Total Cost of Care Model Performance
Annual Report
Fiscal Year 2024 Activities and
Calendar Year 2024

Health Services Cost Review Commission

October 2025

maryland
health services
cost review commission

October 1, 2025

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The Honorable Meena Seshamani
Secretary of the Maryland
Department of Health
201 W. Preston Street
Baltimore, MD 21201

RE: Submission – Report required by Health General § 19-207(b)(6) (MSAR 12506)

Dear Governor Moore, President Ferguson, Speaker Jones, and Secretary Seshamani:

The Health Services Cost Review Commission (HSCRC) respectfully submits the Commission's FY 2024 Annual Report, as required by section 19-207(b)(6) of the Health General Article of the Maryland Code.

This report covers calendar year 2024 performance under the Total Cost of Care Model, fiscal year 2024 operations information, and relevant calendar year 2025 activities.

If you have any questions about this report, please do not hesitate to contact me at not hesitate to contact me at jon.kromm@maryland.gov.

Sincerely,

Jonathan Kromm
Executive Director

maryland health services cost review commission

Annual Report

Fiscal Year 2024 Activities and
Calendar Year 2024 Total Cost of Care Model Performance

July 2025

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Executive Summary

This annual report is prepared in accordance with Section 19-207(b)(6) of the Health-General Article of the Annotated Code of Maryland (MSAR #12506). In accordance with statutory requirements, this report includes:

- An overview of the TCOC Model and implementation activities related to the Model;
- A summary of the State's performance under the TCOC Model, including:
  - Performance in limiting inpatient and outpatient hospital per capita cost growth;
  - Progress toward achieving the State's financial targets established by the TCOC contract;
  - HSCRC actions on activities related to the TCOC contract;
  - Actions approved by HSCRC to promote alternative methods of rate determination and payment of an experimental nature;
  - Reports submitted to the Center for Medicare and Medicaid Innovation related to the TCOC contract
- A summary of HSCRC's role in hospital quality of care activities, including the status of any pay-for-performance initiatives and any known adverse consequences in implementing the TCOC contract as reported to CMMI that may negatively impact quality of care; and
- An update on other HSCRC activities, including care transformation efforts, public and private partnerships, stakeholder engagement, quality initiatives, and rate-setting methodology development.

Highlights from the report are included below.

AHEAD Model

As the planned end date of the Total Cost of Care (TCOC) Model approaches, the HSCRC is planning its next iteration under the Achieving Healthcare Efficiency through Accountable Design (AHEAD) Model. As envisioned by the Centers for Medicare and Medicaid Innovation (CMMI), AHEAD will place a greater emphasis on prevention, population health, and community-based care, while still maintaining a focus on containing healthcare cost growth. At the time of this writing, the Governor's Office and the Maryland Department of Health are leading negotiations with the federal government to make final updates to the AHEAD Model terms and agreements.

Total Cost of Care Model Performance

Under the TCOC Model, Maryland is measured annually against six key metrics to determine if Maryland is driving Medicare cost savings and hospital quality improvement. Maryland met all TCOC Model targets in 2024. These results are preliminary and not considered final until verified by CMMI.

Performance Measures	Annual 2024 Targets	Target Met
Annual Medicare TCOC Savings	Achieve $336M in annual Maryland Medicare TCOC per Beneficiary of savings	s
TCOC Guardrail Test	Cannot exceed growth in National Medicare TCOC per beneficiary by more than 1% per year and cannot exceed the National Medicare TCOC per beneficiary by any amount for 2+ consecutive years	s
All-Payer Revenue Limit	All-payer growth ≤ 3.58% per capita	s
Improvement in All-Payer Potentially Preventable Conditions	Exceed the CY 2018 PPC rates for 14 Potentially Preventable Conditions (PPCs) that comprise Maryland's Hospital Acquired Condition program (MHAC)	s
Readmissions Reductions for Medicare	Maryland's aggregate Medicare 30-day risk-adjusted all-cause, all-site readmission rate at regulated hospitals ≤ the National Readmission Rate for Medicare Fee for Service (FFS) beneficiaries	s
Hospital Population-Based Payment	≥ 95% of all Regulated Revenue for Maryland residents paid according to a Population-Based Payment methodology	s

