenue-at-risk ( $\pm 1\%$ ) under the traditional MPA in 2024”.

The increase to 2% is consistent with this directive from CMS to increase the revenue-at-risk. Staff are recommending setting the new level at  $\pm 2\%$  based on further input from CMS and discussions with stakeholders about the reasonable level of increase. The translation between actual results and the revenue-at-risk would not be changed from the current 3:1 ratio. Therefore, the revenue-at-risk would be reached at  $\pm 6\%$ .

### Add Population Health Measure

In last year’s final recommendation, the Commission approved adding a population health metric to the quality adjustment included in the Traditional MPA once a measure had been identified. This expected addition was also noted by CMS in their January 18, 2023, approval letter. The Commission is now considering a population health measure, Staff recommend including that measure, once finalized, in the

Calendar Year 2024 MPA adjustment according to the formula approved last year (adjusted for 2% revenue-at-risk):

*TCOC results x 1/3 (capped at 2% of Medicare revenue) x (1 + 2 x (RRIP + MHAC Reward/Penalty + Population Health Quality Measure) where the Population Health Quality Measure is scaled to generate a result of ±4%.*

This formula will result in total revenue-at-risk of ±2.32% of Medicare payments.

## **Institute a “CTI Buy-out” of the Traditional MPA**

### Background

The traditional MPA is intended to hold hospitals accountable for managing Total Cost of Care in their community. The geographic attribution currently used was the result of multiple years of experimentation. Previously the attribution relied on relationships between hospitals, primary care physicians and beneficiaries. This approach was abandoned for 3 reasons:

1. Physician movement and beneficiary movement among physicians resulted in unstable results where a hospital's outcome could reflect their physician panel changes more than their care management results.
2. Reliance on hospital-designed physician networks allowed hospitals to concentrate their management in the communities they chose to enter which may not be reflective of their local community.
3. The mechanical process of completing the attribution was complex and required extensive data collection, reconciliation and mapping efforts to capture physician networks.

Geographic attribution was implemented when the State moved away from primary-care physician attribution because it addresses all three of these issues. However, it does not address the original intent of the primary care physician-based attribution, which was extending the focus to beneficiaries with whom the hospital has a clinical relationship beyond the hospital.

In the MPA Recommendation for Calendar Year 2021 Staff noted that the geographic attribution increased the percentage of beneficiaries who received a service from their attributed hospital from 12.8% to 14.2%. But this statistic does not capture hospital those activities beyond hospital care. That hospitals will develop clinical relationships beyond the hospital is a fundamental aspiration of the TCOC Model. The primary-care based attribution attempted to address this aspiration by incorporating non-hospital providers, but it created the other issues noted above.

Staff believe the lesson of the MPA attribution methods to date is that all MPA attributions, whether geographic or otherwise suffer from two fundamental limitations: 1) the MPA attribution is required to

attribute 95 percent of all Maryland beneficiaries to some hospital and therefore each hospital will receive a significant number of non-clinically attributed beneficiaries; and 2) the MPA is a one-size fits all attribution that does not allow for the specifics of individual hospital's clinical service or population health strategies.

#### Recommendation

In addition to be a requirement of the TCOC Model contract Staff believes that the traditional MPA continues to play an important role in anchoring a hospital's focus in their local community. However, Staff believe that CTIs are a vital enhancement to the traditional MPA that addresses the gaps in the MPA by allowing a hospital to design and be rewarded for initiatives that focus on populations targeted by the hospital based on customized algorithms that are specific to the hospital's clinical programs and designed to capture beneficiaries with significant cost of care risk. This program addresses both the weaknesses identified above in the MPA.

Therefore, Staff are proposing that hospitals be allowed to eliminate the downside risk on the traditional MPA based on the ratio of the unique beneficiaries covered by their CTIs to the beneficiaries attributed to the hospital under the Traditional MPA. For example, a hospital with 10,000 attributed beneficiaries in the traditional MPA that also established CTIs that cover 5,000 unique beneficiaries would have any MPA penalty reduced by 50% (5,000/10,000). There would be no impact on upside rewards from MPA.

