maryland
health services
cost review commission

# Final Quality-Based Reimbursement Program for Rate Year 2025

November 9, 2022

This document contains the staff final recommendations for updating the Quality-Based Reimbursement Program for RY 2025.

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## List of Abbreviations

| | |
|---|---|
| CDC | Centers for Disease Control & Prevention |
| CAUTI | Catheter-associated urinary tract infection |
| CDIFF | Clostridium Difficile Infection |
| CLABSI | Central Line-Associated Bloodstream Infection |
| CMS | Centers for Medicare & Medicaid Services |
| DRG | Diagnosis-Related Group |
| ED | Emergency Department |
| FFY | Federal Fiscal Year |
| HCAHPS | Hospital Consumer Assessment of Healthcare Providers and Systems |
| HSCRC | Health Services Cost Review Commission |
| 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 measure and found disparities by race, dual-status, and Area Deprivation. Over the coming year, HSCRC staff will explore methods to assess disparities in Timely Follow-Up across social factors and develop hospital incentives for reducing these disparities, similar to the approved readmission disparity gap improvement policy. |

## RECOMMENDATIONS

This document puts forth the RY 2025 Quality-Based Reimbursement (QBR) final policy recommendations. This recommendation proposes maintaining updates from RY 2024 with minimal changes to the program measures as outlined below. It also makes several recommendations for the development of monitoring reports and building of infrastructure that will support expansion of the QBR program in future rate years. Staff greatly benefits from Commissioner support on these longer-term initiatives.

Final Recommendations for RY 2025 QBR Program:

1. Continue Domain Weighting as follows for determining hospitals' overall performance scores: Person and Community Engagement (PCE) - 50 percent, Safety (NHSN measures) - 35 percent, Clinical Care - 15 percent.
    a. Within the PCE domain, continue to include four linear HCAHPS measures weighted at 10% of QBR score; remove associated revenue at risk from top box.
    b. Within the PCE domain, add the Timely Follow-Up measure for Medicaid.

2. Develop the following monitoring reports for measures that will be considered for adoption after RY 2025:
    a. 30-day all-payer, all-cause mortality (claims based)
    b. Timely Follow-Up for Behavioral Health
    c. Disparity gaps for Timely Follow-Up
3. Implement the HCAHPS improvement framework with key stakeholders.
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements; For CY 2023 require submission of:
    a. ED-2 eCQM for monitoring; consider for re-adoption after RY 2025 (in CY 2024)
    b. Safe Opioid Use eCQM for monitoring
    c. Four additional eCQM measures aligned with the SIHIS goals and hospital improvement priorities
    d. Clinical data elements for 30-day mortality and readmission hybrid measures beginning July 2023
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

# INTRODUCTION

Maryland hospitals have been funded under a population-based revenue system with a fixed annual revenue cap 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. The revisions include annual updates to each program policy, which must be approved by the Health Services Cost Review Commission (HSCRC), and have also included more recent large-scale overhauls of the Maryland Hospital Acquired Condition Program and Readmissions Reduction Incentive Program to better align program policies with the expanded and evolving goals of the TCOC Model agreement.

Under the TCOC Model, Maryland must request exemptions each year from CMS pay-for-performance programs, e.g., the Value Based Purchasing (VBP) program for which the Quality Based Reimbursement (QBR) is the state analog. CMS assesses and grants these exemptions based on a report for each program showing that Maryland's results continue to meet or surpass those of the nation. CMS notified the HSCRC on October 29, 2021, that Maryland's exemptions were granted for federal fiscal year 2022. However, CMS raised concerns about Maryland's subpar performance on measures in two QBR Program domains: (1) the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures in the Person and Community Engagement domain and (2) the Centers for Disease Control and Prevention's (CDC's) National Health Safety Network infection measures in the Safety domain. CMS also noted its support for re-adoption of ED wait time measurement due to Maryland's historical poor performance. Finally, as part of exemption approval, CMS stipulated that Maryland develop a high-level work plan to redesign the QBR program and then a report summarizing the potential changes that would be recommended to the Commission. Further, CMS noted they expect the State to advance hospital quality improvement, total population health, and health equity. State improvements in each of these three areas are fundamental to the overall success of the Maryland TCOC Model. As such, they should be comprehensively integrated and aligned across the spectrum of healthcare delivery. CMS noted their evaluation of future CMS Quality Program Waiver requests will consider Maryland's performance improvement and advancement in these three high-priority areas. HSCRC has submitted our exemption request for FY 2023 and responded to the issues raised by CMS in last year's exemption approval; staff is awaiting CMS' response.

This RY 2025 policy recommendation summarizes the state's efforts to implement updates identified during last year's redesign of the QBR Program, which was the first hospital pay-for-performance program implemented by the HSCRC. Specifically, it describes the work done by the HSCRC staff and QBR Redesign Subgroup convened in 2021, and by the standing PMWG which moved the subgroup findings forward. This policy includes recommended changes to the program for RY 2025 (see Figure 1 for status and progress of work by domain and measure). See the RY 2024 QBR policy for additional information on the findings from the QBR Redesign.

**Figure 1. Status and Progress on QBR Redesign Tasks**

| Domain/ Measure | RY 2025 | Future program years |
|---|---|---|
| **Person and Community Engagement domain** | | |
| **HCAHPS** | • Monitor HCAHPS linear and overall scores after allocating 10% of points for the linear scores to the Person and Community Engagement (PCE) domain<br>• Use HCAHPS patient level data from the Maryland Health Care Commission (MHCC) for additional analytics, including on disparities, and hospital improvement<br>• Work with stakeholders to facilitate more sharing of best practices | • Continue to use HCAHPS patient-level data from the MHCC for additional analytics, including on disparities, and hospital improvement.<br>• Continue working with stakeholders to facilitate more sharing of best practices |
| **Emergency department (ED) wait times** | • Conduct more research and analyses, such as an analysis of ED median times during the COVID-19 pandemic if the data are publicly released by CMS<br>• Use infrastructure for electronic clinical quality measures (eCQMs) to enable the collection of data for an ED wait time measure; begin collection in CY 2022 | • Continue to collect the ED wait time measure eCQMs; consider adopting the ED measure in the QBR Program in future years<br>• Determine components to allow inclusion of measure in program (such as performance standards) |
| **Follow-up measure** | • Identify strategies for all hospitals in Maryland to achieve the SIHIS goal for Timely Follow-up<br>• Develop monitoring reports for behavioral health for the Timely Follow-Up measures | • Evaluate the results in the monitoring reports for the Medicaid and behavioral health follow-up measures; consider adding a measure that includes Medicaid and/or behavioral health to the QBR Program in RY 2025 |
| **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, maintain alignment with the national VBP Program; focus on improvement on current measures.<br>• Analyze impact of COVID on MD vs national trends | • Continue to analyze Maryland trends compared to national performance.<br>• Explore working with CDC to add more innovative and less burdensome "digital" measures. |

| Domain/ Measure | RY 2025 | Future program years |
|---|---|---|
| **Clinical Care domain** | | |
| **30-day mortality** | • Review additional analyses related to 30-day measure<br>• Continue to develop the 30-day measure for monitoring in RY 2025 | • Continue to evaluate 30-day measure<br>• Consider developing a hybrid measure using eCQM infrastructure<br>• Consider adoption for RY 2026 |
| **Total hip arthroplasty/total knee arthroplasty** | • Consider expansion of the current inpatient total hip arthroplasty/total knee arthroplasty measure to all-payers and to outpatient cases. | • When eCQM infrastructure is developed, explore adaptation of provider measures to assess all-payer inpatient and outpatient complications<br>• Explore opportunities for Patient Reported Outcome Measures (PROMs) |

## Implications of COVID-19

Like the rest of the United States, Maryland has spent the past two and a half years battling the COVID-19 pandemic. First responders, nurses, doctors, hospitals, and health care providers have worked heroically to combat this dangerous virus. Emergency measures have transformed our health care landscape, in some cases temporarily and in others permanently.

CMS has paused revenue adjustments for both the VBP (QBR-analogous) and HAC Reduction programs for FY 2023 due to COVID impact concerns; Maryland shares the same concerns and is considering suspension of the revenue adjustments for RY 2023 for the QBR and MHAC programs. Given the expected persistence of COVID-19, Maryland might decide that more adjustments are needed to further account for the effects of the pandemic in the RY 2024 QBR policy. Thus, staff recommended to the Commission that we retrospectively assess the need for changes for the RY 2024 policy and report those changes to the Commission. For RY 2025, staff is only recommending retrospectively evaluating the revenue adjustment scale cut point to allow for national comparison and to take into account any COVID issues (i.e., rather than adjusting measurement, focus on how measures are converted to revenue adjustments).

# 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 program assesses hospital performance against national standards for its Person and Community Engagement and Safety domains. For the Clinical Care domain, the program uses Maryland-specific standards for the inpatient mortality measure and national standards for the Medicare only measure of total hip arthroplasty/total knee arthroplasty (THA/TKA) complications. Figure 2 compares RY 2024 QBR measures and domain weights to those used in the VBP Program.

**Figure 2. RY 2024 QBR measures and domain weights compared with those used in the VBP Program**

| Domain | Maryland QBR domain weights and measures | CMS VBP domain weights and measures |
|---|---|---|
| **Clinical Care** | **15 percent**<br>Two measures: All-cause inpatient mortality; THA/TKA complications | **25 percent**<br>Five measures: Four condition-specific mortality measures; THA/TKA complications |
| **Person and Community Engagement** | **50 percent**<br>Nine measures: Eight HCAHPS categories top box score and four categories linear score; Medicare follow-up after chronic conditions exacerbation | **25 percent**<br>Eight HCAHPS measures top box score. |
| **Safety** | **35 percent**<br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90 | **25 percent**<br>Five measures: CDC NHSN HAI measures |
| **Efficiency** | n.a. | **25 percent**<br>One measure: Medicare spending per beneficiary |

With the selected measures from above, the QBR Program assesses hospital performance based on the national threshold (50th percentile) and benchmark (mean of the top decile) values for all measures, except the HSCRC calculated in-hospital mortality rate and Medicare Timely Follow-Up (which uses state data to calculate performance standards). 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 national 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. 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.