Hospital Quality Programs

The Maryland Model is structured to incentivize hospitals' efforts to continually improve patient treatment outcomes. The Model includes both rewards and penalties related to hospital performance on specific quality metrics. HSCRC operates four quality programs that support the Model's goals: the Quality-Based Reimbursement (QBR) Program, the Maryland Hospital Acquired Conditions (MHAC) Program, the Readmissions Reduction Incentive Program (RRIP), and the Potentially Avoidable Utilization (PAU) Savings Program.

Quality-Based Reimbursement Program: The Quality-Based Reimbursement Program evaluates hospitals' outcomes in three primary areas; Safety, Clinical Care, and Patient and Consumer Engagement.

- Safety: Infections are a major problem in hospitals, can have a significant impact on patient care and outcomes, and can be minimized or controlled through the implementation of best practices. For the healthcare-associated infection measures, Maryland is performing worse than the nation on CAUTI, SSI-Hysterectomy, and C.Diff. The State performs better than the nation on SSI-Colon and MRSA, and performs on par with the nation on CLABSI.

- Clinical Care: Ten of 40 hospitals worsened slightly in CY2024 on the inpatient mortality measure.

- Patient and Community Engagement: Maryland continues to lag the nation in performance on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient experience measures. This is an area of significant concern for the HSCRC.

Maryland Hospital Acquired Conditions: Potentially Preventable Conditions, or PPCs, are negative outcomes that may result from the process of care in hospitals. In CY 2024, there has been an improvement in the PPCs included in the payment program, with fewer PPCs overall compared to the 2018 base year.

Readmissions: Due to the incentives of the Maryland Model, lower acuity patients are more likely to receive care in non-hospital settings, and the patients who receive hospital care are more likely to have complex health care needs. This could result in an increased rate of inpatient readmissions. To ensure accurate analysis, CMMI analyzed Maryland's readmissions on a risk-adjusted basis and found them to be below national average for comparable levels of patient need.

Potentially Avoidable Utilization (PAU): The PAU Savings policy measures the revenue associated with readmissions as well as per capita avoidable admissions. In FY 2025, HSCRC implemented an incremental prospective savings requirement of 0.02 percent of total hospital revenue. Staff continue to develop the policy for FY 2026.

Population Health

Statewide Integrated Health Improvement Strategy: In 2021, CMMI approved Maryland's Statewide Integrated Health Improvement Strategy (SIHIS) which was designed to improve health outcomes, achieve health equity, and control the total cost of care for Marylanders. Maryland established improvement goals across three domains: Hospital Quality, Care Transformation, and Total Population Health, specifically diabetes, opioid use disorder, and maternal and child health.

Revenue for Reform: The primary goal of Revenue for Reform is to direct hospital retained revenue to community-based population health investments and to drive population health improvement. In FY 2025, $60.1 million was directed to community health and expanding and maintaining access to physicians in Baltimore City, Prince George's County, Montgomery County, and the Eastern Shore.

Care Transformation and Partnership Programs

Episode Care Improvement Program: Beginning Jan. 1, 2025, 15 hospitals are participating in the Episode Care Improvement Program, which allows hospitals to link payments among providers for an episode of care, aligning incentives among hospitals, physicians and post-acute care facilities to improve quality and generate savings.

Episode Quality Improvement Program: This program allows specialty providers to coordinate care through clinical episodes and increases accountability for patients. Providers can receive incentive payments by

improving their performance on quality metrics and reducing cost of care. As of Jan. 1, 2025, there were 128 EQIP entities and 3,362 care providers enrolled – representing 38 specialties.

Care Transformation Initiatives: Under this program, hospitals are assigned Medicare beneficiaries and are accountable for the total cost of care in six categories, including palliative care, primary care and outpatient services. In FY 2025, 42 hospitals are participating in a total of 235 active CTIs.

