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630th Meeting of the Health Services Cost Review Commission

April 9, 2025

(The Commission will begin in public session at 12:00 pm for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00 pm)

CLOSED SESSION
12:00 pm

1. Update on Administration of Model - Authority General Provisions Article, §3-103 and §3-104

PUBLIC MEETING
1:00 pm

1. Review of Minutes from the Public and Closed Meetings on March 12, 2025

Specific Matters

For the purpose of public notice, here is the docket status.

Docket Status – Cases Closed

2669A Johns Hopkins Health System

2. Docket Status – Cases Open

2668R Johns Hopkins Howard County Medical Center
2670A University of Maryland Medical Center

Informational Subjects

1. Presentation: Advancing Innovation in Maryland (AIM) Winners

    a. Pilot Integration of Methadone Treatment Information into CRISP

    b. Leveraging CRISP to Share the Asthma Action Plan Across Hospital-based, Ambulatory and School-based Healthcare Providers

Subjects of General Applicability

2. Report from the Executive Director

c. Model Monitoring
d. Legislative Update

3. Final Recommendation: Maryland Hospital Acquired Conditions (MHAC) Policy for RY 2027
4. Final Recommendation: Readmission Reduction Incentive Program (RRIP) Policy for RY 2027
5. Final Recommendation: Medicare Performance Adjustment (CY 2025 Policy / FY 2027 Payment)
6. Presentation: FY24 Hospital System Financial Results
7. Hearing and Meeting Schedule

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Application for an Alternative Method of Rate Determination

University of Maryland Medical Center

April 9. 2025

IN RE: THE APPLICATION FOR AN	*	BEFORE THE MARYLAND HEALTH	
ALTERNATIVE METHOD OF RATE	*	SERVICES COST REVIEW	
DETERMINATION	*	COMMISSION	
UNIVERSITY OF MARYLAND MEDICAL	*	DOCKET:	2025
CENTER	*	FOLIO:	2480
BALTIMORE, MARYLAND	*	PROCEEDING:	2670A

I. INTRODUCTION

On February 27, 2025, University of Maryland Medical Center ("Hospital") filed a renewal application for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The Hospital is requesting approval to continue to participate in a global price arrangement with Cigna Health Corporation for solid organ and blood and bone marrow transplants. The Hospital requests that the Commission approve the arrangement for one year beginning April 1, 2025.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by University of Maryland Faculty Physicians, Inc. ("FPI"), which is a subsidiary of the University of Maryland Medical System. FPI will continue to manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to regulated services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the updated global rates was developed by calculating mean historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospital will continue to submit bills to FPI for all contracted and covered services. FPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between FPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract. FPI maintains it has been active in similar types of fixed fee contracts for several years, and that FPI is adequately capitalized to bear risk of potential losses.

V. STAFF EVALUATION

Staff found that the experience under the arrangement for the last year has been favorable. Staff believes that the Hospital can continue to achieve a favorable performance.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination with Cigna Health Corporation. for solid organ transplant and blood and bone marrow transplants for one-year beginning April 1, 2025. The Hospital must file a renewal application annually for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

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Final Recommendation for the Maryland Hospital Acquired Conditions Program for Rate Year 2027

April 9, 2025

This document contains staff final recommendations for the RY 2027 Maryland Hospital Acquired Conditions Program.

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List of Abbreviations

AHRQ	Agency for Health Care Research and Quality
APR-DRG	All Patients Refined Diagnosis Related Groups
CMS	Centers for Medicare & Medicaid Services
CY	Calendar Year
DRG	Diagnosis-Related Group
FFY	Federal Fiscal Year
FY	State Fiscal Year
HAC	Hospital-Acquired Condition
HAI	Hospital Associated Infection
HSCRC	Health Services Cost Review Commission
ICD	International Statistical Classification of Diseases and Related Health Problems
MHAC	Maryland Hospital-Acquired Condition
NHSN	National Healthcare Safety Network
NQF	National Quality Forum
PMWG	Performance Measurement Work Group
POA	Present on Admission
PPC	Potentially Preventable Complication
PSI	Patient Safety Indicator
QBR	Quality-Based Reimbursement
RY	Rate Year
SIR	Standardized Infection Ratio
SOI	Severity of Illness
TCOC	Total Cost of Care
VBP	Value-Based Purchasing
YTD	Year to Date

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Key Methodology Concepts and Definitions

Potentially preventable complications (PPCs): 3M originally developed 65 PPC measures, which are defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying illness. PPCs, like national claims-based hospital-acquired condition measures, rely on **present-on-admission codes** to identify these post-admission complications.

At-risk discharge: Discharge that is eligible for a PPC based on the measure specifications

Diagnosis-Related Group (DRG): A system to classify hospital cases into categories that are similar clinically and in expected resource use. DRGs are based on a patient's primary diagnosis and the presence of other conditions.

All Patients Refined Diagnosis Related Groups (APR-DRG): Specific type of DRG assigned using 3M software that groups all diagnosis and procedure codes into one of 328 All-Patient Refined-Diagnosis Related Groups.

Severity of Illness (SOI): 4-level classification of minor, moderate, major, and extreme that can be used with APR-DRGs to assess the acuity of a discharge.

APR-DRG SOI: Combination of Diagnosis Related Groups with Severity of Illness levels, such that each admission can be classified into an APR-DRG SOI "cell" along with other admissions that have the same Diagnosis Related Group and Severity of Illness level.

Case-Mix Adjustment: Statewide rate for each PPC (i.e., normative value or "norm") is calculated for each diagnosis and severity level. These **statewide norms** are applied to each hospital's case-mix to determine the expected number of PPCs, a process known as **indirect standardization**.

Observed/Expected Ratio: PPC rates are calculated by dividing the observed number of PPCs by the expected number of PPCs. Expected PPCs are determined through case-mix adjustment.

Diagnostic Group-PPC Pairings: Complications are measured at the diagnosis and Severity of Illness level, of which there are approximately 1,200 combinations before one accounts for clinical logic and PPC variation.

Zero norms: Instances where no PPCs are expected because none were observed in the base period at the Diagnosis Related Group and Severity of Illness level.

Policy Overview

Policy Objective	Policy Solution	Effect on Hospitals	Effect on Payers/Consumers	Effects on Health Equity
The quality programs operated by the Health Services Cost Review Commission, including the Maryland Hospital Acquired Conditions (MHAC) program, are intended to drive improvements in patient outcomes and to ensure that any incentives to constrain hospital expenditures under the Total Cost of Care Model do not result in declining quality of care on an all-payer basis. 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 MHAC 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 over time.	The MHAC policy currently holds 2 percent of inpatient hospital revenue at-risk for complications that may occur during a hospital stay as a result of treatment rather than the underlying progression of disease. Examples of the types of hospital acquired conditions included in the current payment program are respiratory failure, pulmonary embolisms, and surgical-site infections.	This policy affects a hospital's overall GBR and so affects the rates paid by payers at that particular hospital. The HSCRC quality programs are all-payer in nature and so improve quality for all patients that receive care at the hospital.	Historically the MHAC policy included the better of improvement and attainment, which incentivized hospitals to improve poor clinical outcomes that are often emblematic of disparities. The protection of improvement has since been phased out to ensure that poor clinical outcomes and the associated health disparities are not made permanent, which is especially important for a measure that is limited to in-hospital complications. In the future, the MHAC policy may provide direct hospital incentives for reducing disparities, similar to the approved readmission disparity gap improvement policy. Also for future consideration is inclusion of electronic Clinical Quality Measures to address areas such as maternal complications, which disproportionately impact lower income, minority patients.

Recommendations

The MHAC policy was redesigned in Rate Year (RY) 2021 to modernize the program for the new Total Cost of Care Model.[1] The RY 2021 policy approach to performance assessment, scoring, and conversion of scores to revenue adjustments has been maintained through RY 2026. This RY 2027 final recommendation maintains the Potentially Preventable Complication (PPC) measures used for RY 2026 and also presents methodology updates to address small cell size concerns and scaling to determine revenue adjustments. Specifically, the policy provides validity and reliability analysis results, hospital-level and statewide scores and revenue adjustments for the current methodology that scores hospitals on each PPC individually compared to an option that scores hospitals based on a PPC composite measure. While small hospitals initially raised concerns about small cell sizes, staff proposes the Commission consider adopting this new scoring methodology for all hospitals based on the findings outlined in this policy. Staff also proposes changes for how scores are converted to revenue adjustments. Lastly, staff outlines stakeholders' feedback to the policy as well as our responses.

The final recommendations for the RY 2027 Maryland Hospital Acquired Conditions (MHAC) program are as follows:

1. Use 3M Potentially Preventable Complications (PPCs) to assess hospital acquired complications.
    a. Maintain a focused list of PPCs in the payment program that are clinically recommended and that generally have higher statewide rates and variation across hospitals.
    b. Assess monitoring PPCs based on clinical recommendations, statistical characteristics, and recent trends to prioritize those for future consideration for updating the measures in the payment program.
    c. Engage hospitals on specific PPC increases to understand trends and discuss potential quality concerns.
2. Assess performance using more than one year of data for small hospitals (i.e., less than 21,500 at-risk discharges and/or 22 expected PPCs). The performance period for small hospitals will be CYs 2024 and 2025.
3. Assess hospital performance based on statewide attainment standards.
4. Score hospital performance on a PPC composite that includes all payment PPCs weighted by

[1] See the RY 2021 policy for detailed discussion of the MHAC redesign, rationale for decisions, and approved recommendations.

hospital specific expected volume and Solventum (3M) cost weights as a proxy for patient harm.[2]

5. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent:
    a. Use a continuous linear scale that ranges from 0 to 100 percent without a hold harmless zone.
    b. Establish the cut point for penalties and rewards as the average hospital MHAC score as determined through prospective modeling.
    c. Retrospectively assess the average hospital MHAC scores and propose to the Commissioners that the cutpoint be modified if the actual average score is more than +/- 10 percent different from the prospectively modeled average MHAC score.
6. Going forward, consider other candidate measures/measure sets that may be important for assessing hospital avoidable, harmful complications and appropriate for use in the program, e.g., digitally specified measures.

Introduction

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

[2] Hospitals without any at-risk or expected for a specific PPC would not be assessed on that PPC. The two maternity related PPCs are dropped for hospitals without this service line, but almost all other Payment PPCs are included for all hospitals at this time weighted by the hospital volume.

incentives of the global budget system, while guarding against unintended consequences and penalizing poor performance.

The Maryland Hospital Acquired Conditions (MHAC) program is one of several quality pay-for-performance initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value over time. The program currently holds 2 percent of hospital revenue at-risk for hospital acquired complications that may occur during a hospital stay as a result of treatment rather than the underlying progression of disease. Examples of the types of hospital acquired conditions included in the current payment program are sepsis, respiratory failure, pulmonary embolisms, and surgical-site infections.

For MHAC, as well as the other statewide hospital quality programs, annual updates are vetted with stakeholders and approved by the Commission to ensure the programs remain aggressive and progressive with results that meet or surpass those of the national CMS analogous programs (from which Maryland must receive annual exemptions). With the onset of the Total Cost of Care Model Agreement, each Quality program was overhauled to ensure they support the goals of the Model. For the MHAC policy, the overhaul was completed during 2018, which entailed an extensive stakeholder engagement effort. The major accomplishments of the MHAC program redesign were focusing the payment incentives on a narrower list of clinically significant complications, moving to an attainment only system given Maryland's sustained improvement on complications, adjusting the scoring methodology to better differentiate hospital performance, and weighting complications by their associated cost weights as a proxy for patient harm. The redesign also assessed how hospital performance is converted to revenue adjustments, and ultimately recommended maintaining the use of a linear revenue adjustment scale with a hold harmless zone.

For this RY 2027 MHAC policy, staff proposes maintaining the current focused list of payment PPCs and suggests consideration of potential changes to calculate hospital scores and applying revenue adjustments to address small cell size concerns that particularly impact small hospitals; the potential changes entail the use of a composite measure to calculate all hospital scores, and updating the revenue adjustment scaling approach. The Assessment section below includes an evaluation of PPCs in the payment program as well as those in "monitoring" status using the RY 2026 current MHAC methodology. This recommendation does not propose moving any complication categories from monitoring to payment. However, the Assessment section does provide analyses to evaluate the current methodology versus using a composite score, and includes a discussion of options for updating revenue adjustment scaling.

Background

Exemption from Federal Hospital-Acquired Condition Programs

The Federal Government operates two hospital complications payment programs, the Deficit Reduction Act Hospital Acquired Condition program (DRA-HAC), which reduces reimbursement for hospitalizations with inpatient complications, and the HAC Reduction Program (HACRP), which penalizes hospitals with the highest rates of complications. Detailed information, including HACRP complication measures, may be found in Appendix I. Also, it should be noted that the CMS Value-Based Purchasing program and the analogous Quality Based Reimbursement program contain a safety domain that assess hospital acquired complication measures.

Because of the State's unique all-payer hospital model and its global budget system, Maryland does not directly participate in the federal pay-for-performance programs. Instead, the State administers the Maryland Hospital Acquired Conditions (MHAC) program, which relies on quality indicators validated for use with an all-payer inpatient population. However, the State must submit an annual report to CMS demonstrating that Maryland's MHAC program targets and results continue to be aggressive and progressive, i.e., that Maryland's performance meets or surpasses that of the nation. Specifically, the State must ensure that the improvements in complication rates observed under the All-Payer Model through 2018 are maintained throughout the TCOC model. Based on performance to date, CMS has granted Maryland exemptions from the federal pay-for-performance programs (including the HAC Reduction Program) each year through Federal Fiscal Year 2025.

Overview of the MHAC Policy

The MHAC program, first implemented for Rate Year 2011, is based on a classification system developed by 3M Health Information Systems (3M), now Solventum. To identify potentially preventable complications (PPCs), the system uses the present-on-admission (POA) variable for eligible secondary diagnosis codes available in claims data to identify conditions not POA. The PPC system originally comprised specifications for 65 PPCs,[3] defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying

[3] In RY 2020, 45 out of 65 PPCs or PPC combinations were included in the program as 3M had discontinued some PPCs and others were deemed not suitable for a pay-for-performance program. The re-designed RY 2021 policy reduced the PPCs assessed to a focused list of 14 PPCs that were clinically actionable and had higher rates and greater variation across hospitals, and/or were clinically significant. In RY 2025, the policy was updated to include PPC 47 Encephalopathy, so there are now 15 payment PPCs.

illness. For example, the program holds hospitals accountable for venous thrombosis and sepsis that occur during inpatient stays. These complications can lead to 1) poor patient outcomes, including longer hospital stays, permanent harm, and death; and 2) increased costs. Thus, the MHAC program is designed to provide incentives to improve patient care by adjusting hospital budgets based on PPC performance.

Current MHAC Methodology

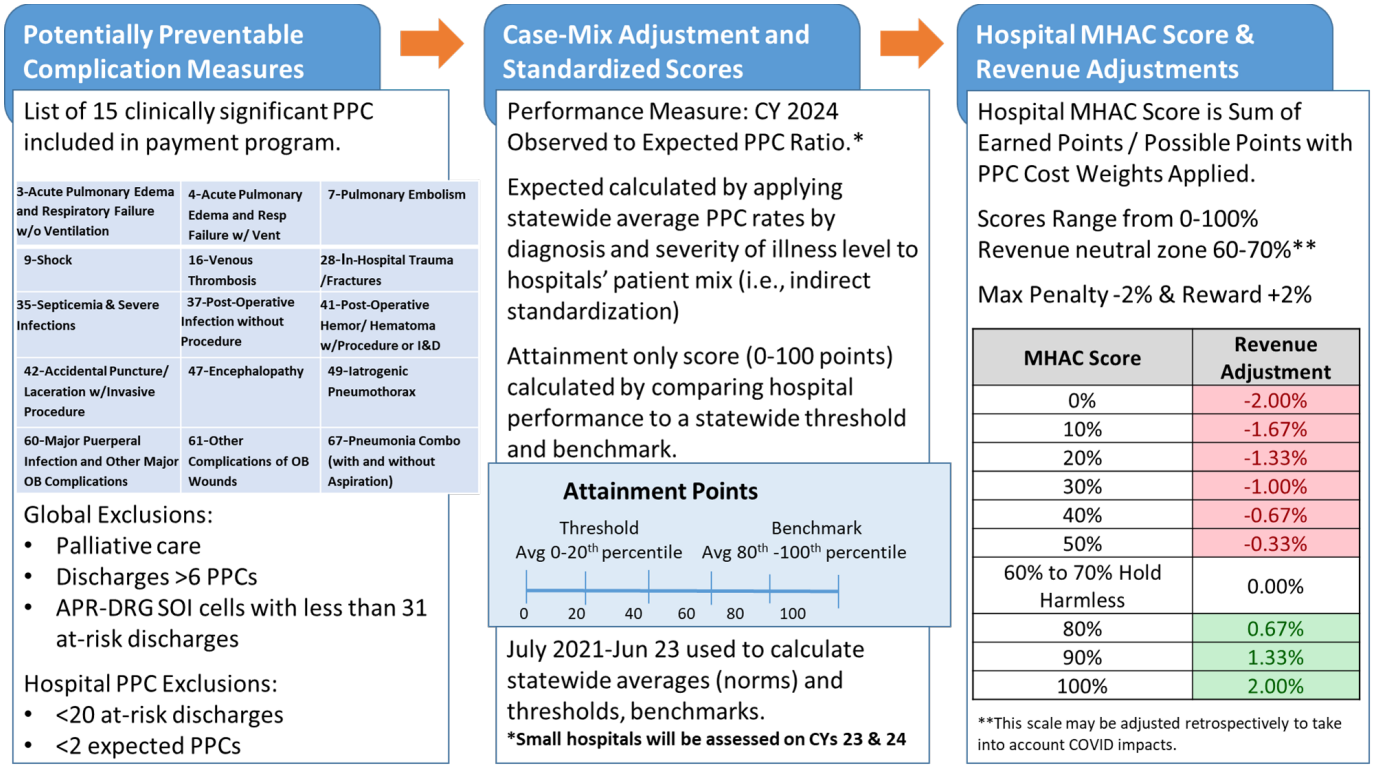
Figure 1 provides an overview of the three steps in the Rate Year 2026 MHAC methodology (also see Appendix II) that converts hospital performance to standardized scores, and then payment adjustments, as outlined below:

Step 1. For the PPCs identified for payment, clinically-determined global and PPC-specific exclusions, as well as volume based hospital-level exclusions are identified to ensure fairness in assignment of complications.

Step 2. Case-mix adjustment is used to calculate observed to expected ratios that are then converted to a standardized point score (from 0-100 points) based on each hospital's attainment levels using a similar scoring methodology that is used for CMS Value-Based Purchasing and Maryland QBR program.

Step 3. Overall hospital scores are then calculated by taking the points for each PPC and multiplying by the 3M PPC cost weights, then summing numerator (points scored) and denominator (possible points) across the PPCs to calculate a percent score. A linear point scale set prospectively is then used to calculate the revenue adjustment percent. This prospective scaling approach differs from national programs that relatively rank hospitals after the performance period. Additionally, the HACRP differs in that it provides no opportunity for rewards and reduces payments by 1 percent for hospitals in the worst-performing quartile.

Figure 1. Overview Rate Year 2026 MHAC Methodology



Assessment

This section provides an overview of the statewide PPC trends—for those used for payment, under monitoring, and overall (comprising a total of 58 PPCs)–using the current RY 2026 methodology. Following the results to date, this section provides analyses that evaluate the validity and reliability of hospital scores using the current methodology compared to options that score hospitals based on a PPC composite measure. The scoring methodologies vary in terms of PPC inclusion criteria, what is used to weight the PPC measures for the overall MHAC score, and how PPC performance is assessed relative to performance standards and rolled up to calculate the overall MHAC score. Lastly, this section provides modeled revenue adjustments for hospitals based on both scoring methods as well as additional options for scaling rewards and penalties.

Statewide PPC Performance Trends

Performance trends to date provided below use the RY 2026 methodology, illustrating Maryland's continued improvement under the program.

Complications Included in Payment Program

Under the All-Payer Model, Maryland hospitals saw a dramatic decline in complications and, as a State, well exceeded the requirement of a 30 percent reduction by the end of CY 2018. These reductions were achieved through clinical quality improvement, as well as improvements in documentation and coding.

As mentioned previously, the MHAC redesign assessed which PPCs should be included in the pay-for-performance program based on criteria developed by the Clinical Adverse Events Measures (CAEM) subgroup that are outlined in the "Monitored Complications" section below.

Under the TCOC Model, Maryland must maintain these improvements by not exceeding the CY 2018 PPC rates for complications included in the payment program. Figure 2 below shows the statewide observed to expected (O/E) ratio from 2018 through September CY 2024.[4] The O/E ratio presents the count of observed PPCs divided by the calculated number of expected PPCs (which is generated using statewide normative values applied to the case-mix of discharges a hospital experiences). An O/E Ratio of greater than 1 indicates that a hospital experienced more PPCs than expected, and conversely, an O/E Ratio less than one indicates that a hospital experienced fewer PPCs than expected. Figure 2 below also indicates how Maryland is performing relative to CY 2018, which is the time period that will be used to assess any backsliding on performance.[5] Specifically, there has been a 40.9 percent decrease in the ratio based on the most recent data available (CY 2018 YTD O/E ratio = 1.15 and CY 2024 YTD O/E ratio = 0.68).

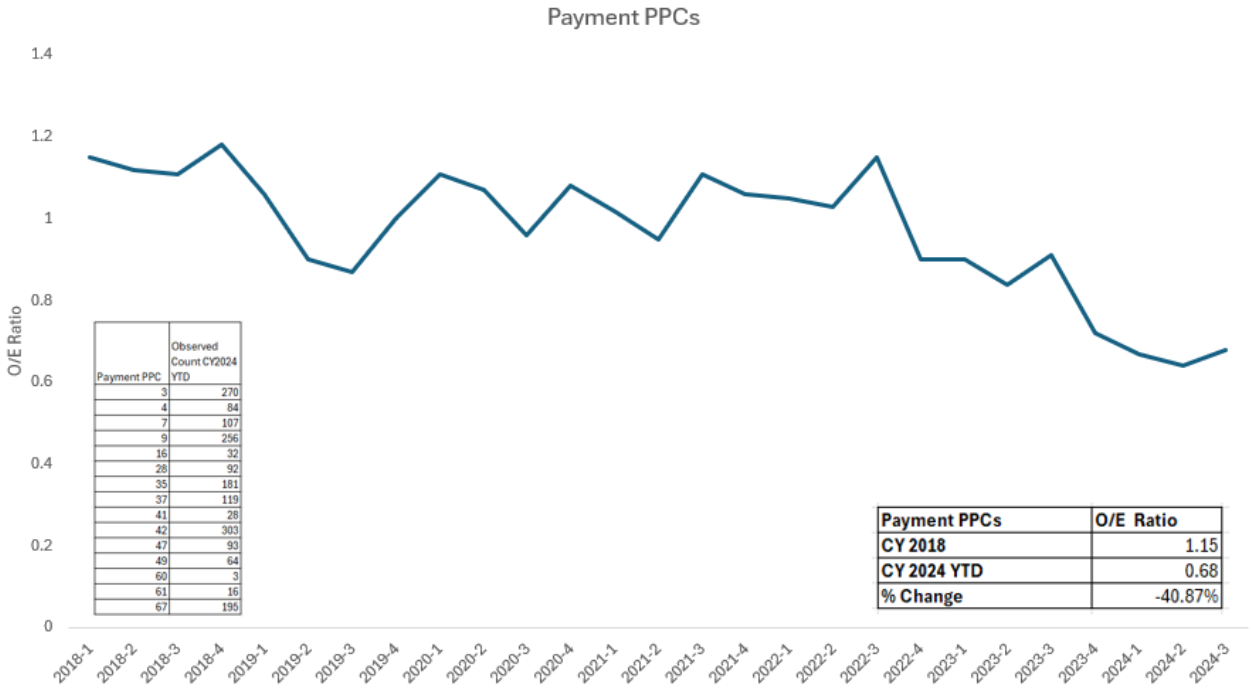
PPCs in the MHAC payment program include:

3 Acute Pulmonary Edema and Resp Failure w/o Ventilation
4 Acute Pulmonary Edema, Resp Failure w/ventilation
7 Pulmonary Embolism
9 Shock
16 Venous Thrombosis
28 In-Hospital Trauma and Fractures
35 Septicemia & Severe Infections
37 Post-Operative Infection & Deep Wound Disruption Without Procedure

[4] Staff notes that, consistent with federal policies during the COVID Public Health Emergency, PPC data from January-June 2020 will not be used for assessing quality of care.
[5] Beginning in v38 of the 3M PPC grouper, COVID exclusions vary by PPC.

41 Peri-Operative Hemorrhage & Hematoma w/ Hemorrhage Control Procedure or I&D
42 Accidental Puncture/ Laceration During Invasive Procedure
47 Encephalopathy
49 Iatrogenic Pneumothorax
60 Major Puerperal Infection and Other Major Obstetric Complications
61 Other Complications of Obstetrical Surgical & Perineal Wounds
67 Pneumonia Combo (with and without aspiration)

Figure 2. Payment Program PPCs Observed to Expected Ratios by Quarter CY 2018 to CY 2024 YTD Through September

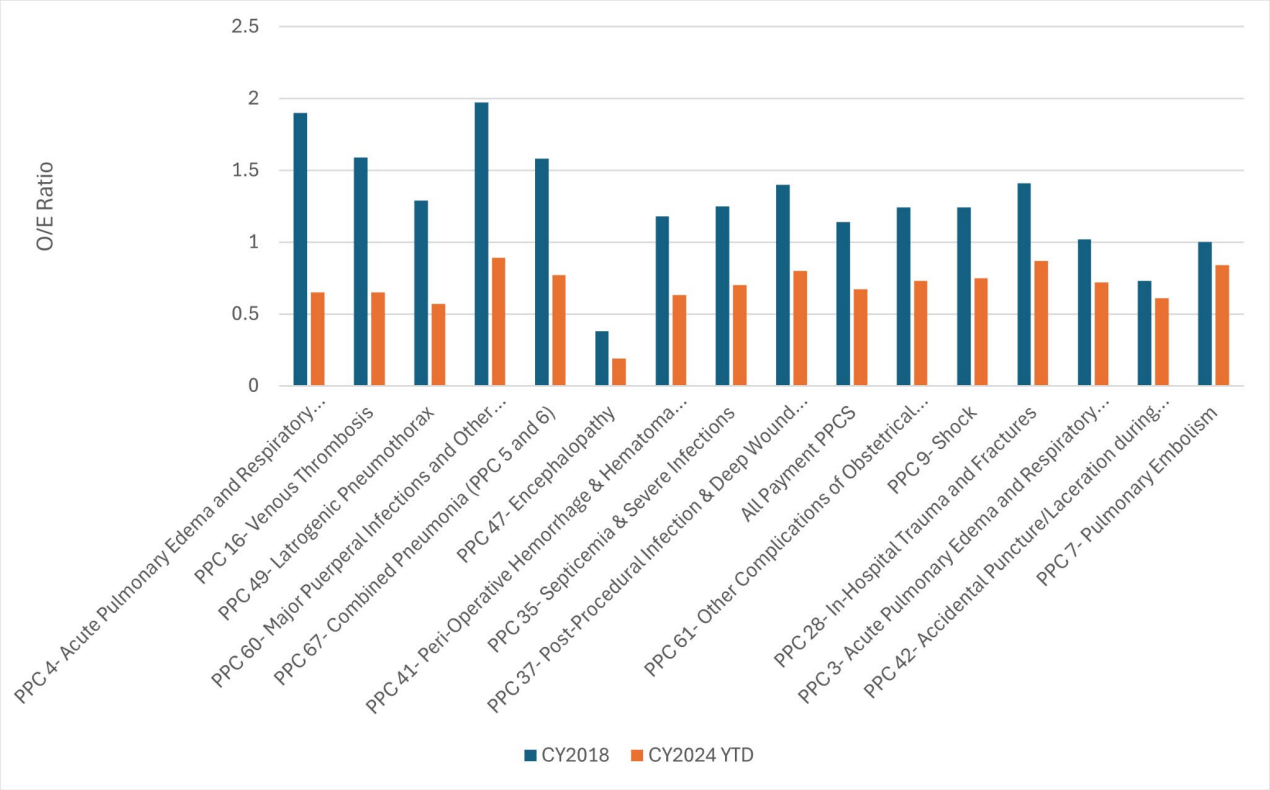


Payment PPC	Observed Count CY2024 YTD
3	270
4	84
7	107
9	256
16	32
28	92
35	181
37	119
41	28
42	303
47	93
49	64
60	3
61	16
67	195

Payment PPCs	O/E Ratio
CY 2018	1.15
CY 2024 YTD	0.68
% Change	-40.87%

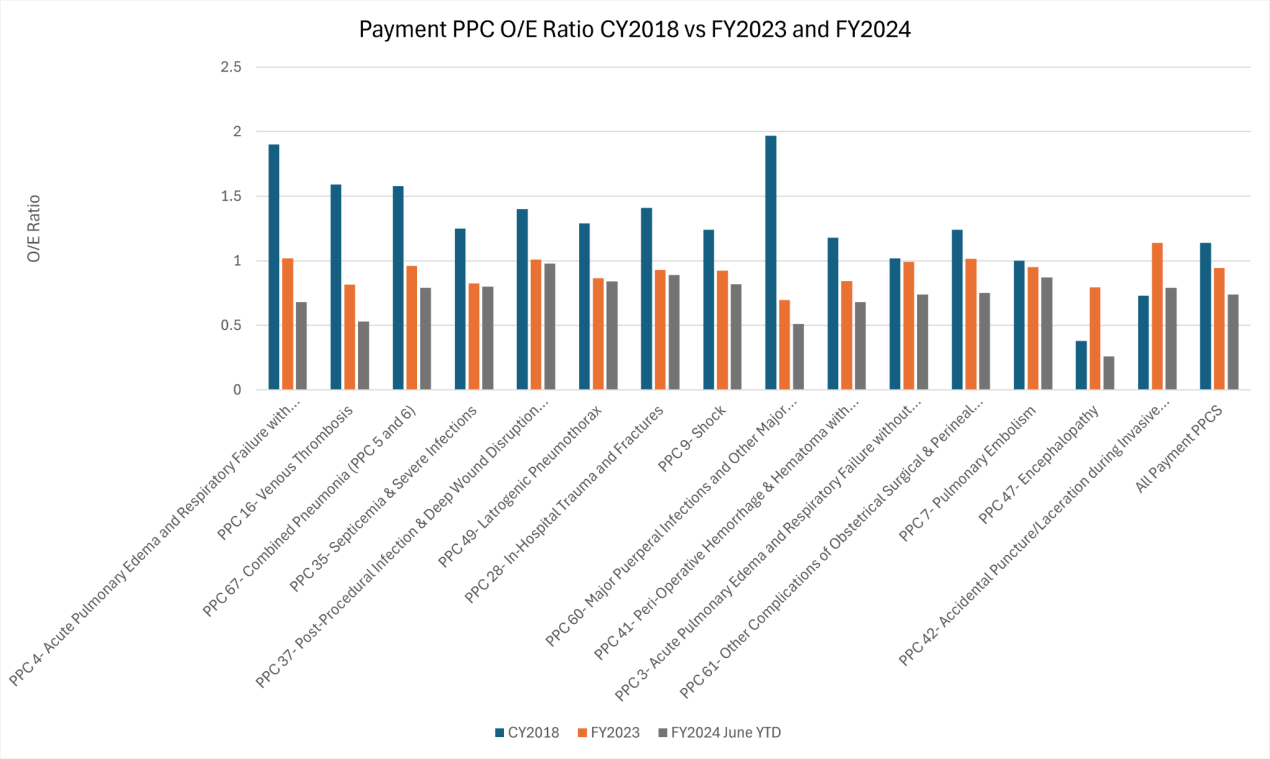
In terms of specific improvements among the 15 payment PPCs, Figure 3 shows the O/E ratios for CY 2018 and CY 2024 YTD, sorted from greatest percent decrease (on the left). The three PPCs with the greatest decreases (improvements) include PPC 4- Acute Pulmonary Edema and Respiratory Failure with Ventilation, PPC16- Venous Thrombosis, and PPC 67- Combined Pneumonia.