Staff believe this is an appropriate accommodation because:

1. Year 1 of the CTI program resulted in substantial financial incentives with \$130 million of savings and \$56 Million reallocated among hospitals. While this was revenue neutral to the system as a whole, each individual hospital faced significant financial risk.
2. A hospital may not be able to directly reach all their geographically attributed beneficiaries and therefore allowing them to partially "substitute" beneficiaries they can reach is appropriate. HSCRC believe that the best incentives are the ones where hospitals are accountable for populations they can directly impact.
3. MPA outcomes are a result of all factors driving care costs in the community some of which are unrelated to the activities of the hospitals, CTIs which are more targeted, are more likely to reflect specific actions of the hospitals.
4. Hospitals bear up to 2.5% downside risk (assuming the policy change on CTI risk discussed below is adopted) under the CTI program so they retain considerable risk within CTIs although their MPA risk is diluted.
5. Maximum downside risk under CTIs and MPA combined would still be 2.5% - well above historic MPA levels of 1%
6. Hospitals retain significant risk under other elements of the TCOC Model including Global Budgets and the total cost of care components of the HSCRC's efficiency policy.

Staff note that in discussions with industry the addition of the CTI Buy-out was a considerable positive when considering the additional risk of increasing the traditional MPA to 2% and Staff believe it is a greater benefit to the model to maintain provider alignment with the actionable incentives of the CTI program than it is to maximize downside risk under the traditional MPA.

A similar CTI Buy-out was rejected by CMS in prior periods. The following section discusses why Staff believe a different decision may be merited this time. However, if the Commission approves this recommendation, but CMS does not approve the proposed CTI Buy-out it is Staff's intent to implement all other aspects of this recommendation as written.

#### CMS Considerations

After allowing the CTI Buy-out for a time-limited window in 2022, in their October 20, 2021, memo regarding the Calendar Year 2022 MPA recommendation CMS noted that:

*“CMS fully supports the implementation of geographic attribution as proposed in the MPA PY 2022 policy and sees this as a critical factor for ensuring the future efficacy of both the traditional MPA and CTIs. Because attribution is now better aligned between CTIs and the traditional MPA, CMS believes it would be counter intuitive for the buyout to continue, and thus CMS formally rejects the State’s MPA PY 2022 proposal to continue the CTI buyout.”*

Staff believe alignment between the CTIs and traditional MPA is a reason for including the buy-out rather than eliminating it and therefore are including it in the current proposal. Staff believe CMS may reach a different conclusion in relation to the current recommendations because:

1. The CTI programs are now live and:
  - a. The actual practices implemented under CTIs reflect activities that leverage the touch points high total cost of care patients have with hospitals that are only weakly incented under geographical attribution, for example:
    - i. Real-time data sharing with skilled nursing facilities to prevent readmissions
    - ii. Warm hand offs with community partners after discharge for health-related social needs
    - iii. Referral to palliative care programs for end-of-life patients
  - b. Rewards and penalties under CTIs are now quantified and material. For the first completed CTI period (Fiscal Year 2022) the \$130 Million of scored savings resulted in \$56 Million being shifted from hospitals with negative results to those with positive results. In comparison total penalties of \$42 Million were levied under the Traditional MPA for Calendar Year 2022.

- c. Staff analyzed the representation of beneficiaries attributed under active CTIs compared to all Maryland Medicare Part A+B beneficiaries and found representation in CTIs was statistically similar to across multiple equity-related metrics including measures such as % Black or African American, % Dual Eligible and % Disabled (see Appendix A for details on this analysis). This is important as it shows that hospitals are not targeting CTIs to cherry-pick specific populations.
2. As described above, total cost of care risk across CTIs and traditional MPA would be 2.5% (~\$125 million statewide) with the maximum buy-out, well above historic levels. When adding the Commission's efficiency policy, which is 50% based on geographically determined total cost of care performance, *all-payer* total cost of care risk reaches 3.1% (~\$600 million statewide). Both these amounts assume a hospital pursues CTIs aggressively and is able to maximize the buy-out. For the period the CTI buy-out was implemented the largest buy-out applied was only 52%. Assuming a 50% buy-out the maximum risks are 3.5% (~\$175 million statewide) for Medicare and 3.4% all-payer (~\$650 million statewide). These amounts include only the total cost of care risk and do not reflect hospital risk under other policies such as global budgets and quality. See Appendix B for the calculation of the maximum risk amounts.