The preset scale for revenue adjustments is 0 to 80 percent, regardless of the score of the highest-performing hospital in the state, and the cut-point at which a hospital earns rewards or receives a penalty is 41 percent. This reward and penalty cut-point is based on an analysis of the national VBP Program

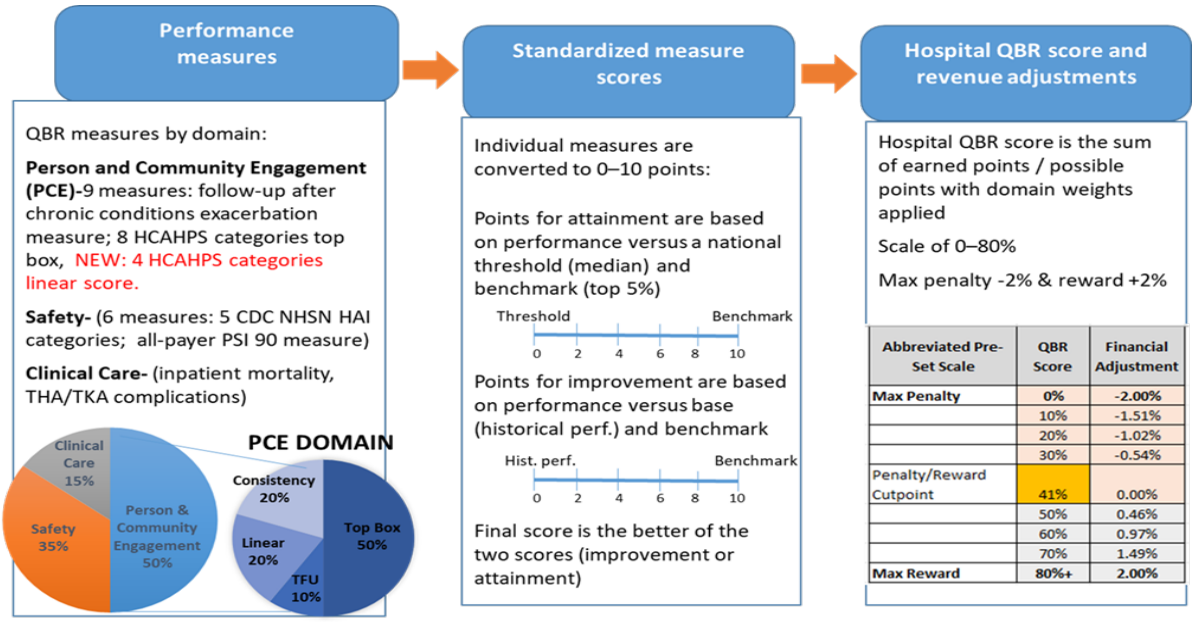
scores for federal fiscal years 2016–2021, which indicated the average national score using Maryland domain weights (without the Efficiency domain) was around 41 percent (ranging from 38.5 to 42.7).

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 2024 QBR Policy Methodology Overview**




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

## 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 has proposed a preliminary revenue adjustment scale and a method

for assessing the scale retrospectively, but does not present new modeling of potential revenue adjustments.

## Person and Community Engagement Domain

The Person and Community Engagement domain currently measures performance using the HCAHPS patient survey and a measure of timely follow-up (TFU) after discharge for an acute exacerbation of a chronic condition for Medicare FFS beneficiaries. This domain accounts for 50 percent of the overall QBR score. In addition this domain previously included the emergency department (ED) wait time measures for admitted patients, which were retired in CY 2019 and CY 2020 due to federal discontinuance of these measures. This section also discusses the HSCRC staff's work with CRISP to collect the eCQM version of the ED wait time measure.

### 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 on either improvement or attainment, 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[1]; 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.

The VBP and QBR program have historically measured HCAHPS based on the top-box score (e.g., the percent of respondents who indicate they strongly agree). As part of the RY 2024 QBR Redesign, the state decided to also score hospitals on the HCAHPS linear scores, which are the average response across all response categories. Specifically, 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. Also by focusing on just 4 of the 8 measures, staff believes additional emphasis will be put on these important measures that have been shown to be correlated with other patient safety outcomes. The HSCRC staff recommends including the linear measures for RY 2025; however, staff will assess if adding the linear measures helps improve top-box scores over the

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

coming 2-3 years. If top box scores do not improve, the staff will recommend removing the linear measures in future rate years.

Figures 4 and 5 below provide graphic and numeric representations respectively of the HCAHPS measure results for Maryland compared to the Nation, revealing that:

- Maryland continues to lag behind the Nation.
- Both the Nation and Maryland declined slightly from the base to the performance periods for most of the HCAHPS categories.
- For the "Overall Rating 9 or 10" category, Maryland performs worse than the Nation but both Maryland and the Nation maintained their performance from the base.
- For " Discharge Information Provided", Maryland and the Nation performed on par with one another and maintained their performance levels from the base.

Subsequent to the state vs. national analysis through 3/31/21, updated data through 6/30/21 was released on CMS Care Compare showing similar trends of Maryland lagging behind the nation and poorer performance for both Maryland and the nation in the performance period compared with the pre-COVID base period.

**Figure 4. HCAHPS Top Box Results: Maryland Compared to the Nation, CY 2019 vs 10/1/20-9/30/21**

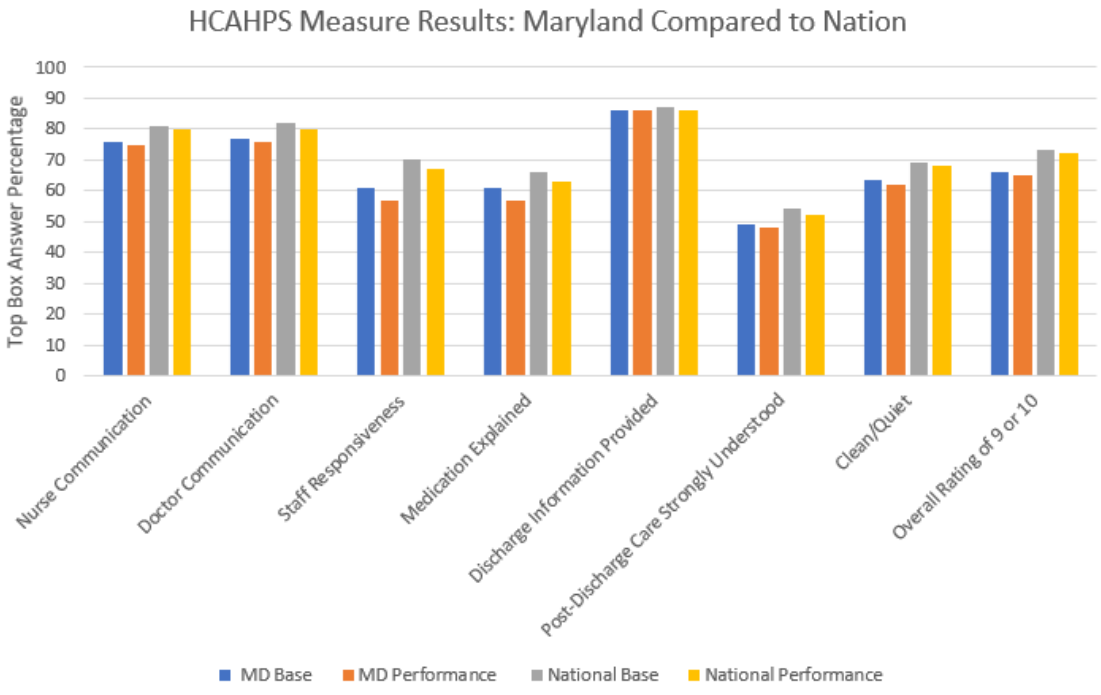


Figure. 5 HCAHPS Numeric Results: Maryland Compared to the Nation

| | MD Base | MD Performance | National Base | National Performance |
|---|---|---|---|---|
| Nurse Communication | 76 | 75 | 81 | 80 |
| Doctor Communication | 77 | 76 | 82 | 80 |
| Staff Responsiveness | 61 | 57 | 70 | 67 |
| Medication Explained | 61 | 57 | 66 | 63 |
| Discharge Information Provided | 86 | 86 | 87 | 86 |
| Post-Discharge Care Strongly Understood | 49 | 48 | 54 | 52 |
| Clean/Quiet | 63.5 | 62 | 69 | 68 |
| Overall Rating of 9 or 10 | 66 | 65 | 73 | 72 |

## Maryland HCAHPS Improvement Framework

### Background

One important area CMMI has identified in feedback to the Commission is the need for targeting improvement in HCAHPS in the Person and Community Engagement domain, worth 50% of the QBR program score. Specifically, CMMI's correspondence noted the following:

> "CMS encourages the State to prioritize strategies to investigate the root cause of poor HCAHPS performance, create a formalized platform for hospitals to share HCAHPS best practices, and invest in infrastructure to capture patient-level-data; CMS believes that these strategies have the greatest potential to maximize sustained performance improvement in HCAHPS, long-term. CMS suggests 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. CMS is 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. CMS expects the FFY 2023 CMS Quality Program Waiver request to include a framework development timeline and proposal outlining the State's approach for developing HCAHPS performance improvement goals. This proposal and timeline will be heavily considered in evaluating the State's CMS Quality Program Waiver request for FFY 2023. "

### Historic Efforts to Improve HCAHPS

The State and hospitals have worked to target HCAHPS improvement over the past several years. In addition to increasing the incentives to double that of the nation under the QBR program, the Maryland Hospital Association (MHA) has worked with hospitals and health systems to assess HCAHPS performance and develop improvement initiatives stemming from best practices and leveraging efforts correlated with improvements in patient satisfaction. MHA planned additional collaboratives for CY 2020,

but these plans were halted because, like many hospitals around the country, all staff were fully engaged in responding to the COVID crisis.

**Past Learning Collaboratives and Programs**

In 2018, MHA initiated a Patient Experience Mentoring Program. The program identified hospitals whose patient satisfaction scores were a top box, exceeded the Nation average, and improved over time. MHA reached out to them to know their success strategies and possibly replicate them state-wide. MHA paired the hospitals to create an inter-hospital sharing platform to guide/support each other and identify opportunities to improve HCAHPS scores. The pilot began with patient experience leads visiting their partner hospital for a discrete on-site visit. The leads toured the ED/patient rooms, attended morning bed huddles, observed nurse leader rounding, etc. They filled out a site visit guide with observations and shared it with the partner hospital. Hospitals have expressed that the peer program was beneficial and enhanced staff engagement.