Figure 3. Payment Program PPC Observed to Expected Ratios CY 2018 and CY 2024 September YTD



Staff also analyzed payment PPC changes for FYs 2023 and 2024 compared to the base period of CY 2018 as illustrated in Figure 4 below. The overall PPC O/E ratios show a steadily declining trend across the three time periods; from FY2023 to FY2024 all payment PPCs showed a decrease in the O/E ratios (improvement).

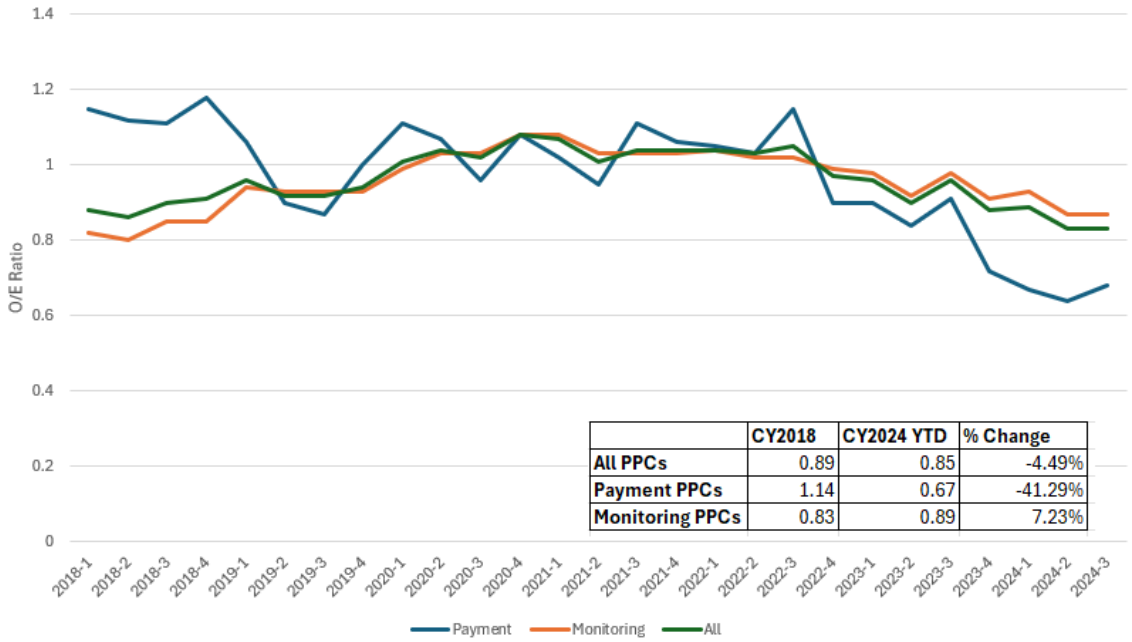
Figure 4. Payment Program PPC Observed to Expected Ratio Trends; CY 2018, FY 2023, and FY 2024



Monitored Complications

In addition to focusing on a narrowed list of PPCs for payment, as stated previously, the RY 2021 MHAC policy following the program redesign included a recommendation to monitor the remaining PPCs. Staff fulfills this recommendation by monitoring all PPCs that are still considered clinically valid by 3M, and distinguishing between “Monitoring” and “Payment” PPCs. The overall PPC trend across all 56 (payment and monitored) PPCs shows that there has been a decrease in the overall statewide O/E ratio from 0.89 in CY 2018 to 0.85 in CY 2024 YTD through September; the minimal improvement in overall performance is the result both of increases in some of the PPCs under monitoring status and reductions in the payment program PPCs, as illustrated in Figure 5 below. As also illustrated, the monitored PPC trends have increased from 0.83 as of 2018 to 0.89 in YTD 2024 with the highest O/E ratios experienced from Q3 2020 to Q1 2021 during the COVID peak period.

Figure 5. PPC O/E RatioTrends CY 2018 Qtr 1 Through CY 2024 Qtr 3



	CY2018	CY2024 YTD	% Change
All PPCs	0.89	0.85	-4.49%
Payment PPCs	1.14	0.67	-41.29%
Monitoring PPCs	0.83	0.89	7.23%

To support determinations on whether to move monitored PPCs into the payment program, staff considers several factors identified by the Clinical Adverse Events Measures (CAEM) subgroup which was convened when the MHAC program was re-designed for RY 2021. These include:

- PPC Data Analysis/Statistics: greater than 50% increase in O/E ratio compared to 2018, rate per 1,000 generally 0.5 or above, volume of observed events 100 or above (over two years), significant variation across hospitals, O/E ratios less than .85 and greater than 1.15, and at least half of the hospitals are eligible for the PPC.
- Additional Considerations: PSI overlap, clinical significance, potential influence of coding practices/changes, opportunity for improvement/actionability, impact on all-payers.

Based on staff evaluation of the monitored PPCs vetted with the PMWG, staff does not recommend moving any monitored PPCs into the payment program for RY 2027. Appendix III provides the statewide percentage changes in the O/E ratios for the monitored PPCs from 2018 to 2024 YTD through September sorted by the observed PPCs with the largest increases.

Stability of Case-Mix Adjusted PPC Rates and Scoring

Small Cell Size Considerations

Statistical issues of measurement validity and reliability related to small cell sizes impact all hospitals but are amplified for small hospitals. The current MHAC program addresses small cell size concerns in two ways: 1) All hospitals are excluded from being assessed on a PPC if they do not meet the minimum criteria of 2 expected PPCs and 20 admissions at-risk for a PPC; and 2) Small hospitals (those with less than 21,500 at-risk or 22 expected PPCs across all payment PPCs) are assessed using two years of data. Currently in RY 2026, only 4 hospitals are assessed on all of the 15 PPCs in the MHAC program and 5 hospitals are considered small hospitals by the criteria outlined above.

Despite the Commission's best efforts to address small cell size concerns, one relatively small hospital has requested changes to the MHAC policy that would better balance the tradeoff between incenting greater year over year performance across all in-hospital complications and concerns of statistical instability for PPC evaluations amongst small hospitals. In advance of the RY 2026 Policy, the hospital expressed their concerns that they had in previous years been eligible for PPC 35-Sepsis but had the previous year seen their expected rate drop below 2, rendering them ineligible for inclusion of this PPC in their MHAC score. They noted further that the PPC was serious and highly amenable to interventions which they had identified and implemented; however, with the minimum expected criteria of 2, their performance on PPC 35 is not counted or recognized in their score. Staff did not remove the inclusion requirement of 2 expected PPCs, as there was concern over the potential instability of the measurement with very low numbers of events. Further, the hospital was concerned that they were measured on two years of performance, vs. one year, as a small hospital.

As Maryland hospitals continue to improve on payment PPCs, small cell size issues are also impacting larger hospitals (i.e., non-small hospitals) and reducing the regulatory oversight of complications. The current approach of having minimum criteria for at-risk and expected is designed to increase validity and reliability of the measures. However, over time, hospitals may be assessed on fewer PPC measures, effectively reducing the comprehensiveness of the program and failing the crucial test of content validity, the degree to which a measure captures the concept it is intended to measure. Thus, staff assessed methods to evaluate the PPCs through updates to the MHAC methodology aimed at better addressing small cell size issues and related statistical reliability and validity. Among the methods considered were Bayesian

smoothing[6], a statistical approach used by CMS for similar concerns, and scoring performance using a weighted composite evaluation, which would assess a hospital on all PPCs as one measure relative to statewide performance standards, as opposed to evaluating each PPC individually compared to performance standards. Results of the modeling to address small cell sizes and excluded PPCs were presented to the PMWG during the RY 2026 policy development process. Initial concerns regarding Bayesian smoothing were that, despite improved statistical reliability, small hospitals' evaluations and financial penalties/rewards would be driven by the statewide average as opposed to the hospital's' performance, which additionally could reduce the incentive for small hospitals to improve. For these reasons, staff focused its attention on the composite measurement approach in RY 2027.

Potential PPC Composite Score Options to Improve Statistical Measurement

During the RY 2027 MHAC updating process, concerns were again raised regarding the current MHAC methodology by PMWG members and other hospital stakeholders and included the following:

- **Low Content Validity** - Hospital performance may be based on a small subset of PPCs, as few as two or three of the 15 PPC measures for small hospitals.
- **Reduced Reliability** - Individual PPC measurement results in lower reliability as measured by signal to noise ratios, i.e., the degree to which the measurement captures hospital complications (signal) versus random variation or interference that can mask or obscure the signal (noise).
- **Face Validity** - Scores for hospitals defined as small tend to be at the high or low ends of performance.
- **Redundant Data Use** - Two years of data in the measurement period for small hospitals (vs. one year for other hospitals) means that one year of performance will be counted in two consecutive Rate Year scores under the program.

Working with Mathematica Policy Research (MPR), staff assessed and presented options for developing a weighted PPC composite to address these issues. Specifically, three potential composite methodologies

[6] Under this Bayesian smoothing approach, a hospital's smoothed O/E ratio for each PPC measure equals the sum of a) the hospital's O/E ratio for the PPC measure times the reliability of the PPC measure at the hospital and b) one minus the reliability of the PPC measure at the hospital times the statewide O/E ratio for the PPC measure. If the reliability of a PPC measure is 1.00 at the hospital, then the hospital's smoothed O/E ratio equals the hospital's O/E ratio and is not affected by the statewide average. If the reliability of a PPC measure is 0.00 at a hospital, then the hospital's smoothed O/E ratio equals the statewide average.

were modeled and compared to the current MHAC methodology. Similarities and differences from the current methodology in the steps for calculating hospital composite scores are outlined in Figure 6 below.

Figure 6. Summary of MHAC Score Calculation Steps for Current Methodology vs Composite Models 1-3

Calculation Steps	Current Methodology	PPC Composite Option 1	PPC Composite Option 2	PPC Composite Option 3
PPC Exclusion Criteria	Exclude PPC measures with <2 expected PPCs or <20 at risk discharges	Exclude PPCs with 0 at-risk discharges		
PPC Measure "Volume" Weights	PPC measures not weighted by volume	PPC measures with greater expected PPCs at hospital receive a larger weight	PPC measures with more at-risk discharges at hospital receive larger weight	PPC measures with more observed PPCs across Maryland hospitals receive a larger weight
PPC Measure 3M Cost Weights	PPC measures are weighted by 3M Cost Weights			
Benchmarks and Thresholds	For each of the 15 payment PPCs, calculate a benchmark and threshold	Calculate a benchmark and threshold for the PPC Composite		

As shown in Figure 6 above, the differences between the current methodology and the composite options are the PPC exclusion criteria, what is used to weight the PPC measures, and how performance is assessed relative to performance standards (i.e., the benchmarks and thresholds). While all of the methods tested maintain the use of the Solventum (3M) cost weights as a proxy for patient harm, the composite options also weight by volume using three different methods. More importantly, the composite methodologies differ from the current methodology in that hospitals are scored on the PPC measure composite as opposed to being scored on each individual PPC (i.e., how the benchmarks and thresholds are calculated).

In order to evaluate the current methodology and potential composite score options, staff assessed the validity and reliability of each method. Specifically, the models were assessed on content validity[7] and signal to noise ratios for reliability. Content validity refers to the degree to which a measure captures the concept it is intended to measure. The intention of the MHAC Program is to evaluate Maryland hospitals based on their performance on the 15 payment PPCs, so methodologies that evaluate Maryland hospitals on all 15 payment PPCs would have the highest content validity. The composite methodologies tested evaluate Maryland hospitals on payment PPC measures with greater than 0 at-risk discharges, resulting in very high content validity, even for the smallest hospitals (Figure 7). Staff believes this is the most important reason to move to this methodology.

Figure 7. Content Validity Current Methodology Versus Composite Options

Hospital Category*	Number of Hospitals	Average Number of PPC Measures Evaluated	
		Current Methodology	Composite Methodology
Small Hospitals	5	3.6	13.2
Medium Hospitals	15	11.0	14.5
Large Hospitals	21	13.8	15

*Hospital category definitions are based on FY 2024 data. Small hospitals had less than 21,500 at-risk discharges or 22 expected PPCs; medium hospitals had between 60,000 and 150,000 at-risk discharges; large hospitals had greater than 150,000 at-risk discharges.

The current methodology evaluates Maryland hospitals on PPC measures for which the hospital has at least two expected PPCs, resulting in fewer PPC measures being evaluated, especially for small and medium hospitals. As illustrated in Figure 7 above, the five small Maryland hospitals are evaluated on an average of 13.2 payment PPC measures under the composite methodologies compared with 3.6 payment PPC measures under the current methodology. The 15 medium Maryland hospitals are evaluated on an

[7] Staff also assessed predictive validity, the extent that past performance is predictive of future performance and is assessed by calculating the correlation of results between different performance periods. While all composite options demonstrated sufficient predictive validity, Composite Option 1 demonstrated slightly higher correlations compared to the other composite options.

average 14.5 payment PPC measures under the composite methodologies compared with 11.0 payment PPC measures under the current methodology. In addition to improving content validity, evaluating small hospitals on almost all of the 15 payment PPCs under the composite methodologies lessens the degree to which one observed PPCs on one payment PPC measure can have a drastic negative impact on a small hospital's MHAC revenue adjustment in consecutive rate years.

The other evaluation that assisted staff in advancing to a composite methodology was reliability. Reliability refers to the consistency of a measure and thus its dependability in assessing the performance of a hospital, minimizing random errors in measurement. Staff assessed the reliability of PPC measures and PPC composite values using the Morris signal-to-noise method under which a score of 1.00 indicates a perfect signal of hospital performance without noise (i.e., perfect reliability) and a score of 0 indicates no signal of hospital performance and all noise (i.e., worst reliability). Staff consider reliability above 0.50 to be acceptable but would hope the MHAC methodology could achieve an average reliability across Maryland hospitals of 0.75 or higher. The current methodology achieves reliability generally somewhat below the desired minimum of 0.50, with the average reliability across FY 2021 to FY 2024 being 0.39. Composite Options 1, 2, and 3 all yield substantially higher reliability than the current methodology, especially Composite Option 1 with an average reliability of 0.76 across FY 2021 to FY 2024 (Figure 8).

Figure 8. Average Reliability Across Maryland Hospitals using a 1-year Performance Period by Methodology

Performance Period	Current Methodology*	Composite Option 1	Composite Option 2	Composite Option 3
FY 24	0.24	0.61	0.48	0.54
FY 23	0.38	0.81	0.63	0.68
FY 22	0.50	0.81	0.70	0.76
FY 21	0.42	0.80	0.62	0.72
Average	**0.39**	**0.76**	**0.61**	**0.68**

Based on the results of reliability and validity analyses of the current methodology versus the composite options presented above and also detailed in Appendix IV, **staff supports adoption of Composite Option 1 to replace the current methodology**.

Hospital Scores and Revenue Adjustments

The hospital MHAC scores are calculated based on 1) hospital performance on each payment PPC measure relative to the PPC measure's benchmark and threshold (current methodology) or 2) hospital performance on the weighted PPC composite relative to the PPC composite benchmark and threshold (proposed staff change). Hospital MHAC scores are then converted to revenue adjustments using a prospectively determined revenue adjustment scale, which allows hospitals to track their progress throughout the performance period. Since the MHAC program redesign in RY 2021, the scale has remained the same–that is, it ranges from 0 to 100 percent with a hold-harmless zone between 60 and 70 percent (originally centered around the average hospital score calculated prospectively); subsequently, as long as the statewide average score was within that zone in a given year, staff did not adjust the range for simplicity. However, with moving to the Composite scoring methodology, staff is proposing to adopt a continuous linear revenue adjustment scale that ranges from 0 to 100 percent without a hold harmless zone. The average hospital MHAC score, as determined through prospective modeling, would still be the cut point for rewards and penalties. Staff believes there is no longer a need for a hold harmless zone because the composite methodology is more reliable and the revenue adjustments closer to the cut point are generally small. Figure 9 provides the estimated revenue adjustments statewide under the current methodology and Composite Option 1, with and without a hold harmless zone. This prospective modeling does not provide actual values for any rate year, and has been updated in the final policy with more recent data. For this modeling, the average MHAC score varied across the two methods with the average score higher under the Composite score compared to the current methodology. Thus, the changes in revenue adjustments are due to the change to the Composite and the higher score needed to get a reward.

The estimated statewide aggregate penalties and rewards were larger under Composite Option 1 than the Current Methodology (Figure 1). Net revenue adjustments increased from $3.7 million under the Current Methodology to $43.8 million under the Composite Option 1 with no hold harmless zone (staff proposal). Hospitals' estimated revenue adjustments under the Current Methodology and Composite Option 1 were highly correlated (0.83 with no hold harmless zone and 0.85 with a hold harmless zone).

Figure 9. Statewide Aggregate Revenue Adjustments Under Current Methodology and Composite Option 1

	Current Methodology		Composite Option 1 Methodology	
	No Hold Harmless Zone	Hold Harmless Zone	No Hold Harmless Zone	Hold Harmless Zone
State Net Total	$3,673,917	$1,268,658	$43,766,281	$41,640,034
Penalty	-$29,096,005	-$21,676,921	-$40,468,836	-$35,363,552
% Inpatient	-0.25%	-0.18%	-0.34%	-0.30%
Reward	$32,769,922	$22,945,579	$84,235,117	$77,003,586
% Inpatient	0.28%	0.19%	0.71%	0.65%

Appendix V contains the by-hospital MHAC scores and estimated hospital revenue adjustments under the current methodology and Composite Option 1. Staff has recommended that the cut point be prospectively set but a retrospective assessment should also be done in the initial years of the methodology to check the average hospital MHAC scores. Staff proposes that if the actual average MHAC score is more than +/- 10 percentage points different from the prospectively modeled average MHAC score, that the staff provide the Commission with a recommendation to change the cut point after the performance period.

Stakeholder Feedback and Staff Responses

Feedback on the Draft RY 2027 MHAC Recommendations was offered by Commissioners, PMWG Members, other hospital stakeholders and in written comments from the Maryland Hospital Association (MHA), Johns Hopkins Health System (JHHS), University of Maryland Medical System (UMMS), Garrett Regional Medical Center (GRMC), and Medstar Health. Feedback, summarized below, addressed the current methodology versus transitioning to Composite Option 1, and did not address use of a continuous scale versus one with a hold harmless zone as is done with the current methodology. Staff believes that this is in part because the statewide revenue adjustments do not vary significantly with or without the hold harmless zone and thus have recommended moving to the full linear scale that assesses revenue adjustments differentially across all scores.

Transition to a Composite Measure Approach

- Several PMWG members, hospital stakeholders, and written commenters (UMMS, GRMC, MedStar, MHA) articulated support for the methodology updates, highlighting the improved validity and reliability of the Composite Option 1 approach compared to the MHAC current methodology, noting in particular the benefit of more accurate measurement for small hospitals. MedStar

specifically notes that Composite Option 1 is more comprehensive and that by weighting the PPCs by the hospital expected PPC rate it holds large and small hospitals accountable for the PPCs that are most germane to their scope of care.

- GRMC favors Composite Option 1 for all hospitals, but suggests adopting it at least for the hospitals defined as small, as the approach more fairly measures their actual performance on all of the PPC measures. In further support of Composite Option 1, GRMC raised concerns with staff that their hospital would not be assessed on the Sepsis PPC under the current methodology (because they have less than two expected PPCs), yet they believe inclusion of the PPC allows them to receive credit for important improvement efforts they have made in this area. Conversely, GRMC acknowledges that under the Composite methodology they would be newly at risk for PPCs between zero and two expected occurrences, but believe the Composite more accurately measures their quality of care. Using similar rationale, GRMC has previously opposed the use of Bayesian smoothing that is often used to address small cell size measurement concerns, as their scores would be significantly influenced by the statewide mean, and again not reflect their actual performance.
- MHA recommends that HSCRC incorporate a hybrid approach that allows smaller hospitals to be on the new PPC composite methodology and also allows larger hospitals to remain on the existing MHAC program PPC methodology. They note that while small hospitals are advantaged by Composite Option 1, they believe an undue burden is placed on Academic Medical Centers (AMCs) because norms are set on unique surgeries that they perform (e.g., complex bowel procedures, complex cardiac surgery, major spinal reconstruction/revision surgery, and neurosurgery) and thus incur greater penalties and have limited opportunities to improve because of the complex nature of these unique procedures.
- Both JHHS and UMMS support further and more comprehensive refinement and evaluation of the Composite Option 1.
    - JHHS recommends continuation of the current MHAC methodology for RY2027, pending this additional work. The JHHS letter also notes that while Maryland transitions from the Total Cost of Care Model and into the future state, they anticipate significant policy changes with implications for quality policies and methodologies. Therefore, to ensure alignment and efficiency, substantial changes to the MHAC program should not be made until foundational policy and model elements are established.

- UMMS alternatively supports moving ahead with the methodology updates but recommends additional analyses to enhance the methodology. Specifically, they have concerns about the specialized procedures performed by the AMCs and suggest further enhancements to the new methodology such as (a) setting targets for cohorts of hospitals that have similar patient types; (b) restricting APR-DRG-SOIs (All Patient Refined Diagnosis-Related Groups - Severity of Illness) in the model to common diagnoses across hospital types, similar to the Quality Based Reimbursement (QBR) mortality program; and (c) acquiring data outside the state of Maryland for comparison of academic medical centers.

Staff Response

Staff concurs that Composite Option 1 offers a superior scoring approach, resulting in hospital specific-scores with significantly increased content validity and reliability:

- Content validity, the degree to which a measure captures the concept it is intended to measure[8] is greatly improved by increasing the number of PPCs on which hospitals are measured. The number of PPCs out of 15 on which hospitals are measured on average increases from 3.6 PPCs for small hospitals, 11.0 for medium hospitals, and 13.8 for large hospitals under the current methodology to 13.2, 14.5 and 15 respectively. Given the payment PPCs have been vetted for clinical significance and actionability, staff believe it is important to assess hospitals on any PPC that is applicable to the patients they serve. Furthermore, weighting the MHAC score by hospital specific expected PPCs focuses the hospitals on complications that are more common for the patients they serve and does not overly weight low volume PPCs for small hospitals.
- Reliability is the consistency of a measure and thus its dependability in assessing the performance of a hospital versus measurement error[9]. Higher reliability indicates that the measure methodology allows us to distinguish one hospital's performance from another, as well as actual clinical performance from random variation. Reliability of PPC measurement statewide over 4 years (FY 21 through FY 24) improves from an average signal to noise ratio of 0.39 under the current

[8] The intention of the MHAC Program is to evaluate Maryland hospitals based on their performance on the 15 payment PPCs, so methodologies that evaluate Maryland hospitals on all 15 payment PPCs would have the highest content validity.

[9] Using the Morris signal-to-noise method, a score of 1.00 indicates a perfect signal of hospital performance without noise (i.e., perfect reliability) and a score of 0 indicates no signal of hospital performance and all noise (i.e., worst reliability). A score of 0.50, for example, means that a given score is subject to random variation and is reliable each at 50% of the time.

methodology to 0.76 under Composite Option 1, indicating that on average the measure results are unreliable 61% of the time under the current methodology but that decreases to 24% of the time under Composite Option 1.

In short, the Composite option is far superior in distinguishing hospital performance such that all hospitals are held increasingly accountable for PPCs that are most germane to the types of patients and services they provide.

With regard to the concerns related to PPC norms for rare and complex procedures done at AMCs, staff looks forward to working with these hospitals to conduct additional analyses and make methodology refinements if needed. However, the staff does think that the proposed changes are superior to the current methodology and thus are not supportive of delaying its implementation or adopting a hybrid approach. Specifically, while AMCs may be performing unique surgeries, staff believes fundamentally that these surgeries should be assessed for potentially preventable complications. Since the start of using the PPCs, the individual PPC measures have been refined based on input from Maryland hospitals, and, as such, changes (e.g., new exclusions) have been made for clinical scenarios where the complication is deemed not preventable by Solventum. Thus, the HSCRC encourages hospitals to continue to submit input to Solventum where there are clinical concerns through the established process. Second, staff believes that the norms at the diagnosis and severity of illness level are granular enough to take into account differences in expected outcomes. Hospitals with an observed-to-expected ratio greater than 1 during the performance period means that either their performance has worsened from the base period for patients where they heavily influence the normative values, or their performance is worse compared to other hospitals seeing patients with the same diagnoses and severity of illness, or a combination of both. But in whatever case, this type of performance, i.e., an observed-to-expected ratio greater than 1, suggests hospitals do have room for improvement. Last, in terms of the benchmarks and thresholds, staff will continue to assess whether AMCs are unfairly being held to performance standards set by smaller hospitals.

Again, staff agrees that ongoing analysis to improve and refine the PPC measures and methodology should be undertaken for the MHAC program specifically, and staff will continue to partner with hospitals and other key stakeholders formally through the work of the PMWG and informally through ongoing open communication.

Finally, staff agrees that transitioning from the TCOC model to the future model may entail establishing updated foundational policy elements for the quality programs. As has been our approach, staff will collaborate with hospitals and other key stakeholders to undertake the needed work.

Updating Measures Based on Data Trends

Commissioner Elliot commented in response to the MHAC Draft RY 27 policy about PPCs in monitoring status, noting that some have increasing trends that may warrant further investigation,e.g., PPC 26 Diabetic Ketoacidosis.

Staff Response

Staff notes that in the program redesign in RY 2021 the PMWG subgroup established criteria to evaluate monitored PPCs to determine whether they should be included in the MHAC payment program. Based on the established criteria, staff does not recommend moving any monitored PPCs into the payment program at this time. Staff agrees that the criteria for evaluating PPCs appropriate for inclusion in the payment program should be updated based on any approved updates to the program methodology (i.e., clinically significant but low volume complications could be reconsidered under a weighted composite).

Recommendations

The final recommendations for the RY 2027 Maryland Hospital Acquired Conditions (MHAC) program are as follows:

1. Use 3M Potentially Preventable Complications (PPCs) to assess hospital acquired complications.
    a. Maintain a focused list of PPCs in the payment program that are clinically recommended and that generally have higher statewide rates and variation across hospitals.
    b. Assess monitoring PPCs based on clinical recommendations, statistical characteristics, and recent trends to prioritize those for future consideration for updating the measures in the payment program.
    c. Engage hospitals on specific PPC increases to understand trends and discuss potential quality concerns.
2. Assess performance using more than one year of data for small hospitals (i.e., less than 21,500 at-risk discharges and/or 22 expected PPCs). The performance period for small hospitals will be CYs 2024 and 2025.
3. Assess hospital performance based on statewide attainment standards.
4. Score hospital performance on a PPC composite that includes all payment PPCs weighted by hospital specific expected volume and Solventum (3M) cost weights as a proxy for patient harm.[10]
5. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent:
    a. Use a continuous linear scale that ranges from 0 to 100 percent without a hold harmless zone.
    b. Establish the cut point for penalties and rewards as the average hospital MHAC score as determined through prospective modeling.
    c. Retrospectively assess the average hospital MHAC scores and propose to the Commissioners that the cutpoint be modified if the actual average score is more than +/- 10 percent different from the prospectively modeled average MHAC score.
6. Going forward, consider other candidate measures/measure sets that may be important for assessing hospital avoidable, harmful complications and appropriate for use in the program, e.g., digitally specified measures.

[10] Hospitals without any at-risk or expected for a specific PPC would not be assessed on that PPC. The two maternity related PPCs are dropped for hospitals without this service line, but almost all other Payment PPCs are included for all hospitals at this time weighted by the hospital volume.

