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.

P: 410.764.2605 4160 Patterson Avenue | Baltimore, MD 21215 hscrc.maryland.gov

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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
eCQM	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.[1] 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
Person and Community Engagement domain		
HCAHPS	• 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. • Use HCAHPS patient level data from the Maryland Health Care Commission (MHCC) for additional analytics, including on disparities, and hospital improvement • Plan for statewide adoption of added question(s) to the survey linked to best practice with evidence that implementation improves HCAHPS scores	• Continue to use HCAHPS patient-level data from the MHCC for additional analytics, including on disparities, and hospital improvement. • Continue working with stakeholders to facilitate more sharing of best practices • Adopt additional question(s) in the payment program after CY 2024.
Emergency department (ED) wait times	• Collect ED wait time measures and promote performance improvement through the EDDIE project • Potentially adopt an ED wait time/length of stay measure in the PCE domain given its correlation with patient experience	• Continue to evaluate ED length of stay measures, including eCQMs, and use of the QBR program to incentivize improvement • Collaborate with CMS on ED boarding measures
Follow-up measure	• Continue to include the TFU measure for Medicaid, which was added in the RY 2025 program • Implement a TFU disparity measure beginning with Medicare to reduce disparities and support achievement of the SIHIS goal for Timely Follow-up • Explore behavioral health data sources and ways to monitor follow up following a hospitalization for behavioral health	• Evaluate the ongoing TFU rates for Medicare, as well as the disparity gap measure, to ensure SIHIS goal is met • Monitor impact on TFU for Medicaid • Consider adding a measure that includes / behavioral health to the QBR Program in RY 2026
Safety domain		
CDC National Health Safety Network	• 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	• Continue to analyze Maryland trends compared to national performance. • Explore working with CDC to add more innovative and less burdensome "digital" measures.

[1] See the RY 2024 QBR policy for additional information on the findings from the QBR Redesign.

Domain/ Measure	RY 2026	Future program years
Clinical Care domain		
30-day mortality	• Maintain IP mortality measure but also phase in the 30-day all-cause, all-payer measure (i.e., include both measures)	• Evaluate weight on mortality in program • Monitor the Medicare a hybrid measure using the digital measures infrastructure • Plan for implementation of an all-payer hybrid measure using the digital measures infrastructure
Total hip arthroplasty/total knee arthroplasty (THA/TKA)	• Remove measure for QBR and monitor for RY2026 • Continue to explore options for expanding measurement of THA/TKA complications to all-payers and outpatient cases	• Continue to develop outpatient quality of care strategy using THA/TKA as exemplar • Explore opportunities for Patient Reported Outcome Measures (PROMs)

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
Clinical Care	**15 percent** Two measures: All-cause inpatient mortality; THA/TKA complications	**10 percent (-5 percent)** Two measures: all-cause, all-condition inpatient mortality; all-cause, all-condition 30-day mortality.	**25 percent** Five measures: Four condition-specific mortality measures; THA/TKA complications
Person and Community Engagement	**50 percent** Nine measures: Eight HCAHPS categories top box score and consistency, and linear score (four categories); TFU (Medicare, Medicaid).	**60 percent (+10%)** 10 measures: Eight HCAHPS categories top box score and consistency, linear score (four categories) ; TFU (Medicare, Medicaid, disparities) improvement); ED LOS.	**25 percent** Eight HCAHPS measures top box score.

Domain	Maryland RY 2025 QBR domain weights and measures	Maryland Proposed RY 2026 QBR domain weights and measures	CMS VBP domain weights and measures
Safety	**35 percent** Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90	**30 percent (-5%)** Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90	**25 percent** Five measures: CDC NHSN HAI measures
Efficiency	n.a.	n.a.	**25 percent** 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

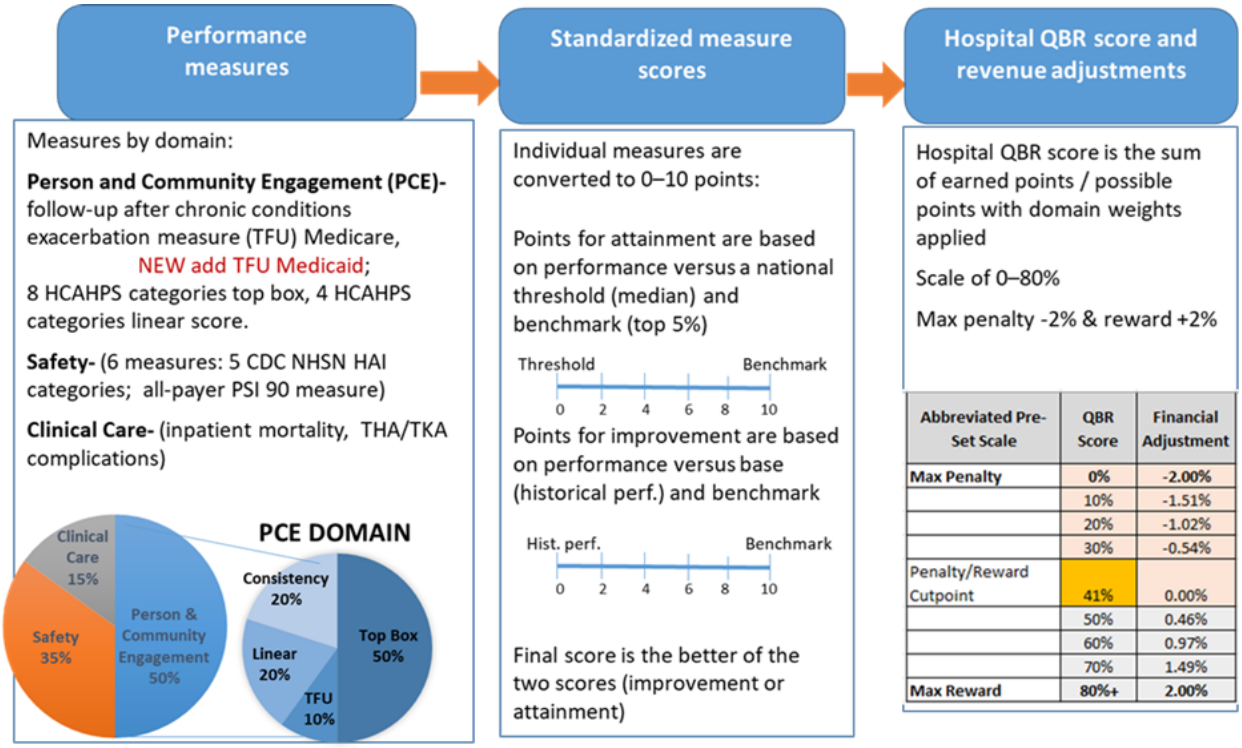
during the performance year, it protects Maryland hospitals from excessive penalties due to changes in performance post-COVID compared to national hospitals. The RY 2026 policy will also provide recommendations for the RY 2024 final cut point based on more recent analyses, however, for RY 2026 the staff 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[2]; 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.

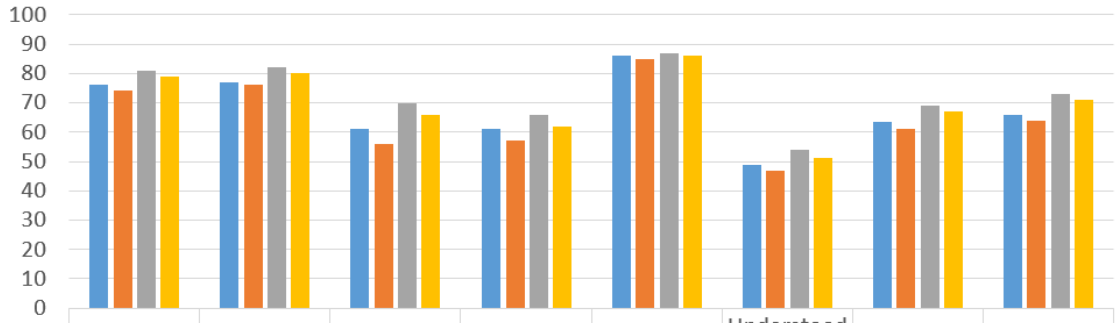
CMS Care Compare data on HCAHPS top box and linear performance through 6/30/22 reveal the following, as illustrated in Figures 4 and 5 below:

- Both the Nation and Maryland declined slightly from the base to the performance periods on top box and linear scores for all of the HCAHPS categories.

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

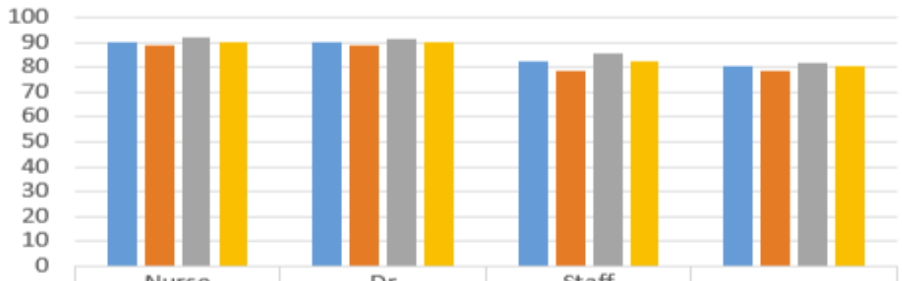
- For " Discharge Information Provided", Maryland and the Nation performed most similarly on top box scores.
- For both top box and linear scores, Maryland lags behind the Nation in the base and the performance periods.

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



	Nurse Communication	Dr Communication	Staff Responsiveness	Medication Explained	Discharge Info Provided	Understood Post-Discharge Care	Clean & Quiet	9/10 Overall Rating
MD Base	76	77	61	61	86	49	63.5	66
MD Performance	74	76	56	57	85	47	61	64
Nation Base	81	82	70	66	87	54	69	73
Nation Performance	79	80	66	62	86	51	67	71

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



	Nurse Communication	Dr Communication	Staff Responsiveness	Care Transition
MD Base	90	90	82	80
MD Performance	89	89	79	79
National Base	92	92	86	82
National Performance	90	90	82	80

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.