Maryland Primary Care Program: As of January 2025, there were 481 participating practices (533 sites) in this program, which allows primary care providers to play an increased role in prevention, management of chronic disease, and preventing unnecessary hospital utilization. In particular, these practices track diabetes, hypertension, body mass index (BMI) and depression – and integrate behavioral health services into the primary care setting. This program also focuses on advancing health equity and reducing disparities at the primary care level. In 2024, $29.9 million was invested in the Health Equity Advancement Resource and Transformation (HEART) Payment program to provide resources to practices to support the social needs of high-risk patients.

Regional Partnerships: The HSCRC developed the Regional Partnership Catalyst Program to build sustainable programs to advance the population health goals of the TCOC Model, specifically diabetes and behavioral health, over five years (CY 2021 – CY 2025). $57,817,849 was directed to six Regional Partnerships to implement diabetes prevention and management programs. HSCRC decided to end funding for these programs due to concerns over long-term sustainability. Funding ended in June 2024, but all six have indicated they will seek to continue to provide diabetes services. $79.1 million is directed to three Regional Partnerships to build and expand access to behavioral health crisis services, including mobile response teams, crisis stabilization centers, and same-day access to behavioral health care.

Maternal and Child Health Funding Initiative: The HSCRC is directing $26.9 million in cumulative funding through December 2027 to MDH to fund Medicaid and public health initiatives that address severe maternal mortality and childhood asthma. In FY 2024, MDH prioritized growing enrollment and access to doula care, home-visiting programs for young mothers and infants, group-based prenatal care programs, and asthma-home visiting programs for children with moderate to severe asthma.

Hospital Financial Performance

Update Factor: Each year, the HSCRC adjusts hospitals' Global Budget Revenue to account for inflation and demographic shifts, and to provide resources for care coordination and population health strategies. On July 1, 2024, the HSCRC approved a 4.53 percent per capita revenue increase for hospitals under global budgets.

Audited FY 2024 Data: The HSCRC monitors hospital financial performance and regulates inpatient and outpatient services located at hospitals (referred to as "regulated services"), including emergency

department services. HSCRC's regulatory authority does not include all aspects of hospital business. Areas of hospital business that are outside of HSCRC's regulatory authority, such as physician fees, and outpatient services provided at locations distant from the hospital campus are referred to as "unregulated services."

In order to understand the full scope of hospital financial performance, HSCRC conducts multiple analyses, including regulated operating margins, unregulated operating margins, and total operating margins. These analyses showed increases in all margins over FY 2024. In addition, despite low total operating margins, which are heavily influenced by unregulated services, Maryland's regulated hospital industry remained profitable.

- The total combined audited regulated and unregulated operating margin was 0.90 percent (0.06 percent in FY 2023).
- The total margin, i.e., the combined operating and non-operating margins, was 3.80 percent (1.69 percent in FY 2023).
- The operating margin for services regulated by the HSCRC was 7.85 percent (6.60 percent in FY 2023).

Introduction

The Health Services Cost Review Commission (HSCRC) is an independent State agency responsible for regulating the quality and cost of hospital services to ensure all Marylanders have access to high-quality healthcare. The HSCRC achieves this by regulating revenues that hospitals raise through patient billing, and by designing and driving innovative healthcare delivery programs. Together, these efforts provide better care coordination and better health outcomes for Marylanders.

The HSCRC is at the forefront of Maryland's transformative effort to improve the quality of care for all by emphasizing population health and health equity while lowering healthcare spending growth under the unique Maryland Health Model (or "Maryland Model"). The Maryland Model improves health care for people across the state by encouraging hospitals, physicians, and other healthcare professionals to work collaboratively to provide high-quality care to patients. The Maryland Model introduces new investments and incentives in the state to engage the wide range of providers in care transformation efforts.