In 2019, MHA conducted a **Patient Experience learning Conference**. The participants of the MHA mentoring program were in attendance to share their lessons learned/experiences. MHA began the event by sharing state-wide HCAHPS scores to help hospitals identify and close the gaps. National HCAHPS expert Carrie Brady facilitated the rest of the conference. Ms. Brady conducted a panel discussion on technology to support rounding, organizational structures to support patient experience, Nurse leader rounding, and staff engagement. Ms. Brady also made participants take the HCAHPS survey and reviewed the Always Events Toolkit. The takeaway of the conference was for the participants to receive a guide to creating their peer-to-peer learning program within the hospital or health system.

To address the ongoing concerns going forward, HSCRC will work in collaboration with Maryland hospitals, MHA, and other important stakeholders committed to developing and implementing a framework that supports improving Maryland performance on HCAHPS. An initial critical component of the framework includes collaboration with all key stakeholders, including Maryland Hospital Association (MHA), hospital staff/entities accountable for HCAHPS survey administration and for data analysis, patient representatives, and the Maryland Healthcare Commission (MHCC). Critical components of the framework are outlined below.

**Administrative Leadership Accountability:**

HSCRC will first identify for each hospital the key hospital staff accountable for HCAHPS survey administration, data analysis, and improvement. These hospital contacts will be engaged in all activities established under the HCAHPS improvement framework.

***Anticipated Timeline:*** *HSCRC will work with MHA and hospitals to identify HCAHPS-accountable hospital contacts by December 2022.*

**Data Analysis and Data Sharing:**

HSCRC will conduct or facilitate data analysis of HCAHPS data to stratify hospital-specific reporting on levels and rankings of performance on both top box scores, and on linear scores newly added to the QBR program as of rate year 2024. The analysis will also include hospital performance on specific HCAHPS categories. Further, HSCRC will work with MHCC to understand patient-specific demographic factors that may be contributing to hospital-specific trends or that may indicate disparities in performance.

***Anticipated Timeline:*** *HSCRC will work with MHCC to analyze patient-level HCAHPS data once hospitals have submitted data for a full year. HCAHPS data submission began with MHCC receiving CY 2021 Q3 data in January 2022. We anticipate beginning an analysis of the HCAHPS data as of January 2023.*

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

Drawing from a review of the literature on improving HCAHPS, hospitals will be surveyed on approaches they have implemented to improve their performance. Subsequently, hospitals will be convened so that they can share their experiences in designing and implementing best practices, which will include but are not limited to those outlined below.

***Anticipated Timeline:*** *HSCRC will work with MHA, MHEI and hospitals to plan and implement sharing of best practices to improve HCAHPS beginning in CY 2023 and continuing into CY 2024.*

*Organizational Factors*

In a study of organizational factors that may improve patient experience, interviews of staff and patient representatives were conducted at eight geographically spread out organizations that included three inpatient hospitals known for such improvements. The study identified the following processes for improving patient-centered care:

1. strong, committed senior leadership,
2. clear communication of strategic vision,
3. active engagement of patient and families throughout the institution,
4. sustained focus on staff satisfaction,
5. active measurement and feedback reporting of patient experiences,
6. adequate resourcing of care delivery redesign,

7. staff capacity building,
8. accountability and incentives and
9. a culture strongly supportive of change and learning.[2]

*Patient-Physician Communication*

One publication provided a summary of current literature that lays out best practices that hospitals can employ to improve physician-patient communication, specifically targeting the HCAHPS survey. [3] The article outlined Best Practices summarized in the Figure 6 below.

**Figure 6. Hospital Provider Communication Best Practices**

| Demonstrating Courtesy and Respect | Best Practices for Improving Listening | Best Practices for Explaining |
|---|---|---|
| Knock before entering a patient's room.<br>Greet the patient by name.<br>Introduce yourself and your role. Review the chart prior to entering the room.<br>● Treat every concern brought up as important and ex-plain why you prioritize certain concerns over others in the hospital.<br>Ask the patient for permission to conduct a physical examination.<br>● At the end of an encounter, ask for questions in an open-ended fashion<br>● End the hospital stay on a positive note. | ● Avoid interrupting the patient.<br>● Take notes so they know you take their concerns seriously<br>● Summarize key points of a discussion.<br>● Pay attention to nonverbal cues, and acknowledge emotions<br>● Sit at the bedside.<br>● Use social touch to convey empathy.<br>● Be comfortable with silence: allow 5 seconds to re-sume conversation when there is a pause.<br>● Watch your body language; don't appear hurried, bored or fidgety; don't cross your arms. | ● Avoid medical jargon<br>● Explain physical examination findings as you are conducting the examination.<br>● Use the teach-back method to ensure understanding; utilize open-ended questions.<br>● Explain procedures/testing before they are ordered/ performed.<br>● Write out important information, if needed (use white-boards in rooms).<br>● Give patients a way to contact you with any questions after the hospital stay. |

*Discharge Planning/Care Transition*

A study surveyed 1,600 acute care hospitals on whether the following strategies were used:

[2] Luxford, Karen, Dana Gelb Safran, and Tom Delbanco. "Promoting Patient-Centered Care: A Qualitative Study of Facilitators and Barriers in Healthcare Organizations with a Reputation for Improving the Patient Experience." *International Journal for Quality in Health Care*, vol. 23, no. 5, 2011, pp. 510–515.

[3] Dutta, Suparna, and Syeda Uzma Abbas. "HCAHPS And The Metrics Of Patient Experience: A Guide For Hospitals And Hospitalists." *Hospital Medicine Practice*, vol. 3, no. 6, June 2015. Available at http://medicine.med.miami.edu/documents/Patient_Satisfaction_6-15.pdf.

1. use of a dedicated discharge planner or discharge coordinator, create discharge summary prior to discharge and share with outpatient provider,
2. schedule follow-up appoints for all patients prior to discharge,
3. use electronic tools to reconcile discharge medications, and
4. use formal discharge checklist to document components of the discharge process.[4]

After categorizing responders into low-strategy, mid-strategy, and high-strategy groups based on quartiles of the number of strategies that used, the study found that compared with low-strategy hospitals, high-strategy hospitals had a higher overall rating (+2.23 percentage points (pp), P<0.001), higher recommendation score (+2.5 pp, P<0.001), and higher satisfaction with discharge process (+1.35 pp, P=0.01) and medication communication (+1.44 pp, P=0.002).

**Next Steps**

Building off of the past efforts, MHA is working with Maryland Healthcare Education Institute (MHEI) and the Maryland Patient Safety Center (MPSC) on two current initiatives to support HCAHPS improvements through education and training efforts:

- What Do Our Patients Want From Us Now?
- BIRTH Equity: Breaking Inequality Reimagining Transformative Healthcare

HSCRC, again working with identified key stakeholders, will collaborate to finalize and implement the framework. Throughout the remainder of CY 2022 and going forward, the Commission will provide periodic updates on the framework and its implementation, including HCAHPS data trends.

## Emergency Department Wait Time Measure

Long ED wait times are an enduring issue in Maryland, which has had longer wait times than the national average pre-dating the start of global budgets in 2014. Concerns about unfavorable ED throughput data have been shared by many Maryland stakeholders, including the HSCRC, the Maryland Health Care Commission, payers, consumers, emergency room physicians, the Maryland Institute of Emergency Medical Services Systems, and the Maryland General Assembly.[5] Under alternative payment models, such as hospital global budgets or other hospital capitated models, there may be an incentive to reduce

[4] Figueroa, J.F., Y. Feyman, X. Zhou, and K.J. Maddox. "Hospital-Level Care Coordination Strategies Associated with Better Patient Experience." *BMJ Quality & Safety,* vol. 27, 2018, pp. 844–851. Available at https://qualitysafety.bmj.com/content/qhc/27/10/844.full.pdf.

[5] For the "Emergency Department Overcrowding Update" November 2019 Joint Chairman Report, please see http://www.miemss.org/home/Portals/0/Docs/LegislativeReports/miemss-ed-overcrowding-update-10-31-19.pdf?ver=2019-11-19-174743-763.

staffing that leads to ED throughput issues. Measuring ED wait times is one way to monitor for unintended consequences of the Model on hospital throughput. In general, ED staff supported including the inpatient wait time measures to address the issue of ED boarding and hospital throughput.

In RY 2020 (CY 2018 measurement period), the QBR Program introduced the use of the two inpatient ED wait time measures (ED-1b and ED-2). The HSCRC included the measures as part of the QBR Person and Community Engagement domain because of the correlation between ED wait times and HCAHPS performance. To ensure fairness in performance assessment Maryland hospitals are compared to national peer groups based on ED volume. Stakeholders have also voiced concern about whether the measures should be risk adjusted for occupancy. Staff analysis of 2019 data do indicate that ED visit volume and occupancy are both statistically significantly associated with ED-2b in univariate regression analyses ($p < .05$). However, after controlling for ED volume, occupancy is no longer statistically significant. Based on this analysis, hospitals with greater volumes should be given a higher time threshold, and staff also suggested considering continuous volume adjustment in the future. In CYs 2019 and 2020, CMS's Hospital Inpatient Quality Reporting (IQR) program stopped requiring submission of the ED-1b and ED-2b measures, respectively, which meant that the HSCRC had to remove the measures from the QBR Program. However, the Commissioners requested that staff pursue other options to obtain ED wait time data. Staff recommended the CMS electronic clinical quality measure (eCQM) version of the ED-2 measure, which is optional for hospitals to submit. However, in the FY 2022 IPPS Final Rule, CMS finalized plans to remove this measure beginning with CY 2024 reporting. Despite its removal from the IQR program, HSCRC staff believes it will be possible for hospitals to continue to report the measure electronically since the measure is already nationally specified and continues to be used voluntarily by hospitals for submission to CMS for CYs 2022 and 2023, and is part of the Joint Commission measure set.