Appendix I. Background on Federal Complication Programs

The Federal Government operates two hospital complications payment programs, the Deficit Reduction Act Hospital Acquired Condition program (DRA-HAC) and the HAC Reduction Program (HACRP), both of which are designed to penalize hospitals for post-admission complications.

Federal Deficit Reduction Act, the Hospital-Acquired Condition Present on Admission Program

Beginning in Federal Fiscal Year 2009 (FFY 2009), per the provisions of the Federal Deficit Reduction Act, the Hospital-Acquired Condition Present on Admission Program was implemented. Under the program, patients were no longer assigned to higher-paying Diagnosis Related Groups if certain conditions were acquired in the hospital and could have reasonably been prevented through the application of evidence-based guidelines.

Hospital-Acquired Condition Reduction Program

CMS expanded the use of hospital-acquired conditions in payment adjustments in FFY 2015 with a new program, entitled the Hospital-Acquired Condition Reduction Program, under the authority of the Affordable Care Act. That program focuses on a narrower list of complications and penalizes hospitals in the bottom quartile of performance. Of note, as detailed in Figure 1 below, all the measures in the Hospital-Acquired Condition Reduction Program are used in the CMS Value Based Purchasing program, and the National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures are also used in the Maryland Quality Based Reimbursement (QBR) program.

Figure 1. CMS Hospital-Acquired Condition Reduction Program (HACRP) FFY 2024 Measures

Recalibrated Patient Safety Indicator (PSI) measure:^ ● PSI 03 – Pressure Ulcer Rate ● PSI 06 – Iatrogenic Pneumothorax Rate ● PSI 08 – In-Hospital Fall with Hip Fracture Rate ● PSI 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 or Deep Vein Thrombosis Rate ● PSI 13 – Postoperative Sepsis Rate ● PSI 14 – Postoperative Wound Dehiscence Rate ● PSI 15 – Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate
Central Line-Associated Bloodstream Infection (CLABSI)^*
Catheter-Associated Urinary Tract Infection (CAUTI)^*
Surgical Site Infection (SSI) – colon and hysterectomy^*
Methicillin-resistant Staphylococcus aureus (MRSA) Bacteremia^*
Clostridium Difficile Infection (CDI)^*

^Recalibrated PSI Composite Measures included in the CMS VBP Program beginning FFY 2023. * National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures included in both the CMS VBP and Maryland QBR Programs

For more information on the DRA HAC program POA Indicator, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/index

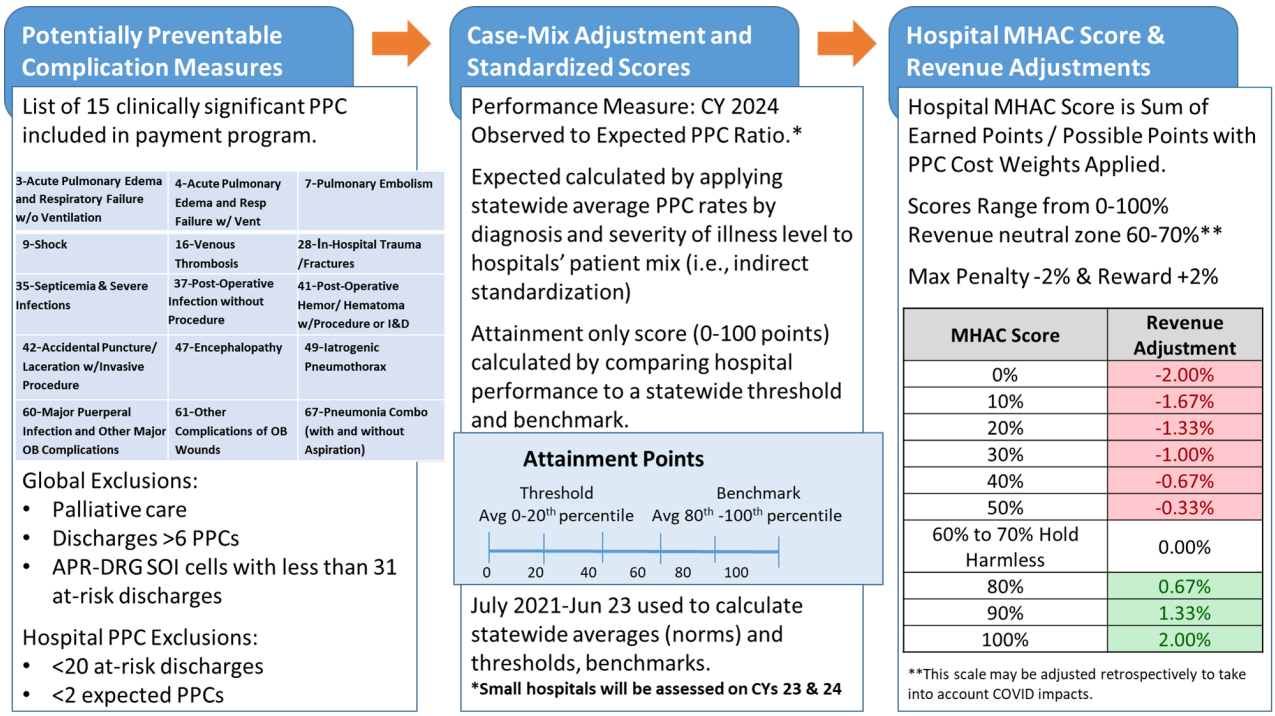
For more information on the DRA HAC program, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Downloads/FAQ-DRA-HAC-PSI.pdf

For more information on the HAC Reduction program, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program

Appendix II: RY 2026 MHAC Program Methodology

Figure 1 below provides a summary overview of the approved RY 2026 MHAC methodology.

Figure 1. Overview of RY 2026 Approved MHAC Methodology



Performance Metric

The methodology for the MHAC program measures hospital performance using the Observed (O) /Expected (E) ratio for each PPC. Expected number of PPCs are calculated using historical data on statewide PPC rates by All Patient Refined Diagnosis Related Group and Severity of Illness Level (APR-DRG SOI). See below for details on how the expected number of PPCs are calculated for each hospital.

Observed and Expected PPC Values

The MHAC scores are calculated using the ratio of $Observed : Expected$ PPC values.

Given a hospital's unique mix of patients, as defined by APR-DRG category and Severity of Illness (SOI) level, the HSCRC calculates the hospital's expected PPC value, which is the number of PPCs the hospital would have experienced if its PPC rate were identical to that experienced by a normative set of hospitals.

The expected number of PPCs is calculated using a technique called indirect standardization. For illustrative purposes, assume that every hospital discharge is considered “at-risk” for a PPC, meaning that all discharges would meet the criteria for inclusion in the MHAC program. All discharges will either have no PPCs, or will have one or more PPCs. In this example, each discharge either has at least one PPC, or does not have a PPC. The unadjusted PPC rate is the percent of discharges that have at least one PPC.

The rates of PPCs in the normative database are calculated for each diagnosis (APR-DRG) category and severity level by dividing the observed number of PPCs by the total number of admissions. The PPC norm for a single diagnosis and severity level is calculated as follows:

Let:

N = norm

P = Number of discharges with one or more PPCs

D = Number of “at-risk” discharges

i = A diagnosis category and severity level

$$N_i = \frac{P_i}{D_i}$$

In the example, each normative value is presented as PPCs per discharge to facilitate the calculations in the example. Most reports will display this number as a rate per one thousand discharges.

Once the normative expected values have been calculated, they can be applied to each hospital. In this example, the normative expected values are computed for one diagnosis category and its four severity levels.

Consider the following example in Figure 2 for an individual diagnosis category.

Figure 2. Expected Value Computation Example for one Diagnosis Category

A Severity of illness Level	B At-risk Discharges	C Observed Discharges with PPCs	D PPCs per discharge (unadjusted PPC Rate)	E Normative PPCs per discharge	F Expected # of PPCs	G Observed: Expected Ratio
			= (C / B)	(Calculated from Normative Population)	= (B x E)	= (C / E) rounded to 4 decimal places
1	200	10	.05	.07	14.0	0.7143
2	150	15	.10	.10	15.0	1.0000
3	100	10	.10	.15	15.0	0.6667
4	50	10	.20	.25	12.5	0.8000
Total	**500**	**45**	**.09**		**56.5**	**0.7965**

For the diagnosis category, the number of discharges with PPCs is 45, which is the sum of discharges with PPCs (column C). The overall rate of PPCs per discharge in column D, 0.09, is calculated by dividing the total number of discharges with PPCs (sum of column C) by the total number of discharges at risk for PPCs (sum of column B), i.e., 0.09 = 45/500. From the normative population, the proportion of discharges with PPCs for each SOI level for that diagnosis category is displayed in column E. The expected number of PPCs for each severity level shown in column F is calculated by multiplying the number of at-risk discharges (column B) by the normative PPCs per discharge rate (column E). The total number of PPCs expected for this diagnosis category is the expected number of PPCs for the severity levels.

In this example, the expected number of PPCs for the APR DRG category is 56.5, which is then compared to the observed number of discharges with PPCs (45). Thus, the hospital had 11.5 fewer observed discharges with PPCs than were expected for 500 at-risk discharges in this APR DRG category. This difference can be expressed as a percentage difference as well.

All APR-DRG categories and their SOI levels are included in the computation of the observed and expected rates, except when the APR-DRG SOI level has less than 30 at-risk discharges statewide.

PPC Exclusions

Consistent with prior MHAC policies, the number of at-risk discharges is determined prior to the calculation of the normative values (hospitals with <10 at-risk discharges are excluded for a particular PPC) and the normative values are then re-calculated after removing PPCs with <2 complication expected. The following exclusions will also be applied:

For each hospital, discharges will be removed if:

- Discharge is in an APR-DRG SOI cell has less than 31 statewide discharges.
- Discharge has a diagnosis of palliative care (this exclusion may be removed in the future once POA status is available for palliative care for the data used to determine performance standards); and
- Discharge has more than 6 PPCs (i.e., a catastrophic case, for which complications are probably not preventable).

For each hospital, PPCs will be removed if during the base period:

- The number of cases at-risk is less than 20; and
- The expected number of PPCs is less than 2.

The PPCs for which a hospital will be assessed are determined using the base period data and not reassessed during the performance period. This is done so that scores can be reliably calculated during the performance period from a pre-determined set of PPCs. The MHAC summary workbooks provide the excluded PPCs for each hospital.

Combination PPCs

Based on clinical input and 3M recommendation, starting in RY 2021 two pneumonia (PPC 5 Pneumonia & Other Lung Infections & PPC 6 Aspiration Pneumonia) PPCs were combined into single pneumonia PPC and the 3M cost weight is a simple average of the two PPC cost weights.

Hospital Exclusions

Acute care hospitals that do not have sufficient volume to have at least 15 at-risk and 1.5 expected for any payment program PPC are excluded from the MHAC policy.

Benchmarks and Thresholds

For each PPC, a threshold and benchmark value are calculated using the determined base period data. In previous rate years when improvement was also assessed, the threshold was set at the statewide median

of 1 and the benchmark was the O/E ratio for the top performing hospitals that accounted for 25% of discharges. For RY 2021 under an attainment only methodology, staff adapted the MHAC points system to allow for greater performance differentiation by moving the threshold to the value of the observed to expected ratio at the 10th percentile of hospital performance, moving the benchmark to the value of the observed to expected ratio at the 90th percentile of hospital performance, and assigning 0 to 100 points for each PPC between these two percentile values.

Attainment Points (possible points 0-100)

If the PPC ratio for the performance period is greater than the threshold, the hospital scores zero points for that PPC for attainment.

If the PPC ratio for the performance period is less than or equal to the benchmark, the hospital scores a full 100 points for that PPC for attainment.

If the PPC ratio is between the threshold and benchmark, the hospital scores partial points for attainment. The formula to calculate the Attainment points is as follows:

- Attainment Points = [99 * ((Hospital's performance period score - Threshold)/ (Benchmark – Threshold))] + 0.5

Calculation of Hospital Overall MHAC Score

To calculate the final score for each hospital, the attainment points earned by the hospital and the potential points (i.e., 100) for each PPC are multiplied by the 3M cost weights. Hospital scores across PPCs are calculated by summing the total weighted points earned by a hospital, divided by the total possible weighted points (100 per PPC * 3M cost weight).

RY 2025 Update: Small Hospital Methodology

Hospital-specific PPC inclusion requirements were updated for the RY 2025 policy, i.e., all hospitals are required to have at least 20 at-risk discharges and 2 expected PPCs in order for a particular PPC to be included in the payment program. Because of the volatility in performance scores for smaller hospitals, the Commission also approved the following policy updates in RY 2025:

> "Establish small hospital criteria for assessing performance under the MHAC policy based on the number of at-risk discharges and expected PPCs (i.e., small hospitals are those with less than staff are proposing for RY 2026 to modify the methodology slightly to make the performance standards less sensitive to potential outliers by averaging the worst and best performing hospitals (as

opposed to taking a single value at a given percentile). This methodology is more in line with the CMS VBP program approach to setting the benchmark. Staff explored a couple of options and finalized averaging the 20 percent of O/E ratios of the worst and best performing hospitals results, which results in similar benchmark and threshold values as compared to the current method but avoids the cliff effects of using a single percentile. 21,500 at-risk discharges and/or 22 expected PPCs across all payment program PPCs) as opposed to the number of PPC measure types, and for hospitals that meet small hospital criteria, increase reliability of score by using two years of performance data to assess hospital performance (i.e., for RY 2025 use CY 2022 and 2023). “

RY 2026 Update: Calculating Performance Standards

Staff modified the methodology slightly to make the performance standards less sensitive to potential outliers by averaging the worst and best performing hospitals (as opposed to taking a single value at the 90th and 10th percentile). This updated methodology is more in line with the CMS VBP program approach to setting the benchmark. Staff explored a couple of options and determined that averaging the 20 percent of O/E ratios of the worst and best performing hospitals results yields similar benchmark and threshold values compared to the previous method but avoids the cliff effects of using a single percentile.

Appendix III: Monitoring PPCs

The table below shows the monitored PPCs' O/E ratios for CY 24 YTD (through September) and the percent changes in the observed-to-expected ratio from CY 2018.

Monitoring PPC	2018 O/E	2024 YTD O/E	2018-2024 % Change	Observed Count CY24 YTD	Eligible Hospitals CY24 YTD
2:Extreme CNS Complications	1.82	0.82	-55.19%	19	23
21: Clostridium Difficile Colitis	1.31	0.73	-44.50%	54	41
25: Renal Failure with Dialysis	1.19	0.68	-43.37%	4	13
45: Post-Procedure Foreign Bodies	0.79	0.52	-34.51%	1	
29:Poisonings due to Anesthesia	0.88	0.61	-30.88%	13	31
10: Congestive Heart Failure	0.82	0.58	-28.67%	6	21
65:Urinary Tract Infection without Catheter	1.11	0.80	-27.62%	407	
66: Catheter-Related Urinary Tract Infection	1.02	0.74	-26.95%	6	
39:Reopening Surgical Site	1.08	0.85	-20.91%	128	
14: Ventricular Fibrillation/Cardiac Arrest	0.84	0.74	-11.31%	168	42
33: Cellutis	0.92	0.90	-2.49%	49	
11: Acute Myocardial Infarction	0.96	0.95	-0.95%	67	39
54: Infections due to Central Venous Catheters	0.85	0.88	3.58%	28	
18: Major Gastrointestinal Complication with Transfusion or Significant Bleeding	0.52	0.60	14.66%	35	38
24: Renal Failure without Dialysis	0.81	0.96	17.77%	706	43
40: Peri-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc	0.82	0.97	18.76%	133	
20: Other Gastrointestinal Complications without Transfusion or Significant Bleeding	0.69	0.88	28.36%	82	41
44: Other Surgical Complication- Mod	0.63	0.81	29.38%	14	
8: Other Pulmonary Complications	0.72	0.95	31.05%	39	39
23: GU Complications Except UTI	0.61	0.84	38.07%	35	37
1:Stroke & Intracranial Hemorrhage	0.68	0.95	40.57%	104	40

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Monitoring PPC	2018 O/E	2024 YTD O/E	2018-2024 % Change	Observed Count CY24 YTD	Eligible Hospitals CY24 YTD
48: Other Complications of Medical Care	0.57	0.80	40.77%	84	
19:Major Liver Complications	0.69	0.98	41.55%	29	35
26: Diabetic Ketoacidosis & Coma	0.59	0.88	47.97%	29	37
50: Mechanical Complication of Device, Implant & Graft	0.56	0.84	50.35%	75	
15: Peripheral Vascular Complications Except Venous Thrombosis	0.53	0.80	50.68%	21	32
34: Moderate Infections	0.60	0.92	52.77	33	
13: Other Cardiac Complications	0.57	0.87	52.96%	27	35
64: Other In-Hospital Adverse Events	0.49	0.77	58.40%	56	
27:Post-Hemorrhagic & Other Acute Anemia with Transfusion	0.72	1.16	61.66%	106	40
52:Inflammation & Other Complications of Devices, Implants or Grafts Except Vascular Infection	0.67	1.09	63.24%	174	
17: Major Gastrointestinal Complications without Transfusion or Significant Bleeding 0	0.67	1.09	63.24%	53	38
38: Post-Operative Wound Infection & Deep Wound Disruption with Procedure	1.24	2.07	67.39%	11	
53:Infection, Inflammation & Clotting Complications of Peripheral Vascular Catheters & Infusions	0.54	0.92	69.77%	26	
51: Gastrointestinal Ostomy Complications	0.47	0.88	87.51%	57	
59: Medical & Anesthesia Obstetric Complications	0.48	0.99	106.96%	54	
31: Decubitus Ulcer	0.35	0.87	147.91%	80	
30: Poisonings due to Anesthesia	**0 observed**	**0 Observed**			
32: Transfusion Incompatibility Reaction	**0 observed**	**0 Observed**			

Appendix IV. Composite Options Testing Results

Working with Mathematica, staff tested three composite options as outlined below.

As shown in the equation below, PPC Composite Option 1 is calculated as the sum of the hospital's observed PPCs times the 3M Cost Weight for each payment PPC measure divided by the sum of the hospital's expected PPCs times the 3M Cost Weight for each payment PPC measure.

$$PPC\ Composite_j = \frac{\left(\sum_{i=1}^{15} ObservedPPC_{ij} * 3MCostWeight_i\right)}{\left(\sum_{i=1}^{15} ExpectedPPC_{ij} * 3MCostWeight_i\right)}$$

PPC Composite Option 1 does not explicitly weight PPC measures by volume, but PPC measures with higher expected PPCs receive more weight. The expected PPCs for a PPC measure increases as the volume of at-risk discharges increases.

As show in the equation below, PPC Composite Option 2 is calculated as the sum of the hospital's observed-to-expected (O/E) ratio for each payment PPC measure, weighted by the PPC measure's 3M Cost Weight and hospital's volume of at-risk discharges for the given PPC measure.

$$PPC\ Composite_j = \sum_{i=1}^{15} \left(\frac{Observed\ PPCs_{ij}}{Expected\ PPCs_{ij}}\right) * \left(\frac{Volume_{ij} * 3MCostWeight_i}{\sum_{i=1}^{15} Volume_{ij} * 3MCostWeight_i}\right)$$

As shown in the equation below, PPC Composite Option 3 is calculated as the sum of hospital's O/E ratio for each payment PPC measure, weighted by the PPC measure's 3M Cost Weight and the proportion of observed payment PPCs statewide for the given PPC measure.

$$PPC\ Composite_j = \sum_{i=1}^{15} \left(\frac{Observed\ PPCs_{ij}}{Expected\ PPCs_{ij}}\right) * \left(\frac{StateProportion_i * 3MCostWeight_i}{\sum_{i=1}^{15} StateProportion_i * 3MCostWeight_i}\right)$$

For example, if there were 10,000 observed PPCs across the 15 payment PPC measures across Maryland hospitals and there were 1,000 observed PPCs for a given payment PPC measure, then the statewide proportion would be 0.10 for the PPC measure.

Similarities and differences from the current methodology in the steps for calculating hospital composite scores are outlined in Figure 1 below.

Figure 1. Summary of MHAC Score Calculation Steps for Current Methodology vs Models 1-3

Calculation Steps	Current Methodology	PPC Composite Option 1	PPC Composite Option 2	PPC Composite Option 3
PPC Exclusion Criteria	Exclude PPC measures with <2 expected PPCs or <20 at risk discharges	Exclude PPCs with 0 at-risk discharges		
PPC Measure "Volume" Weights	PPC measures not weighted by volume	PPC measures with greater expected PPCs at hospital receive a larger weight	PPC measures with more at-risk discharges at hospital receive larger weight	PPC measures with more observed PPCs across Maryland hospitals receive a larger weight
PPC Measure 3M Cost Weights	PPC measures are weighted by 3M Cost Weights			
Benchmarks and Thresholds	For each of the 15 payment PPCs, calculate a benchmark and threshold	Calculate a benchmark and threshold for the PPC Composite		

Staff used data from FY 2018 through FY 2024 to model six iterations of Maryland hospital results under each composite option and the current methodology (Figure 2). To inform decision making, staff assessed the content validity, predictive validity, and reliability of each composite option and the current methodology across the six iterations of results.

Figure 2. Performance Periods for Each Iteration of MHAC Results

Iteration	Small Hospital Performance Period	Non-Small Hospital Performance Period
1	FY 2023- FY 2024	FY 2024

Iteration	Small Hospital Performance Period	Non-Small Hospital Performance Period
2	FY 2022- FY 2023	FY 2023
3	FY 2021- FY 2022	FY 2022
4	FY 2020- FY 2021	FY 2021
5	FY 2019- FY 2020	FY 2020
6	FY 2018- FY 2019	FY 2019

Notes: 1) A base period of FYs 2021 and FY 2022 was used for each iteration to keep PPC measure O/E ratios and PPC composite values on the same scale to facilitate comparisons across iterations. 2) Small hospitals were identified as having <21,500 at-risk discharges or <22 expected PPCs during the base period.

Content validity refers to the degree to which a measure captures the concept it is intended to measure. The intention of the MHAC Program is to evaluate Maryland hospitals based on their performance on the 15 payment PPCs, so methodologies that evaluate Maryland hospitals on all 15 payment PPCs would have the highest content validity. The composite methodologies evaluate Maryland hospitals on payment PPC measures with greater than 0 at-risk discharges, resulting in very high content validity even for the smallest hospitals (Figure 3). The current methodology only evaluates Maryland hospitals on PPC measures for which the hospital has at least two expected PPCs, resulting in fewer PPC measures being evaluated especially for small and medium hospitals. The five small Maryland hospitals are evaluated on an average of 13.2 payment PPC measures under the composite methodologies compared with 3.6 payment PPC measures under the current methodology. The 15 medium Maryland hospitals are evaluated on an average of 14.5 payment PPC measures under the composite methodologies compared with 11 payment PPC measures under the current methodology. In addition to improving content validity, evaluating small hospitals on almost all of the 15 payment PPCs under the composite methodologies lessens the degree to which one observed PPCs on one payment PPC measure can drastically negatively impact a small hospital's MHAC revenue adjustment in consecutive rate years.

Figure 3. Content Validity Current Methodology Versus Composite Options

Hospital Category*	Number of Hospitals	Average Number of PPC Measures Evaluated	
		Current Methodology	Composite Methodology
Small Hospitals	5	3.6	13.2
Medium Hospitals	15	11.0	14.5
Large Hospitals	21	13.8	15

Predictive validity refers to the extent that past performance is predictive of future performance. Staff calculated correlations in hospitals' PPC composite values across iterations to assess predictive validity. A measure can be considered to have sufficient predictive validity if adjacent performance periods have moderately to highly correlated and correlations get smaller as the distance between performance periods increases. All composite options demonstrated sufficient predictive validity, but Composite Option 1 demonstrated slightly higher correlations across iterations of results (Figure 4).

Figure 4. Average Correlations of Composite Values Composite Options

Distance Between Performance Periods	Composite Option 1	Composite Option 2	Composite Option 3
1 Year Apart	0.61	0.57	0.53
2 Years Apart	0.40	0.34	0.28
3 Years Apart	0.31	0.23	0.27
4 Years Apart	0.13	0.10	0.10

Reliability refers to the degree to which a measure captures the underlying quantity the measure is intended to capture. Staff assessed the reliability of PPC measures and PPC composite values using the Morris signal-to-noise method under which a score of 1.00 indicates a perfect signal of hospital performance without noise (i.e., perfect reliability) and a score of 0 indicates no signal of hospital performance and all noise (i.e., worst reliability). Staff consider reliability above .50 to be acceptable but would hope the MHAC methodology could achieve an average reliability across Maryland hospitals of 0.75 or higher. The current methodology achieves reliabilities generally somewhat below the desired minimum reliability of 0.50, with the average reliability across FY 2021 to FY 2024 being 0.39 (Figure 5). Options 1, 2, and 3 all yield substantially higher reliabilities than the current methodology, especially Composite Option 1 with an average reliability of 0.76 across FY 2021 to FY 2024.

Figure 5. Average Reliability Across Maryland Hospitals using a 1-year Performance Period by Methodology

Performance Period	Current Methodology*	Composite Option 1	Composite Option 2	Composite Option 3
FY 24	0.24	0.61	0.48	0.54
FY 23	0.38	0.81	0.63	0.68
FY 22	0.50	0.81	0.70	0.76
FY 21	0.42	0.80	0.62	0.72
Average	**0.39**	**0.76**	**0.61**	**0.68**

Note: Reliability was calculated using a one-year performance period for all hospitals. Two years of performance data are used to assess reliability for small hospitals, so the actual average reliability across Maryland hospitals is slightly higher than represented in Figure 10.
**For the Current Methodology, staff calculated average reliability across payment PPC measures with two or more expected PPCs during the performance period.*

Average reliability dipped lower across methodologies when using FY 2024 as the performance period. As rates of observed PPCs continue to decrease across Maryland hospitals over time, PPC measure and PPC composite reliability could decrease. Staff will continue to monitor PPC measure and PPC composite reliability and consider using two years of performance period data for all hospitals if reliability when using one year of performance period data continues to decrease. Figure 6 below shows that PPC measure and PPC composite reliability is notably higher when using a two-year performance period for all hospitals and above 0.75 for Composite Option 1 for the FY 2024-2023 performance period.

Figure 6. Average Reliability Across Maryland Hospitals using a 2-year Performance Period by Methodology

Performance Period	Current Methodology*	Composite Option 1	Composite Option 2	Composite Option 3
23-24	0.33	0.78	0.68	0.71
22-23	0.50	0.86	0.76	0.80
21-22	0.54	0.87	0.76	0.81
20-21	0.47	0.85	0.71	0.77
Average	**0.46**	**0.84**	**0.73**	**0.77**

**For Current Methodology, calculated average reliability across payment PPCs with two or more expected PPCs during performance period.*

When examining small hospitals only, the composite options have drastically higher reliability than the current methodology (Figure 7). When using two years of data, the average reliability across small hospitals using Composite Option 1 is greater than the minimum reliability of 0.50 but somewhat lower for Composite Option 2 and Composite Option 3 and much lower under the current methodology.

Figure 7. Average Reliability Across Small Maryland Hospitals using a 1-year, 2-year, and 3-year Performance Period by Methodology

Performance Period	Current Methodology*	Composite Option 1	Composite Option 2	Composite Option 3
One Year (FY24)	0.13	0.28	0.14	0.18
Two Years (FY23-24)	0.19	0.51	0.32	0.34
Three Years (FY22-24)	0.32	0.66	0.43	0.41
One Year (FY23)	0.20	0.46	0.26	0.29
Two Years (FY22-23)	0.45	0.67	0.41	0.42
Three Years (FY21-23)	0.41	0.73	0.46	0.45

**For Current Methodology, calculated average reliability across payment PPCs with two or more expected PPCs during performance period.*

Aside from assessing validity and reliability of the composite methodologies, staff also examined hospital level results to understand the implications of the different weights each composite methodology puts on each payment PPC measure. As shown in Figure 8 below, the weight put on each PPC measure can vary notably across composite methodologies. In this hypothetical example, the given hospital has a very similar number of at-risk discharges for PPC measures 28 and 42 and therefore both have volume weights of 12.7% under Composite Option 2. However, PPC 42 has almost twice as many expected PPCs as PPC 28 (10.2 versus 5.4) so PPC 42 receives roughly twice the weight as PPC 28 under Composite Option 1. Reliability tends to increase as the number of expected PPCs at a hospital increases and the weight Composite Option 1 puts on each PPC measure is based on the number of expected PPCs at the hospital, offering a plausible explanation for why Composite Option 1 demonstrated consistently higher reliabilities than the other composite options. Composite Option 3 also yields high reliability levels across iterations, but staff anticipate hospitals may perceive this methodology to be less fair than Composite Option 1 because the weight put on payment PPC measures is based on statewide proportion of expected PPCs instead of hospital-specific percentage of expected PPCs. Across Maryland

hospitals and payment PPC measures, the average difference between the proportion of observed PPCs statewide and hospital-specific percentage of expected PPCs was about 3 percentage points (e.g., 3% compared with 6%), thus confirming that the Composite Option 3 methodology could be considered less representative of hospital-specific performance or less fair. This average difference also could explain why reliabilities across iterations were somewhat lower for Composite Option 3 than Composite Option 1.