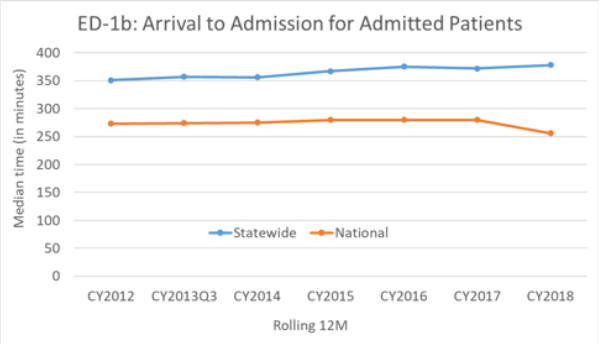
HCAHPS Improvement Framework

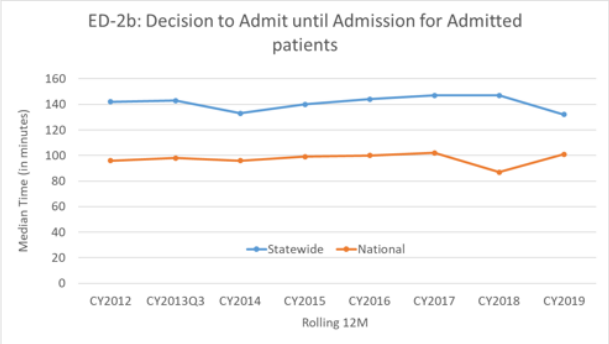
One important area CMS has identified in feedback to the Commission is the need for targeting improvement in HCAHPS in the Person and Community Engagement domain. CMS has recommended that the State consider implementing a State-wide HCAHPS performance improvement initiative that leverages input from 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.

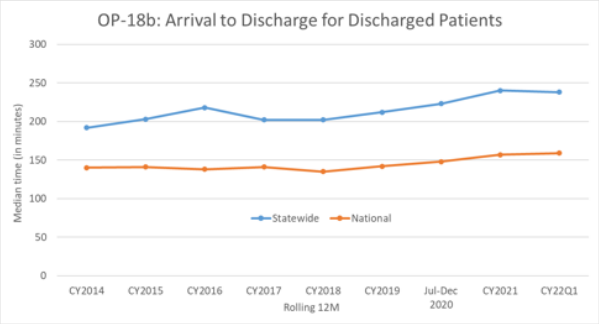
Emergency Department Length of Stay

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,[3] 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







Measure ID	Measure Definition
ED-1	Median time from ED arrival to departure for admitted patients
ED-2	Median admit decision time to ED departure time for admitted patients
OP-18	Median time of ED arrival to departure for discharged patients

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

[3] 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".[4]

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

[4] 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/RY2026, 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.

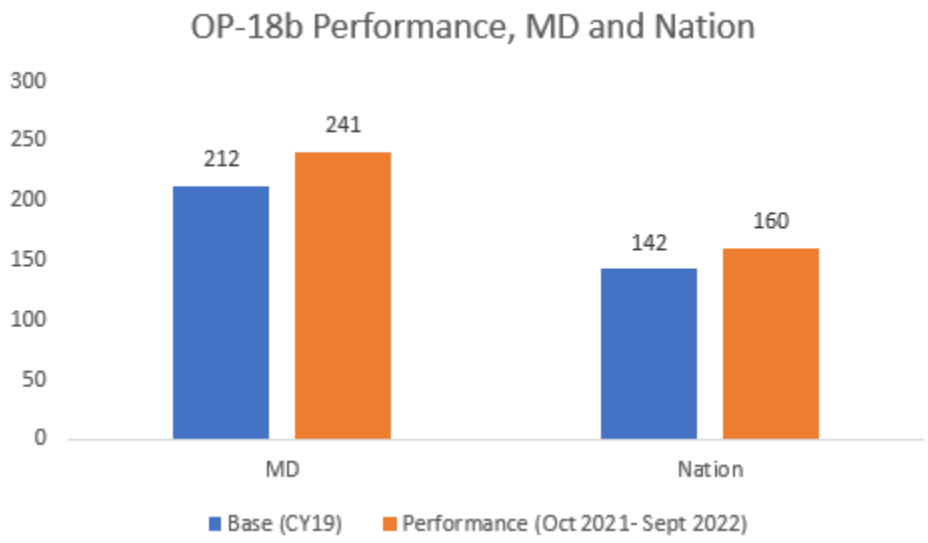
RY 2026 QBR Options for ED Length of Stay

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

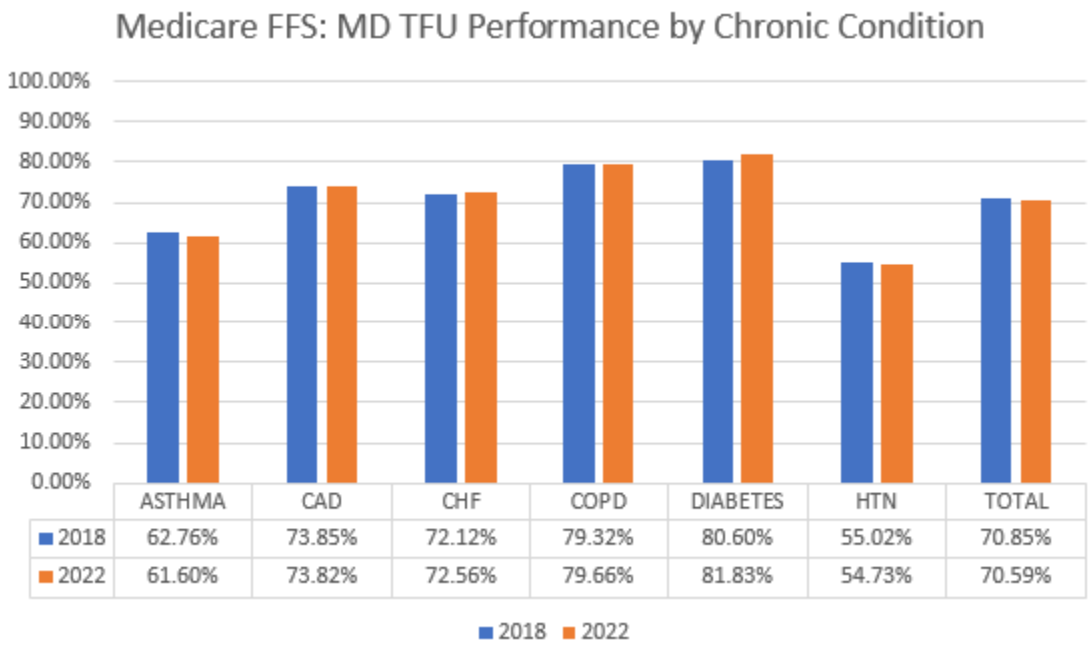
On March 17, 2021, CMS approved Maryland's proposed SIHIS, which included a National Quality Forum-endorsed health plan measure of timely follow-up (TFU) after an acute exacerbation of a chronic condition in the Care Transition domain. The SIHIS goal is to achieve a 75 percent TFU rate for Medicare FFS 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



	ASTHMA	CAD	CHF	COPD	DIABETES	HTN	TOTAL
2018	62.76%	73.85%	72.12%	79.32%	80.60%	55.02%	70.85%
2022	61.60%	73.82%	72.56%	79.66%	81.83%	54.73%	70.59%

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

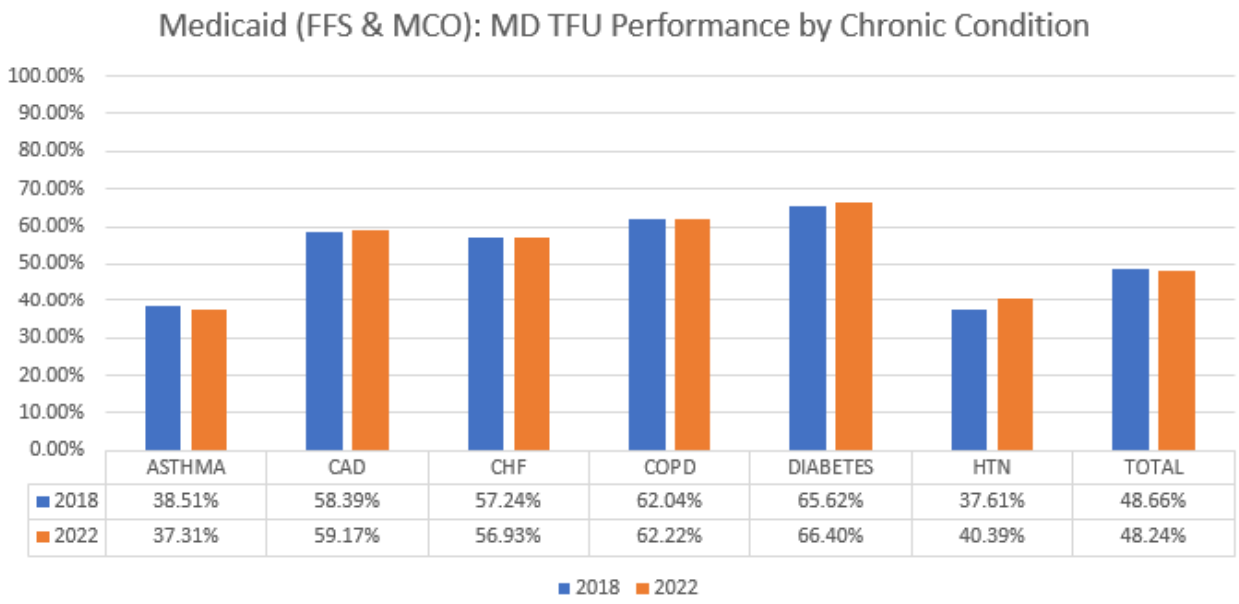
not 100 percent follow-up. Figure 9 shows the annual performance on the total TFU measure for Maryland and the Nation (national data is based on the Chronic Condition Warehouse 5 percent sample). Comparing 2018 to 2022, the Nation has seen a 0.66% increase and Maryland has seen a 0.37% decrease in timely 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