The Maryland Model is the latest iteration of a first-of-its-kind state-level effort to coordinate hospital costs that dates back to the 1970s. Under the current version of the Maryland Model, the system:

- Rewards better health outcomes through pay-for-performance programs that drive higher quality;
- Guarantees that low-income individuals have access to care at all hospitals by providing equitable funding for uncompensated care;

- Creates a stable and predictable revenue system for hospitals, a benefit that was particularly important in the pandemic and for rural hospitals that would otherwise face financial volatility in a fee-for-service system that relies on volumes of services;
- Invests in population health and health equity by using savings from reduced hospital utilization; and
- Provides support for state healthcare infrastructure and subject matter expertise on healthcare financing and reform.

This report describes the achievements the Maryland Model has made since its implementation. The HSCRC, the State, hospitals, non-hospital providers, payers, and a broad spectrum of community partners work together to achieve the objectives of the Maryland Model, creating long-term health improvements and cost savings for Marylanders.

The Maryland Model has two major components:

- The Total Cost of Care (TCOC) Model Agreement with the federal government, which seeks to improve health outcomes and control healthcare costs by aligning hospitals and non-hospital providers (e.g. primary care and specialty physicians) to transform the healthcare delivery system.
- Maryland's long-standing all-payer hospital rate-setting system, which aligns hospital payments from Medicare and Medicaid with those from insurance providers.

The TCOC Model, which began in January 2019, aims to enhance the quality of healthcare and patient experience, improve population health and health outcomes, and reduce the total cost of care for Marylanders. The HSCRC helps direct the State's innovative efforts to transform the delivery system and achieve goals under the TCOC Model.

In 2024, the HSCRC focused on ensuring that the State met the 2024 Medicare total cost of care savings target under the TCOC agreement with the Center for Medicare and Medicaid Innovation (CMMI), while responding to hospital requests for funding support and balancing the interests of consumers, employers, and insurers to control hospital costs.

Also in 2024, the HSCRC continued the planning process for the next iteration of the Maryland Model. In March 2024, HSCRC applied to participate in the Centers for Medicare and Medicaid Services' (CMS) Achieving Healthcare Efficiency through Accountable Design (AHEAD) Model.[1] The AHEAD Model will allow Maryland to continue its commitment to curbing healthcare cost growth, invest in primary care, and promote population health through community investment and encouraging healthier living. In July 2024, CMS announced Maryland as one of the first states to participate in the AHEAD Model. At the time of this

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[1] The AHEAD Model was previously titled the States Advancing All-Payer Health Equity Approaches and Development Model.

writing, the Governor's Office and the Maryland Department of Health are leading negotiations with the federal government to make final updates to the AHEAD Model terms and agreements.

Achieving Healthcare Efficiency through Accountable Design (AHEAD) Model

In March 2024, The Maryland Department of Health (MDH) and the HSCRC applied to participate in the CMS AHEAD Model which will run from 2026 to 2035.

The AHEAD Model is Maryland's next step in transforming health care to improve outcomes and control costs. Launching in 2026, AHEAD builds on the success of the Maryland TCOC Model by placing greater emphasis on prevention, population health, and community-based care. It aims to help Marylanders stay healthy by investing in advanced primary care, empowering communities to make healthy choices, and supporting providers with better data and incentives for high-quality care. AHEAD also continues the state's commitment to controlling health care spending, ensuring that both patients and taxpayers benefit from a more efficient and effective health system.

In July 2024, CMS announced Maryland as one of the first states to participate in Cohort 1 of the AHEAD Model. The Governor's Office and MDH are currently leading negotiations with the federal government to make final updates to the AHEAD Model terms and agreements before implementation begins in 2026.

For more information regarding the AHEAD Model, please visit CMS's model webpage.

Section I: Overview of TCOC Model and Key Requirements

In 2018, the State of Maryland entered into an agreement with CMS to run a demonstration program called the TCOC Model. The TCOC Model aims to coordinate care, implement broad healthcare delivery reform, improve quality and reduce costs across both hospital and non-hospital settings. The TCOC Model includes financial and quality targets that the State must meet to continue the Model agreement with CMMI.

The TCOC Model has three components: hospital population-based revenue, payment and delivery system reform, and population health and health equity.