Figure 8. MHAC Composite Weighting Hypothetical Example

PPC Measure	At-risk discharges	Expected PPCs	Pct. of hospital's expected PPCs (Composite Option 1)	Pct. of hospital's at-risk discharges (Composite Option 2)	Proportion of statewide observed PPCs (Composite Option 3)	3M Cost Weight
28	20,270	5.4	2.4%	12.7%	4.8%	0.45
42	20,294	10.2	4.5%	12.7%	7.3%	0.50

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Appendix V: Hospital MHAC Scores and Revenue Adjustments

Revenue Adjustments using Current Methodology Versus Composite Option 1 (FY 2024, No Hold Harmless Zone)

Hospital ID	Current Methodology MHAC Score	Current Methodology Revenue Adjustment (%)	Current Methodology Revenue Adjustment ($)	Composite Option 1 MHAC Score	Composite Option 1 Revenue Adjustment (%)	Composite Option 1 Revenue Adjustment ($)
210001	81%	0.56%	$1,423,142	100%	2.00%	$5,039,916
210002	62%	-0.31%	-$4,617,661	69%	-0.36%	-$5,302,059
210003	44%	-0.80%	-$2,485,564	46%	-0.91%	-$2,805,928
210004	68%	-0.15%	-$621,983	59%	-0.60%	-$2,473,805
210005	65%	-0.23%	-$590,242	68%	-0.38%	-$976,759
210008	58%	-0.42%	-$931,822	62%	-0.53%	-$1,161,392
210009	44%	-0.80%	-$14,607,773	35%	-1.17%	-$21,246,274
210011	80%	0.49%	$1,246,330	91%	0.86%	$2,203,369

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Hospital ID	Current Methodology MHAC Score	Current Methodology Revenue Adjustment (%)	Current Methodology Revenue Adjustment ($)	Composite Option 1 MHAC Score	Composite Option 1 Revenue Adjustment (%)	Composite Option 1 Revenue Adjustment ($)
210012	82%	0.64%	$3,323,176	100%	2.00%	$10,380,258
210015	81%	0.56%	$2,100,086	100%	2.00%	$7,437,246
210016	81%	0.56%	$1,371,722	100%	2.00%	$4,857,817
210017	62%	-0.31%	-$90,870	96%	1.50%	$433,517
210018	60%	-0.37%	-$353,352	61%	-0.55%	-$528,368
210019	72%	-0.04%	-$145,233	88%	0.49%	$1,704,529
210022	65%	-0.23%	-$578,467	69%	-0.36%	-$897,973
210023	76%	0.19%	$688,215	83%	-0.03%	-$99,947
210024	68%	-0.15%	-$402,570	99%	1.87%	$5,020,432
210027	97%	1.77%	$3,252,024	100%	2.00%	$3,667,597
210028	72%	-0.04%	-$41,650	95%	1.37%	$1,375,935

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Hospital ID	Current Methodology MHAC Score	Current Methodology Revenue Adjustment (%)	Current Methodology Revenue Adjustment ($)	Composite Option 1 MHAC Score	Composite Option 1 Revenue Adjustment (%)	Composite Option 1 Revenue Adjustment ($)
210029	63%	-0.29%	-$1,350,580	68%	-0.38%	-$1,810,249
210032	86%	0.94%	$799,222	100%	2.00%	$1,696,058
210033	74%	0.04%	$58,577	95%	1.37%	$2,229,949
210034	95%	1.62%	$2,080,350	100%	2.00%	$2,564,689
210035	84%	0.79%	$772,265	89%	0.61%	$597,826
210037	66%	-0.20%	-$252,999	88%	0.49%	$601,382
210038	67%	-0.18%	-$249,189	93%	1.12%	$1,568,641
210039	67%	-0.18%	-$143,611	64%	-0.48%	-$387,451
210040	82%	0.64%	$1,029,976	100%	2.00%	$3,217,228
210043	74%	0.04%	$117,117	86%	0.23%	$762,629
210044	74%	0.04%	$94,883	76%	-0.19%	-$510,532

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Hospital ID	Current Methodology MHAC Score	Current Methodology Revenue Adjustment (%)	Current Methodology Revenue Adjustment ($)	Composite Option 1 MHAC Score	Composite Option 1 Revenue Adjustment (%)	Composite Option 1 Revenue Adjustment ($)
210048	55%	-0.50%	-$1,109,998	48%	-0.86%	-$1,892,453
210049	88%	1.09%	$2,590,152	100%	2.00%	$4,737,251
210051	72%	-0.04%	-$77,609	87%	0.36%	$674,710
210056	91%	1.32%	$2,463,763	100%	2.00%	$3,732,568
210057	91%	1.32%	$4,408,925	100%	2.00%	$6,679,462
210058	96%	1.70%	$1,374,710	100%	2.00%	$1,619,362
210060	64%	-0.26%	-$97,883	78%	-0.15%	-$55,167
210061	56%	-0.48%	-$226,110	58%	-0.62%	-$294,751
210062	73%	-0.01%	-$30,054	100%	2.00%	$4,218,428
210063	84%	0.79%	$2,315,287	100%	2.00%	$5,851,361
210064	98%	1.85%	$1,260,000	100%	2.00%	$1,362,957

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Hospital ID	Current Methodology MHAC Score	Current Methodology Revenue Adjustment (%)	Current Methodology Revenue Adjustment ($)	Composite Option 1 MHAC Score	Composite Option 1 Revenue Adjustment (%)	Composite Option 1 Revenue Adjustment ($)
210065	70%	-0.10%	-$90,785	83%	-0.03%	-$25,728

Garrett Regional Medical Center
251 North Fourth Street
Oakland, MD 21550

March 27, 2025

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

RE: Maryland Hospital Acquired Conditions (MHAC) RY2027 Policy recommendations

Dear Mr. Kromm,

On behalf of Garrett Regional Medical Center (GRMC), I am writing in support of utilizing the updated composite option one under the Draft MHAC RY2027 Policy. This updated PPC composite methodology has been found to improve reliability and validity of PPC measurement. We were informed that this new methodology may be put on hold, however we are in favor of this update methodology using a PPC composite.

Garrett Regional Medical Center is being penalized through the current MHAC program because of the volatility for small hospitals. The hospital only had one observed PPC in CY2023 and zero in CY2024, yet we will be penalized under the current program with only two PPC measures evaluated. We have great quality of care at GRMC, and it is not accurately reflected within the MHAC program.

I am requesting that the proposed MHAC modeling proposal move forward for RY2027. If this decision cannot be agreed on for all hospitals, then I request that this modeling be implemented for small hospitals separately, and the precedent for a separate model is already in place as we are currently treated differently. I request that the current methodology for the smaller hospitals be changed, as it is proven to be ineffective in that a hospital with a perfect record would be penalized in the program.

In truth, I maintain that GRMC has been consistently held to standard levels that are unattainable and consistently been treated unfairly by the HSCRC with respect to at risk revenue for the quality programs.

If you have any questions or need additional information to evaluate our request, please feel free to contact me at (301) 533-4173 or via email at mark.boucot@wvumedicine.org.

Sincerely,

Mark Boucot, MBA, FACHE

President and CEO

CC:
Alyson Schuster
Angela Maule

March 27, 2025

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

Dear Dr. Schuster,

On behalf of the Johns Hopkins Health System (JHHS) and its four Maryland hospitals, thank you for the opportunity to provide input on the draft recommendation for the Rate Year (RY) 2027 Maryland Hospital Acquired Conditions (MHAC) Policy. While JHHS understands the intent of the revised methodology proposals and agrees that the methodology should be thoughtfully revised to reflect the efforts and improved performance of hospitals on MHACs, JHHS would caution against substantive methodology changes at this time.

JHHS recommends that HSCRC staff continues the current MHAC methodology for RY2027. This will allow further and more comprehensive refinement and evaluation of the proposed methodologies. Additionally, as Maryland transitions from the Total Cost of Care Model and into the future state, we anticipate significant policy changes with implications for quality policies and methodologies. The foundational policy and model elements should be established and finalized before any substantial changes are made to specific quality policies to ensure alignment and efficiency.

JHHS thanks HSCRC staff for their thoughtful work on this recommendation, and looks forward to further collaboration to evaluate these methodologies and related policies.

Sincerely,

Peter M. Hill, MD, MS, FACEP
Senior Vice President of Medical Affairs
Johns Hopkins Health System

Associate Professor Emergency Medicine
Johns Hopkins School of Medicine

cc: Dr. Joshua Sharfstein, Chairman
Dr. James Elliott, Vice Chairman
Ricardo Johnson
Dr. Maulik Joshi
Adam Kane
Nicki McCann
Dr. Farzaneh Sabi
Jon Kromm

Maryland

Dianne Feeney -MDH- <dianne.feeney@maryland.gov>

MedStar Health proposed MHAC policy

1 message

Patrick, Jonathan E <Jonathan.E.Patrick@medstar.net> Thu, Mar 27, 2025 at 4:08 PM
To: Jon Kromm -MDH- <jon.kromm@maryland.gov>
Cc: Alyson Schuster -MDH- <alyson.schuster@maryland.gov>, "princess.collins@maryland.gov" <princess.collins@maryland.gov>, Dianne Feeney -MDH- <dianne.feeney@maryland.gov>, "Wood, Michael S" <Michael.S.Wood@medstar.net>, "Fairbanks, Terry" <Terry.Fairbanks@medstar.net>

Dear Dr Kromm,

Our team at MedStar Health would like to share our perspective on the FY 2027 Maryland Hospital Acquired Condition (MHAC) Program policies as discussed during the March 19, 2025, HSCRC Performance Measurement Workgroup (PMWG) and March 12th Health Services Cost Review Commission Meeting. We commend the HSCRC staff for the collaborative and careful approach they have taken toward continued evaluation of the MHAC Program for the upcoming years.

We support the HSCRC Staff recommendation to transition to the Composite Option One methodology which incorporates weightings that give PPC measures with greater expected PPCs at an individual hospital a larger weight and removes the low case cutoffs used in the current methodology. This provides a more comprehensive assessment of all hospitals (especially smaller hospitals) and it holds large and small hospitals increasingly accountable for the PPCs that are most germane to their scope of care.

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

Sincerely, Jonathan Patrick

Jonathan Patrick, MD, FACC
Vice President, Clinical Quality
he/him/his
MedStar Institute for Quality and Safety

Maryland
Hospital Association

March 27, 2025

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

Dear Dr. Schuster:

On behalf of the Maryland Hospital Association (MHA) and our member hospitals and health systems, we appreciate the opportunity to provide comments to the Health Services Cost Review Commission (HSCRC) on the draft policy proposal for the Rate Year (RY) 2027 Maryland Hospital Acquired Conditions Program (MHAC) that was introduced in the March 2025 public meeting.

MHA commends HSCRC for developing a proposed MHAC methodology that could improve reliability and better account for the unique needs of smaller community hospitals. Under the "Option 1 Composite Methodology" proposed, the MHAC policy would increase reliability and validity of Potentially Preventable Complications (PPC) measurement more than the current methodology. This methodology is also projected to have more favorable outcomes for smaller hospitals which would support the goal to create more financial sustainability for those organizations.

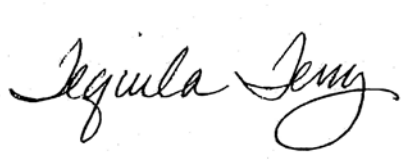
While the proposed PPC composite for MHAC could have these positive outcomes, there are also concerns being raised about the methodology. The proposed composite methodology places an undue burden on Academic Medical Centers (AMCs) by setting norms on unique surgeries, such as complex bowel procedures, complex cardiac surgery, major spinal reconstruction/revision surgery, and neurosurgery. This would create an environment where AMCs would incur greater penalties and have limited opportunities to improve because of the uniquely complex nature of these procedures.

Recommendation
MHA recommends that HSCRC incorporate a hybrid approach in its final MHAC recommendation to ensure the methodology considers the diverse hospital types and services being performed across the state. A hybrid approach should allow smaller hospitals to be on the new PPC composite methodology and also allow larger hospitals to remain on the existing MHAC program PPC methodology. This would ensure fairness across all hospitals in Maryland and would not inadvertently or disproportionately advantage or disadvantage any hospital type.

The MHAC policy plays an important role in improving Maryland's care delivery system and will have significant impacts on hospitals around the state. For these reasons, it is important to take time to ensure the methodologies create opportunities for all hospitals to be successful.

MHA thanks the HSCRC Quality Team for its partnership and our member hospitals look forward to continuing the collaboration on the MHAC program.

Sincerely,



Tequila Terry
Senior Vice President, Care Transformation and Finance

cc: Dr. Jon Kromm, Executive Director
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March 27, 2025

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

Dear Dr. Schuster:

On behalf of the University of Maryland Medical System (UMMS), we would like to express our appreciation for the opportunity to provide feedback on the Draft Recommendation for the Maryland Hospital Acquired Condition (MHAC) Program for Rate Year 2027. We value the HSCRC's continued efforts to improve hospital quality and patient safety, while ensuring fairness in performance measurement across hospitals.

UMMS supports the proposed composite methodology that evaluates hospital performance based on a Potentially Preventable Complication (PPC) composite, incorporating all payment PPCs weighted by hospital-specific expected volume and Solventum (3M) cost weights as a proxy for patient harm. We also recognize the importance of integrating statistical reliability into the program to ensure meaningful and stable assessments of hospital performance.

In addition, UMMS recommends further data analysis to better enhance the policy after the initial implementation of the composite methodology. We suggest collaborating with the UMMS and Johns Hopkins Hospital System (JHHS) to further refine the program, ensuring it is fair for all hospital types.

These two academic medical centers perform specialized surgeries, such as oral/maxillofacial (OMFS), spinal reconstruction and revision, abdominal aortic aneurysm (AAA) repairs, and complex neurosurgery. Since UMMS and JHHS perform most of these types of procedures in the state, they significantly influence expected values. This creates a methodology challenge, making it nearly

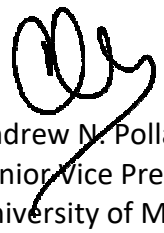
impossible to achieve observed-to-expected ratios that would avoid penalties, as hospitals that perform very few of these procedures set the threshold and benchmark.

Further enhancements may include (a) setting targets cohorts of hospitals that have similar patient types; (b) restricting APR-DRG-SOIs (All Patient Refined Diagnosis-Related Groups - Severity of Illness) in the model to common diagnoses across hospital types, similar to the Quality Based Reimbursement (QBR) mortality program; and (c) acquiring data outside the state of Maryland for comparison of academic medical centers.

We appreciate HSCRC's commitment to improving hospital quality while considering stakeholder feedback, and we look forward to continued collaboration on refining the MHAC program to best serve Maryland patients and healthcare institutions.

Thank you for your consideration. Please feel free to contact us with any questions or for further discussion.

Sincerely,



Andrew N. Pollak, MD
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cc: Joshua Sharfstein, MD, Chairman
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Final Recommendation for the Readmission Reduction Incentive Program for Rate Year 2027

April 9, 2025

This document contains staff final recommendations for the RY 2027 Readmission Reduction Incentive Program. The document also includes staff final recommendations on modifications to the RY 2026 Readmission Reduction Incentive Program.

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List of Abbreviations

ADI	Area Deprivation Index
AMA	Against Medical Advice
APR-DRG	All-patient refined diagnosis-related group
CMS	Centers for Medicare & Medicaid Services
CMMI	Center for Medicare and Medicaid Innovation
CRISP	Chesapeake Regional Information System for Our Patients
CY	Calendar year
eCQM	Electronic Clinical Quality Measure
EDAC	Excess Days in Acute Care
FFS	Fee-for-service
HCC	Hierarchical Condition Category
HRRP	Hospital Readmissions Reduction Program
HSCRC	Health Services Cost Review Commission
HWR	Hospital-Wide Readmission Measure
MCDB	Medical Claims Database
MPR	Mathematica Policy Research
MSA	Metropolitan Statistical Area
NQF	National Quality Forum
PAI	Patient Adversity Index
PMWG	Performance Measurement Workgroup
PQI	Prevention Quality Indicators
RRIP	Readmissions Reduction Incentive Program
RY	Rate Year
SIHIS	Statewide Integrated Healthcare Improvement Strategy
SOI	Severity of illness
TCOC	Total Cost of Care
YTD	Year-to-date

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Key Methodology Concepts and Definitions

Diagnosis-Related Group (DRG): A system to classify hospital cases into categories that are similar in clinical characteristics and in expected resource use. DRGs are based on a patient's primary diagnosis and the presence of other conditions.

All Patients Refined Diagnosis Related Groups (APR-DRG): Specific type of DRG assigned using 3M software that groups all diagnosis and procedure codes into one of 328 All-Patient Refined-Diagnosis Related Groups.

Severity of Illness (SOI): 4-level classification of minor, moderate, major, and extreme that can be used with APR-DRGs to assess the acuity of a discharge.

APR-DRG SOI: Combination of diagnosis-related groups with severity of illness levels, such that each admission can be classified into an APR-DRG SOI "cell" along with other admissions that have the same diagnosis-related group and severity of illness level.

Observed/Expected Ratio: Readmission rates are calculated by dividing the observed number of readmissions by the expected number of readmissions. Expected readmissions are determined through case-mix adjustment.

Case-Mix Adjustment: Statewide rate for readmissions (i.e., normative value or "norm") is calculated for each diagnosis and severity level. These statewide norms are applied to each hospital's case-mix to determine the expected number of readmissions, a process known as indirect standardization.

Prevention Quality Indicator (PQI): a set of measures that can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care sensitive conditions." These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.

Area Deprivation Index (ADI): A measure of neighborhood deprivation that is based on the American Community Survey and includes factors for the theoretical domains of income, education, employment, and housing quality.

Patient Adversity Index (PAI): HSCRC-developed composite measure of social risk incorporating information on patient race, Medicaid status, and the Area Deprivation Index.

Excess Days in Acute Care (EDAC): Capture excess days that a hospital's patients spent in acute care within 30 days after discharge. The measures incorporate the full range of post-discharge use of care (emergency department visits, observation stays, and unplanned readmissions).

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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 Readmission Reduction Incentive Program (RRIP), are intended to drive improvements in patient outcomes and to ensure that any incentives to constrain hospital expenditures under the Total Cost of Care Model do not result in declining quality of care on an all-payer basis. 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 RRIP policy is one of several pay-for-performance quality initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value over time.	The RRIP policy currently holds up to 2 percent of hospital revenue at-risk for performance relative to predetermined attainment or improvement goals on readmissions occurring within 30-days of discharge, applicable to all payers and all conditions and causes.	This policy affects a hospital's overall GBR and also affects the rates paid by payers at that particular hospital. The HSCRC quality programs are all-payer in nature and improve quality for all patients that receive care at the hospital.	Currently, the RRIP policy measures within-hospital disparities in readmission rates, using an HSCRC-generated Patient Adversity Index (PAI), and provides rewards for hospitals that meet specified disparity gap reduction goals. The broader RRIP policy continues to reward or penalize hospitals on the better of improvement and attainment, which incentivizes hospitals to improve poor clinical outcomes that may be correlated with health disparities. It is important that persistent health disparities are not made permanent.

Recommendations

These are the final recommendation for the Maryland Rate Year (RY) 2027 Readmission Reduction Incentives Program (RRIP):

1. Maintain the all-payer, 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023.
3. Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy.
4. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile of statewide performance receive scaled rewards for maintaining low readmission rates.
5. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
6. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards:
    a. beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and;
    b. capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.
7. Monitor emergency department and observation revisits by adjusting readmission measure and through the all-payer Excess Days in Acute Care measure. Consider future inclusion of ED and/or observation stay revisits in the RRIP measure.
8. Update the RRIP policy in future years to align with statewide AHEAD model goals for readmissions.

Introduction

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

The Readmissions Reduction Incentive Program (RRIP) is one of several quality pay-for-performance initiatives that provide incentives for hospitals to improve patient care and value over time that targets all-payer unplanned readmissions. While some hospital readmissions are unavoidable, other hospital readmissions within 30 days result from ineffective initial treatment, poor discharge planning, or inadequate post-acute care and result in poor patient outcomes and financially strained healthcare institutions.[1] The RRIP currently holds up to 2 percent of hospital revenue at-risk in penalties and rewards based on achievement of improvement or attainment targets in 30-day case-mix adjusted readmission rates. In addition, the disparity gap component of the RRIP policy rewards hospitals up to 0.5% of their IP revenue for reducing disparities in

[1] Rammohan R, Joy M, Magam S, et al. (May 15, 2023) The Path to Sustainable Healthcare: Implementing Care Transition Teams to Mitigate Hospital Readmissions and Improve Patient Outcomes. Cureus 15(5): e39022. doi:10.7759/cureus.39022

readmissions based on race (Black vs Non-Black), ADI (high area deprivation vs low deprivation), and Medicaid status (Medicaid beneficiary vs Non-Medicaid beneficiary).

For RRIP, as well as the other State hospital quality programs, updates are vetted with stakeholders and approved by the Commission to ensure the programs remain aggressive and progressive with results that meet or surpass those of the national CMS analogous programs (from which Maryland must receive annual exemptions). For purposes of the RY 2027 RRIP Draft Policy, staff vetted the updated proposed recommendations with the Performance Measurement Workgroup (PMWG), the standing advisory group that meets monthly to discuss Quality policies.

This final policy recommends extending the four-year (2022-2026) improvement target that was approved in the RY2027 policy. However, based on stakeholder concerns, staff has assessed volume and readmission trends and is recommending that an updated two-year blended base period be used to assess improvement for RY2027 and retrospectively for RY2026. In addition to presenting these analyses, the assessment section of this policy also discusses the issue of revisits to the emergency department/observation following an inpatient admission. This final policy does not recommend any changes to the current case-mix adjustment readmission measure and recommends no updates to the disparity gap measurement or goals for improvement. In future years, the RRIP policy will be updated to align with the new AHEAD model and any statewide readmission improvement targets.

Background

Brief History of RRIP program

Maryland made incremental progress each year throughout the All-Payer Model (2014-2018), ultimately achieving the Model goal for the Maryland Medicare FFS readmission rate to be at or below the unadjusted national Medicare readmission rate by the end of Calendar Year (CY) 2018. Maryland historically performed poorly compared to the nation on readmissions; it ranked 50th among all states in a study examining Medicare data from 2003-2004.[2] In order to meet the All-

[2] Jencks, S. F. et al., "Hospitalizations among Patients in the Medicare Fee-for-Service Program," *New England Journal of Medicine* Vol. 360, No. 14: 1418-1428, 2009.

Payer Model Medicare requirements, the Commission approved the inaugural RRIP program in April 2014 to further bolster the incentives to reduce unnecessary readmissions beyond the incentives already inherent in the global budget system. Despite the Medicare FFS targets for the State,CMMI requires the RRIP to address all-payer readmissions. . As recommended by the Performance Measurement Work Group (PMWG), the RRIP is more comprehensive than its federal counterpart, the Medicare Hospital Readmission Reduction Program (HRRP), as it uses an all-cause, all-condition measure and assesses both improvement and attainment. Whereas, HRRP uses Medicare-only condition specific readmission measures to assess attainment.[3]

With the onset of the Total Cost of Care Model (TCOC) Agreement, each program was overhauled to ensure the policy supported the goals of the Model. For the RRIP policy, the overhaul was completed during 2019, which entailed an extensive stakeholder engagement effort. The major accomplishments of the RRIP redesign were modifications to the inclusion and exclusion criteria for the readmission measure, development of a 5-year (2018-2023) improvement target of -7.5 percent, adjustment of the attainment target based on national Medicare and commercial benchmarks, and the addition of an incentive to reduce within hospital disparities in readmissions. Subsequently, during CY2023, staff reassessed Maryland's performance on readmissions and developed a four-year (2022-2026) improvement target of 5 percent that was approved in the RY2026 policy. This improvement target was set using a range of potential improvement scenarios (i.e., historical improvements trended forward) and updated benchmarking for Medicare and Commercial payers nationally.

RRIP Methodology

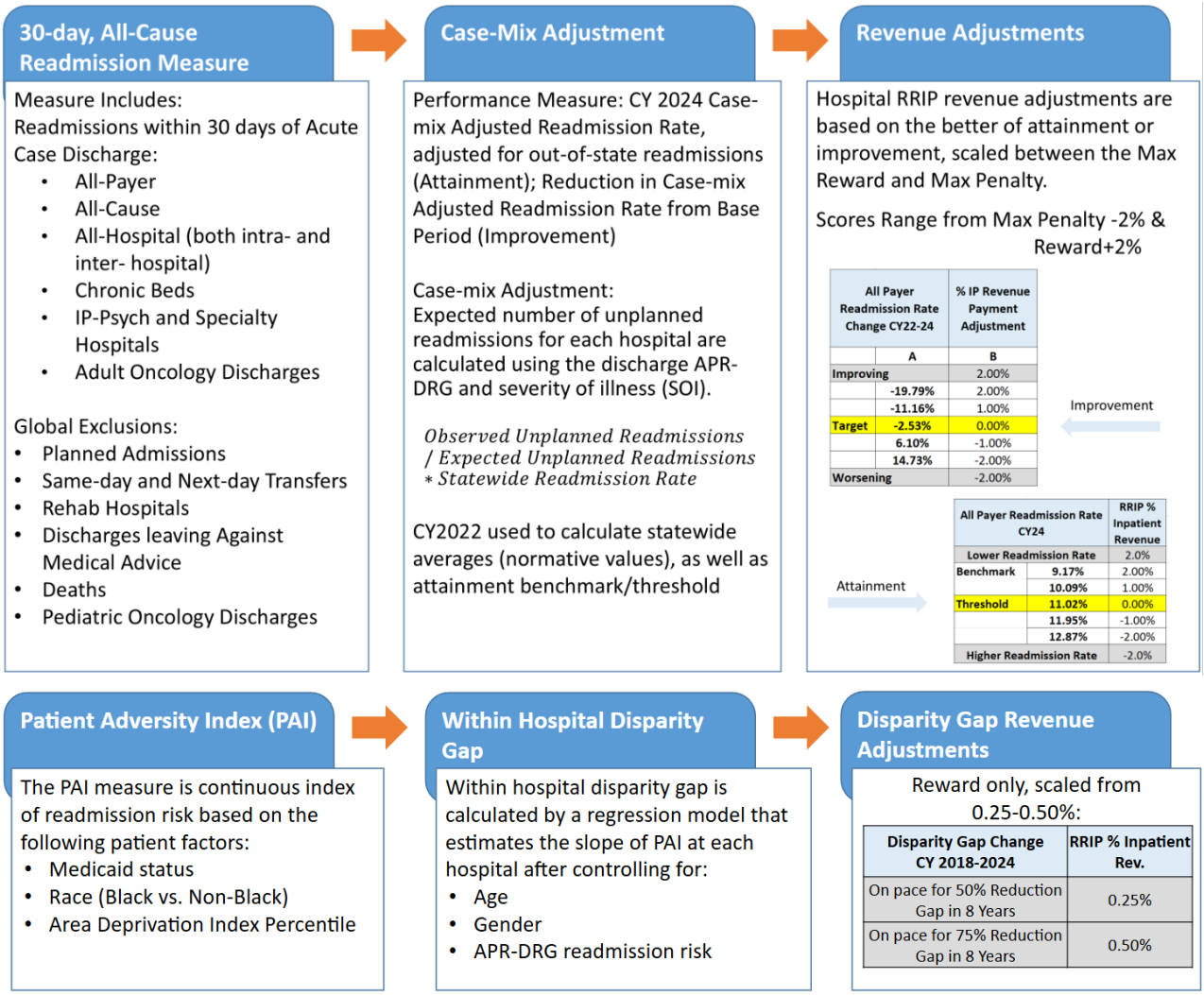
Figure 1 provides an overview of the current RRIP methodology (also see Appendix I) that converts hospital performance to payment adjustments. In Maryland, the RRIP methodology evaluates all-payer, all-cause inpatient readmissions using the CRISP unique patient identifier to track patients across Maryland hospitals. The readmission measure excludes certain types of

[3] For more information on the HRRP, please see: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program

discharges (e.g., pediatric oncology, patients who leave against medical advice, rare diagnosis groups) from consideration, due to data issues and clinical concerns. Readmission rates are adjusted for case-mix using all-patient refined diagnosis-related group (APR-DRG) severity of illness (SOI), and the policy determines a hospital's score and revenue adjustment by the better of improvement or attainment.[4] The disparity gap methodology is separate and provides hospitals with the opportunity to earn rewards (no penalties) based on improvement.

[4] See Appendix I for details on the current RRIP methodology.

Figure 1. RRIP Methodology RY26



Assessment

For RY 2027, the main policy decision is to determine the base period from which to assess improvement for CY 2025 readmission rates. In order to assess the most appropriate base year for improvement, this section assesses readmissions performance and provides improvement scenarios for consideration. While there are no proposed changes to the readmission measure, staff is recommending that additional analytics continue to be conducted over the coming year to

assess hospital revisits to the emergency department and/or observation, which staff believes will complement some of the other workstreams the Commission currently is engaging in to improve emergency room length of stay and address concerns raised by CMMI about higher use of observation status in Maryland. Finally, staff provides performance on the disparity gap measure and recommends to continue this targeted focus on high adversity patients.