TFU Rates	CY2018	CY2019	CY2020	CY2021	CY2022
Maryland	70.85%	71.45%	67.90%	70.07%	70.59%
US	66.82%	69.00%	64.75%	67.68%	67.26%

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



	ASTHMA	CAD	CHF	COPD	DIABETES	HTN	TOTAL
2018	38.51%	58.39%	57.24%	62.04%	65.62%	37.61%	48.66%
2022	37.31%	59.17%	56.93%	62.22%	66.40%	40.39%	48.24%

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

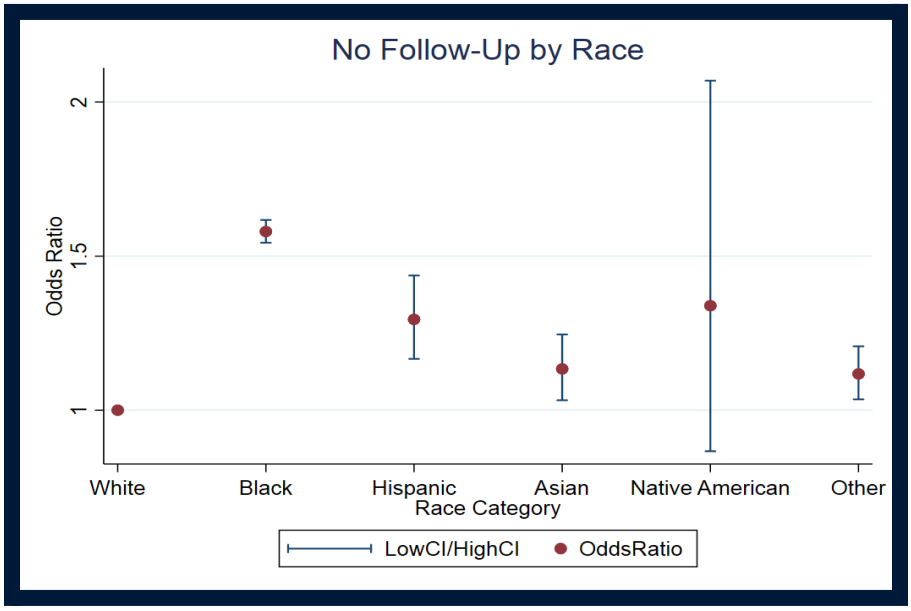


Figure 12. Odds Ratio of No Follow-Up by ADI Decile

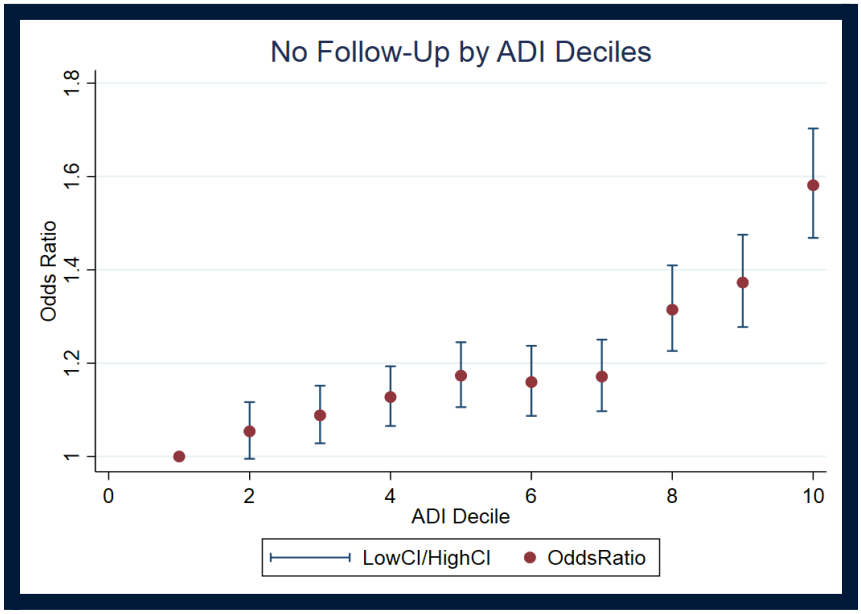
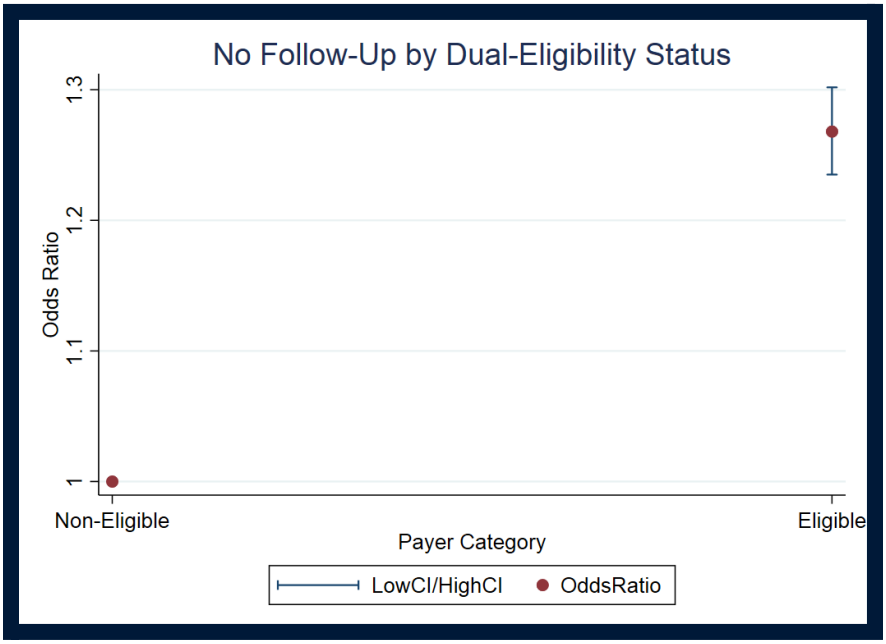


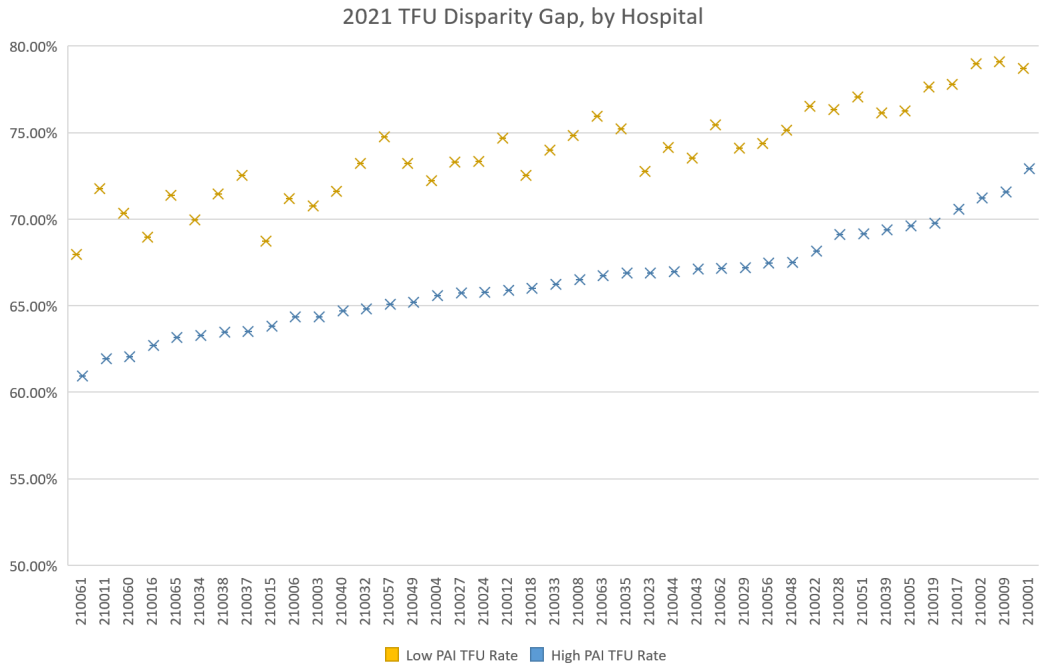
Figure 13. Odds Ratio of No Follow-Up by Dual-Eligibility Status