Figure 1. TCOC Model Components
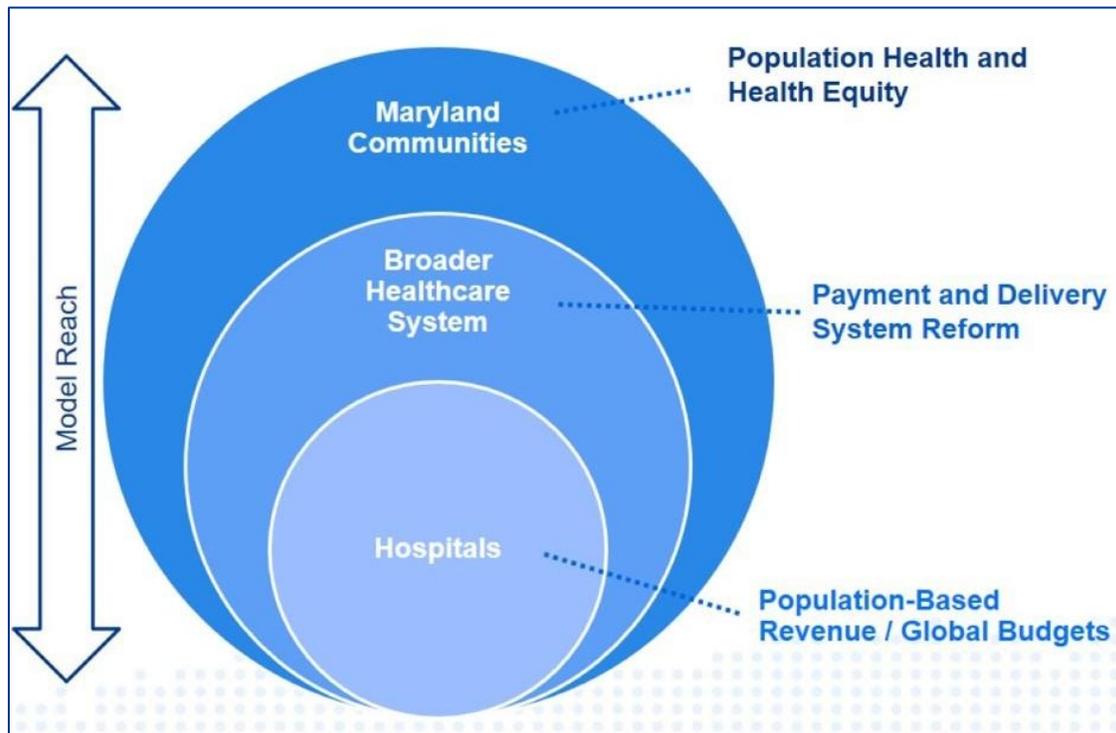
- **Hospital Population-Based Revenue:** The Model allows the State to set hospital payments for Medicare. Under the TCOC Model agreement, hospitals are subject to global budgets, which set an annual payment limit for hospitals regardless of the hospital utilization rate. Global budgets, which have been in place for all general acute hospitals since 2014, have fundamentally changed hospitals' incentives from increasing fee-for-service volume to improving population health and driving toward value-based outcomes. The hospital rate-setting system is discussed in Section VII.

- **Payment and Delivery System Reform:**

  - **Care Redesign and Transformation Programs:** These programs foster care transformation across the health system by expanding incentives for hospitals to work with other providers and creating opportunities for value-based care programs for non-hospital providers. These programs are discussed in Section V.

  - **Maryland Primary Care Program**: The Maryland Primary Care Program (MDPCP) enhances chronic care and health management for Medicare enrollees through advanced primary care. This program is discussed in Section V.

- **Population Health and Health Equity:** The TCOC Model encourages population health investment and provides financial credit for improvement in population health. These initiatives are discussed in Section IV.

Performance Targets

Under the TCOC Model, Maryland is accountable for total cost of care savings under Medicare, inclusive of care provided by both hospital and non-hospital providers, hospital quality outcomes, population health goals with a focus on diabetes, opioid use, and maternal and child health, advanced primary care through the MDPCP program, and other innovative program development for hospitals and non-hospital providers.