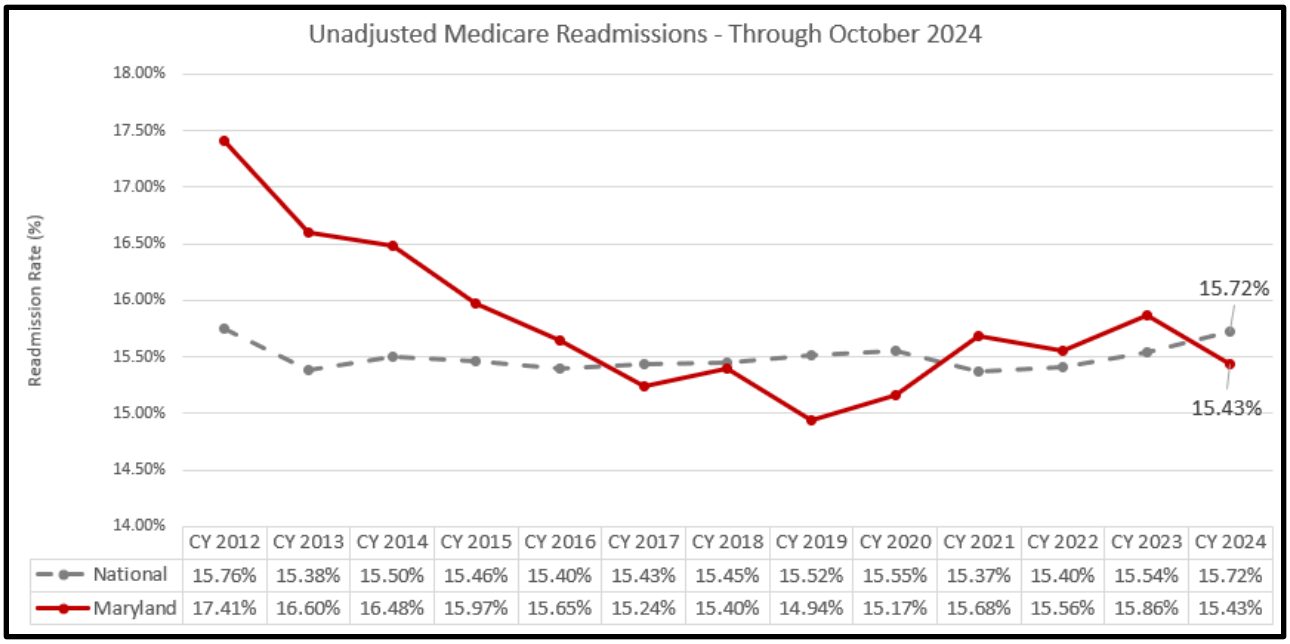
Current Statewide Year To Date Performance

Readmission performance is assessed in several ways. First, we present data on the unadjusted, all-cause Medicare Readmission Rate (the original "Waiver Test"), which shows that Maryland currently has a slightly lower unadjusted readmission rate than the nation. Next, Maryland and the Nation's performance on the CMMI adaptation of the Hospital-Wide Readmission measure for Maryland is presented (the new "Waiver Test"). Last, we present the all-payer, case mix adjusted readmission results used for the RRIP.

Medicare FFS Performance

At the end of 2018, Maryland had an unadjusted FFS Medicare readmission rate of 15.40 percent, which was below the national rate of 15.45 percent. This is the measure that CMMI used to assess Maryland's successful performance on readmissions under the All-payer Model. Under the TCOC model, Maryland is required to maintain a Medicare FFS readmission rate that is below the nation. While the unadjusted Maryland Medicare rate was higher than the nation starting in 2021, the CY2024 YTD readmission data, which is presented in Figure 2, shows Maryland's readmission rate at 15.56 percent, which is slightly lower than the Nation's performance at 15.63 percent.

Figure 2. Maryland and National Medicare FFS Unadjusted Readmission Rates



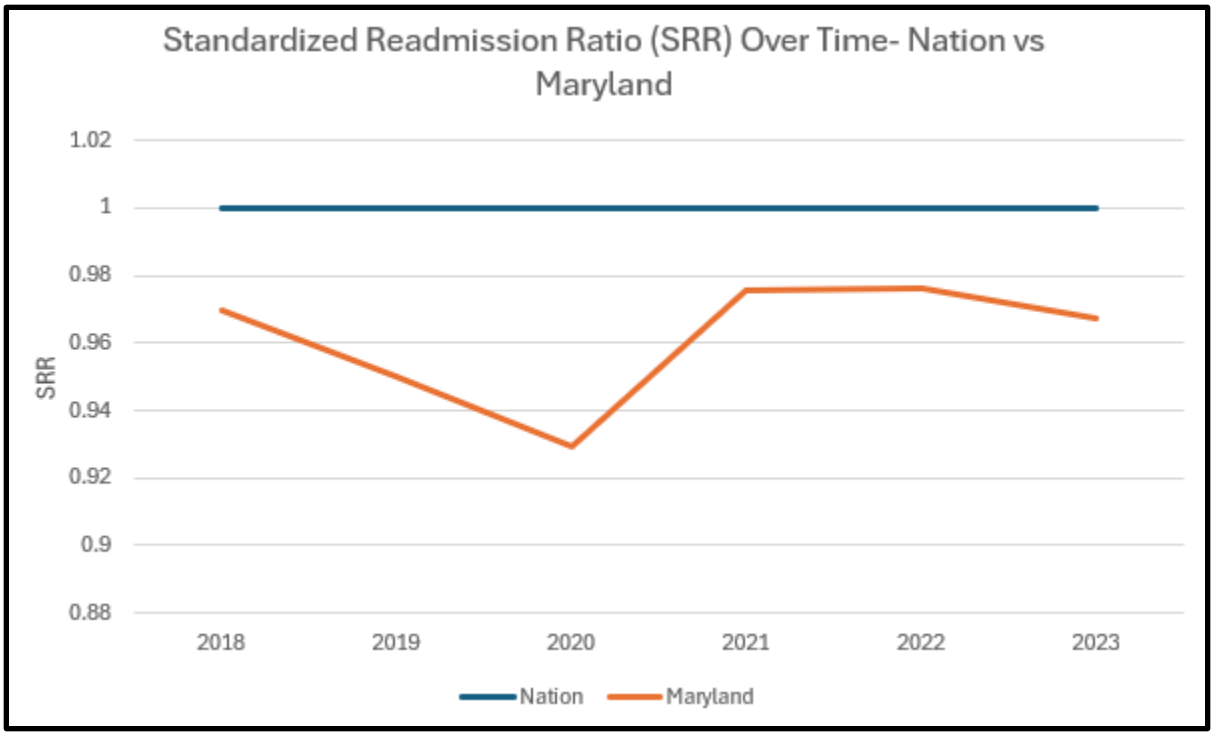
	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
National	15.76%	15.38%	15.50%	15.46%	15.40%	15.43%	15.45%	15.52%	15.55%	15.37%	15.40%	15.54%	15.72%
Maryland	17.41%	16.60%	16.48%	15.97%	15.65%	15.24%	15.40%	14.94%	15.17%	15.68%	15.56%	15.86%	15.43%

Hospital Wide Readmission Measure Performance

Because of concerns about changes in acuity, CMMI agreed to switch to a risk-adjusted readmission measure to compare Medicare performance in Maryland compared to the Nation. Below in Figure 3, Maryland and the Nation's performance on the CMMI adapted HWR measure is presented. The presented statistic is the Standardized Risk Ratio which indicates how observed readmission rates compare to the expected rates; a ratio less than 1 indicates lower than expected readmission rates. Since Maryland's SRR and confidence intervals for all years[5] are below 1, the State performed better than the Nation within this measure in CYs 2018-2023.

Figure 3. Maryland and National Medicare FFS Hospital-Wide Readmission Measure Performance

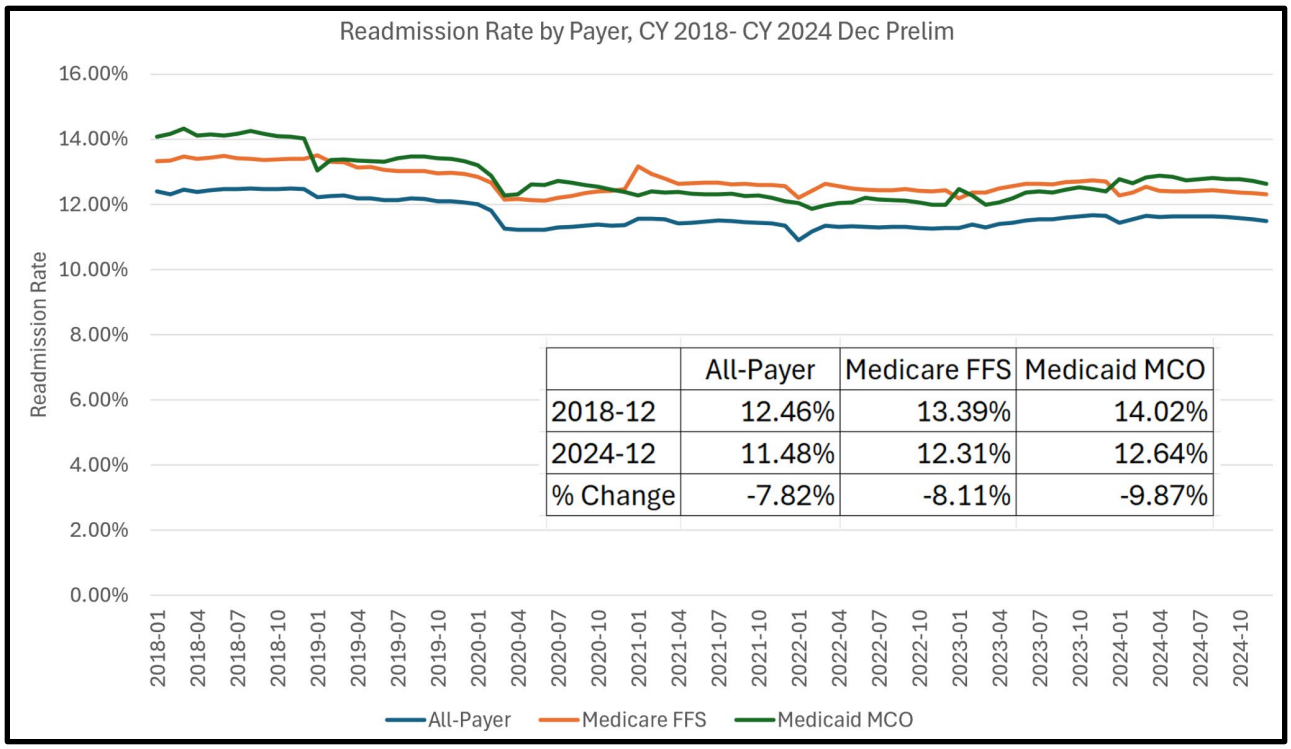
[5] When this analysis was provided to Staff, Lewin was in the process of calculating 2018 confidence intervals, but the 2018 SRR was 0.9700, which is also better than the Nation's.



All-Payer Readmission Performance

Maryland has also performed well statewide over time on RRIP performance standards as shown in Figure 4. In CY 2024 YTD All-payer, Medicare FFS, and Medicaid MCO readmission rates were reduced by 7.82 percent, 8.11 percent and and 9.87 percent from CY2018 YTD, respectively.

Figure 4. Statewide Improvement in Case-Mix Adjusted Readmission Rates by Payer, December 2018 YTD through December 2024 Prelim YTD



	All-Payer	Medicare FFS	Medicaid MCO
2018-12	12.46%	13.39%	14.02%
2024-12	11.48%	12.31%	12.64%
% Change	-7.82%	-8.11%	-9.87%

The RY 2026 RRIP program assesses improvement from CY 2022 to CY 2024, and attainment performance in CY 2024 based on historical standards. As illustrated in Figure 5 below, 13 hospitals are on target to reach the improvement goal of a 2.53 percent reduction, and as shown in Figure 6, 7 hospitals are on target to have a readmission rate below the attainment threshold of 11.02 percent. Hospitals performing well on both improvement and attainment will receive a revenue adjustment equal to the better of these evaluations, in line with the policy aim of simultaneously incentivizing excellent performance and constant improvement. Overall there are only 16 unique hospitals on track to receive a scaled reward for CY 2024 performance, which concerns staff given that the State performs better than the Nation on an unadjusted basis and that the overall improved performance in Maryland relative to the Nation is not driven by improvement of a few large facilities (i.e., some of the largest facilities have worse readmission rates in 2024 than they did in CY 2022, thereby not skewing the statewide results positively). CY

2024 YTD performance indicates that most hospitals are experiencing an increase in readmissions from CY 2022 (N=25/43), as illustrated in Figure 5 below. Stakeholders expressed concerns that the CY2022 base period had an unusually low readmission rate and requested that the staff consider updating the base period to CY2023, as is discussed further in the next section.

Figure 5. By-Hospital Change in All-Payer Case Mix Adjusted Readmission Rates, 2022- 2024 YTD Through December Preliminary

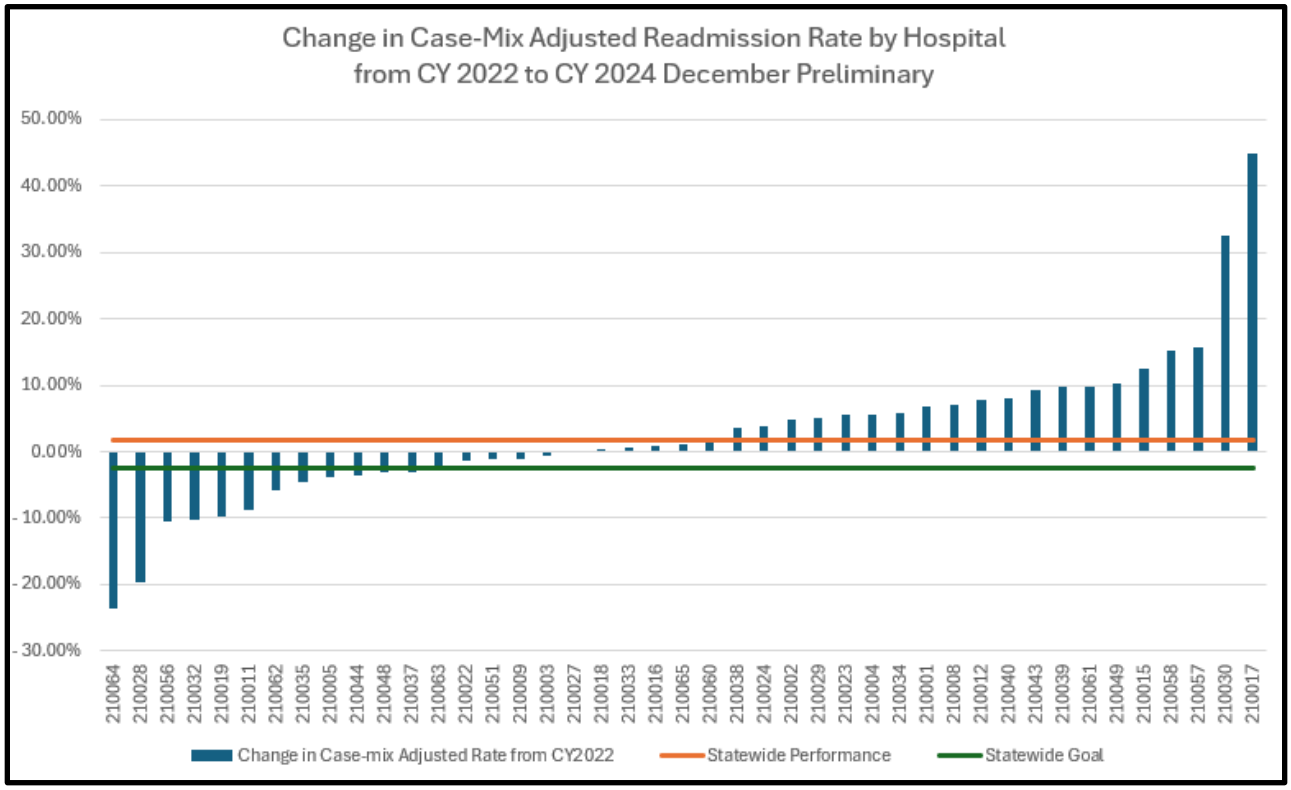
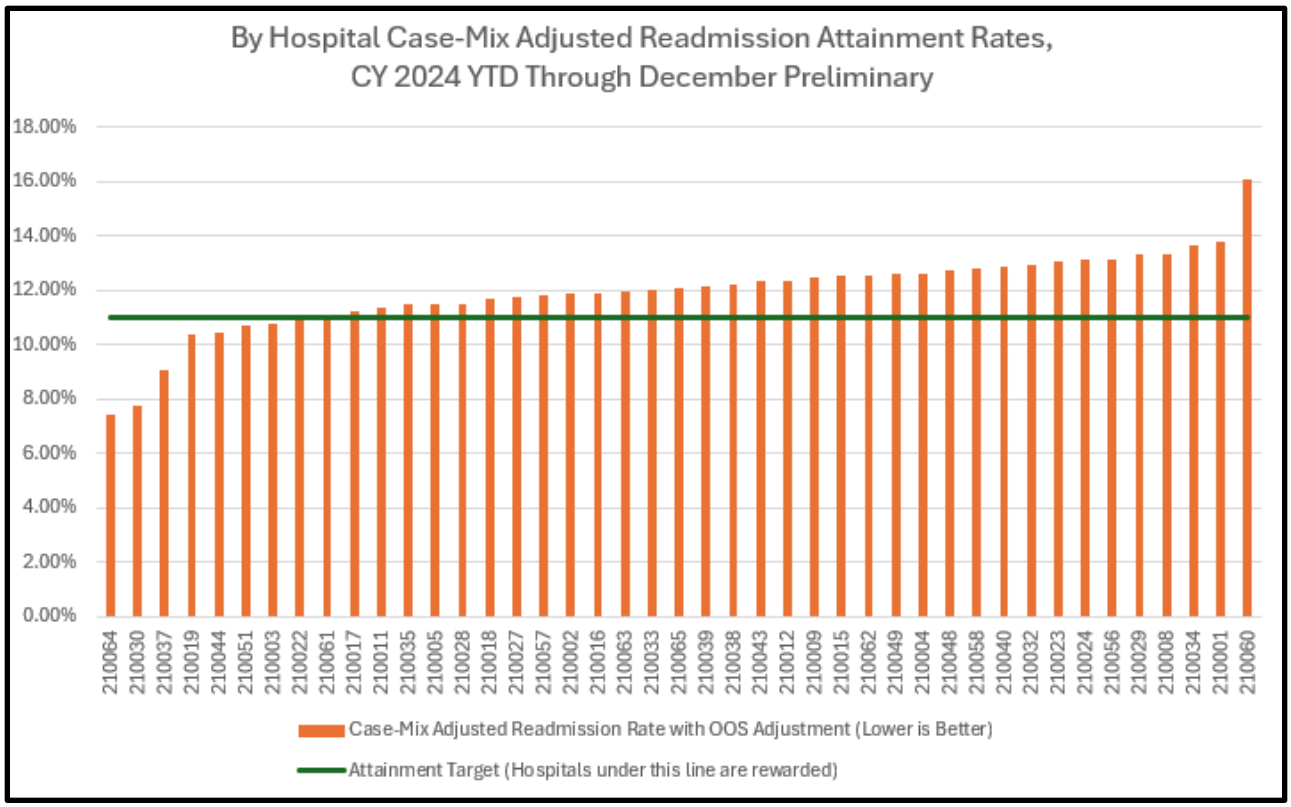


Figure 6. By-Hospital Case Mix Adjusted Readmission Rates, YTD 2024



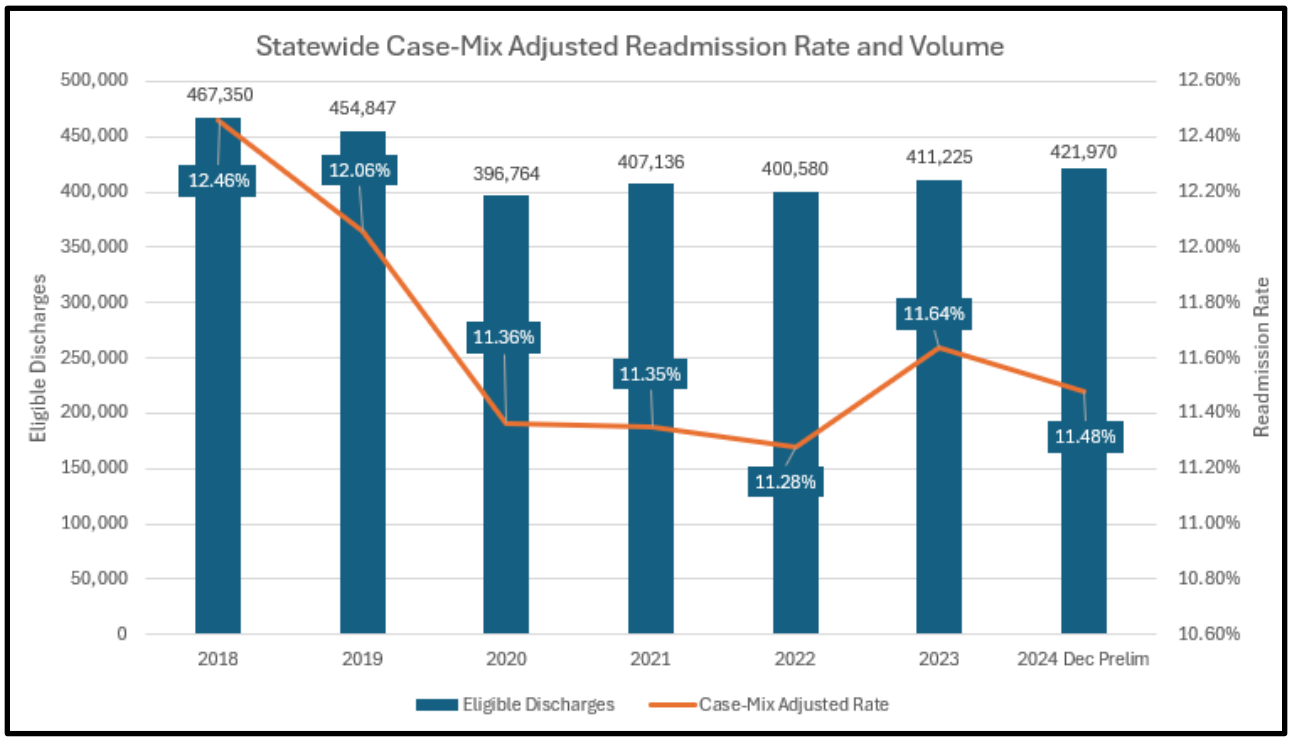
Base Period Concerns

Historically, readmission improvement has been measured over multiple years with a fixed base (e.g., CY2013 was the base for CYs2014-2016 and CY2016 was the base for CYs2017-2018 in the All-Payer Model, 2018 base for 2019-2023 in the TCOC Model). The fixed base was used to address concerns that hospitals may not be able to make incremental annual improvements and so that large improvements in one year that are maintained receive credit under the policy. In the RY 2026 policy, a 5 percent improvement target over 4 years from 2022 base through the 2026 performance period was approved.

Under the RY 2026 policy, hospitals have worse performance in the RRIP than has been seen in previous years and hospitals have raised whether using a fixed base year to assess improvement (unlike other quality programs) is appropriate in general and whether CY 2022 is a representative

year to use as the base in particular. Members of PMWG expressed concern with the use of CY 2022 as the base period due to its historically low volumes and low readmission rate, which is illustrated in Figure 7 below.[6] While staff agrees the volumes are much lower in CY2022 compared to pre-pandemic levels, the volumes in CY2023 are also lower, but the readmission rate is higher. Thus, staff is recommending a blended base period of CY 2022 and CY 2023 for the RY 2027 policy, and to apply this base period retroactively to the RY 2026 policy. Additional discussion on this issue is included in the Stakeholder Feedback section below. Future iterations of the policy, which will have to consider rebasing due to a new statewide improvement goal, may consider rebasing beyond CY 2022 and CY 2023 and whether the base period should be fixed or advanced forward annually.

Figure 7. Statewide Case-Mix Adjusted Readmission Rate, CY 2018-2024 YTD



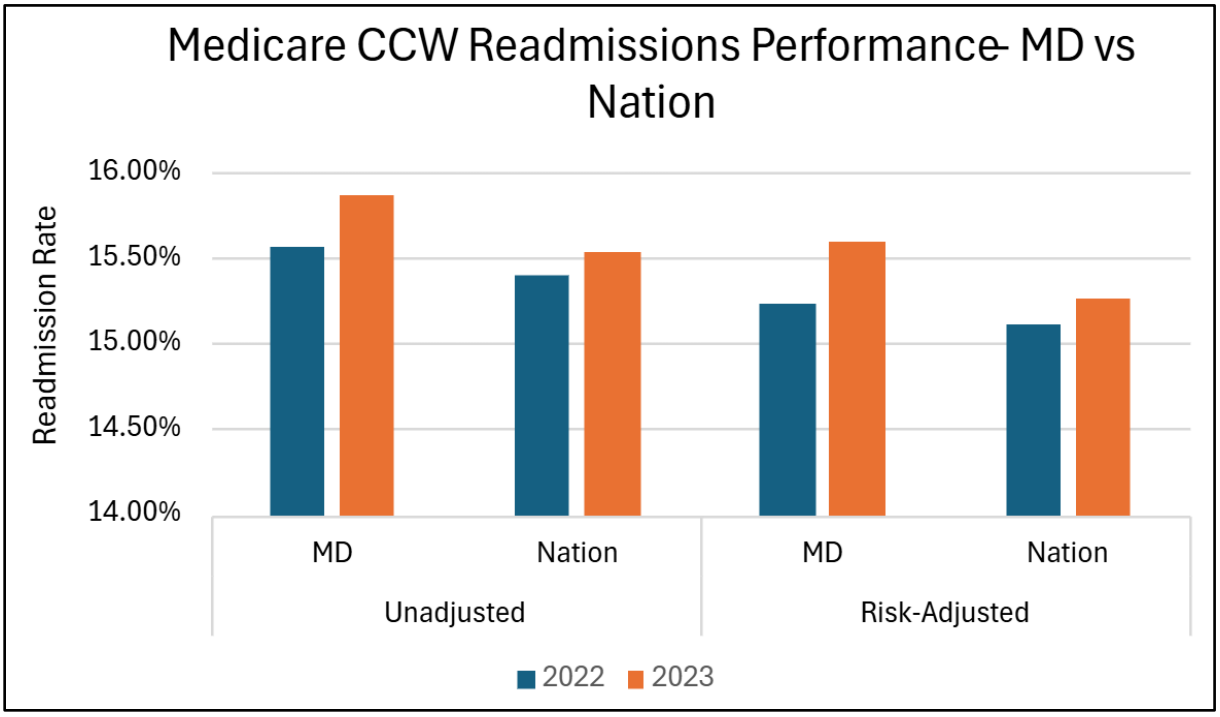
As shown below in Figure 8, both Maryland and the Nation experienced a degradation in readmission rates in CY 2023 on both an unadjusted and risk-adjusted basis. The unadjusted

[6] Due to the COVID-19 PHE, CY 2020 readmission performance has not been evaluated in RRIP policies and therefore should not be considered as a potential base period.

readmission rates are provided monthly by CMMI presented above. However, the risk-adjusted rates presented here are calculated by the HSCRC using the CCW data using slightly different risk-adjusters (e.g., Elixhauser comorbidity flags) due to data availability and not the CMMI adapted HWR risk adjusted measure, as we do not have 2024 readmission rates under this methodology at this time.

While both the Nation and the State saw a degradation in readmission rates from CY 2022 to CY 2023, the State saw a greater degradation while simultaneously performing worse than the Nation in both years, which led staff to reject the idea of moving the base period to CY 2023. Staff believes that blending CY 2022 and CY 2023 takes into account the secular degradation in readmission rates that occurred in CY 2023 without excusing the worsening rates and poor performance compared to the Nation. Further, blending CY 2022 and CY 2023 for the base period provides more stable norms by using a longer time period to establish them; this approach was approved in the RY 2021 MHAC policy to address an identical concern of unstable rates.[7]

Figure 8. Maryland and National Readmissions Performance, Unadjusted and Risk-Adjusted



[7] RY 2021 MHAC Policy, two year base period decision is detailed on pages 20-21.

Statewide modeled revenue adjustments with base period of CY 2022 only, a blended two year base period, and CY 2023 only base period for RY 2026 YTD and estimated RY 2027 are presented below in Figure 9; hospital results are included in Appendix II.

Figure 9. Statewide RY 2026 and RY 2027 Modeled Revenue Adjustments

RY 2026 YTD Revenue Adjustments	CY 2022 Base Period Attainment Target: 11.02% Improvement Target: -2.53%	CY2022/2023 Blended Base Period Attainment Target: 11.31% Improvement Target: -2.53%	CY 2023 Base Period Attainment Target: 11.48% Improvement Target: -2.53%
Net Adjustments ($), (%)	~ -$56M, -0.47%	~ -$34M, -0.30%	~-$4M, -0.03%
Penalties ($), (%)	~ -74M, -0.63%	~ -$53M, -0.45%	~-$32M, -0.27%
Rewards ($), (%)	~ $18M, 0.15%	~ 18M, 0.15%	~$29M, 0.24%

RY 2027 Estimated Revenue Adjustments (difference between RY26 YTD and these estimates are improvement target)	CY 2022 Base Period Attainment Target: 10.88% Improvement Target: -3.78%	CY2022/2023 Blended Base Period Attainment Target: 11.16% Improvement Target: -3.78%	CY 2023 Base Period Attainment Target: 11.33% Improvement Target: -3.78%
Net Adjustments ($), (%)	~ -$66M, -0.56%	~ -$49M, -0.41%	~-$23M, 0.19%
Penalties ($), (%)	~ -$82M, -0.70%	~ -$64M, -0.54%	~-$45M, -0.38%
Rewards ($), (%)	~ 16M, 0.14%	~ $15M, 0.12%	~$22M, 0.18%

Revisits to Emergency Department and Observation Stays

Improvement in readmission rates under the model should result in better patient experience. However, the current readmission measure only counts a readmission if the patient returns to the hospital and is admitted into an inpatient bed. Thus, revisits to the emergency department or for an observation stay after an initial inpatient admission are not considered; revisits that occur after an initial or index ED visit or an observation stay are also not considered. This potentially has an impact on hospital throughput and ED boarding as ED hospital staff have anecdotally indicated that they are doing more testing and diagnostics in the ED that previously may have been done during the inpatient admission to determine whether an admission is really necessary. While this might be appropriate clinically, if these revisits represent quality of care or care coordination concerns, these are not being identified for payment incentives at this time (only exception is PAU, which includes observation stays >=24 hours as inpatient stays). When staff looked at this previously for just observation stays, we found that while readmission rates increased when observation stays were included, the correlation between the readmission rates with and without observation stays was 0.986 in 2018. More recently, staff have been working with MPR to explore observation revisits on a risk-adjusted basis and continue to discuss with stakeholders and experts the clinical rationale for observation use. Also, it should be noted that at this time the national program does not include observation stays in their readmission measures. Thus, for RY 2027, staff recommends that the RRIP readmission measure remain an inpatient only measure. However, staff is continuing to assess this issue to ensure that hospitals are not being rewarded for “gaming” through use of observation, discuss clinical and operational factors impacting patient status during revisits, and will continue to collaborate with CMMI to better understand observation use in Maryland. As discussed below in the AHEAD section, the inclusion of observation is recommended by CMMI so staff will need to address this concern in the coming year.