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

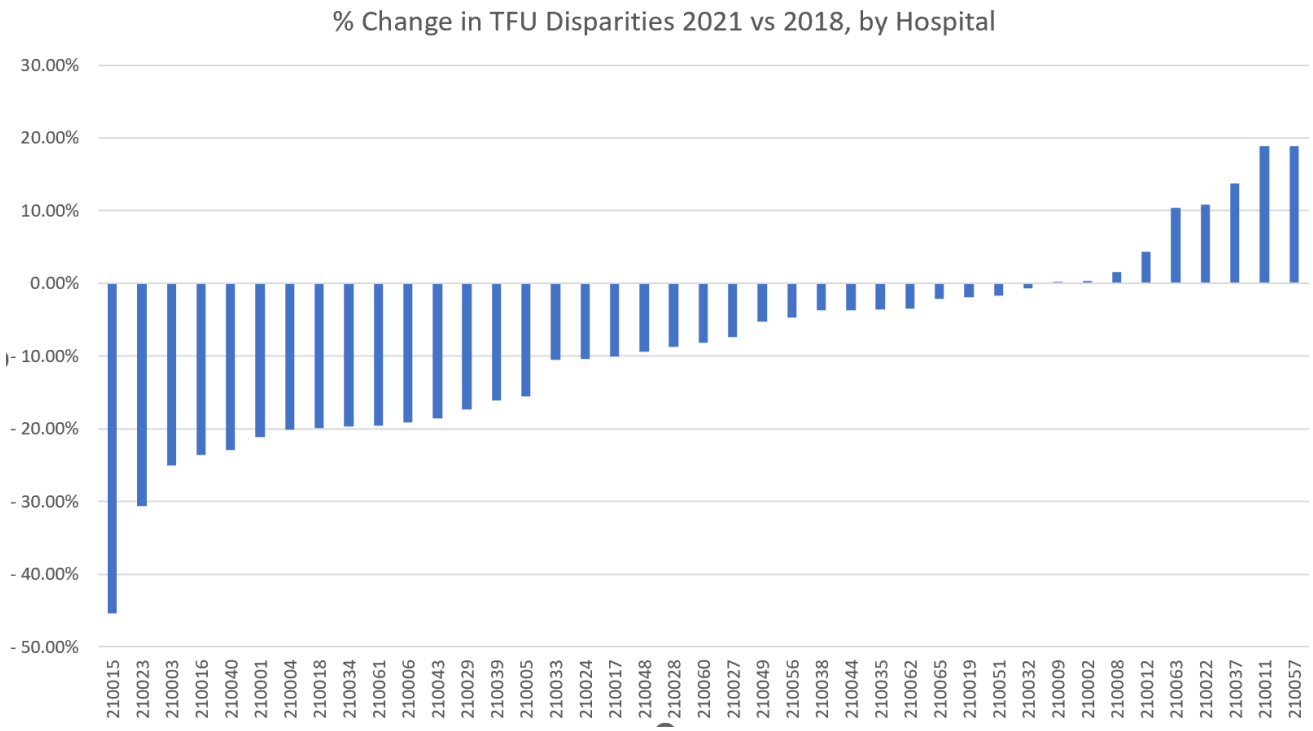


As illustrated in Figure 15 below, most (32) hospitals saw progress in the reduction of disparities in timely follow-up in 2021 compared to 2018. Nine hospitals saw increases in their disparities with two hospitals seeing almost 20% increases. To incentivize hospitals to improve on the disparities experienced 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[5]. The threshold and benchmark were calculated as the median percent and average for the top 10th percentile

[5] The performance standards were rounded for ease of reporting.

of performers respectively, on the change in disparities from CY 2018 to CY 2021 (consistent with how VBP calculates other performance standards).

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).[6] 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.

[6] For use in the QBR Program, as well as the VBP program, the SSI Hysterectomy and SSI Colon measures are combined.

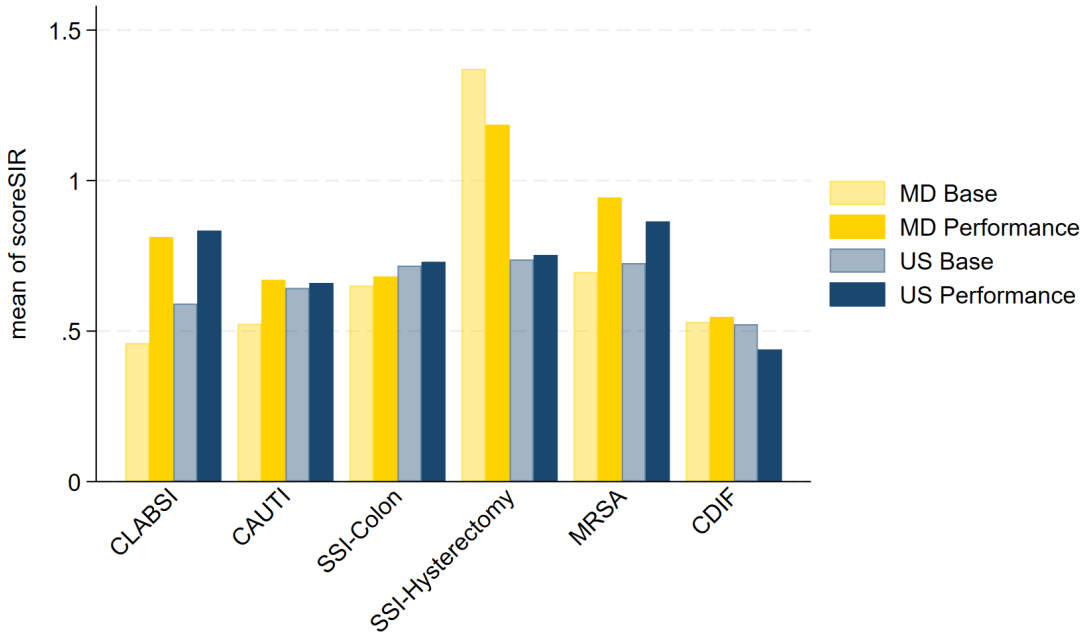
CDC NHSN HAI Measures

The CDCs 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.[7]

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.

[7] 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[8] 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:
    - 09 Perioperative Hemorrhage or Hematoma Rate and 14 Postoperative Wound

[8] 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

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)

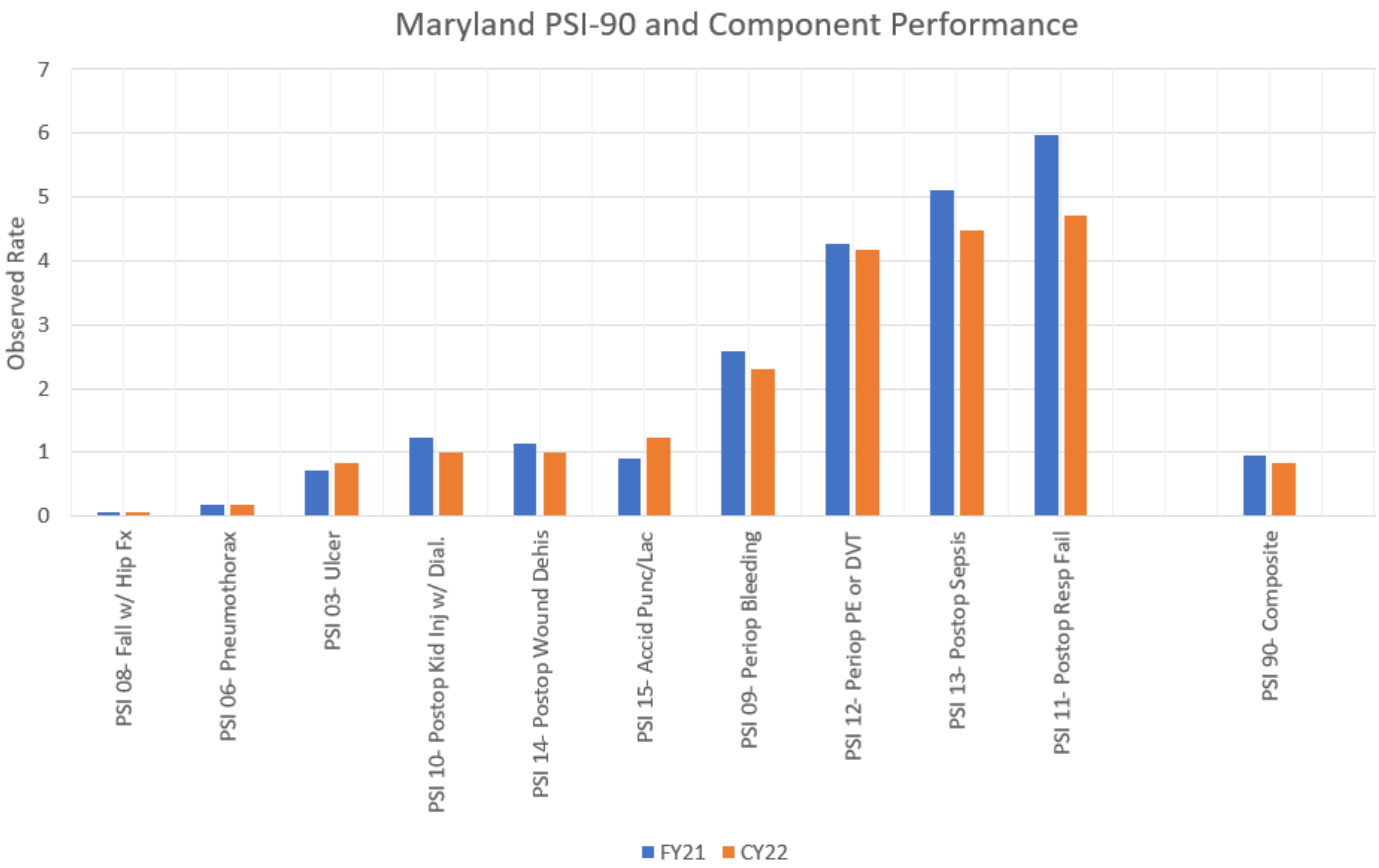
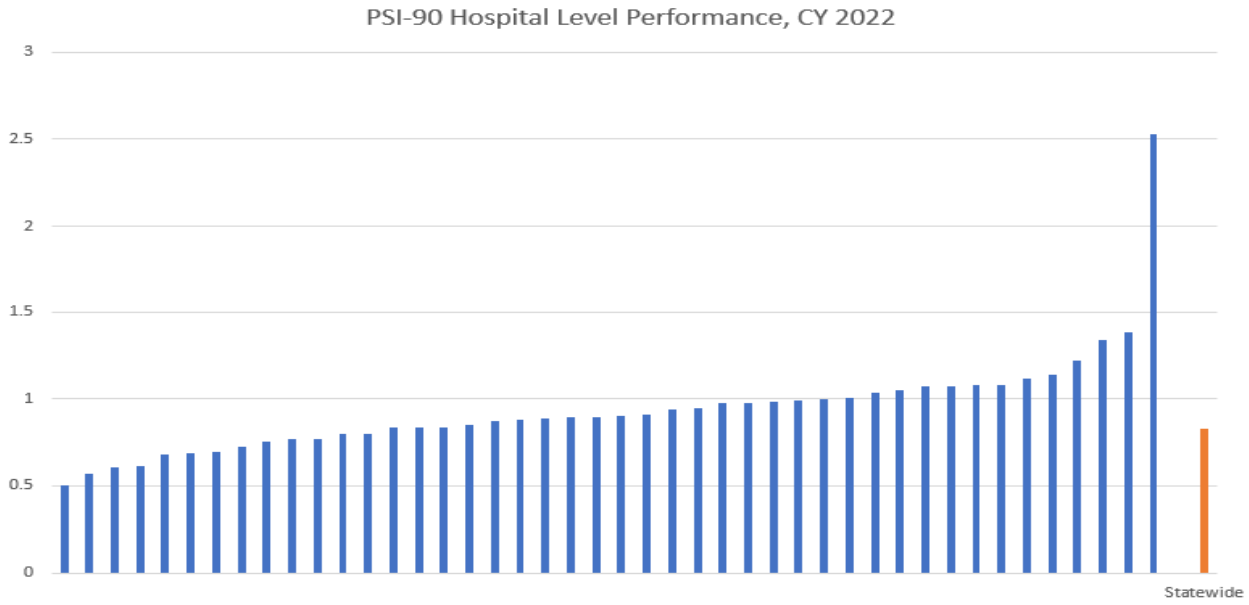