Maryland is required to meet the following six annual performance targets:

- **Annual Medicare Total Cost of Care Savings Target**: Each year Maryland must generate savings for the Medicare program on a total cost of care basis. In 2024, the annual savings target was $336 million.

- **TCOC Guardrail Test:** Maryland must not exceed national Medicare spending per beneficiary growth rate by more than one percent in any year and/or exceed that national growth rate by any amount for two years in a row.

- **All-Payer Hospital Revenue Growth Per Capita:** Maryland must keep all-payer hospital revenue growth equal to or below a compounded average of 3.58 percent per capita annually throughout the term of the contract.

- **Readmissions Reductions for Medicare:** Maryland must match or exceed national and prior Maryland Medicare readmissions rates.

- **All-Payer Reductions in Hospital- Acquired Conditions:** The State must match or exceed previous Maryland performance on all-payer potentially preventable condition (PPC) measures.

- **Hospital Revenue under Population-Based Payment Methodology:** Maryland must have at least 95 percent of hospital revenue under a population-based payment methodology (i.e., global budget revenue) over the course of the Model.

Maryland performance between CY 2019 and CY 2024 is shown in the table below.

Table 1. TCOC Model Performance, 2019-2024[2]

Performance Measures	Annual Targets	2019	2020	2021	2022	2023	2024
Annual Medicare TCOC Savings	$120M (2019), $156M (2020), $222M (2021), $267M (2022), $300M (2023), $336 (2024) in annual Maryland Medicare TCOC per Beneficiary of savings	✓	✓	✓	✓	✓	✓

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[2] These results have not yet been verified by CMMI.

TCOC Guardrail Test	Cannot exceed growth in National Medicare TCOC per beneficiary by more than 1% per year and cannot exceed the National Medicare TCOC per beneficiary by any amount for 2+ consecutive years	✓	✓	✓	×	✓	✓
All-Payer Revenue Limit	All-payer growth ≤ 3.58% per capita	✓	✓	✓	✓	✓	✓
Improvement in All-Payer Potentially Preventable Conditions	Exceed the CY 2018 PPC rates for 14 Potentially Preventable Conditions (PPCs) that comprise Maryland's Hospital Acquired Condition program (MHAC)	✓	✓	✓	✓	✓	✓
Readmissions Reductions for Medicare	Maryland's aggregate Medicare 30-day unadjusted all-cause, all-site readmission rate at regulated hospitals ≤ the National Readmission Rate for Medicare FFS beneficiaries	✓	✓	×[3]	×	✓	✓
Hospital Population Based Payment	≥ 95% of all Regulated Revenue for Maryland residents paid according to a Population-Based Payment methodology	✓	✓	✓	✓	✓	✓

In 2019 and 2020, Maryland met or exceeded all TCOC contractual annual performance targets. Maryland did not meet the Medicare readmissions reductions test in 2021, which requires the State to be below the National Medicare unadjusted readmission rate. CMMI granted an exogenous factor request for missing the 2021 target. In 2022, the State met four of the six contractual requirements. The State did not meet the requirements for the TCOC Guardrail Tests and the Readmissions Reductions for Medicare. The report submitted in 2023 discusses the factors influencing the State's performance and actions taken to address performance challenges in 2022.

Performance improved in 2023, and the State met all six contractual requirements under the TCOC Model. Notably, **the State generated $509 million in annual Medicare TCOC savings,** well beyond the $300 million annual savings requirement. Additionally, Maryland met the annual readmissions reduction test for the first time since 2020. In 2023, the HSCRC and CMMI negotiated the use of a risk-adjusted readmissions measure rather than the previous unadjusted measure. HSCRC believed that the State's unadjusted readmission rate increases in 2021 and 2022 were a result of higher patient acuity over time, a natural result of the TCOC Model which seeks to ensure that only the sickest patients receive care in hospitals, while directing less-acute care to more appropriate, lower-cost settings. CMMI concurred with the HSCRC's position and agreed to use a risk-adjusted readmissions measure for the first time in 2023.