Excess Days in Acute Care (EDAC)

As discussed above, stakeholders remain concerned about emergency department and observation revisits, especially given the global budget incentives to avoid admissions. Another approach for addressing this issue would be to adopt the Excess Days in Acute Care measure

into payment. The EDAC measure captures the number of days that a patient spends in the hospital within 30 days of discharge, and includes emergency department and observation stays by assigning ED visits a half-day length of stay and assigning observation hours rounded up to half-day units.[8] Staff have worked with our methodological contractor to adapt the Medicare Excess Days in Acute Care (EDAC) condition-specific measures to an all-cause, all-payer measure for potential program adoption in future years. This work was completed and monitoring reports for this measure are posted on the CRISP portal on a monthly basis for hospital monitoring and input. However, the EDAC measure has been criticized by some PMWG members because of the time element associated with the readmission. Specifically, the concern is that readmissions with a longer length of stay (which would represent worse performance) may indicate a less preventable readmission. While staff will consider this concern, it could also be countered that a longer readmission represents a more serious quality of care issue from the initial admission. As staff continue to assess observation revisits, EDAC should be monitored.

Digital Measures/Electronic Clinical Quality Measure (eCQM)

Under the Inpatient Quality Reporting program, CMS transitioned from the claims-based 30-day Hospital Wide Readmission (HWR) measure to the digital Hybrid HWR measure. Initially, the July, 1 2023-June 30, 2024 reporting of the hybrid measure for Medicare patients for Federal Fiscal Year 2026 payment year was mandatory; however, CMS shifted the requirement to be voluntary reporting, with mandatory reporting postponed to the July 2024 to June 2025 reporting period. The HWR 30-day readmission hybrid measure merges electronic health record data elements with a set of 13 Core Clinical Data Elements (CCDE) consisting of six vital signs and seven laboratory test results; hospitals must map these 13 CCDE to the patient electronic health record (EHR). The claims and CCDE data are then submitted and used to calculate measure results. For the initial year beginning July 1, 2023, HSCRC required hospitals to submit the hybrid HWR measure data to the State for Medicare patients. Beginning with July 1, 2024 discharges, Maryland expanded the measure submission to include all-payers and patients aged 18 and

[8] Additional information on the EDAC measures and methodology can be found here: https://www.qualitynet.org/inpatient/measures/edac/methodology

above. To prepare for this update, CRISP and Medisolv (CRISP's digital measure subcontractor) have updated the data collection infrastructure and are ready to receive data on the expanded measure with the first submission scheduled to begin in January 2025. However, some hospitals and stakeholders have previously signaled that some hospitals' EHRs may not be ready to submit data on the expanded measure. HSCRC staff will continue to monitor the issues voiced by hospitals and identify strategies as needed to progress on expansion of the Hybrid measure, and will also consider options for augmenting the RRIP all-payer measure with EHR data elements in the future.

Reducing Disparities in Readmissions

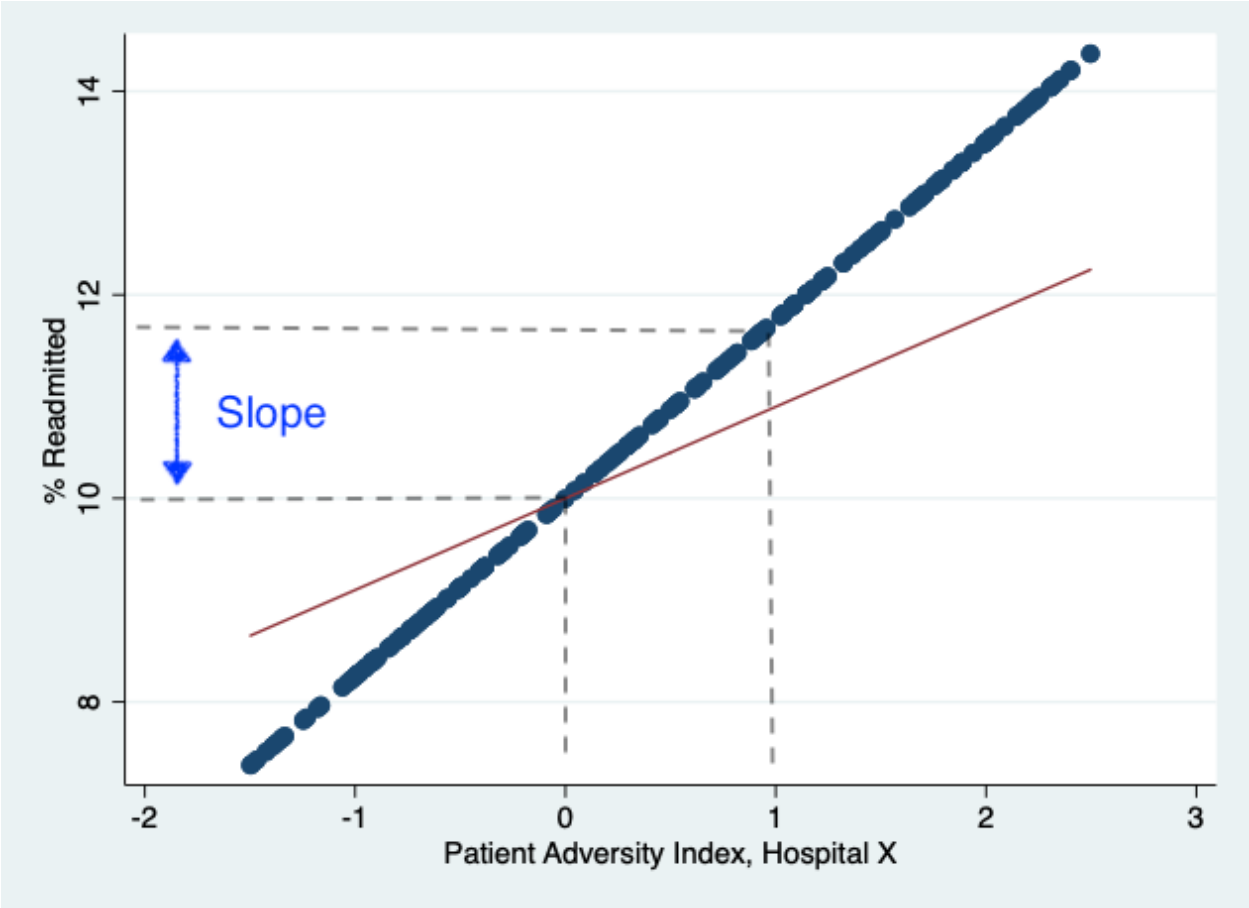
Racial and socioeconomic differences in readmission rates are well documented[9,10] and have been a source of significant concern among healthcare providers and regulators for years. In Maryland, the 2018 readmission rate for Blacks was 2.6 percentage points higher than for whites, and the rate for Medicaid enrollees was 3.4 points higher than for other patients. A 2019 Annals of Internal Medicine paper co-authored by HSCRC staff[11] reported a 1.6 percent higher readmission rate for patients living in neighborhoods with increased deprivation. Maryland hospitals, as well as CMS and the Maryland Hospital Association, identify reduction in disparities as a key priority over the near term. Thus, staff developed and the Commission approved adding a within-hospital disparity gap improvement goal to the RRIP in RY2021.

Specifically, the RRIP within hospital disparity methodology assesses patient-level socioeconomic exposure using the Patient Adversity Index (PAI), a continuous measure that reflects exposure to poverty, structural racism, and neighborhood deprivation. As shown in Figure 10, the relationship between PAI and readmissions is then assessed for each hospital for the base and performance period, and improvements in the slope of the line or in the difference in readmission rates at two

[9] Tsai TC, Orav EJ, Joynt KE. Disparities in surgical 30-day readmission rates for Medicare beneficiaries by race and site of care. *Ann Surg*. 2014;259(6):1086–1090. doi:10.1097/SLA.0000000000000326;
[10] Calvillo–King, Linda, et al. "Impact of social factors on risk of readmission or mortality in pneumonia and heart failure: systematic review." *Journal of general internal medicine* 28.2 (2013): 269-282.
[11] Jencks, Stephen F., et al. "Safety-Net hospitals, neighborhood disadvantage, and readmissions under Maryland's all-payer program: an observational study." Annals of internal medicine 171.2 (2019): 91-98.

points on the line (e.g., PAI = 1 vs PAI = 0) are compared for the base and performance period to calculate improvement. Hospitals that improve on the within hospital disparity gap and improve on overall readmissions, are eligible for a scaled reward up to 0.50 percent of inpatient revenue. Additional information on the development of the within-hospital disparity metric can be found in the RY 2021 RRIP policy.[12]

Figure 10. Hypothetical Example of Relationship between PAI and Readmission Rates



The RRIP disparity gap improvement goal was set through the end of the TCOC model (CY2026) and aligns with one of the goals in the Statewide Integrated Improvement Strategy. The SIHIS goal is to have half of eligible hospitals achieve a 50 percent reduction in readmission disparities.

[12] RY 2021 RRIP Policy

CY 2023 data shows that 22 hospitals saw a reduction in their within-hospital disparities in readmissions, ranging from a 0.55% reduction to a 34.87% reduction, compared to CY 2018. Through the RY2025 RRIP-Disparity Gap Program (CY 2023 performance), scaled rewards were provided to two of these hospitals for reducing their disparities in readmissions by the required minimum of 29.29 percent while simultaneously reducing their overall readmission rate, for a statewide total of about $1.8 million in rewards. CY 2024 YTD data shows that 20 hospitals saw a reduction in their within-hospital disparities in readmissions ranging from a 0.55% reduction to a 39.72% reduction, compared to CY 2018. Despite 20 hospitals reducing readmission disparities from CY 2018, only 1 hospital achieved the disparity gap threshold for rewards (i.e., a reduction of at least 35.16%).

The State remains committed to ensuring hospitals are advancing health equity by continuing to financially incentivize reductions in disparities through the Readmissions Reduction Incentive Program (RRIP) policy and other policies. The ability to set hospital payment incentives specifically for advancing health equity is an important hallmark of the TCOC Model and exemptions from national quality programs. In the RY 2026 Quality Based Reimbursement program, this disparity gap methodology was adapted to the Timely Follow-Up post hospitalization measure and the Commission approved financial incentives for reductions in disparities in follow up for Medicare patients.

For RY 2027, the RRIP disparity gap draft recommendation uses the previously calculated improvement targets pushed forward to CY 2025 performance.

AHEAD Model Considerations

The AHEAD model will begin on January 1st, 2026. As part of the AHEAD model, the state must set Statewide Quality and Equity targets for five mandatory domains and one optional domain. As shown in Table 1 below, CMMI has provided recommended measures for each of the domains. Within the Utilization and Quality Domain, CMMI has recommended readmissions as the measure and at this time the HSCRC and MDH are not proposing a different area of focus for this domain (i.e., State is in agreement to focus on readmissions). However, CMMI has specifically recommended that the National Committee for Quality Assurance's Plan All-Cause Readmission

(NCQA PCR) measure be used by AHEAD states to assess statewide performance over the 9-year model. Currently, HSCRC staff are working with Maryland Department of Health, Maryland Commission on Health Equity's Data Advisory Committee, and contractors to review the NCQA PCR measure specifications in comparison to the RRIP, CMS HWR measure, and the current CMMI developed readmission measure for MD. Based on this assessment, the state will need to pick a readmission measure and develop biannual statewide targets for improvement. The NCQA readmission measure differs from the RRIP and HWR measure in that it includes observation stays as eligible for a readmission and as a readmission from inpatient. Other differences include differences in inclusion/exclusion criteria and risk adjustment approach. In addition, the data source (claims from payers, HSCRC case-mix) for calculating the readmission measure needs to be determined. Currently staff plan to assess whether it is feasible to use the NCQA specifications with the HSCRC case-mix data with modifications. Staff are also working to compare Medicare results using claims versus HSCRC case mix data. The advantage of using HSCRC case mix data is that it is more timely than claims and is thus used for RRIP so that hospitals can monitor progress during the performance year. However, CMMI will need to approve any measure adaptations to the NCQA readmission measure, including changes to the type of data used to calculate the measure, or approve the use of an alternative measure for this domain through the process outlined in the CMMI contract with Maryland. Ultimately, the staff believes that the RRIP measure and goals should be aligned with the statewide targets as much as possible, while recognizing there may be reasons to have a more aggressive hospital target (e.g., front loading of improvement, need to ensure statewide target is met). Thus, in future years, staff recommends that the RRIP policy be updated to provide as much alignment as possible, set goals for hospitals to try and ensure that the statewide improvement goal is met, while maintaining the ability to provide hospitals with performance results during the performance period.

Table 1.

	Domain	Measure
1	Population Health	• CDC HRQOL- 4 Health Days Core Module
2	Prevention and Wellness *Choose at least 1 measure*	• Colorectal Cancer Screening (CCS-AD)

		• Breast Cancer Screening: Mammography (BCS-AD)
3	Chronic Conditions *Choose at least 1 measure*	• Controlling High Blood Pressure (CBP-AD) • Hemoglobin A1c Control for Patients with Diabetes (HBDAD)
4	Behavioral Health *Choose at least 1 measure*	• Use of Pharmocotheraphy for Opioid Use Disorder • Antidepressant Medication Management (AMMAD) • Follow-Up After Hospitalization for Mental Illness (FUHAD) • Follow-Up After ED Visit for Substance Use
5	Health Care Quality and Utilization	• Plan All-Cause Unplanned Readmission (PCRAD)
Must choose at least 1 focus area		
6	Focus Area 1- Maternal Health Outcomes *Choose at least 1 measure*	• Live Births Weighing Less Than 2500 Grams (LBWCH) • Prenatal and Postpartum Care: Postpartum care (PPC-AD)
	Focus Area 2- Prevention Measures *Choose at least 1 measure*	• Adult Immunization Status • Prevalence of Obesity • Medical Assistance with Smoking and Tobacco Use Cessation (MSC) • ED Visits for Alcohol and Substance Use Disorders
	Focus Area 3- Social Drivers of Health *Choose at least 1 measure*	• Food Insecurity • Housing Quality

Stakeholder Feedback and Staff Responses

Comment letters on the draft policy were received from the Johns Hopkins Hospital System (JHHS), Garrett Regional Medical Center, and the Maryland Hospital Association (MHA), MedStar

Health, and the University of Maryland Medical System (UMMS). Stakeholder feedback was also provided through the PMWG. Specific input provided and staff responses are below.

Comments on RRIP base period

The feedback received on the RRIP base period strongly favored for the most part using CY2023 only as the base for RY2026 and RY2027. The concerns raised in the letters were specifically around use of CY2022 in the blended base, as well as about maintaining a base period for multiple years (i.e., not advancing the base year annually) and using only one year for the base. Here are the comments from each letter:

- Garrett suggests that CY2022's volume and readmission trends are an outlier and thus not an accurate base for comparison in future years.
- JHHS is appreciative of staff considering changing the base from CY 2022 for both RY26 and RY27. They are supportive of a blended CY 2022 and CY 2023 base period, but are not opposed to a CY 2023 base period for both RY 2026 and RY 2027.
- MedStar strongly believes that CY2022 should not be used due to COVID and service mix changes. They also recommend that multiple years be used for the base to increase stability and during discussions have also suggested that the base period should be moved forward annually (i.e., not remain static over multiple RYs). Specifically, they feel that the program should be changed to use CY 2023 as the base period for RY 2026. For RY 2027, they feel it would be reasonable to use a two-year base period (CY23/24) for greater stability, but are not opposed to just using a CY 2023 base period and revisiting the issue of a multi-year base and/or moving the base period forward in the future.
- MHA recommends using only CY2023 as the base period for both RYs. They cite larger readmission improvements from CY2018 to CY2022 (RY2024) than were expected and that readmission rates have started to return to pre-covid levels in CY2023.
- UMMS recommends the use of CY 2023 for the base period for both RY26 and RY27. They provide information about the impact of COVID in CY2022 on admissions/service mix and suggest since performance has improved in CY24 YTD for Maryland compared to the nation, that the estimated penalties are too high. Lastly, they state that the

degradation in performance in CY23 was taken into account in the RY2025 RRIP policy, which had much higher penalties than RY2024.

Staff response

Staff believes that the two-year blended base period approach is the best option for both RY 2026 and RY 2027. As was shown in Figure 7 in the assessment section, both the volume of hospital admissions and the readmission rates dropped significantly in 2020 compared to previous years. While the CY2022 volume and readmission rate remained significantly lower than the CY2019 volume and readmission rate, in CY2023 the volume was only slightly higher than in CY2022 but the readmission rate increased more significantly. Then, as volume further increased in CY2024 YTD, the readmission rate decreased compared to CY2023, again showing that there is not as clear of a relationship between hospital admission volume and readmissions and that quality of care could indeed have been worse in CY2023. However, stakeholders still posited that the CY2022 readmission rate may have been low relative to 2023 due to COVID and specifically the Omicron surge in early 2022. Staff analyzed the impact of removing index admissions during the Omicron surge in January and February 2022. The results indicate that the readmission rate does not change very much when those months are removed compared to the full calendar year (i.e., the full CY 2022 readmission rate is 11.28% and the CY2022 readmission rate without January and February is 11.30%). Because it is difficult to fully establish whether CY2022 or CY2023 is an anomaly, staff believe the two-year blended base is the most fair.

The additional concern of using a static base period and then measuring improvement from that base over multiple years can be reconsidered in future years (as well as whether multiple years should be used). However, this original decision was made in consultation with hospitals to provide credit for hospitals that had large improvements early on and maintain those improvements but do not achieve the attainment target, thus receiving rewards for the same improvement for multiple years. Furthermore, the static base also means that hospitals with a decline in performance in one year are not rewarded in a subsequent year for improvements back to where they were in the base. This was particularly important early in the model since Maryland needed to improve for Medicare FFS relative to the nation. While staff are amenable to revisiting

this issue, there were benefits to hospitals that improved and maintained that improvement in terms of rewards (or lower penalties) over multiple years but that benefit also comes with the risk that degradations in performance may also result in penalties for multiple years. Last, while it is true the improvements in CY2022 may have been higher than anticipated, hospitals were rewarded for that improvement.

Comments on Out of State (OOS) Adjustment

Garrett expressed concern that despite having a very low readmission rate within Maryland, that the adjustment for out of state readmissions increases their readmission rate and believes that transfers out of state may account for the high estimate of out of state readmissions. While not mentioned in their comment letter, Medstar also discussed with staff concerns about transfers out of state that subsequently transfer back to a Maryland hospital being counted as readmissions since the case-mix dataset does not see the out of state admission and treat the entire stay with transfers as one admission.

Staff Response

The RRIP policy accounts for readmissions that occur out of state by calculating the ratio of the total readmission to the readmission rate that occurs within Maryland using the Medicare CCW dataset. This ratio is then applied to the all-payer readmission rate for assessment of attainment since otherwise border hospitals, where patients may be more likely to be readmitted outside the state, would have lower readmission rates simply due to geography. In addition, both the RRIP measure and the CCW readmission measure do not count direct transfers as readmissions but instead treat admissions with a transfer as one admission. The hospital that transferred the patient does not have that patient in their readmission denominator, but instead the hospital from which the patient is ultimately discharged is assigned the index admission. Direct transfers are defined as those with an admission date that is the same or up to one day after a previous discharged date. Thus, the high out of state ratio for Garrett and other border hospitals is from admissions that should occur out of state more than 2 days after discharge from the Maryland hospital. However, this does not address the concern raised by Medstar. Medstar maintains that there are patients that they transfer to an out of state hospital for a specific procedure and then

bring them back to the local hospital within Maryland before they are discharged. These cases within the HSCRC case mix data would be flagged as a readmission. And while this should not be the case in the Medicare CCW data, there may be care patterns that are being missed by the transfer logic that Garrett is seeing in their data. Thus, staff have begun to look at the CCW medicare claims to identify cases being flagged as readmissions out of state and will work with hospitals to validate or ensure the transfer logic is working correctly. Staff will also use the CCW medicare data to assess the impact of out of state transfers that are repatriated back to a MD hospital, and will also look into using the Medicaid and All-Payers Claims Database to assess the issue for other payers as well. Future RRIP policy will provide results of these analyses and recommendations to address any issues identified.

Comments on Reducing the Improvement Target

JHHS suggested that staff consider reducing the 5 percent improvement target to encourage and recognize improvement in readmission performance. In addition, UMMS recommends reducing the improvement target goals by one year for both RY26 (retrospectively) and RY27.

Staff Response

The approved RY 2026 policy set a 5% improvement target from CY 2022 through CY 2026. This target was determined based on Medicare and Commercial benchmarks for CY 2022 performance. The CY 2023 Medicare and Commercial benchmarks were calculated and suggest that a 5% improvement target is still reasonable. For example, for Maryland to achieve the 2023 Medicare FFS benchmarked rate for peer regions, there would need to be a 7-8 percent improvement from current readmission. Given the benchmarks, and the proposal of a blended base period with the degradation in readmission rates from CY 2022 to CY 2023, staff is continuing to recommend a 5% improvement target through end of CY2026.. This translates into an improvement goal for RY26/CY24 of 2.53 percent and RY27/CY25 of 3.78 percent.

Comments on RRIP Disparity Gap Measurement

JHHS expressed concern with only one or two hospitals receiving the disparity gap incentives and recommended that staff reconsider the methodology and scale for the disparity gap reward to ensure policy recognizes improvements.

Staff Response

Staff agrees that the disparity gap goals are ambitious, but the program was designed to be such as it is a reward only program. The purpose of this incentive is for hospitals to make continuous improvements in their disparity gap, which requires the reward threshold to be increasingly more difficult to achieve. However, as we transition to the AHEAD model, staff will work with stakeholders with aims of assessing the methodology and targets. Specifically, over the next year, staff will reassess the methodology for calculating the disparity gap to ensure improvements are recognized and provide the hospitals with modeling that more clearly shows the impact of changes in readmissions on the disparity gap. Staff will also assess the improvement targets and scaling, while maintaining the commitment of incentivizing hospitals that continuously make improvements in reducing disparities by race, payer status, and ADI.

Comments on EDAC Measurement and Use in Payment Incentive

JHHS expressed concerns with the EDAC measure and the potential unintended consequences of limiting appropriate and needed care for more severe clinical conditions due the length of the readmission being included in the EDAC measure. They also expressed that hospitals would be penalized for both EDAC and RRIP, especially when patients came to the hospital through the ED.

Staff Response

First, at this time, staff do not intend to propose the EDAC measure be implemented into a payment incentive but remain concerned about hospital revisits to ED and observation. Thus, staff has updated the recommendation to say that we should consider future inclusion of revisits in the readmission measure. This is because CMMI has expressed that they think observation stay revisits should be included into readmission evaluation as

part of the ongoing assessment of Maryland readmissions. The specific concerns raised by JHHS about the EDAC measure are below.

JHHS concerns about the excess days in acute care measure include: 1) penalizing hospitals for clinical complexity as reflected in more days of post-discharge care could result in limitation of care and 2) concern that EDAC and RRIP are duplicative, particularly when patients come through the ED. First, the concern about clinical complexity is addressed by risk adjustment, which assesses the expected number of post-discharge days for patients of a specific level of clinical complexity and compares this to the actual post-discharge days. Second, though EDAC includes readmissions, the measure attempts to account for the full range of avoidable post-discharge use rather than focusing only on inpatient readmissions and to account more accurately than the readmission measure for the cost of post-discharge care by including both the length and number of readmissions. To avoid double counting, if ED visits occur on the same day as observation or inpatient stays, only the observation or inpatient stays are included in the measure numerator. Staff do think that EDACs assessment of the severity of the readmission and additional days in the hospital experienced by the patient, is important to monitor.

Recommendations

These are the final recommendation for the Maryland Rate Year (RY) 2027 Readmission Reduction Incentives Program (RRIP):

1. Maintain the all-payer, 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023.
3. Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy.

4. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile of statewide performance receive scaled rewards for maintaining low readmission rates.
5. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
6. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards:
    a. beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and;
    b. capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.
7. Monitor emergency department and observation revisits by adjusting readmission measure and through the all-payer Excess Days in Acute Care measure. Consider future inclusion of ED and/or observation stay revisits in the RRIP measure.
8. Update the RRIP policy in future years to align with statewide AHEAD model goals for readmissions.

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Appendix I. RRIP Readmission Measure and Revenue Adjustment Methodology

Introduction: RRIP Redesign Subgroup

As part of the ongoing evolution of the All-Payer Model's pay-for-performance programs to further bring them into alignment under the Total Cost of Care Model, HSCRC convened a work group to evaluate the Readmission Reduction Incentive Program (RRIP). The work group consisted of stakeholders, subject matter experts, and consumers, and met six times between February and September 2019. The work group focused on the following six topics, with the general conclusions summarized below:

1. Analysis of Case-mix Adjustment and trends in Eligible Discharges over time to address concern of limited room for additional improvement;
    - Case-mix adjustment acknowledges increased severity of illness over time
    - Standard Deviation analysis of Eligible Discharges suggests that further reduction in
    - readmission rates is possible
2. National Benchmarking of similar geographies using Medicare and Commercial data;
    - Maryland Medicare and Commercial readmission rates and readmissions per capita are on par with the nation
3. Updates to the existing All-Cause Readmission Measure;
    - Remove Eligible Discharges that left against medical advice (~7,500 discharges)
    - Include Oncology Discharges with more nuanced exclusion logic
    - Analyze out-of-state ratios for other payers as data become available
4. Statewide Improvement and Attainment Targets under the TCOC Model;
    - 7.5 percent Improvement over 5 years (2018-2023)
    - Ongoing evaluation of the attainment threshold at 65th percentile
5. Social Determinants of Health and Readmission Rates; and
    - Methodology developed to assess within-hospital readmission disparities
6. Alternative Measures of Readmissions
    - Further analysis of per capita readmissions as broader trend; not germane to the RRIP policy because focus of evaluation is clinical performance and care management post-discharge
    - Observation trends under the All-Payer Model to better understand performance given variations in hospital observation use; future development will focus on incorporation of Excess Days in Acute Care (EDAC) measure in lieu of including observations in RRIP policy
    - Electronic Clinical Quality Measure (eCQM) may be considered in future to improve risk adjustment

Methodology Steps

1) Performance Metric

The methodology for the Readmissions Reduction Incentive Program (RRIP) measures performance using the 30-day all-payer all hospital (both intra- and inter-hospital) readmission rate with adjustments for patient severity (based upon discharge all-patient refined diagnosis-related group severity of illness [APR-DRG SOI]) and planned admissions.[13] Unique patient identifiers from CRISP are used to be able to track patients across hospitals for readmissions.

The measure is similar to the readmission rate that is calculated by CMMI to track Maryland performance versus the nation, with some exceptions. The most notable exceptions are that the HSCRC measure includes psychiatric patients in acute care hospitals, and readmissions that occur at specialty hospitals. In comparing Maryland's Medicare readmission rate to the national readmission rate, the Centers for Medicare & Medicaid Services (CMS) will calculate an unadjusted readmission rate for Medicare beneficiaries. Since the Health Services Cost Review Commission (HSCRC) measure is for hospital-specific payment purposes, an additional adjustment is made to account for differences in case-mix. See below for details on the readmission calculation for the RRIP program.

2) Inclusions and Exclusions in Readmission Measurement

- Planned readmissions are excluded from the numerator based upon the CMS Planned Readmission Algorithm V. 4.0. The HSCRC has also added all vaginal and C-section deliveries and rehabilitation as planned using the APR-DRGs, rather than principal diagnosis.[14] Planned admissions are counted as eligible discharges in the denominator, because they could have an unplanned readmission.
- Discharges for newborn APR-DRG are removed.[15]
- Exclude bone marrow transplants and liquid tumor patients by making these discharges not eligible to have an unplanned readmission or count as an unplanned readmission.[16]
- Exclude patients with a discharge disposition of Left Against Medical Advice (PAT_DISP = 71, 72, or 73 through FY 2018; 07 FY 2019 onward)
- Rehabilitation cases as identified by APR-860 (which are coded under ICD-10 based on type of daily service) are marked as planned admissions and made ineligible for readmission after readmission logic is run.
- Admissions with ungroupable APR-DRGs (955, 956) are not eligible for a readmission, but can be a readmission for a previous admission.