## Recommendations Related to the MPA Framework Reconciliation Component

### Recap of Current Program

In the MPA Framework recommendation Staff noted that under GBRs hospitals do not capture utilization savings that occur outside their GBR and therefore any successes they achieve help the State meet the TCOC Model savings target but do not help the hospitals. The Commission adopted the MPA Framework recommendation and implemented the CTI program as a response to this disconnect. The recommendation noted the following principles in order to strengthen hospital incentives:

- Hospitals should keep the savings from their CTIs up to 100% to the extent feasible.
- Incentives should be structured to reward participation in CTIs and penalize non-participation.
- New and Existing CTIs that transform care across the entire delivery system should be supported.

The Framework also included the use of the MPA-RC to pay incentives earned under CTIs and to offset those incentives by reducing Medicare Fee-for-service payments to all hospitals to create a net zero adjustment (the Offset). This approach was adopted as per the Staff's October 2019 Final MPA Framework Recommendation, "First, it mitigates the possibility that these care transformation payments will result in a net increase in the TCOC run rate. Second, when a hospital captures the savings from their CTIs, the

resulting increased costs will be spread as an offset across all hospitals resulting in non-participating hospitals being 4 penalized for their non-participation.”

The CTI program has just completed its second performance year (on June 30, 2023) and the third performance year is underway. Staff shared results from the first performance year with the Commission in October 2023. These results reflected significant participation with 107 total CTIs, \$130 Million of gross scored savings and revenue redistribution from unsuccessful to successful hospitals of \$56 Million. In Year 3 the number of CTIs increased to 249.

## **Recommended Revisions – Cap Hospital Downside Risk**

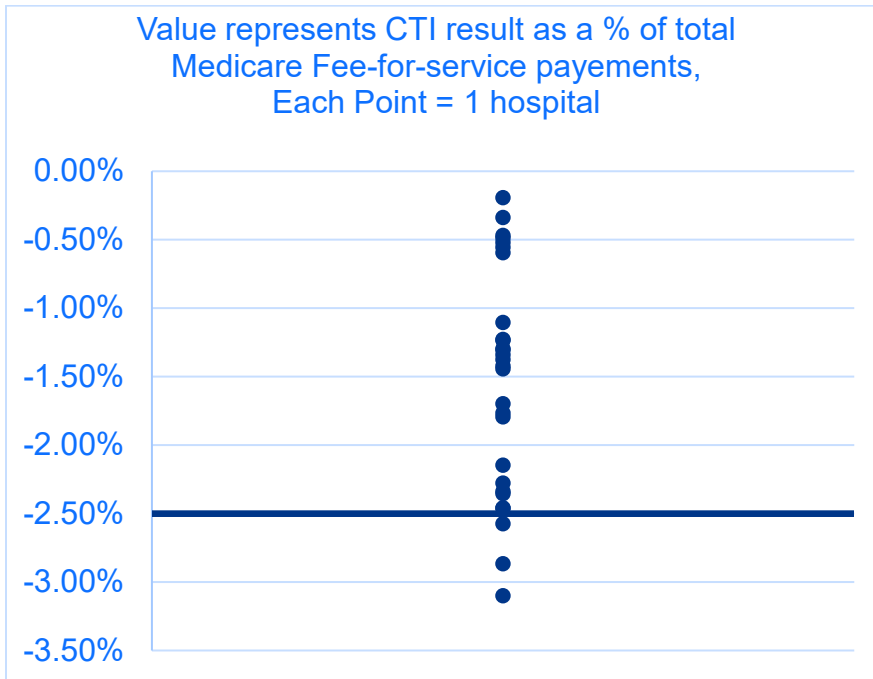
As discussed above one of the principles of CTIs was that “hospitals should keep the savings from their CTIs up to 100% to the extent feasible.” One result of that principle is that there can be no cap on downside risk to hospitals in the Offset or else hospitals would not be able to realize their full benefit and maintain overall neutrality. The implication of this approach is that hospitals have theoretically unlimited downside risk and the amount of actual risk is hard to quantify as it depends on the level of success achieved by other hospitals.