Figure 18 below illustrates the hospital-level performance on the all-payer PSI-90 composite measure for CY 2022; consistent with last year, the variation in performance by hospital suggests there may be opportunity for improvement on this measure.

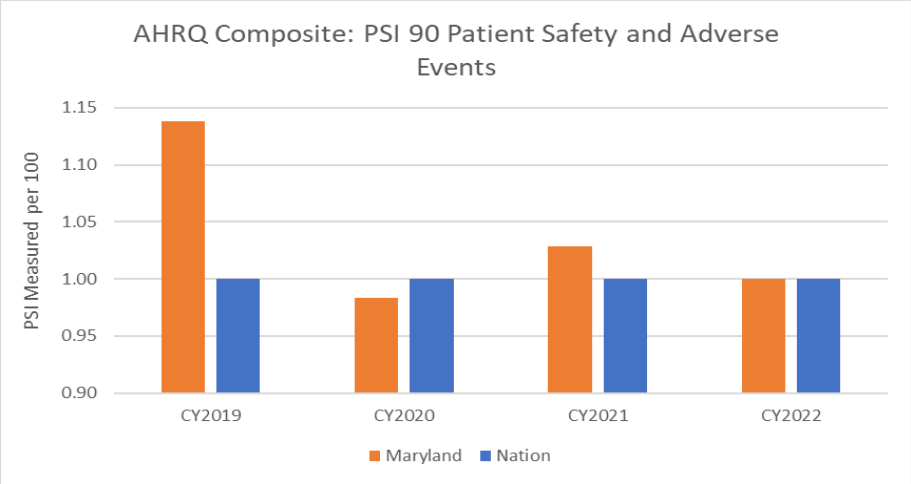
Figure 18. PSI-90 Hospital-Level Performance, CY 2022[9]



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.

[9] 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.

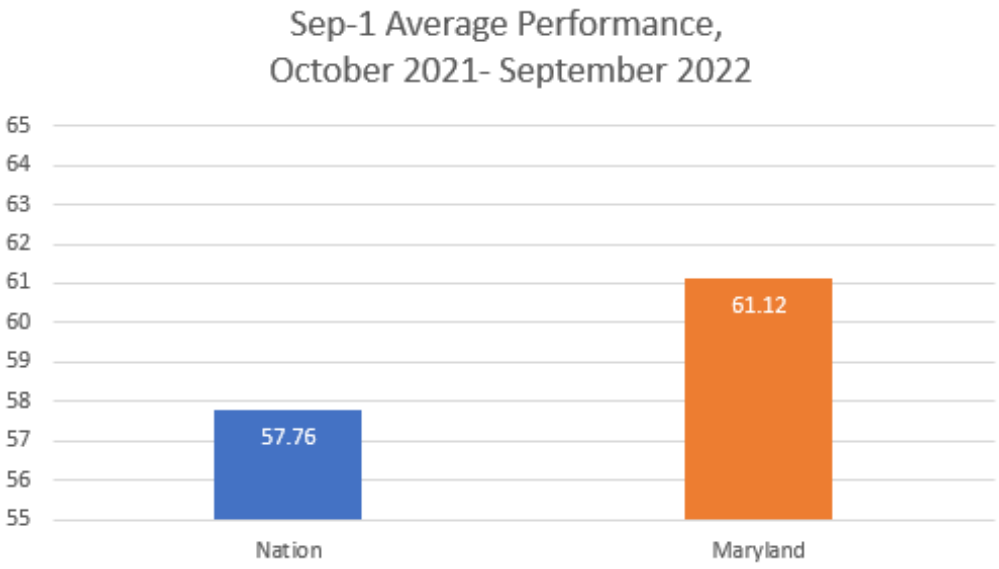
Figure 19. Maryland vs. National Performance on PSI 90 Composite Measure, CY 19-CY 22[10]



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.

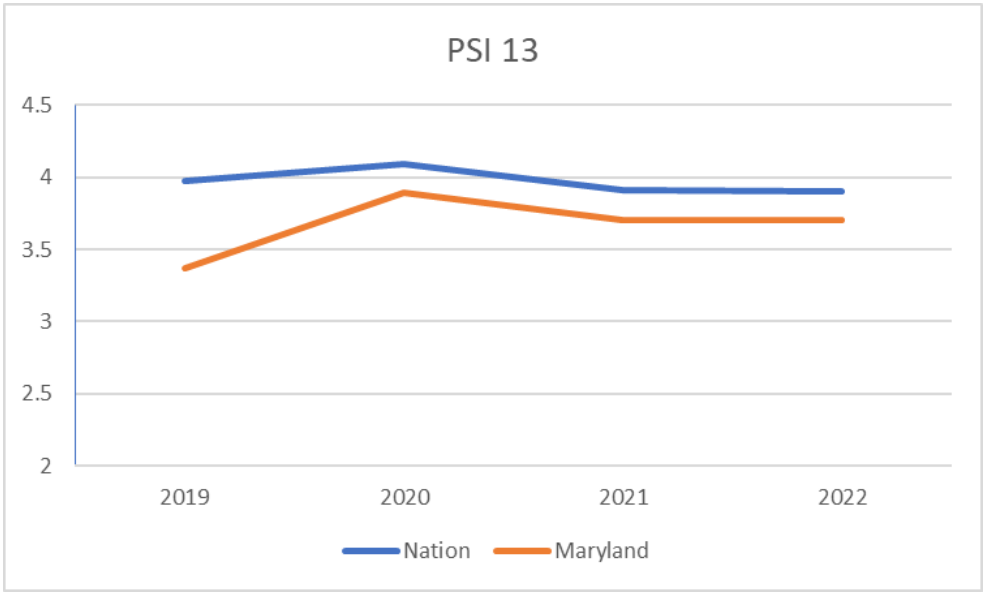
Figure 20. Maryland vs. the Nation, Sep-1 Early Management Bundle Measure



[10] 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.[11] 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.[12] 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

[11] 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.
[12]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.

sepsis performance. Given the concerns about the sepsis bundle process measure and Maryland's 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.

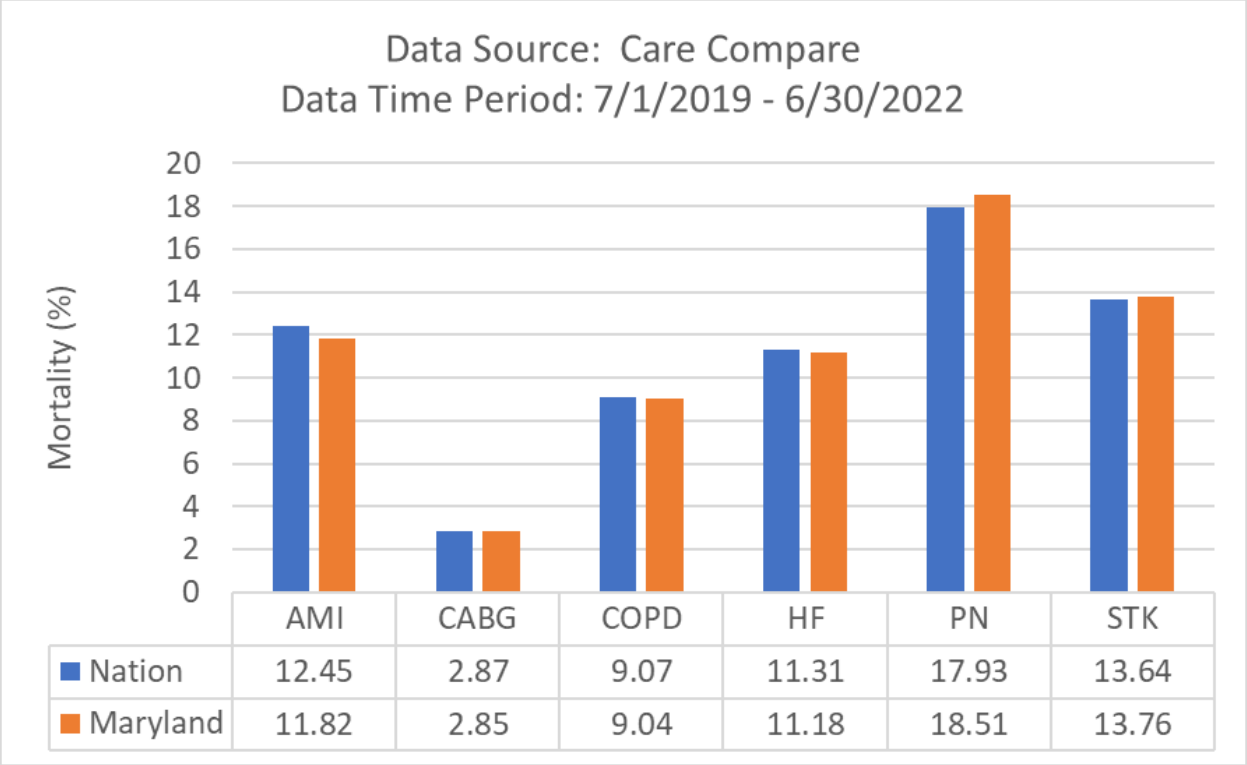
Of note, Maryland's QBR mortality measure currently differs from the CMS VBP Program that uses four condition-specific, 30-day mortality measures for Medicare beneficiaries. Medicare also monitors two additional 30-day mortality measures for Coronary Artery Bypass Graft (CABG) and Stroke (STK). The HSCRC 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