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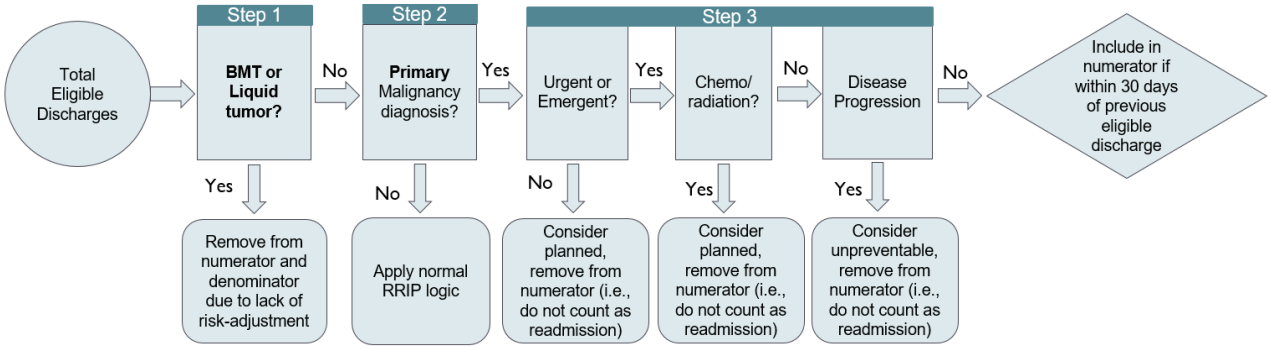
[13] Planned admissions defined under [CMS Planned Admission Logic version 4 – updated March 2018].
[14] **Rehab** DRGs: 540, 541, 542, 560, and 860; **OB Deliveries and Associated DRGs**: 580, 581, 583, 588, 589, 591, 593, 602, 603, 607, 608, 609, 611, 612, 613, 614, 621, 622, 623, 625, 626, 630, 631, 633, 634, 636, 639, 640, and 863.
[15] **Newborn APR-DRGs:** 580, 581, 583, 588, 589, 591, 593, 602, 603, 607, 608, 609, 611, 612, 613, 614, 621, 622, 623, 625, 626, 630, 631, 633, 634, 636, 639, 640, and 863.
[16] **Bone Marrow Transplant:** Diagnosis code Z94.81 or CCS Procedure code 64; **Liquid Tumor:** Diagnosis codes C81.00-C96.0. See section below for additional details on the oncology logic.

- APR-DRG-SOI categories with less than two discharges statewide are removed.
- A hospitalization within 30 days of a hospital discharge where a patient dies is counted as a readmission; however, the readmission is removed from the denominator because the case is not eligible for a subsequent readmission.
- Admissions that result in transfers, defined as cases where the discharge date of the admission is on the same or next day as the admission date of the subsequent admission, are removed from the denominator. Thus, only one admission is counted in the denominator, and that is the admission to the transfer hospital (unless otherwise ineligible, i.e., died). It is the second discharge date from the admission to the transfer hospital that is used to calculate the 30-day readmission window.
- Beginning in RY 2019, HSCRC started discharges from chronic beds within acute care hospitals.
- In addition, the following data cleaning edits are applied:
    - Cases with null or missing CRISP unique patient identifiers (EIDs) are removed.
    - Duplicates are removed.
    - Negative interval days are removed.
      HSCRC staff is revising case-mix data edits to prevent submission of duplicates and negative intervals, which are very rare. In addition, CRISP EID matching benchmarks are closely monitored. Currently, hospitals are required to make sure 99.5 percent of inpatient discharges have a CRISP EID.

Additional Details on Oncology Logic:

Flow Chart for Revised Oncology Logic



*Items that are **bolded** are adaptations from NQF measure

This updated logic replaces the RY 2021 measure logic that removes all oncology DRGs from the dataset, such that an admission with an oncology DRG cannot count as a readmission or be eligible to have a readmission.

Step 1: Exclude discharges where patients have a bone marrow transplant procedure, bone marrow transplant related diagnosis code, or liquid tumor diagnosis. This logic varies from the NQF cancer hospital measure which risk-adjusts for bone marrow transplant and liquid tumors. HSCRC staff recommended removing these discharges (similar to current DRG exclusion) because the current indirect standardization approach did not allow for additional risk-adjustment but based on conversations with clinicians staff agreed these cases were significantly more complicated and at-risk for an unpreventable readmission.

Step 2: Flag discharges with a primary malignancy diagnosis to apply cancer specific logic for determining readmissions. This varies from the NQF cancer hospital measure that flags patients with primary or secondary malignancy diagnosis being treated in a cancer specific hospital. Staff think we should only flag those with a primary diagnosis since in a general acute care hospital there may be differences in the types of patients with a secondary malignancy diagnosis. Further, we remove the bone marrow and liquid tumor discharges regardless of malignancy diagnosis, thus ensuring the most severe cases are removed. Last, our initial analyses did not show a large impact on overall hospital rates when primary vs primary and secondary malignancies were flagged. It should be noted however that the current modeling in this policy uses readmission rates where both primary and secondary are flagged.

Step 3: Flag planned admissions using additional criteria beyond the CMS planned admission logic:

a) Nature of admission of urgent or emergent considered unplanned, all other nature of admission statuses are planned
b) Any admission with primary diagnosis of chemotherapy or radiation is considered planned
c) Any admission with primary diagnosis of metastatic cancer is not considered preventable, and thus gets excluded from being a readmission

In step 3, admissions are deemed not eligible to be a readmission but they are eligible to have a subsequent unplanned readmission.

3) Details on the Calculation of Case-Mix Adjusted Readmission Rate

Data Source:

To calculate readmission rates for RRIP, inpatient abstract/case-mix data with CRISP EIDs (so that patients can be tracked across hospitals) are used for the measurement period, with an additional 30 day runout. To calculate the case-mix adjusted readmission rate for CY 2023 performance period, data from January 1 through December 31, plus 30 days in January of the next year are used. CY 2022 data are used to calculate the normative values, which are used to determine a hospital's expected readmissions, as detailed below.

Please note that, the base year readmission rates are not "locked in", and may change if there are CRISP EID or other data updates. The HSCRC does not anticipate changing the base period data, and does not anticipate that any EID updates will change the base period data significantly; however, the HSCRC has decided the most up-to-date data should be used to measure improvement. For the performance period, the CRISP EIDs are updated throughout the year, and thus, month-to-month results may change based on changes in EIDs.

SOFTWARE: APR-DRG Version 42 for CY 2018-CY 2025.

Calculation:

$$\text{Case-Mix Adjusted Readmission Rate} = \frac{\text{(Observed Readmissions)}}{\text{(Expected Readmissions)}} * \text{Statewide Base Year Readmission Rate}$$

Numerator: Number of observed hospital-specific unplanned readmissions.

Denominator: Number of expected hospital specific unplanned readmissions based upon discharge APR-DRG and Severity of Illness. See below for how to calculate expected readmissions, adjusted for APR-DRG SOI.

Risk Adjustment Calculation:

Calculate the Statewide Readmission Rate without Planned Readmissions.

- Statewide Readmission Rate = Total number of readmissions with exclusions removed / Total number of hospital discharges with exclusions removed.

For each hospital, enumerate the number of observed, unplanned readmissions.

For each hospital, calculate the number of expected unplanned readmissions at the APR-DRG SOI level (see Expected Values for description). For each hospital, cases are removed if the discharge APR-DRG and SOI cells have less than two total cases in the base period data.

Calculate at the hospital level the ratio of observed (O) readmissions over expected (E) readmissions. A ratio of > 1 means that there were more observed readmissions than expected, based upon a hospital's case-mix. A ratio of < 1 means that there were fewer observed readmissions than expected based upon a hospital's case-mix.

Multiply the O/E ratio by the base year statewide rate, which is used to get the case-mix adjusted readmission rate by hospital. Multiplying the O/E ratio by the base year state rate converts it into a readmission rate that can be compared to unadjusted rates and case-mix adjusted rates over time.

Expected Values:

The expected value of readmissions is the number of readmissions a hospital would have experienced had its rate of readmissions been identical to that experienced by a reference or normative set of hospitals,

given its mix of patients as defined by discharge APR-DRG category and SOI level. Currently, HSCRC is using state average rates as the benchmark.

The technique by which the expected number of readmissions is calculated is called indirect standardization. For illustrative purposes, assume that every discharge can meet the criteria for having a readmission, a condition called being “eligible” for a readmission. All discharges will either have zero readmissions or will have one readmission. The readmission rate is the proportion or percentage of admissions that have a readmission.

The rates of readmissions in the normative database are calculated for each APR-DRG category and its SOI levels by dividing the observed number of readmissions by the total number of eligible discharges. The readmission norm for a single APR-DRG SOI level is calculated as follows:

Let:

N = norm
P = Number of discharges with a readmission
D = Number of eligible discharges
i = An APR DRG category and a single SOI level

$$N_i = \frac{P_i}{D_i}$$

For this example, the expected rate is displayed as readmissions per discharge to facilitate the calculations in the example. Most reports will display the expected rate as a rate per one thousand.

Once a set of norms has been calculated, the norms are applied to each hospital’s DRG and SOI distribution. In the example below, the computation presents expected readmission rates for a single diagnosis category and its four severity levels. This computation could be expanded to include multiple diagnosis categories, by simply expanding the summations.

Consider the following example for a single diagnosis category.

Expected Value Computation Example – Individual APR-DRG

A Severity of Illness Level	B Eligible Discharges	C Discharges with Readmission	D Readmissions per Discharge (C/B)	E Normative Readmissions per Discharge	F Expected # of Readmissions (A*E)
1	200	10	.05	.07	14.0
2	150	15	.10	.10	15.0
3	100	10	.10	.15	15.0
4	50	10	.20	.25	12.5
Total	**500**	**45**	**.09**		**56.5**

For the diagnosis category, the number of discharges with a readmission is 45, which is the sum of discharges with readmissions (column C). The overall rate of readmissions per discharge, 0.09, is calculated by dividing the total number of eligible discharges with a readmission (sum of column C) by the total number of discharges at risk for readmission (sum of column B), i.e., 0.09 = 45/500. From the normative population, the proportion of discharges with readmissions for each severity level for that diagnosis category is displayed in column E. The expected number of readmissions for each severity level shown in column F is calculated by multiplying the number of eligible discharges (column B) by the normative readmissions per discharge rate (column E) The total number of readmissions expected for this diagnosis category is the sum of the expected numbers of readmissions for the 4 severity levels.

In this example, the expected number of readmissions for this diagnosis category is 56.5, compared to the actual number of discharges with readmissions of 45. Thus, the hospital had 11.5 fewer actual discharges with readmissions than were expected for this diagnosis category. This difference can also be expressed as a percentage or the O/E ratio.

4) Revenue Adjustment Methodology

The RRIP assesses improvement in readmission rates from base period, and attainment rates for the performance period with an adjustment for out-of-state readmissions. The policy then determines a hospital's revenue adjustment for improvement and attainment and takes the better of the two revenue adjustments, with scaled rewards of up to 2 percent of inpatient revenue and scaled penalties of up to 2 percent of inpatient revenue. The figure below provides a high level overview of the RY 2026 RRIP methodology for reference.

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30-day, All-Cause Readmission Measure

Measure Includes:
Readmissions within 30 days of Acute Case Discharge:

- All-Payer
- All-Cause
- All-Hospital (both intra- and inter- hospital)
- Chronic Beds
- IP-Psych and Specialty Hospitals
- Adult Oncology Discharges

Global Exclusions:

- Planned Admissions
- Same-day and Next-day Transfers
- Rehab Hospitals
- Discharges leaving Against Medical Advice
- Deaths
- Pediatric Oncology Discharges

Case-Mix Adjustment

Performance Measure: CY 2024 Case-mix Adjusted Readmission Rate, adjusted for out-of-state readmissions (Attainment); Reduction in Case-mix Adjusted Readmission Rate from Base Period (Improvement)

Case-mix Adjustment:
Expected number of unplanned readmissions for each hospital are calculated using the discharge APR-DRG and severity of illness (SOI).

$$\textit{Observed Unplanned Readmissions} \;/\; \textit{Expected Unplanned Readmissions} * \textit{Statewide Readmission Rate}$$

CY2022 used to calculate statewide averages (normative values), as well as attainment benchmark/threshold

Revenue Adjustments

Hospital RRIP revenue adjustments are based on the better of attainment or improvement, scaled between the Max Reward and Max Penalty.

Scores Range from Max Penalty -2% & Reward+2%

All Payer Readmission Rate Change CY22-24		% IP Revenue Payment Adjustment
	A	B
Improving		2.00%
	-19.79%	2.00%
	-11.16%	1.00%
Target	-2.53%	0.00%
	6.10%	-1.00%
	14.73%	-2.00%
Worsening		-2.00%

Improvement

Attainment

All Payer Readmission Rate CY24		RRIP % Inpatient Revenue
Lower Readmission Rate		2.0%
Benchmark	9.17%	2.00%
	10.09%	1.00%
Threshold	11.02%	0.00%
	11.95%	-1.00%
	12.87%	-2.00%
Higher Readmission Rate		-2.0%

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Appendix II. Modelled RY 2026 and RY 2027 Revenue Adjustments

RY 2026 YTD Modelled Revenue Adjustments, CY 2022 Base Period vs CY 2022 & 2023 Base Period vs CY 2023

			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	HOSPITAL NAME	FY 24 Estimated Permanent Inpatient Revenue	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment
210001	Meritus	$251,995,786	-$2,696,355	-1.07%	-$2,393,960	-0.95%	$1,215	0.00%
210002	UMMS- UMMC	$1,473,072,120	-$13,846,878	-0.94%	-$5,450,367	-0.37%	-$579,764	-2.00%
210003	UMMS- Capital Region	$309,492,831	-$680,884	-0.22%	$464,239	0.15%	$2,677,419	1.43%
210004	Trinity - Holy Cross	$413,940,590	-$4,346,376	-1.05%	-$3,684,071	-0.89%	$151,248	2.00%
210005	Frederick	$254,562,530	-$381,844	-0.15%	-$1,603,744	-0.63%	$2,472,349	2.00%
210008	Mercy	$220,664,524	-$3,199,636	-1.45%	-$2,030,114	-0.92%	$1,034,414	1.06%
210009	JHH- Johns Hopkins	$1,818,903,395	-$5,274,820	-0.29%	-$3,637,807	-0.20%	$618,986	0.20%
210011	St. Agnes	$254,764,484	$1,120,964	0.44%	-$101,906	-0.04%	-$1,008,546	-1.05%
210012	Lifebridge- Sinai	$519,012,883	-$4,982,524	-0.96%	-$4,515,412	-0.87%	$41,561	0.11%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	HOSPITAL NAME	FY 24 Estimated Permanent Inpatient Revenue	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment
210015	MedStar- Franklin Square	$371,862,302	-$6,544,777	-1.76%	-$4,536,720	-1.22%	$512,445	0.51%
210016	Adventist- White Oak	$242,890,872	-$922,985	-0.38%	-$48,578	-0.02%	-$145,665	-0.18%
210017	Garrett	$28,988,189	-$579,764	-2.00%	-$579,764	-2.00%	$3,016,176	1.43%
210018	MedStar- Montgomery	$96,052,028	-$1,258,282	-1.31%	-$1,181,440	-1.23%	-$3,439,923	-1.03%
210019	Tidal- Peninsula	$350,375,491	$4,169,468	1.19%	$4,134,431	1.18%	$0	0.00%
210022	JHH- Suburban	$249,484,035	-$99,794	-0.04%	$948,039	0.38%	$1,820,045	0.69%
210023	Luminis- Anne Arundel	$367,930,454	-$2,943,444	-0.80%	-$3,164,202	-0.86%	$6,061,496	1.73%
210024	MedStar- Union Mem	$267,917,283	-$3,188,216	-1.19%	-$1,366,378	-0.51%	-$170,762	-0.36%
210027	Western Maryland	$183,379,829	-$696,843	-0.38%	-$825,209	-0.45%	-$8,249,204	-0.56%
210028	MedStar- St. Mary's	$100,479,485	$1,969,398	1.96%	$1,406,713	1.40%	$1,283,659	0.70%
210029	JHH- Bayview	$471,786,218	-$2,736,360	-0.58%	-$3,208,146	-0.68%	-$712,775	-0.28%
210030	UMMS- Chestertown	$7,562,394	$151,248	2.00%	$151,248	2.00%	$1,846,182	0.74%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	HOSPITAL NAME	FY 24 Estimated Permanent Inpatient Revenue	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment	$ Better of Attainment or Improvement	RY 26 Prelim % Revenue Adjustment
210032	ChristianaCare, Union	$84,802,922	$678,423	0.80%	$474,896	0.56%	-$2,605,488	-1.10%
210033	Lifebridge- Carroll	$162,844,959	-$602,526	-0.37%	-$65,138	-0.04%	-$2,574,599	-0.88%
210034	MedStar- Harbor	$128,234,465	-$1,782,459	-1.39%	-$1,141,287	-0.89%	-$1,200,428	-0.29%
210035	UMMS- Charles	$97,586,229	$800,207	0.82%	$985,621	1.01%	-$151,537	-0.16%
210037	UMMS- Easton	$123,617,439	$2,472,349	2.00%	$2,027,326	1.64%	-$101,906	-0.04%
210038	UMMS- Midtown	$140,418,656	-$688,051	-0.49%	$224,670	0.16%	$340,047	0.14%
210039	Calvert	$80,925,064	-$517,920	-0.64%	-$388,440	-0.48%	-$934,223	-0.18%
210040	Lifebridge- Northwest	$160,861,387	-$1,672,958	-1.04%	-$1,045,599	-0.65%	$244,267	0.15%
210043	UMMS- BWMC	$325,584,009	-$4,558,176	-1.40%	-$3,190,723	-0.98%	-$2,869,858	-0.78%
210044	GBMC	$263,774,655	$105,510	0.04%	$184,642	0.07%	$2,000,794	0.11%
210048	JHH- Howard County	$220,287,562	$704,920	0.32%	$594,776	0.27%	-$2,417,105	-0.65%
210049	UMMS-Upper Chesapeake	$236,862,562	-$3,766,115	-1.59%	-$2,108,077	-0.89%	-$1,990,767	-0.79%
210051	Luminis- Doctors	$187,232,106	$1,142,116	0.61%	$1,479,134	0.79%	-$1,009,310	-0.31%
210056	MedStar- Good Sam	$186,628,391	$1,772,970	0.95%	$1,343,724	0.72%	$393,172	0.28%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
210057	Adventist- Shady Grove	$333,973,100	-$4,341,650	-1.30%	-$2,104,031	-0.63%	-$377,429	-0.08%
210058	UMROI	$80,968,088	-$59,512	-0.07%	-$1,295,489	-1.60%	-$1,232,420	-0.46%
210060	Adventist-Ft. Washington	$37,782,970	-$226,698	-0.60%	-$298,485	-0.79%	$1,362,957	2.00%
210061	Atlantic General	$47,434,007	-$588,182	-1.24%	-$493,314	-1.04%	-$112,603	-0.07%
210062	MedStar-Southern MD	$210,921,411	$1,708,463	0.81%	$1,919,385	0.91%	$969,265	0.44%
210063	UMMS- St. Joe	$292,568,045	-$672,907	-0.23%	-$1,960,206	-0.67%	$0	0.00%
210064	Lifebridge-Levindale	$68,147,842	$1,362,957	2.00%	$1,362,957	2.00%	-$525,761	-0.41%
210065	Trinity - Holy Cross Germantown	$94,710,748	-$331,488	-0.35%	-$227,306	-0.24%	$1,699,117	0.77%
STATEWIDE		$11,821,284,339	-$56,029,431		-$34,944,112		-$3,863,259	
Penalty			-$74,188,424		-$52,645,913		-$32,410,073	
Reward			$18,158,993		$17,701,801		$28,546,814	

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RY 2027 Modelled Revenue Adjustments, CY 2022 Base Period vs CY 2022 & 2023 Base Period vs CY 2023 Base Period

			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
210001	Meritus	$251,995,786	-$3,049,149	-1.21%	-$2,746,754	-1.09%	-$2,343,561	-0.93%
210002	UMMS- UMMC	$1,473,072,120	-$16,351,101	-1.11%	-$7,365,361	-0.50%	-$11,489,963	-0.78%
210003	UMMS- Capital Region	$309,492,831	-$1,145,123	-0.37%	$123,797	0.04%	-$30,949	-0.01%
210004	Trinity - Holy Cross	$413,940,590	-$4,925,893	-1.19%	-$4,304,982	-1.04%	-$1,821,339	-0.44%
210005	Frederick	$254,562,530	-$763,688	-0.30%	-$1,934,675	-0.76%	-$1,094,619	-0.43%
210008	Mercy	$220,664,524	-$3,530,632	-1.60%	-$2,339,044	-1.06%	$1,390,187	0.63%
210009	JHH- Johns Hopkins	$1,818,903,395	-$8,003,175	-0.44%	-$6,184,272	-0.34%	-$727,561	-0.04%
210011	St. Agnes	$254,764,484	$764,293	0.30%	-$458,576	-0.18%	-$458,576	-0.18%
210012	Lifebridge- Sinai	$519,012,883	-$5,761,043	-1.11%	-$5,242,030	-1.01%	-$1,660,841	-0.32%
210015	MedStar- Franklin Square	$371,862,302	-$7,065,384	-1.90%	-$5,020,141	-1.35%	-$2,974,898	-0.80%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
210016	Adventist- White Oak	$242,890,872	-$1,287,322	-0.53%	-$412,914	-0.17%	-$24,289	-0.01%
210017	Garrett	$28,988,189	-$579,764	-2.00%	-$579,764	-2.00%	-$579,764	-2.00%
210018	MedStar- Montgomery	$96,052,028	-$1,431,175	-1.49%	-$1,315,913	-1.37%	-$1,219,861	-1.27%
210019	Tidal- Peninsula	$350,375,491	$3,678,943	1.05%	$3,643,905	1.04%	$5,430,820	1.55%
210022	JHH- Suburban	$249,484,035	-$449,071	-0.18%	$573,813	0.23%	$1,496,904	0.60%
210023	Luminis- Anne Arundel	$367,930,454	-$3,458,546	-0.94%	-$3,679,305	-1.00%	-$3,384,960	-0.92%
210024	MedStar- Union Mem	$267,917,283	-$3,590,092	-1.34%	-$1,768,254	-0.66%	-$1,634,295	-0.61%
210027	Western Maryland	$183,379,829	-$971,913	-0.53%	-$1,081,941	-0.59%	$1,026,927	0.56%
210028	MedStar- St. Mary's	$100,479,485	$1,828,727	1.82%	$1,255,994	1.25%	$371,774	0.37%
210029	JHH- Bayview	$471,786,218	-$3,396,861	-0.72%	-$3,915,826	-0.83%	-$1,085,108	-0.23%
210030	UMMS- Chestertown	$7,562,394	$151,248	2.00%	$151,248	2.00%	$151,248	2.00%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
210032	ChristianaCare, Union	$84,802,922	$559,699	0.66%	$347,692	0.41%	-$127,204	-0.15%
210033	Lifebridge-Carroll	$162,844,959	-$846,794	-0.52%	-$309,405	-0.19%	$0	0.00%
210034	MedStar- Harbor	$128,234,465	-$1,961,987	-1.53%	-$1,333,638	-1.04%	-$718,113	-0.56%
210035	UMMS- Charles	$97,586,229	$663,586	0.68%	$849,000	0.87%	$849,000	0.87%
210037	UMMS- Easton	$123,617,439	$2,336,370	1.89%	$1,903,709	1.54%	$2,472,349	2.00%
210038	UMMS- Midtown	$140,418,656	-$884,638	-0.63%	$14,042	0.01%	$196,586	0.14%
210039	Calvert	$80,925,064	-$647,401	-0.80%	-$485,550	-0.60%	-$315,608	-0.39%
210040	Lifebridge-Northwest	$160,861,387	-$1,898,164	-1.18%	-$1,270,805	-0.79%	-$353,895	-0.22%
210043	UMMS- BWMC	$325,584,009	-$5,013,994	-1.54%	-$3,679,099	-1.13%	-$1,497,686	-0.46%
210044	GBMC	$263,774,655	-$316,530	-0.12%	-$131,887	-0.05%	$1,292,496	0.49%
210048	JHH- Howard County	$220,287,562	$374,489	0.17%	$286,374	0.13%	$660,863	0.30%
210049	UMMS-Upper Chesapeake	$236,862,562	-$4,121,409	-1.74%	-$2,415,998	-1.02%	-$2,937,096	-1.24%

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
210051	Luminis- Doctors	$187,232,106	$879,991	0.47%	$1,273,178	0.68%	$2,302,955	1.23%
210056	MedStar- Good Sam	$186,628,391	$1,493,027	0.80%	$1,063,782	0.57%	-$279,943	-0.15%
210057	Adventist- Shady Grove	$333,973,100	-$4,909,405	-1.47%	-$2,504,798	-0.75%	-$4,208,061	-1.26%
210058	UMROI	$80,968,088	-$78,944	-0.10%	-$1,400,748	-1.73%	-$24,290	-0.03%
210060	Adventist-Ft. Washington	$37,782,970	-$279,594	-0.74%	-$355,160	-0.94%	-$11,335	-0.03%
210061	Atlantic General	$47,434,007	-$673,563	-1.42%	-$554,978	-1.17%	-$237,170	-0.50%
210062	MedStar- Southern MD	$210,921,411	$1,392,081	0.66%	$1,624,095	0.77%	$2,699,794	1.28%
210063	UMMS- St. Joe	$292,568,045	-$1,082,502	-0.37%	-$2,369,801	-0.81%	-$2,984,194	-1.02%
210064	Lifebridge- Levindale	$68,147,842	$1,362,957	2.00%	$1,362,957	2.00%	$1,362,957	2.00%
210065	Trinity - Holy Cross Germantown	$94,710,748	-$473,554	-0.50%	-$369,372	-0.39%	-$293,603	-0.31%
STATEWIDE		$11,821,284,339	-$73,463,000		-$51,057,405		-$22,813,922	
Penalty			-$88,948,411		-$65,530,991		-$44,518,782	

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			CY 2022 Base		CY22/23 Blended Base		CY 2023 Base	
HOSPITAL ID	**HOSPITAL NAME**	**FY 24 Estimated Permanent Inpatient Revenue**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**	**$ Better of Attainment or Improvement**	**RY 26 Prelim % Revenue Adjustment**
Reward			$15,485,411		$14,473,586		$21,704,860	

WVU Medicine

Garrett Regional Medical Center

251 North Fourth Street
Oakland, MD 21550

March 3, 2025

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

RE: RRIP RY2027

Dear Mr. Kromm,

On behalf of Garrett Regional Medical Center (GRMC), I am writing with concerns over the RRIP RY2027 Modeling. Notwithstanding, first and foremost, I would like to thank the HSCRC, especially Alyson Schuster's continued willingness to work with us on the MHAC program's methodology for small hospitals. That work as you probably know has led to potential improvements in the modeling for the whole state.

With respect to the RRIP RY2027 modeling the baseline period proposal is a combination of 2022 and 2023. I respectfully request that you look more closely about utilizing 2022 in the baseline period, as this was an outlier year due to COVID and the unusual volume fluctuations and readmission activity during this time. I'm concerned that this is an inaccurate reflection for comparison of future year readmissions.

With respect to the RR performance at Garrett Regional Medical Center, I would also like to note that the hospital has one of the lowest, if not the lowest readmission rates in the state of Maryland since 2017 up until CY2024. Yet, GRMC will have a negative revenue adjustment for both improvement and attainment for RY2026 and again for RY2027.

We are at a disadvantage due to the out of state (OOS) adjustment ratio due to our location at the border of two neighboring states. GRMC has the highest OOS ratio in the state due to these factors. Until the out of state adjustment factor is addressed, we are unable not receive appropriate consideration for an attainment adjustment. Currently, transfers are being included in the OOS factor which is an inaccurate representation of our readmissions.

January through November 2024, the hospital's case mix adjusted readmission rate is currently 8.12% and this shows an increase of 44.48%. We still have a low readmission rate, however due to our very low numerator and low readmission rates in previous years, we have no ability to meet the improvement target.

Garrett Regional Medical Center has had patient navigation programs and community health workers in place for over 10 years to help reduce readmissions. We strive to provide the best care possible to our patients. We ask that we be given the same opportunity to achieve the maximum revenue adjustments possible. We request that you please evaluate the readmission program that does not allow for the accurate evaluation of readmissions in a scenario like that of GRMC.

If you have any questions or need additional information to evaluate our request, please feel free to contact me at (301) 533-4173 or via email at mark.boucot@wvumedicine.org.

Sincerely,

Mark Boucot, MBA, FACHE
President and CEO

CC: Alyson Schuster
Angela Maule

MedStar Health

10980 Grantchester Way
Columbia, MD 21044

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

MedStarHealth.org

March 11, 2025

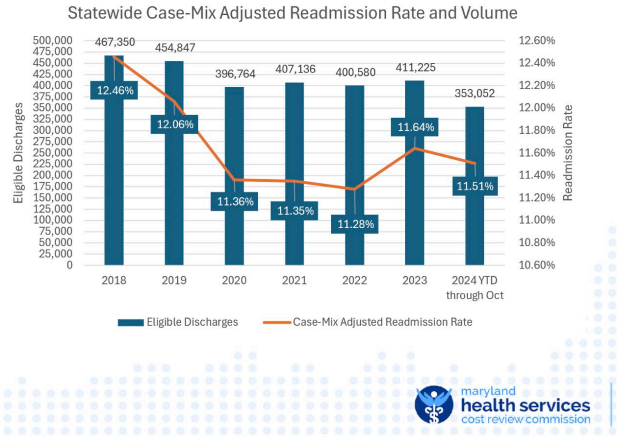
Jon Kromm
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Kromm:

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

We write today to provide our perspective on the RY26 and RY27 Readmissions Reduction Incentive Program (RRIP) policies as discussed at the February 19, 2025, HSCRC Performance Measurement Workgroup (PMWG). We commend the HSCRC staff for the collaborative and careful approach they have taken toward refining RRIP for the upcoming years. We would like to highlight several key considerations as we move toward finalizing the policies.

We agree with HSCRC staff and other health systems' representatives on the PMWG that CY2022 readmissions rates represent a significant outlier both at the national and the Maryland state level. The special variation in readmissions data related to the COVID pandemic was clear starting in CY20 and continued through CY22 (see graphic below). During this period our hospitals experienced decreasing proportions of encounters focused on caring for chronically ill inpatients at higher risk for readmission (eg HF, COPD) and increasing proportions of encounters for patients acutely ill with COVID (who had consistently lower readmission rates). Moreover, as the number of admissions for COVID decreased after the first quarter of CY22, a backlog of elective cases continued to keep readmission rates low. CY23 represented a return to volumes and cases that were more like the pre-pandemic state.