For these reasons hospitals have advocated for a cap on downside risk after implementation of the Offset. Staff have been concerned that such a cap would dilute the incentives for hospitals by allowing them to “choose” the downside cap rather than aggressively pursuing care transformation. This concern was particularly acute when there was no insight into the actual level of downside risk in the program.

Now that the first year of CTI performance results are available Staff believes setting a downside cap at the outer edge of actual experience to create greater predictability for hospitals is appropriate. Therefore, Staff recommends the Commission cap the downside risk of a hospital under the CTI program to 2.5% of total Medicare Payments, effective with the second program year (Fiscal Year 2023) and redistribute additional risk across all hospitals to maintain the overall savings neutrality in the program (note the redistribution would include the capped hospitals resulting in an effective cap slightly higher than 2.5%).

The recommendation of a cap equal to 2.5% is based on the actual results from the first year. These results are summarized in Exhibit 1. This level was selected to avoid creating immunity from harm for hospitals while still providing a level of protection that is relevant to the outcomes of the program.

## Exhibit 1: Distribution of Loss Values, First CTI Performance Year



## Discussions of Comments Received

### Background

As with all recommendations this draft recommendation was developed with substantial community input including ideas and commitments resulting from prior recommendations, a series of specific workgroups and ongoing dialog with stakeholders. However, a formal comment period and Staff discussion of those responses is usually held for the final recommendation. Staff departed from this practice for this draft recommendation because this recommendation will be the basis for requesting approval from CMS for the MPA Policy, as required under the TCOC Model Agreement. Should CMS not approve the approach outline herein those changes will be addressed in the Final Recommendation.

In addition to discussion during the workgroups, Staff held two more formal comment submission periods during the workgroup process, one prior to the October 25, 2024, Total Cost of Care Workgroup and a second prior to the submission of this recommendation. The next section recaps these comments along with staff response. Across the two rounds letters were received from MHA, the University of Maryland Medical System, Medstar Health, Johns Hopkins Health System and Adventist Health System in the first round.

## Recap of Comments

Major areas of focuses addressed by multiple stakeholders include:

**Support for the CTI Buy Out:** Industry stakeholders strongly supported the re-introduction of the CTI Buy Out.

**Support for capping downside risk on CTIs:** Industry stakeholders strongly supported a cap on downside risk on CTIs to create a level of predictability for hospitals. Staff changed the proposed cap from 3.0% to 2.5% based on this feedback.

**Concerns about overall level of total cost of care risk:** Stakeholders acknowledge the need to raise the revenue-at-risk under MPA to 2%. Industry raised concerns that under the combination of MPA, CTI and Commission Efficiency policy, hospitals have significant revenue at risk related to total cost of care. Staff included in this recommendation a quantification of that total risk exposure and plans to include a similar discussion in the MPA request to CMS. While most comments pertained to the level of risk being potentially too high, one commenter noted that the 3:1 translation of performance in the MPA (i.e. it takes a 6% win/miss to generate a 2% reward/penalty) dilutes the rewards for strong MPA performance and significantly and may be a disincentive to effective management. Staff believes the Commission should consider a change to this approach in the future.

**Population Health Measure:** There were significant concerns raised about the proposed diabetes-related quality measure to be used in the population health element of the MPA quality adjustment. This recommendation is silent on the specific measure to be used and Staff believe those concerns will be addressed in the relevant recommendation. Staff notes that the inclusion of a population health metric in the MPA has long been a request of CMS and that the Commission needs to identify a meaningful measure for inclusion within this recommendation.