### *Collection of ED Wait Time Data*

Currently staff is collaborating with CRISP and its contractor, Medisolv, to collect electronic clinical quality measures (eCQMs), including the ED-2 eCQM, and clinical core data elements for hybrid measures since CMS is signaling this direction for quality measurement. Half of hospitals began submitting the measure using CY 2021 data, and all hospitals have been required to submit the measure for all four quarters in CY 2022. Please see more information regarding Maryland's hospital eCQM Infrastructure in the section below. The eCQM ED-2 measure has several advantages:

- Nationally specified measure
- National historical data will be available for establishing performance standards
- Aligns with CMS requirements for submitting eCQMs through CY 2023, and is still used voluntarily by the Joint Commission

Stakeholders are supportive of monitoring the eCQM ED-2 measure, appreciating that it correlates with patient experience and serves as a broad measure of hospital efficiencies: many departments have to be working properly for a decrease to take place in the time between the decision to admit and actual admission. Broadly, subgroup members noted that eCQM measures are simple, perform better than other collected measures (for example, abstraction measures), and give hospitals the ability to look at data in real time.

Concerns raised about implementing eCQM ED-2 into payment include the lack of comparable historical or national data on all hospitals for creating a benchmark since reporting is voluntary. Because it is a voluntary metric nationally, poor performing hospitals may choose not to report. Noting the concerns around implementing ED-2 into payment, staff believes that there are ways to develop performance standards. For example, staff note that we could continue with the same performance standards as we had with the chart abstracted measure or develop a scoring methodology that only looks at improvement. Thus, for this policy we are asking Commissioners to approve the recommendation to require hospitals to submit the ED-2 eCQM for CY 2023 performance and then in future policies consider readopting the measure for payment.

## Timely Follow-Up After Discharge

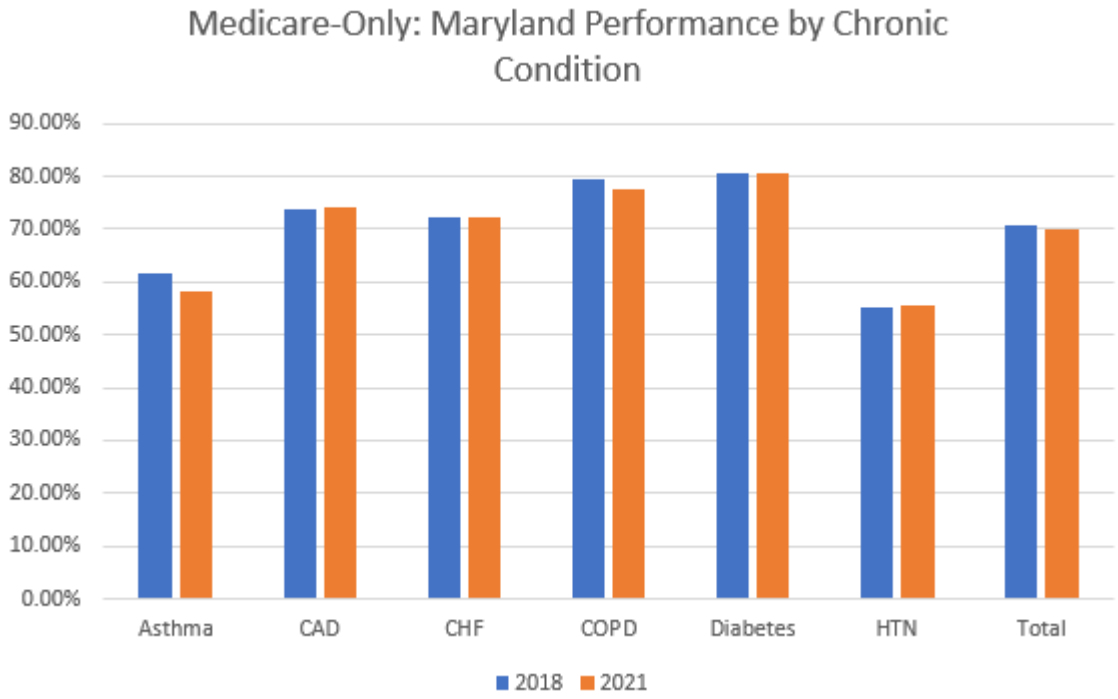
On March 17, 2021, CMS approved Maryland's proposed SIHIS, which included a National Quality Forum-endorsed health plan measure of timely follow-up (TFU) after an acute exacerbation of a chronic condition in the Care Transition domain. The SIHIS goal is to achieve a 75 percent TFU rate for Medicare FFS 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 recommend continuing it in the RY 2025 QBR program weighted at 10 percent of the PCE domain (20 percent of the overall QBR score).

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 7 shows Maryland's performance over time for each chronic condition and all conditions combined. For all conditions, there was a slight drop from 2018 to 2021 (70.85% to 70.07%) and thus Maryland did not meet the Year 3 SIHIS goal of 72.38 percent. The largest drop in follow-up was for asthma (-3.5%) and COPD (-1.7%), which also had increases in the number of discharges requiring follow-up in CY 2021 and thus higher weighting in the total composite. For CAD, CHF, diabetes, and hypertension there were slight increases in follow-up but also decreases in the number of discharges in 2021. Thus the weighting or number of discharges in the composite also impacts the total rate and may need to be considered as we assess progress on increasing follow-up.

**Figure 7. Medicare-only: Maryland Timely Follow-Up by Condition**




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

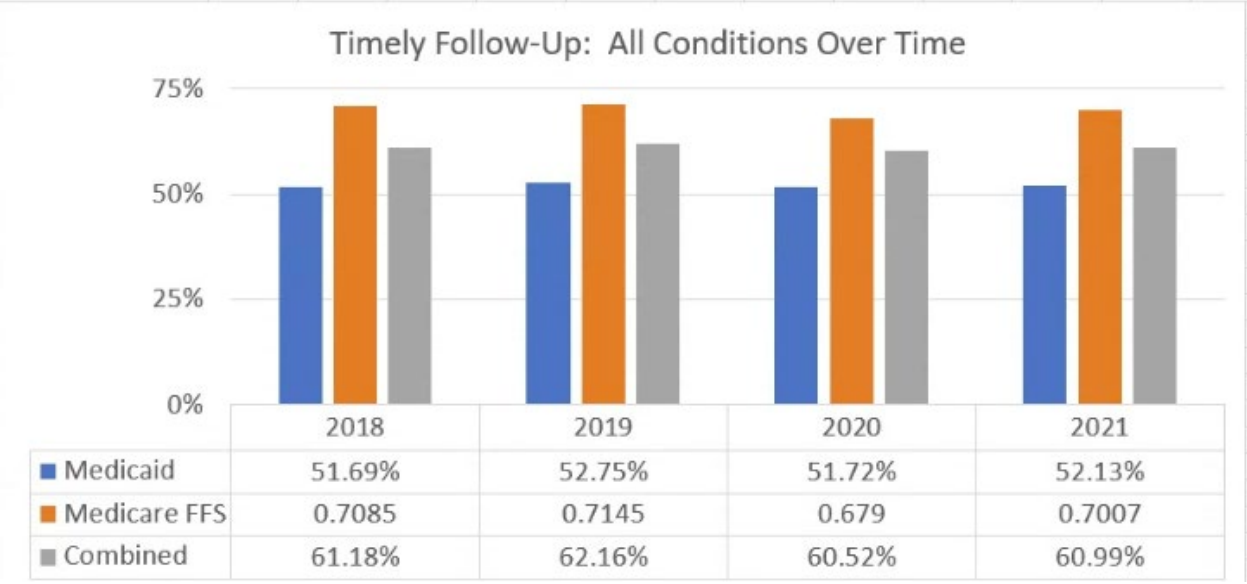
Figure 8 shows the annual performance on the total TFU measure for Maryland and the Nation (national data is based on the Chronic Condition Warehouse 5 percent sample). Overall there was a drop in TFU for both the State and the nation during the COVID-19 PHE. Based on the data from CY 2021, the state was at 70.07 percent TFU across all conditions and as mentioned above did not meet the Year 3 SIHIS goal of a TFU rate of 72.38 percent. However, Maryland did have some recovery in 2021 from 2020 and performed about 2.5 percent better than the Nation despite missing the SIHIS goal.

**Figure 8. Medicare-only: Timely Follow-Up across All Conditions**

| | CY2018 | CY2019 | CY2020 | CY2021 |
|---|---|---|---|---|
| **Maryland** | 70.85% | 71.45% | 67.90% | 70.07% |
| **US** | 66.82% | 69.00% | 64.75% | 67.68% |

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. Figure 9 shows the TFU rate for both Medicare FFS and Medicaid individually and combined. Currently staff is vetting with the PMWG how to incorporate Medicaid in the payment program. Issues to discuss include the concerns of the SIHIS goal being missed for Medicare FFS, the significant differences between Medicare and Medicaid rates that make it less suitable as a combined measure, and the weight that would be put on a Medicaid measure (i.e., how would the current 5 percent of the PCE domain be split and is that weight significant enough of an incentive). The HSCRC staff will further review these issues with PMWG in October and request that comment letters provide feedback on how to incorporate Medicaid. Based on this discussion the staff will provide a final recommendation for consideration in November.

**Figure 9 Medicaid and Medicare FFS: Timely Follow-Up across All Conditions**



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

### *Health Equity Workgroup Findings*

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 10, 11, and 12, but overall the analysis found disparities on all three factors. For example, Figure 10 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. Given that the state did not meet the 2021 Year 3 Milestone Target and the overwhelming evidence of disparities in this measure, HSCRC staff will develop hospital incentives for reducing these disparities, similar to the approved readmission disparity gap improvement policy, over the next year. The methodology will address how to measure disparities in the three exposure factors above using a composite exposure variable that is not associated with the outcome. This differs from the current readmission methodology and will require time to develop the measure before reports can be provided to hospitals. However, this is a priority of the staff and will hopefully aid the state in achieving the final SIHIS goal of a 75 percent (or 0.5% better than the nation) timely follow-up rate in CY 2026.