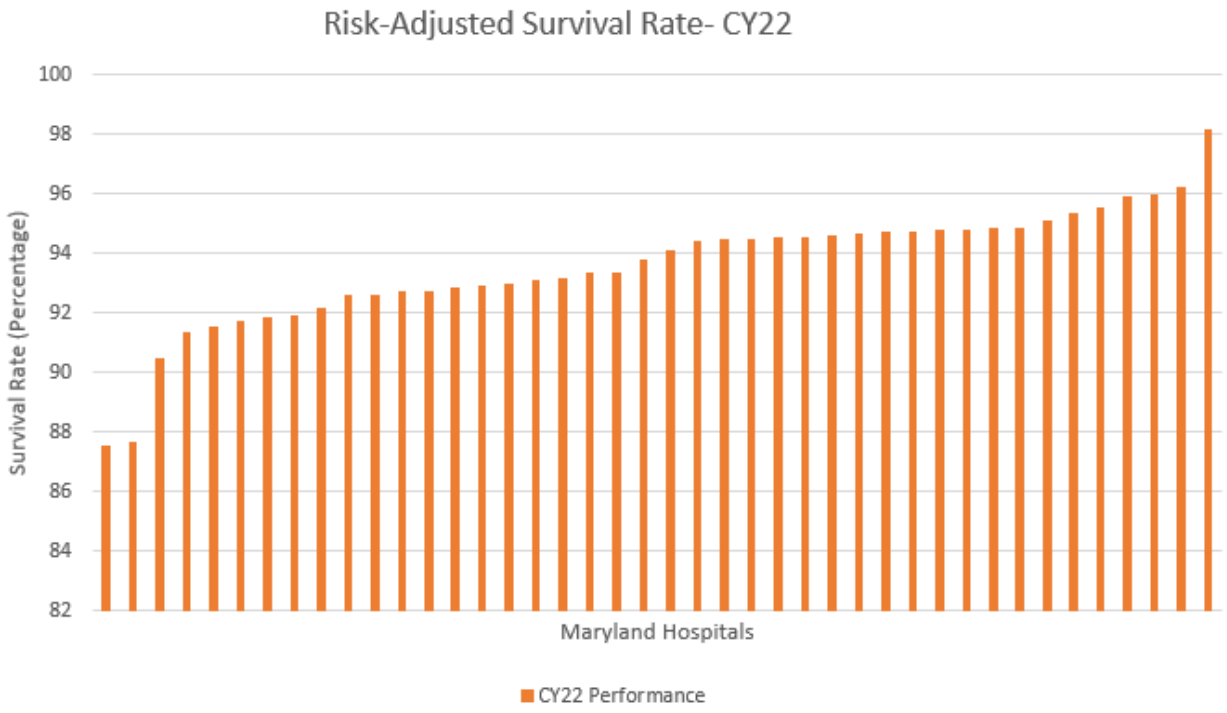
	AMI	CABG	COPD	HF	PN	STK
Nation	12.45	2.87	9.07	11.31	17.93	13.64
Maryland	11.82	2.85	9.04	11.18	18.51	13.76

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.[13]

[13] 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

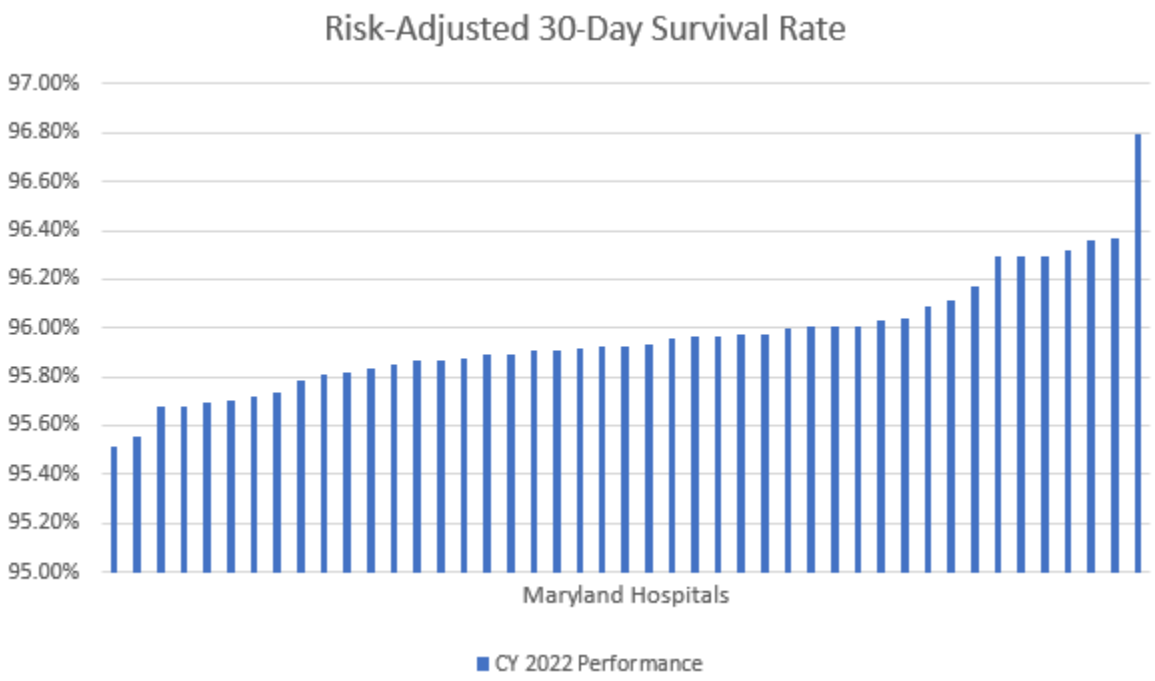


New 30-Day Inpatient, All-payer, All-condition Mortality Measure

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

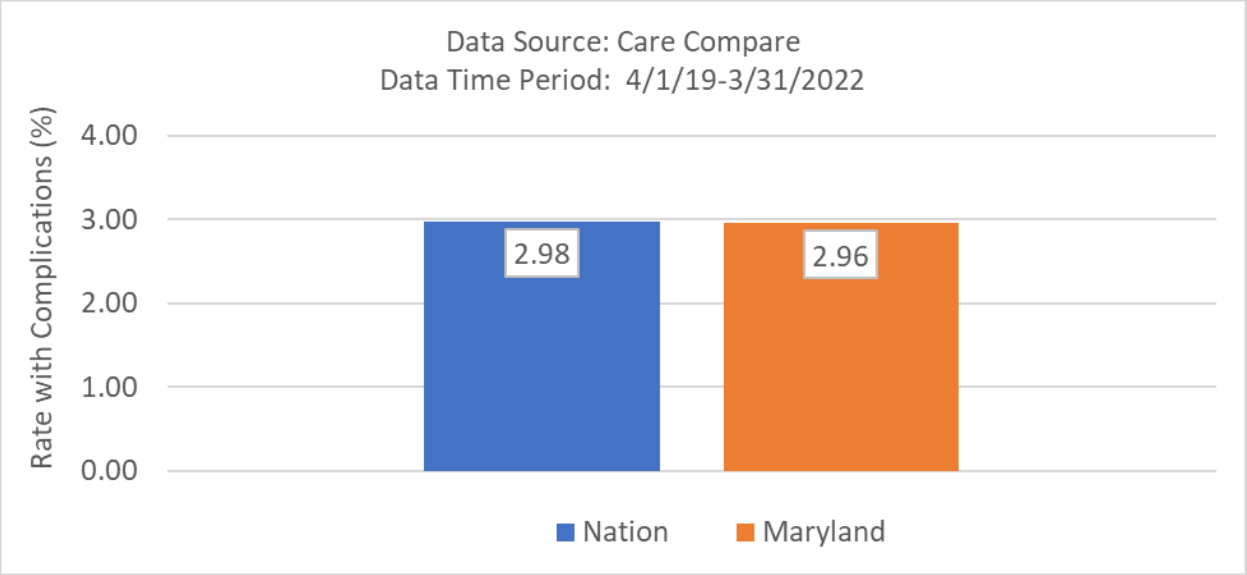


Last, as part of the digital measures initiative, staff plans to consider transitioning from the fully claims-based measure to the hybrid 30-day mortality measure (claims plus Core Clinical Data Elements) in the future. In order to do this on an all-payer basis, electronic health record (EHR) vendors 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 eCQMs. 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 eCQM; 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 eCQM Reporting Requirements

Reporting Period/ payment determination	CMS Measures	Maryland Measures
CY 2024/ FY 2026	Three self-selected eCQMs; Three required eCMQs -Safe Use of Opioids -Cesarean Birth -Severe Obstetric Complications Clinical data elements for two hybrid measures -30-day mortality -30-day readmissions	Two self-selected eCQMs; Required eCQMs- -Safe Opioids -hypoglycemia -hyperglycemia -Cesarean Birth -Severe Obstetric complications Clinical data elements for two hybrid measures -30-day mortality -30-day readmissions

In addition to the eCQM 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).