**Other CTI Provisions:** Stakeholders identified a number of concerns related to specific technical elements of the CTI program and the need for continual education on these programs. Staff continually review the specifics of these programs. Staff working with CRISP have established a Learning Collaborative to provide information to hospitals and other stakeholders on these programs.

**Data Analytics:** One stakeholder identified areas where the Commission could strengthen analytics related to the various care transformation programs. Staff continually work with CRISP to enhance reporting under these programs.

**Benchmarking:** One stakeholder suggested the Commission should revisit the benchmarks used to set the MPA targets as performance may have changed since the base year of 2019. Staff are currently planning to refresh the total cost of care benchmarks starting in the summer of 2024 for 2025 implementation.



**Continued interest in revising the beneficiary algorithm used in the MPA:** Industry commentator acknowledge the challenges with the old primary care-based attribution in the MPA but also continued to raise concerns that the current geographic-based attribution does not properly incent care transformation. Staff believe the combination of the geographic MPA and the hospital-targeted CTI policy is the best available alternative given current constraints and does not believe revisiting this issue is merited in the short-term.

**Impact of CTI offset on Academic Institutions:** One commenter noted that *“The linkage of these policies [CTI-related policies] to Medicare revenue disproportionately impacts the state’s academic medical centers (AMCs) compared to others in the state, because AMCs receive patients from across the state and country due to the regional and national programs they support. This provides less opportunity to engage in and impact longitudinal care or outcomes for some patients who reside outside of the immediate area of the hospital.”* Staff understands the concern that the opportunity for AMCs under CTI may be less than their relative revenue under the policy as the offsetting revenue to CTI savings is distributed based on fee-for-service Medicare revenue. However, Staff does not believe a policy change is merited absent quantification of the relative lack of opportunity and an alternative method of distributing the offset that was fair to all parties.

## Appendix A: CTI Representation Analysis

Exhibit A1 compares the representations of certain populations in implemented CTIs (“Attributed” column) to their representation were the same set of CTI definitions implemented Statewide for all Medicare Fee-for-service beneficiaries (“Unattributed” column). The results are not consistent with systematic underrepresentation among the underserved populations that we analyzed. There is a slight underrepresentation in implemented CTIs in rural areas and a slight over-representation in Health Professional Shortage areas (see note 2). Both of these are populations with relatively small representation in total and therefore it only takes 1 or 2 CTIs to create this phenomenon. Staff will work with rural hospitals during the next enrollment period to determine if there are any systematic barriers.

**Table A1: Representativeness of Attributed CTI Episodes Relative to Unattributed CTI Episodes**

| Population                                                                  | All Potential CTI Episodes |              |         |
|-----------------------------------------------------------------------------|----------------------------|--------------|---------|
|                                                                             | Attributed                 | Unattributed | MSD (1) |
| <b>N</b>                                                                    | 345,357                    | 16,374,896   | -       |
| <b>Black or African American</b>                                            | 26.4%                      | 26.5%        | -0.001  |
| <b>Hispanic</b>                                                             | 1.3%                       | 1.3%         | -0.001  |
| <b>Asian/Pacific Islander, American Indian/Alaska Native, Other/Unknown</b> | 7.4%                       | 7.4%         | 0.000   |
| <b>Dual Medicaid Eligibility</b>                                            | 20.3%                      | 17.7%        | 0.069   |
| <b>Disabled</b>                                                             | 19.4%                      | 19.4%        | 0.000   |
| <b>High-Deprivation Neighborhood</b>                                        | 12.6%                      | 13.7%        | -0.031  |
| <b>Rural Census Tract</b>                                                   | 3.4%                       | 7.3%         | -0.148  |
| <b>Health Professional Shortage area</b>                                    | 3.2%                       | 1.7%         | 0.117   |

Notes:

1. MSD: The Mean Standardized Difference is the difference in means between two groups as a fraction of the standard deviation in the measure.
2. An MSD below 0.10 is generally considered ignorable small and many sources consider an MSD less than 0.20 as ignorable.
  - a. An MSD > 0 indicates that attributed EQIP episodes have more representation of a given underserved population than in the pool of statewide unattributed episodes.
  - b. An MSD < 0 indicates that attributed EQIP episodes have less representation.