**Figure 10. Odds Ratio of No Follow-Up by Race**

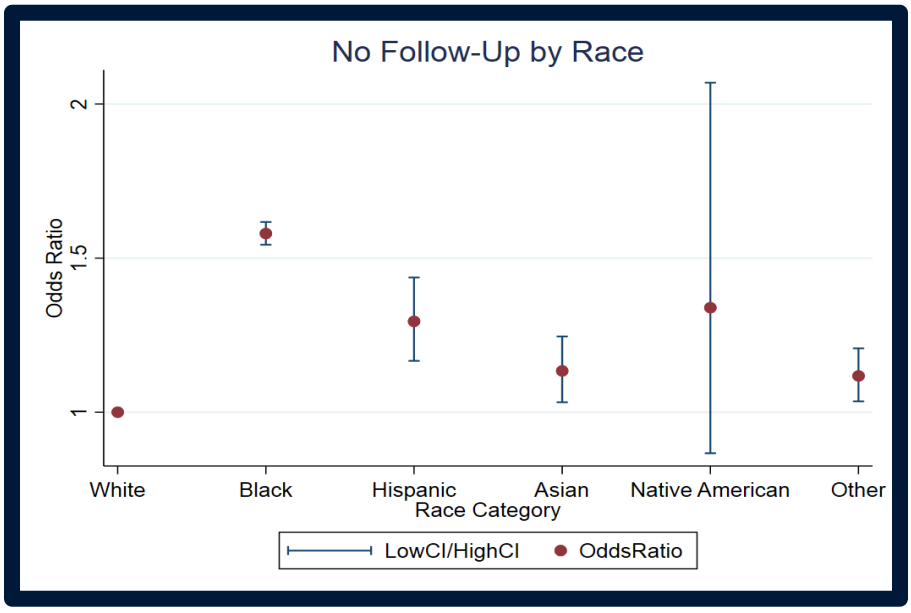


**Figure 11. Odds Ratio of No Follow-Up by ADI Decile**

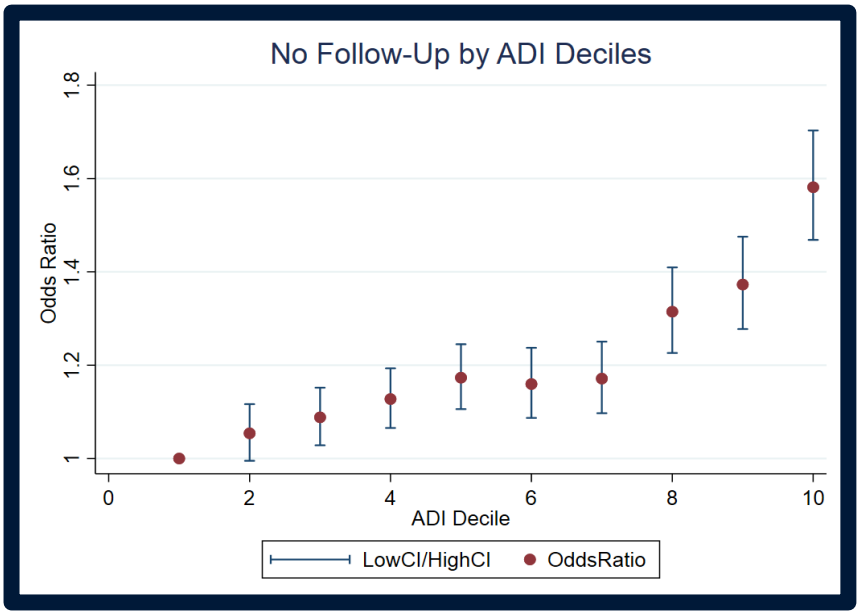
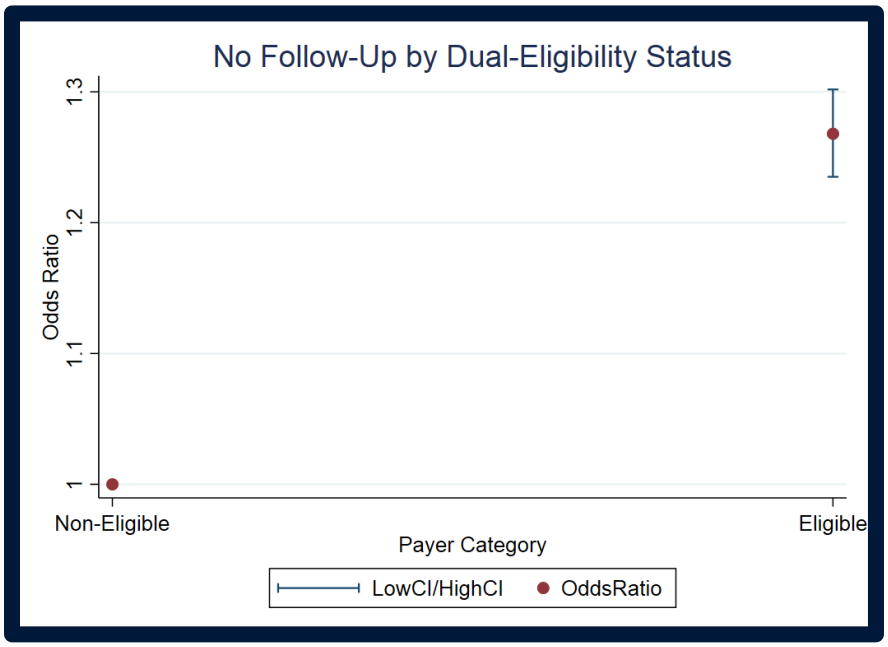



**Figure 12. Odds Ratio of No Follow-Up by Dual-Eligibility Status**



## 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] It is weighted at 35 percent of the QBR score.

### CDC NHSN HAI measures

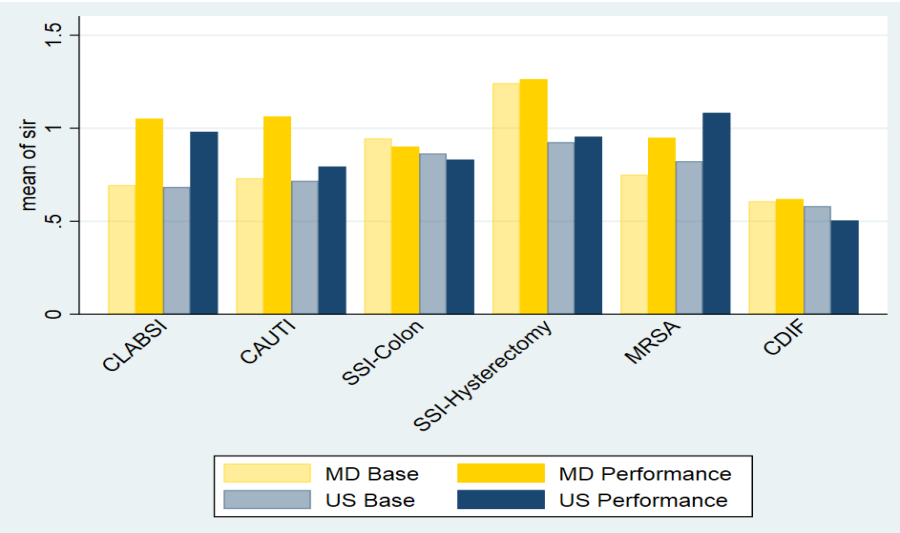
The CDCs National Healthcare Safety Network (NHSN) tracks healthcare-associated infections such as central-line associated bloodstream infections and catheter-associated urinary tract infections. Both Maryland and the nation have seen increases in HAIs during CY 2020 and CY 2021. Specifically, CDC has reported that there were significant increases in the national SIRs for CLABSI, CAUTI, VAE, and MRSA bacteremia in 2020 compared to 2019, but that the increases varied by quarter and State. In Maryland, there were statistically significant increases in CLABSI in 2020, while all other NHSN measures for Maryland did not show a statistically significant change despite increases. Furthermore a recent study has shown that the increase in HAI SIRs continued into CY 2021.[7] For example, nationally CLABSI increased by 45 percent from Q1 2019 to Q1 2021. Based on these trends, the FY 2023 CMS final rule suppressed the NHSN HAI measures in the national VBP program based on the significant changes in the national results during COVID, as well as significant shortages in health personnel that would impact care delivery. Thus, the Maryland and national results below should be interpreted cautiously and the HSCRC staff will need to monitor whether CMS makes any additional recommendations for suppressing measures during the RY 2025 performance period.

CMS Care Compare has updated the HAI SIR data tables for the nation and by state through October 2021. As Figure 13 below indicates, Maryland's performance is worse (higher SIRs) on all measures with the exception of MRSA. Furthermore, Maryland performed worse on all measures except SSI-Colon from 2019; nationally the measures also got worse except for MRSA and c.Diff.

**Figure 13. NHSN SIR Values for CY19 compared to Q4 CY20-Q3 CY21, Maryland versus the nation.**

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

[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




## Patient Safety Index (PSI-90)

To align with the VBP program and expand the QBR program's measurement of preventable complications that cause patient harm and increase the cost of hospital care, the Commission approved the adoption of the all-payer version of the PSI-90 measure in the RY 2023 QBR program at the recommendation of staff and PMWG stakeholders. 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 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 is recommending to retain it in the RY 2025 QBR program.

As illustrated in Figure 14 below, for CY 2021 (with COVID cases removed as recommended by AHRQ) compared with CY 2019, Maryland's statewide performance is as follows:

- The state has **improved** with lower rates in 2021 on PSIs 09 Perioperative Hemorrhage or Hematoma Rate and 14 Postoperative Wound Dehiscence Rate.
- The state has **neither improved or declined** on PSIs 03 Pressure Ulcer Rate, 08 In-Hospital Fall With Hip Fracture Rate, and 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate.
- The state has **worsened** with higher rates in 2021 on PSIs 06 Iatrogenic Pneumothorax Rate, 11 Postoperative Respiratory Failure Rate, 12 Perioperative Pulmonary Embolism (PE) or Deep Vein

[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

Thrombosis (DVT) Rate, 13 Postoperative Sepsis Rate, and 15 Abdominopelvic Accidental Puncture or Laceration Rate.

- On the overall PSI 90 composite measure, the state has worsened slightly.