RY2025 Update

As with RY 2024, staff will reassess the current preset scale for RY 2025 as was indicated in the policy. Similar considerations will be examined as was done for RY2024; however, it should be noted that the performance standards for RY2025 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 RY 2025 scaling.

RY2026 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 RY 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 RY 2024 and will be done for RY 2025, staff will retrospectively assess the cut point with more recent data. However, unlike with RY2024, 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 RY2024, 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 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 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

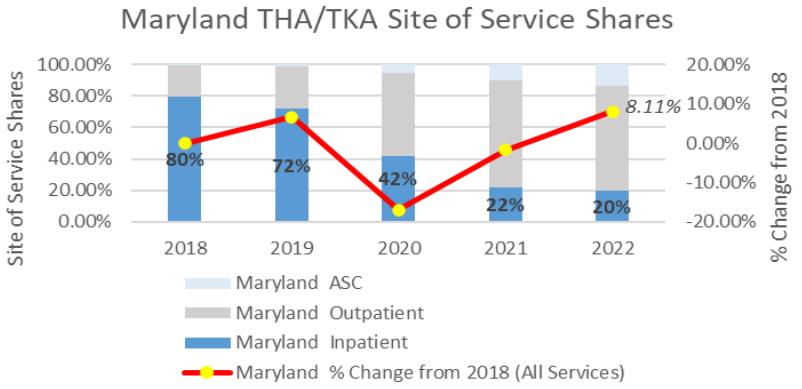
Comments were generally supportive of removing this measure in RY 2026 with UMMS submitting comments recommending its exclusion based on migration of the vast majority of these procedures to non-inpatient settings. PMWG Member Stephen Michaels, orthopedic surgeon from MedStar, concurred with removing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

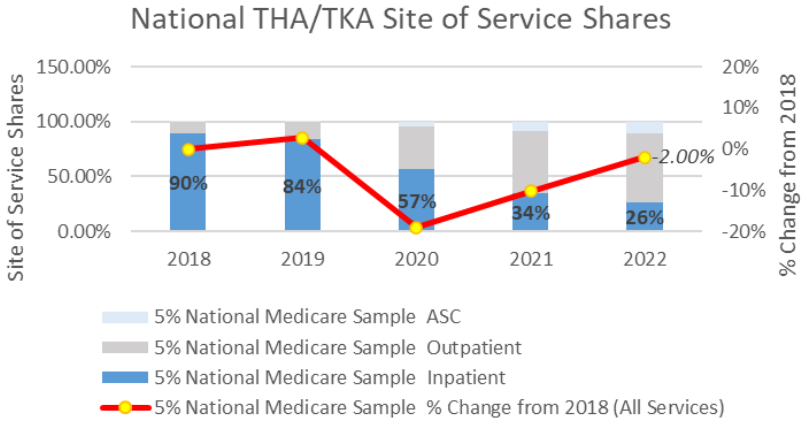
Staff Response:

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

RY2026 Proposed Weighting (2% total at-risk)	Model 1: Current Policy w/o THA-TKA	Model 2: Draft Recommendation w/o THA-TKA	Model 3: Modified Staff Recommendation	Model 4: No Weight Changes w/o THA-TKA or ED LOS
PCE Domain	**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%
Clinical Care Domain	**15%**	**15%**	**10%**	**15%**
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%
Safety Domain	**35%**	**25%**	**30%**	**35%**
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 "	
PCE Domain					*Lower than 1 indicates Worse than the Nation*				
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	
Safety Domain									
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	
Clinical Care Domain									
THA/TKA	2.50	2.60	3.10	3.20	0.96	0.97	1.04%	3.00	
Condition Specific 30-Day Mortality									
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	1 = Better than Nation
					Improved Relative to the Nation		8	2	2= Worse but Bridged Gap to Nation
					Worsened Relative to the Nation		11	13	3=Worse and did not Bridge Gap to Nation
					Total		21	21	Total

Figure 32. 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.

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
Clinical Care	**15 percent** Two measures: All-cause inpatient mortality; THA/TKA complications	**1 percent (no change)** Three measures: all-cause, all-condition inpatient mortality; all-cause, all-condition 30-day mortality,	**25 percent** Five measures: Four condition-specific mortality measures; THA/TKA complications
Person and Community Engagement	**50 percent** Nine measures: Eight HCAHPS categories top box score and consistency, and four categories linear score; TFU Medicare, Medicaid.	**60 percent (+10%)** 10 measures: Eight HCAHPS categories top box score and consistency, and four categories linear score; TFU Medicare, Medicaid, disparities improvement; ED LOS.	**25 percent** Eight HCAHPS measures top box score.
Safety	**35 percent** Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90	**25 percent (-10%)** Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90	**25 percent** Five measures: CDC NHSN HAI measures
Efficiency	n.a.	n.a.	**25 percent** 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.[14] Rewards (positive scaled amounts) or penalties (negative scaled

[14] 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,[15] 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 50th percentile, of all hospitals' performance during the baseline period) and the benchmark (which is the mean of the top decile, or roughly the 95th 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.[16] 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.

[15] VBP measure specifications can be found at www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html.

[16] 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 50th 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 50th 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.

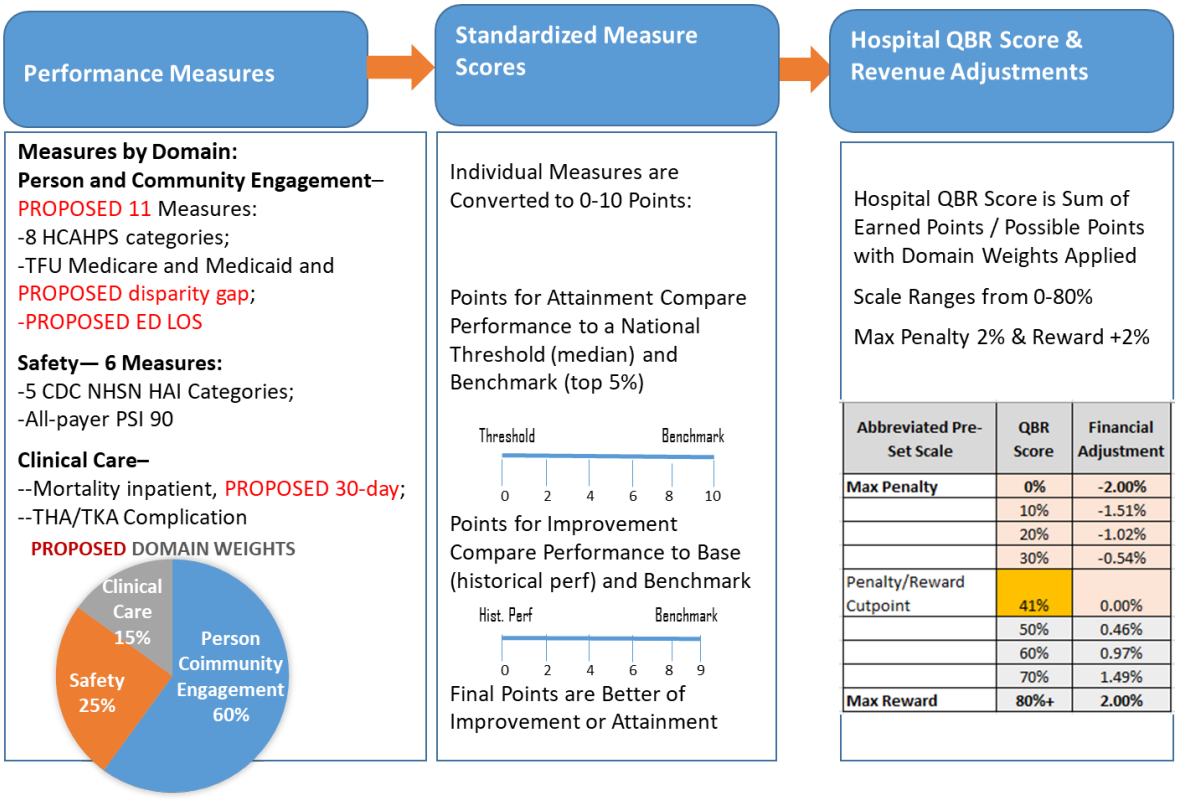
Total performance score*:* The total performance score is computed by multiplying the domain scores by their specified weights and then adding those totals together. The total performance score is then translated into a reward or penalty that is applied to hospital revenue.

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.[17] 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[18] , 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

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

[18] 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.[19] Technical details for calculating measure scores are provided below.

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

[19] Source: https://impaqint.com/measure-information-timely-follow-after-acute-exacerbations-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.

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.[20]

[20] Please see https://impaqint.com/measure-information-timely-follow-after-acute-exacerbations-chronic-conditions.

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:

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.

[NUM(ASM) + NUM(CAD) + NUM(HF) + NUM (COPD) + NUM(DIAB) + NUM(HTN)] / [DENOM(ASM) + DENOM(CAD) + DENOM(HF) + DENOM (COPD) + DENOM(DIAB) + DENOM(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: NUM(HF) / DENOM(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.[21]

[21] Please see full details on CMS Digital Quality Measurement Strategic Roadmap: 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

PROPOSED Quality Based Reimbursement (QBR) Program Rate Year 2026 Base and Performance Periods

Rate Year (Maryland Fiscal Year)	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
Calendar Year	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)														Rate Year Impacted by QBR Results			
												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*																				

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 CTI	$ 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
	Statewide Total	**$11,246,174,568**			**-$63,871,949**

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[22] (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."

[22]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.[23] 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.