## Appendix B: Calculation of Maximum at Risk

**Table B1: Assuming maximum buy-out achieved under CTI Buy-out**

|                                                                                | Integrated Efficiency                                                                                                                                             | MPA                                                                                            | CTI's                                                                                                       |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Evaluation</b>                                                              | 50% ICC, 25% Medicare TCOC Assessment, 25% Commercial TCOC Assessment                                                                                             | Cumulative TCOC Growth compared to TCOC Target that accounts for historical TCOC effectiveness | Attributed TCOC compared to historical TCOC updated for inflation.                                          |
| <b>One-time or Permanent</b>                                                   | Permanent                                                                                                                                                         | One-time                                                                                       | One-time                                                                                                    |
| <b>Potential At-Risk (%)</b>                                                   | ~75% of Inflation in Update Factor                                                                                                                                | 2% of Medicare Revenue, less CTI buy-out (assume 100%)                                         | Share of Statewide CTI Savings less Hospital-specific savings, capped at 2.5%                               |
| <b>Potential At-Risk Assuming Average GBR Size of \$300M (\$)</b>              | \$300M X 3% UF X 75% Reduction from IE = \$6.75M                                                                                                                  | \$300M X 33% Med FFS Share X 2% MPA Reduction X 100% buyout = \$0                              | \$300M X 33% Med FFS Share x 2.5% = \$2.5 M.                                                                |
| <b>Requirements to Have Potential At-Risk = Realized At-Risk</b>               | Assuming hospital had worst TCOC performance in the State, it would also need to be at least worse than 20th percentile of ICC performance (rank of 35 out of 43) | The hospital must exceed its Medicare TCOC Target by 6%.                                       | The hospital must have produced no savings in any CTI and the State must have produced at least 3% average. |
| <b>\$9.25M Total Potential All-Payer Revenue At-Risk is equivalent to 3.1%</b> |                                                                                                                                                                   |                                                                                                |                                                                                                             |

**Table B2: Assuming 50% buy-out achieved under CTI Buy-out**

|                                                                                 | Integrated Efficiency                                                                                                                                             | MPA                                                                                            | CTI's                                                                                                       |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Evaluation</b>                                                               | 50% ICC, 25% Medicare TCOC Assessment, 25% Commercial TCOC Assessment                                                                                             | Cumulative TCOC Growth compared to TCOC Target that accounts for historical TCOC effectiveness | Attributed TCOC compared to historical TCOC updated for inflation.                                          |
| <b>One-time or Permanent</b>                                                    | Permanent                                                                                                                                                         | One-time                                                                                       | One-time                                                                                                    |
| <b>Potential At-Risk (%)</b>                                                    | ~75% of Inflation in Update Factor                                                                                                                                | 2% of Medicare Revenue, less CTI buy-out (assume 50%)                                          | Share of Statewide CTI Savings less Hospital-specific savings, capped at 2.5%                               |
| <b>Potential At-Risk Assuming Average GBR Size of \$300M (\$)</b>               | \$300M X 3% UF X 75% Reduction from IE = \$6.75M                                                                                                                  | \$300M X 33% Med FFS Share X 2% MPA Reduction X 50% buyout = \$1.0 M                           | \$300M X 33% Med FFS Share x 2.5% = \$2.5 M.                                                                |
| <b>Requirements to Have Potential At-Risk = Realized At-Risk</b>                | Assuming hospital had worst TCOC performance in the State, it would also need to be at least worse than 20th percentile of ICC performance (rank of 35 out of 43) | The hospital must exceed its Medicare TCOC Target by 6%.                                       | The hospital must have produced no savings in any CTI and the State must have produced at least 3% average. |
| <b>\$10.25M Total Potential All-Payer Revenue At-Risk is equivalent to 3.4%</b> |                                                                                                                                                                   |                                                                                                |                                                                                                             |

|                                |   |                                   |
|--------------------------------|---|-----------------------------------|
| <b>IN RE: THE PARTIAL RATE</b> | * | <b>BEFORE THE HEALTH SERVICES</b> |
| <b>APPLICATION OF THE</b>      | * | <b>COST REVIEW COMMISSION</b>     |
| <b>TIDAL HEALTH</b>            | * | <b>DOCKET: 2023</b>               |
| <b>PENINSULA REGIONAL</b>      | * | <b>FOLIO: 2441</b>                |
| <b>SALISBURY, MARYLAND</b>     | * | <b>PROCEEDING: 2631N</b>          |