**Figure 14. Maryland Statewide All-Payer Performance on PSI-90 and Component Indicators, COVID Removed, CY 2021 Compared to CY 2019**

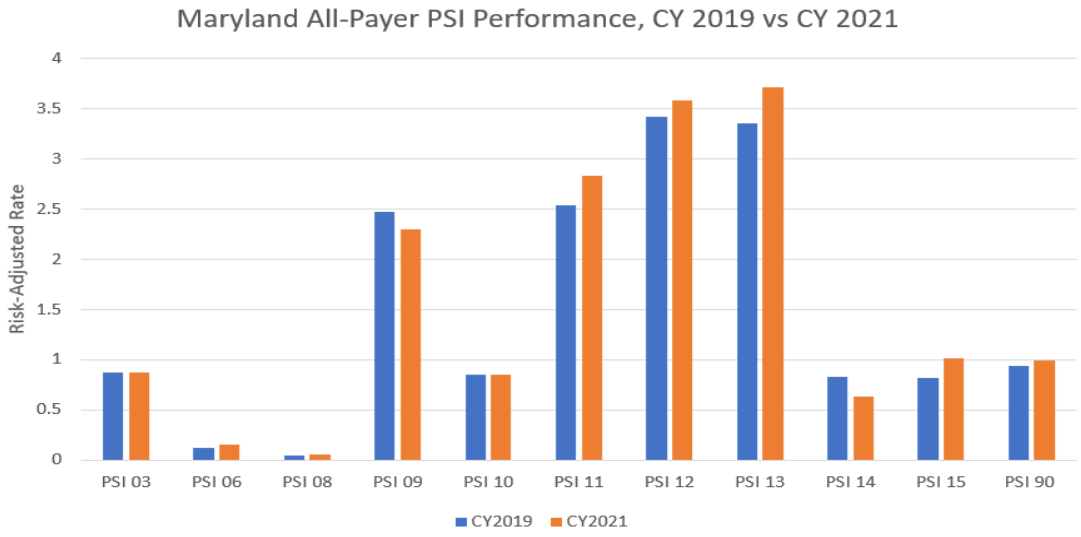
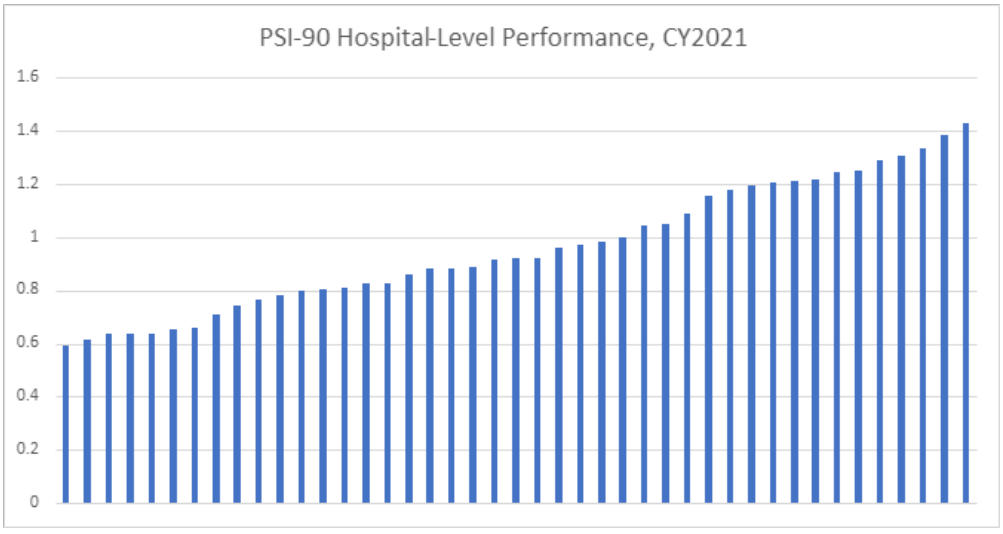



Figure 15 below illustrates the hospital-level performance on the all-payer PSI-90 composite measure for CY 2021; the variation in performance by hospital suggests there may be opportunity for improvement on this measure. However, it should be noted that this data may be impacted by the COVID PHE even though COVID cases were removed.

**Figure 15. PSI-90 Hospital-Level Performance, CY 2021**



## Clinical Care Domain

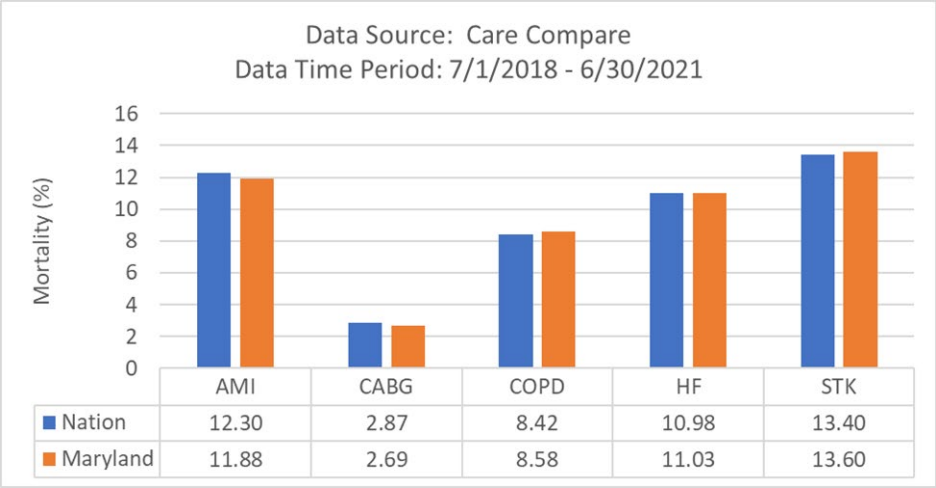
This domain, weighted at 15 percent of the QBR score, currently includes:

- A broader inpatient, all-payer, all-condition mortality measure that is weighted at 10 percent. This 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 is in the process of developing an all-payer, all-cause 30 day mortality measure and recommends developing monitoring reports for RY 2025.
- The inpatient Medicare Total Hip Arthroplasty-Total Knee Arthroplasty (THA/TKA) Complications measure is weighted at 5 percent. This is also used by the CMS VBP program.

### Mortality

Based on the most recently available data through June of 2021, Maryland performs on par with the nation on all five of the condition specific mortality measures (data on pneumonia was removed in the latest Care Compare release due to COVID). Specifically Maryland performs slightly better than the nation on AMI and CABG, and slightly worse on COPD, HF, and STK (Figure 16). 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).

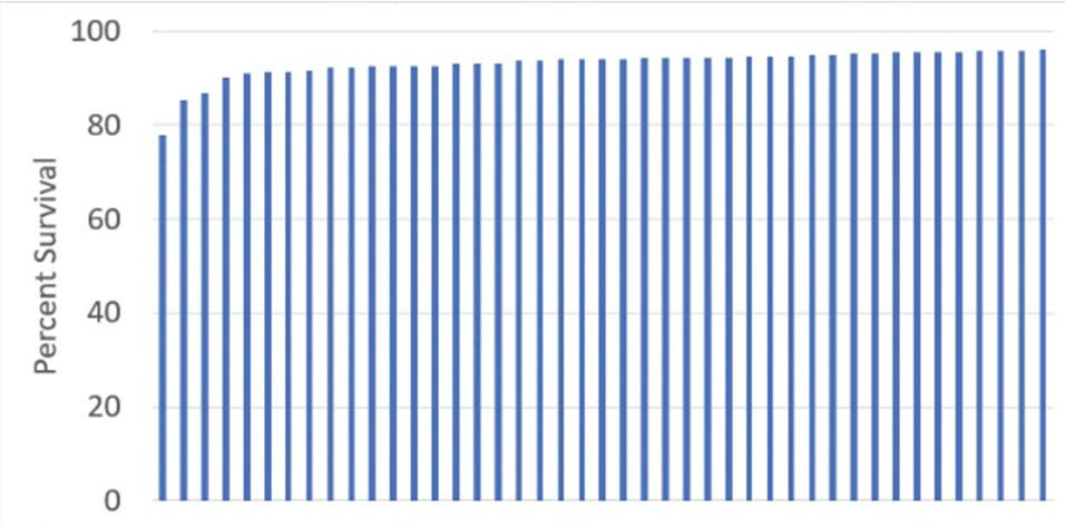
**Figure 16. Maryland vs. National Hospital Performance on CMS Condition-Specific Mortality Measures**




| | AMI | CABG | COPD | HF | STK |
|---|---|---|---|---|---|
| Nation | 12.30 | 2.87 | 8.42 | 10.98 | 13.40 |
| Maryland | 11.88 | 2.69 | 8.58 | 11.03 | 13.60 |

For the QBR all-payer inpatient mortality measure, which assesses hospital services where 80% of the mortalities occur (80% DRG exclusion), statewide survival rate decreased during the COVID PHE from 94.86% in the CY 2019 base period to 93.63% in the CY 2021 performance period. These mortality results modified our risk-adjustment model to add patient COVID status during admission and percent of patients at the hospital with COVID to the CY 2021 regression to better account for COVIDs impact on mortality. As illustrated in Figure 17 below, there are less than a handful of hospitals that appear to have lower survival rates, whereas most perform above 90 percent.

**Figure 17. Maryland Hospital Performance, CY 2021 QBR Inpatient All Condition, All Payer Mortality Measure**

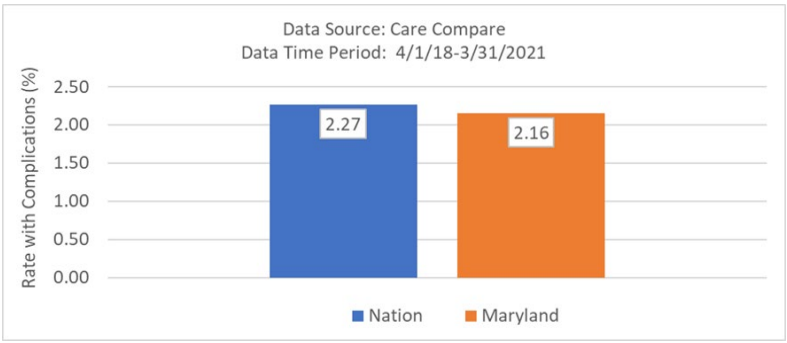



For RY 2024, staff is not proposing any significant methodology changes to the inpatient mortality measure. However, staff continues to assess impacts of COVID on the mortality measure. Furthermore, work continues on development of a 30-day, all-payer, all-cause mortality measure that can be monitored during CY 2023. Staff believes that expansion to a 30-day measure will better capture the quality of care delivered by hospitals. Last, as part of the digital measures initiative, staff plans to move the 30-day mortality measure from fully claims-based to a hybrid measure.

## Hip and Knee Arthroplasty Complications

For the hip and knee complication rate measure based on the most recent data available on Care Compare, Figure 18 illustrates that, based on analysis of the weighted average rates for Maryland and the nation, Maryland performed around 5 percent better than the nation.