[23] 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
Bibliography about the impact of rounding:
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

Maryland HCAHPS Exploratory Data

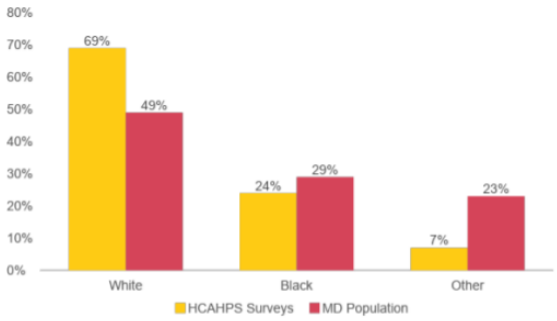
PERFORMANCE MEASUREMENT WORKGROUP MEETING

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)

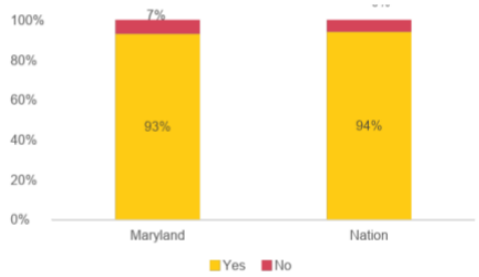
- Q3 2021 – Q2 2022 (33,134 surveys)
- MD population data from 2020 Census



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



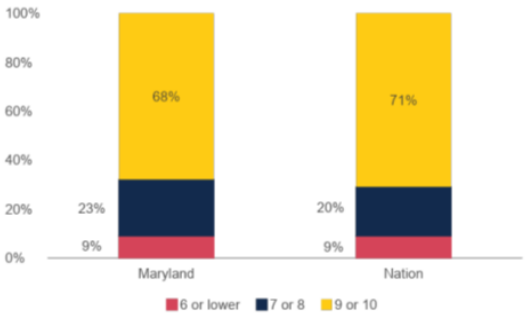
National data: Q2 2021-Q1 2022

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

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



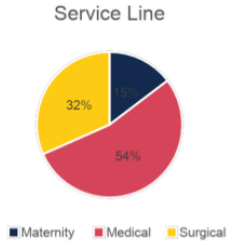
National data: Q2 2021-Q1 2022

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

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

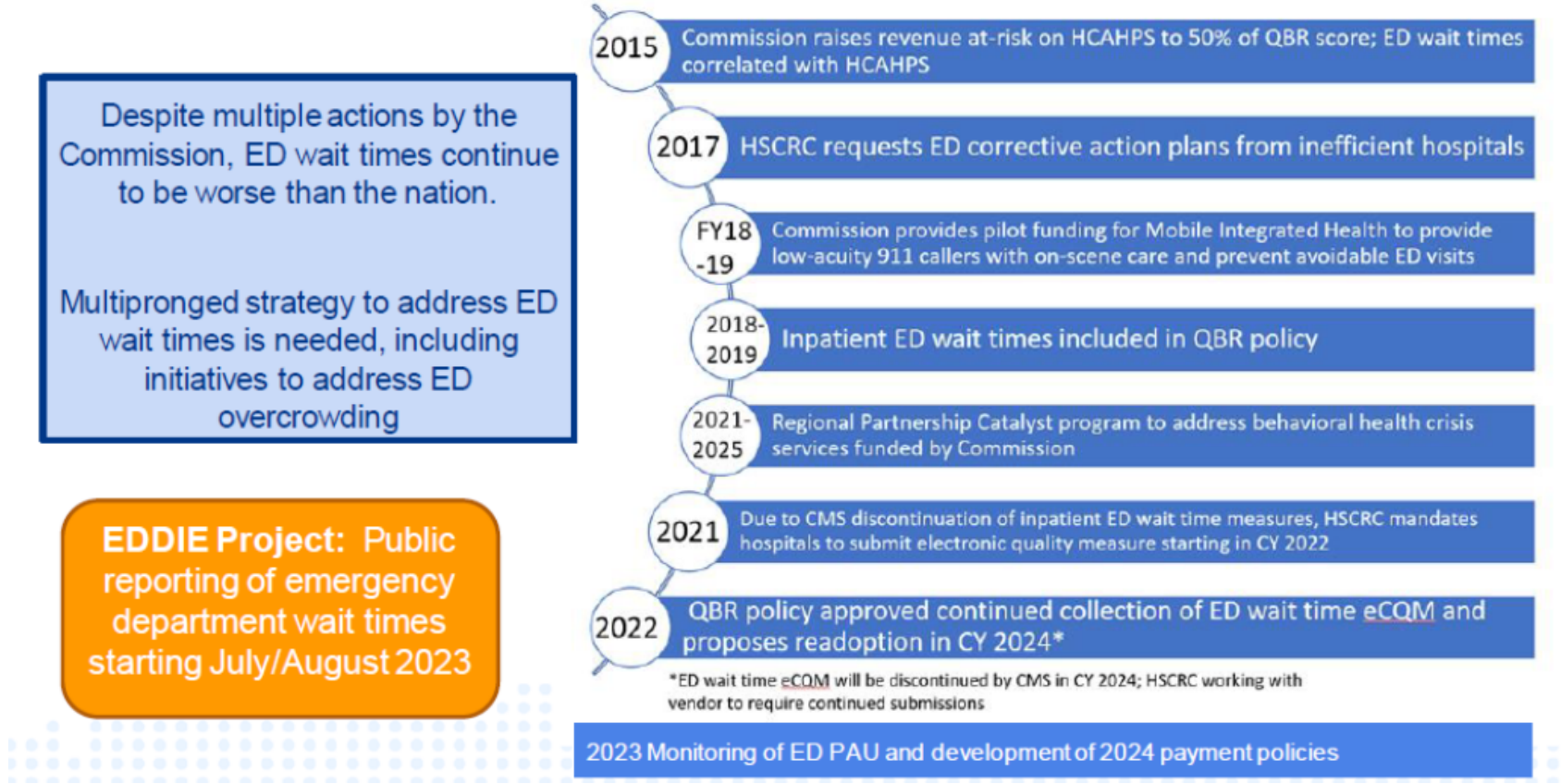
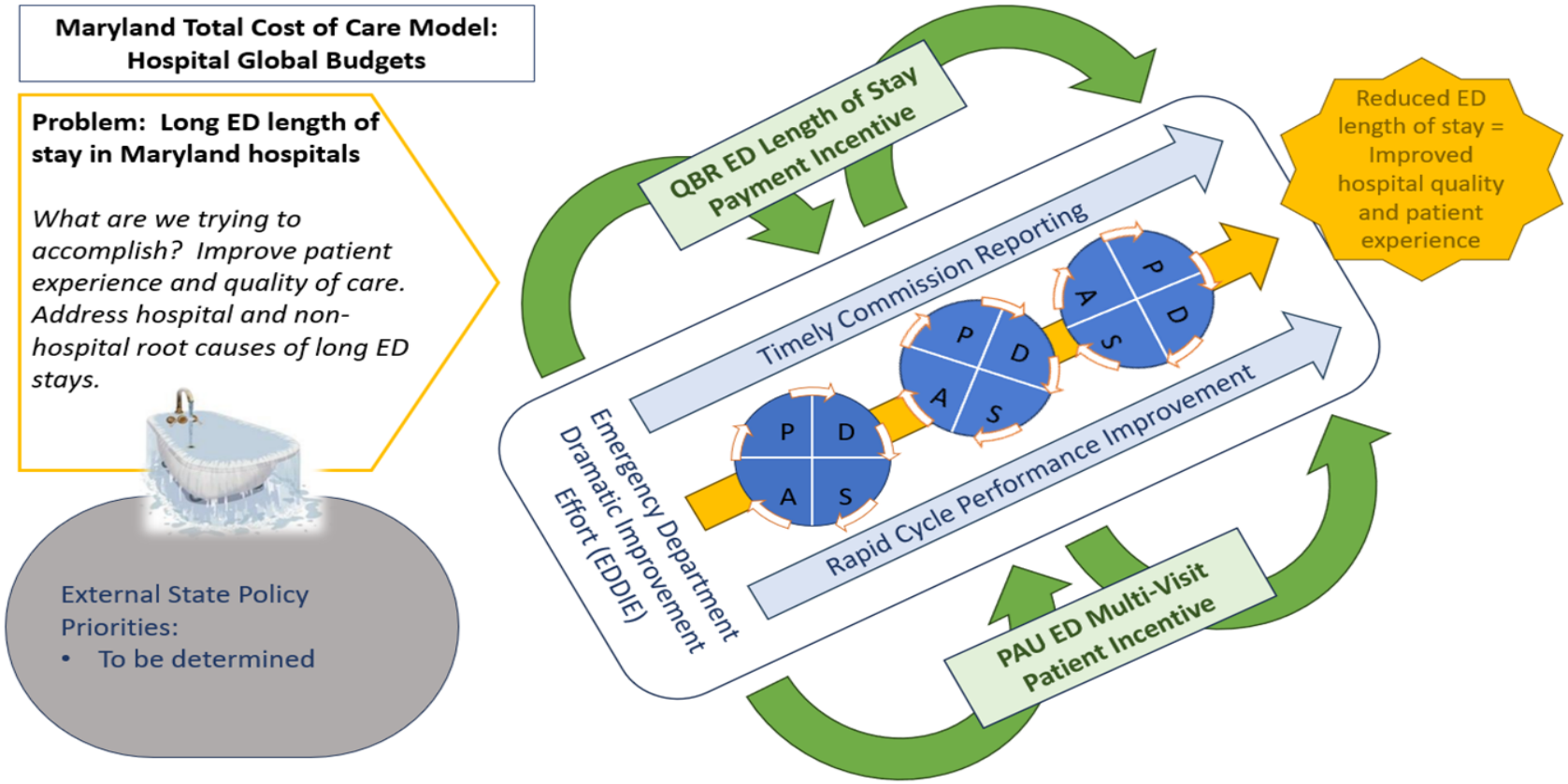


Figure 4. EDDIE Plan-Do-Study-Act Cycles and Pay-for-Performance Incentives



APPENDIX E. MODELING RESULTS BY HOSPITAL

		Model 1		Model 2		Model 3		Model 4	
Hospital ID	Hospital Name	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