**Staff Recommendation**  
**December 13, 2023**

## **Introduction**

On August 28, 2023, Tidal Health Peninsula Regional (“THPR” or “The Hospital”) submitted a partial rate application requesting a new rate for Inpatient Child and Adolescent Acute Psychiatric (PCD) services. The Hospital received approval on May 16, 2019 from the Maryland Health Care Commission (MHCC) for the establishment of a 15-bed inpatient psychiatric unit for treatment of children and adolescents to address the needs of the residents of the lower Eastern Shore and neighboring communities for these acute care hospital services. These services are expected to open on January 1, 2024. Currently, there are no pediatric inpatient psychiatric resources available on the Maryland’s Eastern Shore.

## **Staff Evaluation**

These beds were approved by MHCC as child and adolescent beds and subsequently licensed as child and adolescent beds by the Office of Healthcare Quality. HSCRC policy is to set the rates for new services at the lower of the statewide median or at a rate based on a hospital’s projections. There are currently no acute care hospitals in the state that have a rate for PCD.

Therefore, staff must take a slightly different approach when developing this rate. Staff applied a cost differential to the base rate used to account for the increase in clinical care hours needed to care for these patients. The Hospital requested a cost differential of 15.1 percent based on their projections. Staff applied a cost differential of 12.6 percent, which represents the average of the cost differential at Sheppard Pratt which is 10.1 percent and the hospital projection. Staff then applied the average cost differential of 12.6 percent to the lesser of the statewide median or the Hospital’s current rate for acute psych services.

For fiscal year 2024, THPR has a PSY rate of \$1,838.55 and the median rate per patient day which is 1,845.67. The 12.6 percent cost differential was applied to THPR’s current FY 2024 PSY rate of \$1,838.55 to calculate a recommended rate of \$2,071.21 for PCD services.

| <u>Service</u>                       | <u>Service Unit</u> | <u>Unit Rate</u> |
|--------------------------------------|---------------------|------------------|
| Child & Adolescent Acute Psychiatric | Patient Days        | \$2,070.21       |

## **Recommendation**

After reviewing the Tidal Health application, the staff recommends:

1. That the PCD rate of \$2,070.21 per patient day be approved effective January 1, 2024; and
2. That the PCD rate center not be rate realigned until one full year of cost data has reported to the Commission; and
3. That the Hospital's Global Budget be adjusted outside of this recommendation for the incremental volume consistent with the FY2022 GBR Modification agreement.



**TO:** HSCRC Commissioners  
**FROM:** HSCRC Staff  
**DATE:** December 13, 2023  
**RE:** Hearing and Meeting Schedule

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**Joshua Sharfstein, MD**  
Chairman

**Joseph Antos, PhD**  
Vice-Chairman

**James N. Elliott, MD**

**Ricardo R. Johnson**

**Maulik Joshi, DrPH**

**Adam Kane, Esq**

**Nicki McCann, JD**

January 10, 2024 To be determined - GoTo Webinar

February 14, 2024 To be determined - GoTo Webinar

The Agenda for the Executive and Public Sessions will be available for your review on the Wednesday before the Commission meeting on the Commission's website at <http://hscrc.maryland.gov/Pages/commission-meetings.aspx>.

Post-meeting documents will be available on the Commission's website following the Commission meeting.

**Jonathan Kromm, PhD**  
Executive Director

**William Henderson**  
Director  
Medical Economics & Data Analytics

**Allan Pack**  
Director  
Population-Based Methodologies

**Gerard J. Schmith**  
Director  
Revenue & Regulation Compliance

**Claudine Williams**  
Director  
Healthcare Data Management & Integrity