**Figure 18. Maryland THA/TKA Measure Performance Compared to the Nation, 4/1/18-3/31/2021**



Since this measure is calculated by Hospital Compare using Medicare claims data using 3-year base and performance periods and includes only Medicare patients, payer stakeholders of the PMWG have voiced support for expanding this measure to the commercial population and other payers if feasible. In addition, staff notes that this measure is applicable only to patients in the inpatient setting. Although CMS reversed its action, with the previous removal of elective hip and knee replacement procedures from the Medicare "inpatient only" list--procedures for which Medicare will reimburse only if performed in the inpatient setting--, and the shift of these procedures to the outpatient setting, staff believes the QBR Program should consider both payer and care setting applicability options for measure expansion.[9]

Going forward, Commission staff will work with the PMWG and other stakeholders to continue building a multiyear, multipronged, broad strategy for inclusion of outpatient measures in the HSCRC's quality programs. Specifically, for a THA/TKA measure, staff and stakeholders should 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 PRO-PM for elective primary THA/TKA procedures. For additional specific details on the options for THA/TKA outpatient and all-payer measure adaption or adoption, please see the Quality Based Reimbursement RY 2024 Policy.

## Electronic Clinical Quality Measures (eCQM)/ Digital Quality Measures Infrastructure

### CMS Digital Quality Measures Roadmap

Like the national programs, the quality programs in Maryland provide incentives for and/or penalties for performance on quality measures, contribute to improvements in health care, enhance patient outcomes, inform consumer choice, and promote transformation to a digital health ecosystem. 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

[9] In the CY 2022 Hospital outpatient prospective payment system (OPPS) and ambulatory surgical center (ASC) payment system final rule, CMS finalized the year's Medicare payment rates for hospital outpatient and ASCs. CMS paused the elimination of the inpatient only list due in part to receiving overwhelming stakeholder feedback arguing that patients' safety would be at far greater risk with a total elimination. The final rule added back to the IPO list all the services removed in 2021 except for three distinct procedures and their associated anesthesia codes. The services described by the following CPT codes will remain off the IPO list:

- 22630 (lumbar spine fusion)
- 23472 (reconstruct shoulder joint
- 27702 (reconstruct ankle joint)
- The anesthesia codes corresponding to these procedures

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).

This increasing availability of structured, FHIR-formatted EHR data can be leveraged to greatly reduce long-standing challenges to quality measurement. Currently, implementing individual EHR-based measures requires providers to install and adapt measure calculation software in their respective EHR systems, which often use variable or proprietary data models and structures. This process is burdensome and costly, and it is difficult to reliably obtain high-quality data across EHR instances. Once providers map their EHR data (structured using a uniform FHIR standard) to a FHIR API to meet the Cures Act requirements, it will be possible to exchange much of the foundational data needed for measures without significant additional provider investment or effort. Learnings from these activities can be leveraged and applied to other digital data that live outside the clinical EHR, enhancing and expanding the use of data such as PRO and PGHD for quality measurement in the future. The advances in interoperability will enable development of measure calculation tools (MCTs) for digital quality measures (dQMs) that solely use EHR data, so providers will no longer need to install measures one-by-one and update them annually in their unique EHR systems. Measures can be self-contained tools executed by the provider on-site, and by multiple other key actors in measurement — including states, CMS, other payers, clinical registries, and data aggregators. This approach to measurement tools could reduce provider measurement burden, facilitate the cross-provider aggregation of data needed for high priority measures such as outcome measures, and support the alignment of measures and data across multiple agencies and payers.

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 MCTs to leverage data beyond just EHRs and across settings and providers. A learning health system powered by advanced analytics applied to all digital health data can optimize patient safety, outcomes, and experience.[10]

## Near-Term Reporting Requirements

As noted earlier Maryland has implemented a statewide infrastructure and required all acute hospitals to report eCQM measures to the state. The reporting requirements are more aggressive than the national CMS requirements as Maryland believes early adoption and migration to the FHIR-formatted data and measures will constitute less burden for hospitals and provide greater opportunity for the state and hospitals to measure and improve quality. Figure 19 below illustrates Maryland and CMS reporting requirements for eCQMs.

### Figure 19. CMS-Maryland CY 2022-CY 2024 Anticipated eCQM Reporting Requirements

| Reporting Period/ payment determination | CMS Measures | Maryland Measures |
|---|---|---|
| CY 2022/<br>FY 2024 | Three self-selected eCQMs<br>plus<br>Safe Use Opioids Concurrent Prescribing | Four eCQMs:<br>Two self-selected eCQMs<br>Two required measures:<br>-Safe Opioids<br>-ED-2 |
| CY 2023/<br>FY 2025 | Three self-selected eCQMs<br>plus<br>Safe Use Opioids Concurrent Prescribing<br><br>Clinical data elements for two hybrid measures<br>(beginning July 2023)<br>-30-day mortality<br>-30-day readmissions | Six required eCQMs:<br>-Safe Opioids<br>-ED-2<br>-hyperglycemia<br>-hypoglycemia<br>-Cesarean Birth<br>-Severe Obstetric complications<br><br>Clinical data elements for two hybrid measures<br>(beginning July 2023)<br>-30-day mortality<br>-30-day readmissions |

[10] Please see CMS Digital Quality Measurement Strategic Roadmap: https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf, last accessed 8/9/2022.

| Reporting Period/ payment determination | CMS Measures | Maryland Measures |
|---|---|---|
| **CY 2024/**<br>**FY 2026** | **Three self-selected eCQMs;**<br>**Three required eCMQs**<br>**-Safe Use of Opioids**<br>**-Cesarean Birth**<br>**-Severe Obstetric Complications**<br><br>**Clinical data elements for two hybrid measures**<br>**-30-day mortality**<br>**-30-day readmissions** | **Number of eCQMs TBD**<br>**Required eCQMs-**<br>**-Safe Opioids**<br>**-ED-2**<br>**-hypoglycemia**<br>**-hyperglycemia**<br>**-Cesarean Birth**<br>**-Severe Obstetric complications**<br><br>**Clinical data elements for two hybrid measures**<br>**-30-day mortality**<br>**-30-day readmissions** |

The state notes that earlier adoption of a full four quarters of data on eCQMs that are consistent across all hospitals in the state will allow Maryland to publicly report these measures through collaboration with the MHCC and its quality reporting website.

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 adapted to our all-payer environment required as of July 1, 2023. The state notes that adoption of an all-payer hybrid HWM measure will allow Maryland to transition to the 30-day mortality measure from its current inpatient mortality measure under the QBR program. In addition, beginning with January 2023, hospitals may submit HWR and/or HWM hybrid measures voluntarily to the state. The required submission timeline is consistent with the CMS timeline requirements as well.In summary, Maryland's early adoption of eCQMs/digital measures will again allow the state to leverage the established infrastructure to monitor and improve quality and to progress to a less burdensome FIHR-enabled environment, and allow for earlier adoption of such measures as patient reported outcomes.

## Revenue Adjustment Methodology

For this policy, staff believe it is important to have a preset method for taking scores and converting those scores to revenue adjustments on a prospective basis. However, over the course of the COVID-19 PHE this has become more and more difficult to do prospectively. Thus for RY 2025, staff propose to maintain the 0-80 percent scale where rewards start for those who score greater than 41 percent. The 41 percent cut point is the most difficult part to estimate as we want to set it high enough to not reward hospitals in Maryland that are performing below the national average. Normally staff would use Care Compare data to approximate QBR scores for all hospitals nationally and set the cut point at the average national score

over the last several years. However, staff have not repeated this analysis on more recent data due to concerns about its validity and reliability, as well as some data being wholly suppressed due to the COVID PHE. 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 determine the cut point needs to be amended, we will report this to the Commission.

## STAKEHOLDER FEEDBACK AND RESPONSES

Comment letters were submitted to the Commission in response to the QBR RY 2025 draft policy from Johns Hopkins Health System (JHHS), the Maryland Hospital Association (MHA), Maryland Medicaid, and Meritus Health. Furthermore, the draft policy was reviewed by the PMWG and the feedback from that workgroup is included below. Commenters were all supportive of the draft policy and direction and continued use of the current QBR methodology. This included: adding patients covered by Medicaid and assessing disparity gaps in the Timely Follow Up (TFU) measure; working to expand the use of the digital measurement infrastructure over time, provided there is flexibility in data submission timelines; and expanding the mortality measure to 30 days, with the proposed monitoring period for CY 2023 before adoption in the payment program. Staff appreciates commenters' support for the draft policy. Additional comments and staff responses are provided below.

**Timely Follow up after discharge**

JHHS noted their concern about the clinical significance of the timeframes proposed in the follow up after discharge metric, citing their findings of a random sample review they conducted of adult patients admitted with HTN and asthma across JHHS. They found that many patients admitted with these conditions were having difficulties refilling their medication for a variety of reasons, let alone having follow up in the specified timeframes. They also note many patients did not seem to have clinical indication for follow up within 7 days or 14 days of discharge, respectively. They support stratification of Medicare and Medicaid populations in TFU measure. They suggest that the HSCRC partner with other state programs to ensure adequate access to care, including primary care and providers that accept Medicare, noting that the measure is described as a health plan measure. Other feedback from PMWG was that timely follow-up is an important and concrete measure for hospitals and that increased weighting of the measure in the QBR program should be considered. Lastly, given the disparities in TFU it was requested by a Commissioner to ensure hospitals have access to data to track disparities in this measure and that reduction in disparities in TFU be prioritized.

**Staff Response:** Staff notes that expected performance on this measure is not 100%. Staff continues to support the NQF-endorsed measure developed by IMPAQ, including the timeframes specified for each medical condition, as the measure has had broader vetting with clinicians and has passed reliability and

validity testing. Staff notes that the measure has the potential to support hospitals in identifying and in helping address social determinants of health, such as resources for prescription and transportation or telehealth resources. Staff agrees that adequate outpatient provider access is important and will consider options for collaborating with health partners on analyses of this issue going forward. Furthermore, staff note that hospitals do have access to TFU by various factors such as race through the CRS portal case level reports and SIHIS dashboard (for Medicare). While staff is not recommending changes to the weighting of the TFU measure in the QBR program at this time, if the measure does not improve overall and/or disparities are not addressed such that the SIHIS goal may not be met, then raising the weight of the measure or including a disparity component should be considered for RY 2026.

**Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)**
In the JHHS letter, they note they value the opportunity to meet with other hospitals to share best practices to improve HCAHPS scores and suggest including other national leaders in these sessions for more learning opportunities.