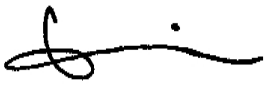
Because CY22 was not representative of standard hospital clinical realities, we feel strongly it should not be included as a part of the RRIP baseline calculation – either independently or blended with CY23. For RY26, we are in favor of using CY23 independently as a more fair comparison for hospital performance.

As we move further away from the pandemic and toward the AHEAD model, we are broadly in favor of a multiyear baseline to lessen the arbitrary benefits or penalties that individual hospitals experience due to favorable or unfavorable baseline years. *Thus, for FY27, we feel it would be reasonable to use a blended baseline of CY23/CY24. Alternatively, the program could use CY23 baseline alone for FY27 and then reconsider a multiyear baseline with the transition to the AHEAD model at the beginning of 2026.*

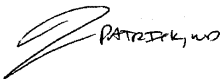
Thank you for your consideration of our perspective. Please let us know if we may provide further clarifications and/or if you would like to discuss with our team.

Sincerely,

Stephen R.T. Evans, MD
Executive Vice President
Medical Affairs and
Chief Medical Officer,
MedStar Health



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



Jonathan Patrick, MD
Vice President, Clinical
Quality, MedStar Health

Maryland
Hospital Association

March 12, 2025

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

Dear Dr. Schuster:

On behalf of the Maryland Hospital Association (MHA) and our member hospitals and health systems, we appreciate the opportunity to provide comments on the draft policy proposal for the Rate Year (RY) 2027 Readmissions Reduction Incentive Program (RRIP).

Overall, we support the proposed updates to the RRIP policy, specifically your willingness to adjust the RRIP base period for both the RY 2026 and RY 2027 policies. However, we urge the HSCRC to **adopt Calendar Year (CY) 2023 as the sole base period (instead of the blended use of CY 2022 and CY 2023).** This approach would enhance the fairness and effectiveness of the incentives in the RRIP program.

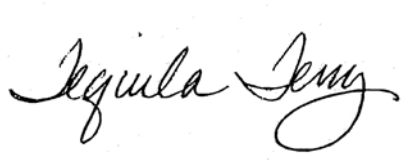
The CY 2022 was an outlier due to the lingering effects of the COVID-19 pandemic and including it in the base period could skew the analyses and benchmarks. CY 2022 performance is also skewed due to COVID. The 9.5% rate of improvement over the CY 2018 base period is roughly 2% greater improvement over four years relative to the 7.5% improvement target expected over five years as defined in the RY 2023 RRIP policy. This significantly accelerated rate of improvement stems from historically low volumes and readmissions and is directly related to operational and care-seeking changes spurred by the pandemic. Maryland readmissions performance on both an unadjusted basis and a risk-adjusted basis began to return to pre-COVID levels in CY 2023. Using CY 2023 alone would provide a more accurate reflection of current hospital performance and would better capture Maryland's improving performance relative to national trends.

Additionally, we would like to express our appreciation to HSCRC for consideration of a retrospective base period adjustment for RY 2026. Like the RY 2027 proposal, this adjustment acknowledges the complexities introduced by the pandemic and ensures a more equitable evaluation of hospital performance.

We look forward to collaborating on future efforts to enhance the RRIP program. We are eager to partner with you to align the RRIP policy with statewide AHEAD model goals for readmissions.

We appreciate this opportunity to provide input and remain committed to working together to ensure that Maryland hospitals continue to lead in reducing readmissions while delivering high-quality, patient-centered care.

Sincerely,



Tequila Terry
Senior Vice President, Care Transformation and Finance

cc: Dr. Ryan Moran, Acting Secretary, Maryland Department of Health
Dr. Joshua Sharfstein, Chair
Dr. James Elliott
Ricardo Johnson
Dr. Maulik Joshi
Adam Kane
Nicki McCann
Dr. Farzaneh Sabi

March 12, 2025

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

Dear Dr. Schuster,

On behalf of the Johns Hopkins Health System (JHHS) and its four Maryland hospitals, thank you for the opportunity to provide input on the draft recommendation for the Rate Year (RY) 2027 Readmissions Reduction Incentive Program (RRIP). JHHS is generally supportive of the recommendation, and offers the following comments for consideration.

Staff Recommendation: Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy

> JHHS is supportive of adjusting the RRIP base period for both the RY26 and RY27 policies, and appreciates staff's consideration of retroactive application, as it allows for a more comprehensive measure of performance. Additionally, we are supportive of the combined base year draft recommendation. JHHS understands that some hospitals favor base years starting in CY2023, and is not opposed to using CY2023 for the simplicity of the model.

Staff Recommendation: Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023

> To encourage and recognize improvement in performance, JHHS suggests that staff consider reducing the improvement target.

Staff Recommendation: Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards a) beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and; b) capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.

Given that only one or two hospitals are receiving the disparity gap incentive, JHHS urges that staff reconsider the methodology and scale to ensure the policy appropriately recognizes reductions.

Staff Recommendation: Monitor emergency department and observation revisits by adjusting readmission measure and through all-payer Excess Days in Acute Care (EDAC) measure. Consider future inclusion of revisits of EDAC in the RRIP program.

While JHHS understands excess days will be monitored, the goal of this measure is to reduce preventable usage, not limit appropriate and needed care, and therefore penalizing hospitals for more severe clinical conditions is counterintuitive. We would have concerns if the measure was implemented in the future, particularly for populations who often come to hospitals through the ED, in turn resulting in duplicative penalties for EDAC and RRIP.

JHHS greatly appreciates staff's thoughtful development of this proposal, and looks forward to further collaboration on quality methodologies and policies that further access to high quality care for Marylanders.

Sincerely,

Peter M. Hill, MD, MS, FACEP
Senior Vice President of Medical Affairs
Johns Hopkins Health System
Associate Professor Emergency Medicine
Johns Hopkins School of Medicine

cc: Dr. Joshua Sharfstein, Chairman
Dr. James Elliott, Vice Chairman
Ricardo Johnson
Dr. Maulik Joshi
Adam Kane
Nicki McCann
Dr. Farzaneh Sabi
Jon Kromm

UNIVERSITY of MARYLAND MEDICAL SYSTEM

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CORPORATE OFFICE

March 12, 2025

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

Dear Dr. Schuster:

I extend my gratitude on behalf of the University of Maryland Medical System (UMMS) for the chance to contribute our insights to the Health Services Cost Review Commission's (HSCRC) Draft Recommendations for the Readmission Reduction Incentive Program (RRIP) for Rate Year 2027. We also would like to thank the HSCRC for the consideration of updating the base period of the RRIP policy.

We wish to express our views on specific aspects of the draft recommendations:

Concerns Regarding the CY2022/CY2023 Base Period

We would like to express our concern about the inclusion of Calendar Year 2022 (CY2022) in the base period for the RRIP calculations. During this period, the COVID-19 pandemic continued to have a substantial impact on healthcare delivery, affecting patient volumes and readmission rates. We believe using data during this period does not align with the current healthcare environment:

Evidence of Impact

1. **Significant Decline in Respiratory Volumes**

   Per our publication in the American Journal of Medicine[1], hospital admissions were significantly impacted by the COVID-19 pandemic. In particular, respiratory related admissions were diminished

[1] So JY, O'Hara NN, Kenaa B, Williams JG, deBorja CL, Slejko JF, Zafari Z, Sokolow M, Zimand P, Deming M, Marx J, Pollak AN, Reed RM. Population Decline in COPD Admissions During the COVID-19 Pandemic Associated with Lower Burden of Community Respiratory Viral Infections. Am J Med. 2021 Oct;134(10):1252-1259.e3. doi: 10.1016/j.amjmed.2021.05.008. Epub 2021 Jun 12. PMID: 34126098; PMCID: PMC8196237.

due to the suppressed transmission of seasonal viral pathogens. This decline directly correlates with changes in readmission rates, which may not represent usual patterns.

2. **Governor's Order from December 2021**[2]
   This order required hospitals to lower elective surgery and implement COVID-19 plans during the surges that occurred in CY2022. This further lowered hospital admissions, which again does not represent usual patterns in admissions and readmissions.

3. **UMMS ECMAD Data**
   Furthermore, UMMS shared Equivalent Case-Mix Adjusted Discharges (ECMADs) data with HSCRC staff that shows that volumes in CY2022 were reduced compared to pre-pandemic levels. This reduction in admissions suggests that readmission data from this period may be skewed and not reflective of currents standards.

Performance Indicators

It is worth noting that, according to the Draft Recommendation, the State of Maryland is performing better than the national average in both the unadjusted rate in CY2024 year-to-date and the risk-adjusted readmission rate in CY2023. Despite this positive performance, the proposed RY2026 policy still incorporates a $34.9 million state-wide penalty. This is contradictory to intent of the program.

Additionally, the draft policy states that staff is concerned about the state-wide degradation in CY2023 over CY2022. The rate impact in FY2025, because of this degradation in performance, was a net state-wide rate reduction of $40.45 million ($56.18 million vs $15.73 million) compared to FY2024. We contend that inclusion of CY2022 in the base period will continue to penalize hospitals in future years despite the already incurred reduction of rates in FY2025.

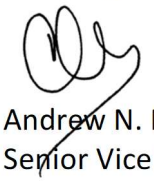
Recommendation

Considering the above observations, we recommend using CY2023 as the base period in both the RY2026 and RY2027 RRIP policies. This approach utilizes data from years not impacted by the pandemic to ensure a fair and equitable evaluation of readmission rates.

Finally, we recommend using the established methodology for 1.28% improvement per year. With a CY2023 base period this results in a 1.28% improvement target for the RY2026 policy and 2.53% for the RY2027 policy.

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

Sincerely,



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

[2] Maryland Department of Health. (2021, December 15). Amended health care matters order. https://health.maryland.gov/phpa/Documents/2021.12.15.01%20-%20MDH%20Order%20-%20Amended%20Health%20Care%20Matters%20Order.pdf

cc: Joshua Sharfstein, MD, Chairman
Jon Kromm, Executive Director
James Elliott, MD
Adam Kane
Maulik Joshi, DrPH
Ricardo R. Johnson
Nicki McCann, JD
Farzaneh Sabi, MD

maryland health services cost review commission

Medicare Performance Adjustment Calendar Year 2025

Final Recommendation

April 2025

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Recommendations For CY 2025 MPA Policy

This recommendation is identical to the recommendation staff shared with the Commission in December 2024 but reflects the removal of the retrospective stop-loss tiering revision only for hospitals where the change would have a positive impact on total payments, which was not approved by CMS. CMS stated that "this would set an undesirable precedent that undermines TCOC savings". In addition, the Commission received one comment letter during the comment period following the draft recommendation. This letter is discussed below. Generally it was consistent with prior comments received and did not result in any changes to the recommendation. Therefore, Staff recommend the following revisions to the Medicare Performance Adjustment (MPA) policy for calendar year 2025 (CY2025) to align with State and federal policy directives as well as feedback from the industry and other stakeholders:

1. Include non-claims-based-payments in the MPA savings target on a go-forward basis beginning in calendar year 2025 (CY 2025).
2. Revise the Care Transformation Initiative (CTI) offset distribution to reflect varying levels of opportunity for total cost of care reductions throughout the State by scaling in accordance with Table 4: Scaled Stop Loss Tiers. In addition, make the revision prospectively effective for all hospitals effective July 1, 2025.

Otherwise, the relevant policies will remain unchanged from the prior year. Staff are recommending the limited changes described above to keep the MPA aligned with other State and federal policymaking. The following discussion provides rationale and detail on each of these recommendations.

However, in alignment with the new States Advancing All-Payer Health Equity Approaches and Development (AHEAD) model Staff is proposing to undertake a more comprehensive review of the various MPA policies in 2025 for implementation in 2026 in conjunction with the start of the AHEAD model.

Policy Overview

Policy Objective	Policy Solution	Effect on Hospitals	Effect on Payers/Consumers	Effect on Health Equity
The Total Cost of Care (TCOC) Model Agreement requires the State of Maryland to implement a Medicare Performance Adjustment (MPA) for	This MPA recommendation fulfills the requirements to determine an MPA policy for CY 2025 and makes incremental	The MPA policy serves to hold hospitals accountable for Medicare total cost of care performance. As such, hospital Medicare payments are adjusted	This policy does not affect the rates paid by payers other than Medicare Fee-for-service. The MPA policy incentivizes the hospital to make	This policy holds hospitals accountable for cost and quality of Medicare beneficiaries in the hospital's service area.

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

Introduction to MPA Policies

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

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

The Traditional Component is governed via annual updates to the MPA policy adopted by the Commission. This document represents the update for Calendar Year 2025 (also known as MPA Year 7). The Efficiency and Savings Component are governed via the MPA Framework adopted by the Commission in October 2019[1] (as amended in the MPA Year 6 recommendation adopted last year). This MPA Year 7 recommendation includes an additional change to the MPA Framework. This policy does not relate to the Savings Component. These three components are added together and applied to the amount that Medicare pays each respective hospital. The MPA is applied as a discount or inflator to the amount that Medicare pays on each claim submitted by the hospital.

Recommendations Related to the MPA Traditional Component

Recap of Current Program

The following recaps the traditional MPA as it was implemented for Calendar Year 2024, it is included as a reference. The approaches described were adopted incrementally in the Calendar Year 2021, 2022, 2023 and 2024 MPA policies, and those policies remain in effect except where changes are specifically denoted in the next section.

The first step in the process is to attribute beneficiaries to hospitals. The current attribution is as follows:

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

[1] Available, starting on page 10, here: MPA Framework

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

Table 1: Scaled Growth Rate Adjustment

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

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

Table 2: Calculation of the MPA Targets

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

D = Growth Rate Adjustment Factor	From Growth Rate Table (applies to 2021 and all subsequent years)
E = MPA TCOC Target	A x (1 + B) x (1 + C - D) = E

Example Calculation of MPA Targets					
Hospital	**Quintile**	**Target Growth Rate**	**2019 TCOC**	**2020 MPA Target**	**2021 MPA Target**
Hospital A	1	3% - 0.00% = 3.00%	$11,650	$12,000	$12,359
Hospital B	2	3% - 0.25% = 2.75%	$11,193	$11,529	$11,846
Hospital C	3	3% - 0.50% = 2.50%	$11,169	$11,504	$11,792
Hospital D	4	3% - 0.75% = 2.25%	$11,204	$11,540	$11,800
Hospital E	5	3% - 1.00% = 2.00%	$10,750	$11,073	$11,294

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

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

Variable	Input
E = MPA Target	See previous section
F = 2021 MPA Performance	Calculation
G = Percent Difference from Target	(E - F) / E
H = MPA Reward or Penalty	(G / 3%) x 1%
I = Revenue at Risk Cap	Greater / lesser of H and + / - 2%
Example MPA Performance Calculations	

Hospital	MPA Target	MPA Performance	% Difference	Reward (Penalty)
Hospital A	$12,359	$12,235	-1.00%	0.33%
Hospital B	$11,846	$11,941	0.80%	-0.27%
Hospital C	$11,792	$11,556	-2.00%	0.67%
Hospital D	$11,800	$11,033	-6.50%	2.00%
Hospital E	$11,294	$11,859	5.00%	-1.67%

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

In the MPA Year 6 final recommendation, the Commission approved two changes to MPA policy beginning in 2024. MPA policy was revised to include an increase in the maximum revenue-at-risk as well as the addition of a population health measure to the quality adjustment included in the Traditional MPA. The amount of revenue-at-risk for Total Cost of Care performance under the Traditional MPA increased from 1% to ±2%. Increasing the revenue at risk under the MPA had been a stated goal of the Center for Medicare and Medicaid Services (CMS) for several years. The translation between actual results and the revenue-at-risk would not be changed from the current 3:1 ratio. Therefore, the revenue-at-risk would be reached at ±6%.

In addition to increasing the revenue-at-risk, MPA policy was revised to add a population health metric to the quality adjustment included in the Traditional MPA and include it in the Calendar Year 2024 and future MPA adjustments according to the formula below (adjusted for 2% revenue-at-risk):

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

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

Recommended Revisions to the Traditional MPA - Include Non-Claims-Based Payments

On November 13, 2024, the Commission approved a retroactive adjustment to correct the MPA savings target for Calendar Years 2020 to 2024 (CY2020 to CY2024) to reflect newly available information on non-

claims-based payments (NCBPs) resulting in a one-time increase to hospital rewards estimated at approximately $22.0 M from Medicare only, through Calendar Year 2023.

Staff recommend replicating this adjustment in the MPA savings target on a go-forward basis beginning in calendar year 2025 (CY 2025) consistent with the approach the Commission already adopted for prior years.

Primary care programs such as the Maryland Primary Care Program (MDPCP) have always been included in MPA scoring with data available monthly that can be attributed at the beneficiary level. However, other value-based programs have not been included in the MPA scoring, to date. The lack of NCBP data for other programs penalizes Maryland results as these programs are more significant outside Maryland. Previously these programs have not been factored into the MPA savings calculation as the data was not uniformly available, is only reported quarterly, and is not at a beneficiary specific level. However, Staff now believe the data is sufficiently complete to incorporate these programs into the MPA target.

Recommendations Related to the MPA Framework Reconciliation Component

Recap of Current Program

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

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

The Framework also included the use of the MPA-RC to pay incentives earned under CTIs and to offset those incentives by reducing Medicare Fee-for-service payments to all hospitals to create a net zero adjustment (the Offset). This approach was adopted as per the Staff's October 2019 Final MPA Framework Recommendation, "First, it mitigates the possibility that these care transformation payments will result in a net increase in the TCOC run rate. Second, when a hospital captures the savings from their CTIs, the resulting increased costs will be spread as an offset across all hospitals resulting in non-participating hospitals being penalized for their non-participation. Additionally, the Offset incents participation in care redesign by encouraging participation through limited downside risk and minimizing administrative barriers. In December of 2023 (MPA Year 6 recommendation), the Framework was amended to include a cap on the

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

Recommended Revisions to the MPA Framework Reconciliation Component

"Improvement Only" Aspects of CTIs

Under CTIs, all scored savings that are paid out are offset by reducing payments to hospitals by an equal amount on a pro rata basis based on Medicare FFS spending at each hospital. Dissavings after the initial offset are limited to 2.5% of Medicare FFS payments with all eliminated savings shared back across all facilities in proportion to Medicare FFS payments (the initial redistribution and stop loss application and further redistribution are collectively known as the CTI Offset). The CTI Offset was intended to (1) provide value for hospitals generating care transformation savings while maintaining savings to CMS, (2) prevent a free rider syndrome by "taxing" hospitals that choose not to participate in care redesign or are ineffective, and (3) incent participation in care redesign by encouraging participation through limited downside risk and minimizing administrative barriers. In addition to CTI payments, hospitals benefit from CTI initiatives that reduce hospital utilization via their GBR, although some of this accrues to hospitals other than the CTI owner.

Stakeholders have raised a concern that the CTIs and the CTI Offset is "improvement only" and disproportionally "taxes" hospitals with lower total cost of care management opportunity and that the Commission should revisit the "improvement only" nature of CTIs in the offset to better recognize regional differences. Two aspects of the design make CTIs an "improvement only" program:

(1) CTI rewards improvement against a hospital's own baseline, therefore hospitals in lower cost areas have less opportunity.
(2) The CTI Offset is allocated in proportion to total Medicare spend and therefore does not recognize the varying opportunity. For example, if region A and region B are the same size and region A has 3% opportunity and region B has 6% then Region A has 33% of the upside but bears close to 50% of the risk under the offset redistribution.

Under the Traditional MPA the Commission has already recognized the varying levels of opportunity through the tiered targets described above and this design was adopted to create a policy that blends improvement and attainment aspects.

Proposed Change

Staff do not wish to remove all incentives for all hospitals statewide to improve care delivery but also want to recognize that all areas of the State do not have equal opportunity. It is not technically feasible to fairly change the first "improvement only" aspect of the program – measuring success against a hospital's own baseline - therefore Staff focused on changes to the CTI Offset. Working with stakeholders Staff developed a number of potential approaches to incorporate an attainment aspect into the CTI Offset. Staff sought to balance fairness, complexity and effectiveness in evaluating these approaches. Staff also believe a relatively mild change is justified in this revision to allow evaluation of the impact across more periods, Staff would be open to revisiting this and other CTI Offset aspects in conjunction with the full review of MPA policies next year.

Based on these considerations Staff is recommending the stop loss applied during the offset be tiered in a way that mirrors the Traditional MPA Scaled Growth Adjustment. This will provide greater protection for hospitals with less opportunity without eliminating the incentive for all hospitals to drive savings. Table 4 shows the proposed tiers (currently all hospitals are subject to a 2.5% stop loss).

Table 4: Scaled Stop Loss Tiers

Hospital Performance vs. Benchmark	Proposed Stop Loss
1st Quintile (-15% to + 1% Relative to Benchmark)	1.250%
2nd Quintile (+1% to +10% Relative to Benchmark)	1.875%
3rd Quintile (+10% to +15% Relative to Benchmark)	2.500%
4th Quintile (+15% to +21% Relative to Benchmark)	3.125%
5th Quintile (+21% to +28% Relative to Benchmark)	3.750%

Modeling using Year 2 CTI adjustments showed this change would have had the impact of shifting approximately $5 million from the highest cost quintiles to the lowest cost quintiles. Although as the portfolio of CTIs implemented changes each year the actual future impact could be less or more. However, consistent with stakeholder feedback that changes should not be applied to periods that have already been implemented Staff recommend implementing this change for CTIs starting July 1, 2025.

Staff believe that tiering the offset as described above is appropriate policy but does not wish to retrospectively change the rules applied resulting in the recommendation above being limited to CTIs initiated in the future.

Discussions of Comments Received

Background

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

In addition to discussion during the workgroups, Staff held three more formal comment submission periods, one prior to the October 23 and 30, 2024, Total Cost of Care Workgroup, a second prior to the November 20, 2024, workgroup meeting, and a third after the December 2024 Commission Meeting. The next sections recap these comments along with Staff response. Across the three rounds letters were received from the Maryland Hospital Association (MHA), the University of Maryland Medical System, Adventist HealthCare, Medstar Health, and LifeBridge Health.

Staff also received substantial input on various technical aspects related to scoring savings under CTIs. In response to these comments Staff made limited technical changes to the CTI scoring methodology.

Recap of Comments

Areas of focus addressed by multiple stakeholders include:

Support for incorporating non-claims-based payments into savings calculations: Industry stakeholders strongly supported adding NCBP retroactively and on a go-forward basis.
Concerns about attainment provision in CTIs: Some stakeholders raised concern about this and do not support the change while others support the change while asking for specific methodological analysis to assess fairness. Staff believe the proposed policy is a reasonable compromise between these positions.

Strongly suggest limiting CTI policy changes to future periods: Stakeholders want to limit changes to policy during active and enrolled performance years and are supportive of changes on a prospective basis. Staff adopted this approach.

Support for retrospective implementation of one time, positive-only CTI stop-loss tiering revision: Stakeholders expressed support for the retrospective implementation of one-off, positive-only CTI stop-loss tiering revision only for hospitals where the change would have a positive impact on total payments. Stakeholders cautioned careful deliberation before using this as a way to recoup Statewide savings.

Support for the revision of MPA attribution: Stakeholders proposed revising the attribution methodology to better align. Staff deferred this until 2026 to align with AHEAD-based changes.

Concerns about MPA results and total cost of care results: Stakeholders raised concern that the misalignment of MPA and total cost of care results remains a challenge. Staff notes that the model savings test and MPA savings measurement are designed differently although the addition of NCBP to the MPA savings will partially address this concern.

Future Areas of Focus

In 2024, HSCRC received comments across a wide range of MPA-related policy areas as noted above. In the context of the new AHEAD model HSCRC proposed a more comprehensive revisit of the MPA in 2025 in preparation for the start of the model in 2026. The areas of priority include:

- Revisit the attribution method for Traditional MPA to consider associations between hospitals and beneficiaries other than geography.
- Revisit the scaled growth rate adjustment to validate hospital groupings and targets, this will be done in conjunction with Staffs revisit of the HSCRC's benchmarking approach.
- Consider indexing the CTI offset to the State's savings position such that the offset would be reduced allowing hospitals to retain more savings if the State is performing well on the model savings test.

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CORPORATE OFFICE

December 23rd, 2024

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

RE: UMMS Comment Letter on Draft Recommendation for CY25 Medicare Performance Adjustment

Dear Jon:

On behalf of the University of Maryland Medical System (UMMS) and its member organizations, I am providing feedback on the Draft Recommendation for the CY25 iteration of the Medicare Performance Adjustment (MPA), inclusive of changes to the Care Transformation Initiative (CTI) Policies discussed in the Public Commission Meeting on December 11th, 2024:

Inclusion of Non-Claims-Based Payments

UMMS reiterates support for the inclusion of non-claims-based payments in the MPA scoring to be implemented in the measurement of CY25 performance. As noted by the Commission, Maryland sees exceptional TCOC results while consistently seeing almost all hospitals in the State perform poorly in the MPA. This delta between TCOC and MPA undermines engagement in these policies and often deters returns on investment from the mission of community health, a key goal of the MPA. UMMS has asked the TCOC workgroup to consider ensuring MPA results are benchmarked to statewide savings to Medicare in future methodological iterations and the inclusion of non-claims-based payments is a first step in this direction.

Attainment Change to CTIs – MPA Tiering of CTI Stop-Loss

UMMS supported, in principle, the implementation of TCOC attainment elements into the CTI offset and/or stop-loss methodologies. However, per our November 15th letter to the Commission, the conclusion that differential TCOC standing impacts the ability to achieve savings is not supported by performance year two (PY2) experience nor Commission provided modeling. As noted in more detail previously, 70% of all savings in PY2 were awarded to hospitals in the lowest two quintiles (the proposed lowest TCOC attainment opportunity) of the MPA tiers. The result of any shifts in policy based on this assumed, but not proven attainment theory (the exception would be changes to the revenue neutrality of the policy itself), is putting more burden on hospitals in high TCOC areas and protecting hospitals in low TCOC areas regardless of other important hospital and catchment area characteristics.

Implementing this change based on MPA tiers would hold hospitals in high-cost areas accountable for a possible max of *triple* the amount (3.75% of Medicare revenue) of what hospitals in low-cost areas would be accountable for (1.25% of Medicare revenue). This maximum penalty for 1st quintile hospitals is too low, sitting close to 1% where the Commission has set the minimum savings rate (MSR) for large populations in the CTI policy, and in a spot that could be completely recouped by natural advantages of low-TCOC in the traditional MPA policy. The Commission argues that they don't want to disincentivize participation in the CTI policy but solidifying this as a relatively small loss all but guarantees the decision by hospitals in low-TCOC quintiles to de-prioritize if not completely ignore the policy. The fourth and fifth quintiles on the other hand will have no choice but to continue to invest heavily in their CTI strategies, lest they be regressively targeted by these policies and their MPA adjustment risk and lose a maximum of 6% of their Medicare revenues altogether. The delta proposed between these MPA tiers is not just inequitable, it is simply not sustainable for hospitals in these high-TCOC quintiles to build out. Additionally, as with the integrated efficiency policy and other ranking methods, quintiles ensure there are always hospitals in an advantaged or disadvantaged position and, for one to improve, another must erode. This creates a competitive and further regressive nature to TCOC improvement which disincentives working regionally to improve the State.

The Commission's insistence on insulating hospitals in areas of low cost and putting more burden on hospitals that are in higher cost communities runs counter to the health equity goals of this model and the next. As all Maryland hospitals strive for higher value in care, these policy mechanics redistribute more resources away from high-need areas like Baltimore City and the Eastern Shore to protect hospitals in Montgomery and Howard Counties. Doing this ignores that geography and disparity impact cost, and flatly disincentivizes investment in the places that our model is meant to protect.

UMMS requests again that the MPA quintiles should consider differential health equity experience in hospital attributed populations, reliant on the leadership and expertise of the Maryland Commission on Health Equity in the AHEAD model. UMMS contends that we should not hastily implement tiering that does not fully consider this new governance body's expertise and policy development scope. Additionally, the relationship between MPA quintile and CTI opportunity should be more closely studied following multiple full years of performance data ahead of significant and redistributive policy changes.

Timing of Policy Changes in the Care Transformation Initiatives Policy

UMMS supports the Commission's position of vetting and passing policy changes prior to the enrollment period of and for the next performance period. We appreciate the efforts of the Total Cost of Care Workgroup staff to ensure that this complex modeling and discussion continues with the industry. It is critical hospitals know the rules of engagement in policies prior to setting strategies and making informed investments.

Retrospective Revisions to CTI Performance Years

UMMS supports the retrospective implementation of one-off, positive-only CTI savings changes based on the State's favorable savings position. Shared savings are a core tenet of value-based care models nationwide and Maryland must ensure it can fund its future, in addition to performing and providing return to Medicare. That said, UMMS would caution careful deliberation before using this as a mechanism going forward for recouping Statewide savings. While the Commission should grapple with how to effectively share savings in this model and ensure needed reinvestments can be

made in Maryland, the industry would need to understand and cross-examine the equity and fairness of such an approach.

Sincerely,

Alicia Cunningham
Senior Vice President, Corporate Finance & Revenue Advisory Services

cc:
Mohan Suntha, MD, MBA, UMMS President and Chief Executive Officer
Joe Hoffman, UMMS Chief Financial Officer
Joshua Sharfstein, MD Chairman
James Elliot, MD Vice Chair
Adam Kane
Maulik Joshi, Dr. P.H.
Ricardo R. Johnson
Nicki McCann, JD
Farzaneh (Fazi) Sabi, MD

maryland
health services
cost review commission

TO:
HSCRC Commissioners

FROM:
HSCRC Staff

DATE:
April 9, 2025

RE:
Hearing and Meeting Schedule

May 14, 2025 In person at HSCRC office and Zoom webinar

June 11, 2025 In person at HSCRC office and Zoom webinar

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

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