**Staff Response:** Staff agrees the HCAHPS improvement collaborative project will benefit from national experts and will work with MHA to identify and engage national leaders.

**Prospectively Lower the Reward/Penalty Cut Point from 41 percent to 36 percent**
Both MHA and Meritus support lowering the hospital QBR score cut point for rewards from 41 percent to 36 percent as national data analysis shows that average performance on VBP is as low as 30 percent, with the lower performance attributable to continued impacts of the COVID pandemic.

**Staff Response:** Staff continues to support the 41 percent with the option to analyze whether a decrease is justified retrospectively. This is because as health care rebounds post-COVID, it is unclear whether the current trends will continue or for how long. Thus, as discussed in the policy, staff has outlined the analysis that will be done retrospectively to assess the cut point.

## Final Recommendations for RY 2025 QBR Program

1. Continue Domain Weighting as follows for determining hospitals' overall performance scores: Person and Community Engagement (PCE) - 50 percent, Safety (NHSN measures) - 35 percent, Clinical Care - 15 percent.
    a. Within the PCE domain, continue to include four linear HCAHPS measures weighted at 10% of QBR score; remove associated revenue at risk from top box.
    b. Within the PCE domain, add the Timely Follow-Up measure for Medicaid.
2. Develop the following monitoring reports for measures that will be considered for adoption after

RY 2025:

   a. 30-day all-payer, all-cause mortality (claims based)
   b. Timely Follow-Up for Behavioral Health
   c. Disparity gaps for Timely Follow-Up

3. Implement the HCAHPS improvement framework with key stakeholders.
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements; For CY 2023 require submission of:
   a. ED-2 eCQM for monitoring; consider for re-adoption after RY 2025 (in CY 2024)
   b. Safe Opioid Use eCQM for monitoring
   c. Four additional eCQM measures aligned with the SIHIS goals and hospital improvement priorities
   d. Clinical data elements for 30-day mortality and readmission hybrid measures beginning July 2023
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

# APPENDIX A
# QBR PROGRAM BACKGROUND

## Detailed Overview of HSCRC QBR Program

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.

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 A.1 compares the RY 2023 and 2024 QBR measures and domain weights to those used in the CMS VBP Program.

***Figure A.1. RY 2024-2125 QBR measures and domain weights compared with those used in the VBP Program***

| | Maryland QBR domain weights and measures | CMS VBP domain weights and measures |
|---|---|---|
| **Clinical Care** | **15 percent**<br>Two measures: All-cause inpatient mortality; THA/TKA complications | **25 percent**<br>Five measures: Four condition-specific mortality measures; THA/TKA complications |
| **Person and Community Engagement** | **50 percent**<br>Nine measures: Eight HCAHPS categories; follow-up after chronic conditions exacerbation for Medicare<br>PROPOSED NEW:follow-up after chronic conditions exacerbation for Medicaid | **25 percent**<br>Eight HCAHPS measures |
| **Safety** | **35 percent**<br>Six measures: Five CDC NHSN hospital-acquired infection (HAI) measure categories; all-payer PSI 90 | **25 percent**<br>Five measures: CDC NHSN HAI measures |
| **Efficiency** | n.a. | **25 percent**<br>One measure: Medicare spending per beneficiary |

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

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

## 1. Domain weights and revenue at risk

As already noted, the policy weights theClinical Care domain at 15 percent of the final score, the Safety domain at 35 percent, and the Person and Community Engagement domain at 50 percent.

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.[11] Rewards (positive scaled amounts) or penalties (negative scaled 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,[12] 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 finish developing an efficiency measure that incorporates population-based cost outcomes.

## 2. QBR score calculation

QBR scores are evaluated by comparing a hospital's performance rate to its base period rate, as well as to the threshold (which is the median, or 50$^{th}$ percentile, of all hospitals' performance during the baseline period) and the benchmark (which is the mean of the top decile, or roughly the 95$^{th}$ 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.[13] 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

[11] Scaling refers to the differential allocation of a predetermined portion of base-regulated hospital inpatient revenue based on an assessment of hospital performance.

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

[13] 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.

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.

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

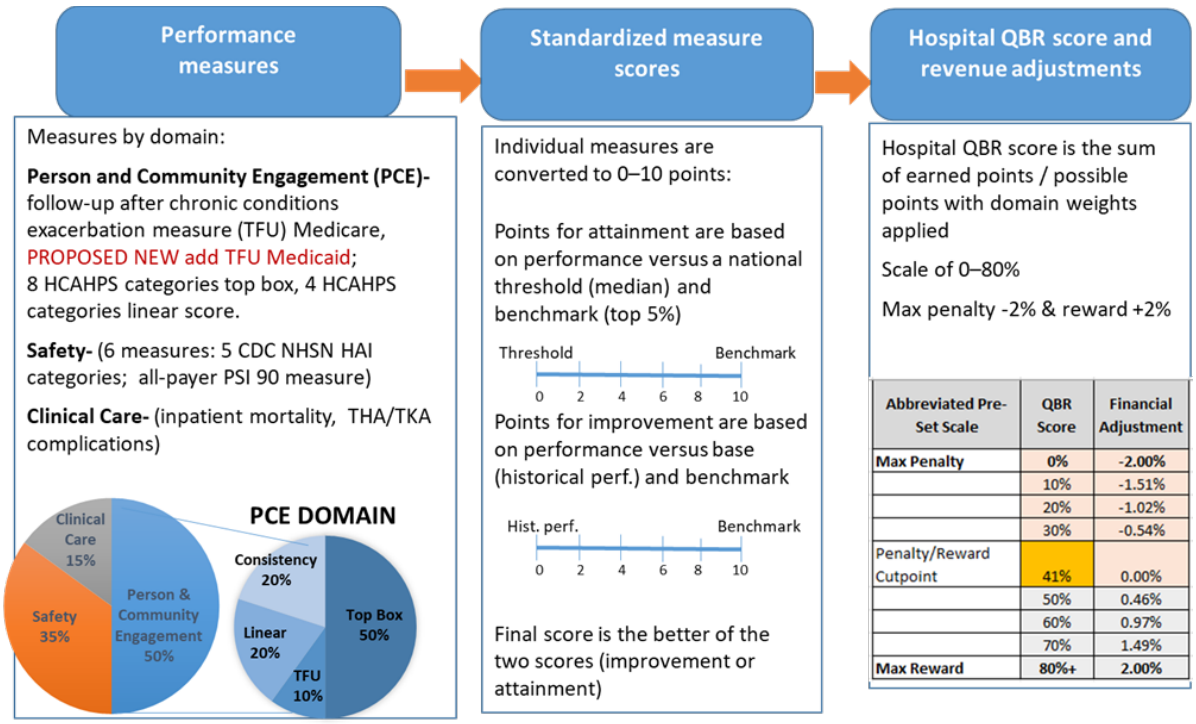
***Total performance score****:* The total performance score is computed by multiplying the domain scores by their specified weights and then adding those totals together. The total performance score is then translated into a reward or penalty that is applied to hospital revenue.

## 3. RY 2023 and 2024 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.

Figure A.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 for RY 2023 and proposed for RY 2024.

*Figure A.2. Process for calculating RY 2024 QBR scores, and Proposed updates for RY 2025*




There were no fundamental changes for the measures and domain weighting for RYs 2024 and 2025, as shown in Figure A.3.

*Figure A.3. RY 2024-2125 QBR domains, measures, and data sources*

| | Clinical Care | Person and Community Engagement | Safety |
|---|---|---|---|
| **QBR RY 24 Program** | **15 percent**<br>**2 measures**<br>• **Inpatient mortality (HSCRC case-mix data)**<br>• **THA TKA (CMS Hospital Compare, Medicare claims data)** | **50 percent**<br>**9 measures**<br>• **8 HCAHPS domains (CMS Hospital Compare patient survey)**<br>• **Follow-Up After Acute Exacerbation of Chronic Conditions (Medicare claims, proposed add Medicaid for RY 2025)** | **35 percent**<br>**7 measures**<br>• **6 CDC NHSN HAI measures (CMS Hospital Compare chart abstracted)**<br>• **PSI 90 all-payer (HSCRC case-mix data)** |

### *a. 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.[14] 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[15] **,** 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
- 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

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

[15] 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).

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.

### *b. 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.[16] Technical details for calculating measure scores are provided below.

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

**Measure steward:** IMPAQ International

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

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

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

1. Hypertension: Within 7 days of the date of discharge
2. Asthma: Within 14 days of the date of discharge

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

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.[17]

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:

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

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.

## 5. QBR RY 2025 base and performance periods by measure

Figure A.4 shows the proposed base and performance period timeline for the RY 2025 QBR Program.

**Figure A.4. RY 2025 timeline (base and performance periods; financial impact)**

| Rate year (Maryland fiscal year) | Q3-19 | Q4-19 | Q1-20 | Q2-20 | Q3-20 | Q4-20 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Calendar year | Q1-19 | Q2-19 | Q3-19 | Q4-19 | Q1-20 | Q2-20 | Q3-20 | Q4-20 | 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 |
| QBR base and performance periods | **BASE- CMS Hospital Compare base period (HCAHPS measures, all CDC NHSN measures)*** | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | **PERFORMANCE: CMS Hospital Compare performance period (HCAHPS measures, all CDC NHSN measures)** | | | | | | |
| | | | | | | | | | | | **BASE- inpatient mortality, PSI-90, follow-up chronic conditions** | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | **PERFORMANCE: inpatient mortality, PSI-90, follow-up chronic conditions)** | | | | | |
| | | | | | | | **PERFORMANCE: THA/TKA Complications**** | | | | | | | | | | | | | | | |

*As described more fully in section V.I.4.b. of the preamble of this final rule, we are finalizing our proposals to update the baseline periods for the measures included in the Person and Community Engagement and Safety domains for FY 2025.

**In accordance with the CMS ECE granted in response to the COVID-19 PHE and the policies finalized in the September 2, 2020 interim final rule with comment titled "Medicare and Medicaid Programs, Clinical Laboratory Improvement Amendments(CLIA), and Patient Protection and Affordable Care Act; Additional Policy and Regulatory Revisions in Response to the COVID–19 Public Health Emergency," (85 FR 54820), we will not use Q1 and Q2 2020 data that was voluntarily submitted for scoring purposes under the Hospital VBP Program.