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[3] HSCRC staff believe unadjusted readmission rate increased due to higher patient acuity over time. CMMI granted an exogenous factor request for missing the 2021 target.

In 2024, the State met all six contractual requirements under the TCOC Model, generating $795 million in annual Medicare TCOC savings, far surpassing the $336 million annual savings requirement. Maryland also met the annual readmissions reduction test for a second year in a row under the updated risk-adjusted measure. These results have not yet been verified by CMMI.

Section II: Total Cost of Care Financial Performance (Calendar Year 2024)

Total Hospital Per Capita Cost Growth

The Maryland TCOC Model agreement requires the State to limit its compounded average annual all-payer hospital per capita revenue growth rate to 3.58 percent. This number is based on the average growth in per capita gross state product (GSP) for the period 2002 through 2012. Through 2024, Maryland has an average per capita cost growth of 2.73 percent since 2013, 0.85 points below the 3.58 percent limit. From 2019 to 2024, Maryland had an average per capita all-payer revenue growth of 3.42 percent, slightly below the 3.58 percent target. This higher growth rate is primarily due to disruptions caused by the pandemic.

Medicare Savings & TCOC Performance

Under the TCOC Model, the total cost of care growth for Maryland Medicare beneficiaries may not exceed the national growth rate by more than one percent in any given year and may not exceed the national growth for two consecutive years. In CY 2024, hospital spending per capita ended favorably when compared with the nation. Non-hospital spending per capita was on trend compared to the nation during CY 2024. These trends continue to be monitored monthly.

Additionally, Maryland must build to an annual $408 million in TCOC savings by the eighth year of the Model (CY 2026). The target was $336 million in 2024 and will be $372 million in CY 2025. Maryland was required to generate an annual $336 million in TCOC savings in CY 2024. Maryland surpassed this requirement in CY 2024, achieving $795 million in annual savings.

Table 2. Annual Medicare TCOC Savings (in millions)

	2019	2022	2021	2022	2023	2024	2025	2026
Target	$120	$156	$222	$267	$300	$336	$372	$408
Actual	$365	$391	$378	$269	$509	$795	TBD	TBD

Policies Influencing Financial Performance and TCOC

Medicare Performance Adjustment (MPA)

The HSCRC implemented the Medicare Performance Adjustment (MPA, or "MPA Traditional") to assist the State in managing both hospital and non-hospital costs under the TCOC Model. The MPA adjusts hospital Medicare payments based on Medicare total cost of care performance. Medicare payment adjustments began in July 2019 (Rate Year 2020). In 2021, the TCOC Workgroup conducted a comprehensive review of the MPA policy, and the 2022 Commission Recommendation overhauled the MPA policy to make the measurement more stable and valid from year to year. The CY 2022 to CY 2023 changes were purposefully limited and this year's recommendation continues this approach by making only minor technical changes to the methodology. For CY 2025, the HSCRC made minor changes to the MPA policy to align with State and federal policy directives as well as feedback from the industry and other stakeholders; otherwise, the relevant policies will remain unchanged from the prior year.

Update Factor

The Update Factor policy is an annual system-wide update to a hospital's Global Budget Revenue (GBR). It incorporates quality, volume, and other adjustments that determine the reasonableness of hospital prices. The HSCRC staff considers the following conditions to balance when considering the update:

1. Meeting the requirements of the TCOC Model agreement;
2. Providing hospitals with the necessary resources to keep pace with changes in inflation and demographics;
3. Ensuring that hospitals have adequate resources to invest in care coordination and population health strategies for long-term success under the TCOC Model; and
4. Incorporating quality performance programs (discussed in Section III).

The Fiscal Year 2025 Update Factor was implemented on July 1, 2024, and included the following policy recommendations:

- An overall increase of 4.80 percent for revenue (inclusive of an uncompensated care increase and deficit assessment reduction), resulting in a 4.53 percent per capita revenue increase for hospitals under Global Budgets.
- All hospitals will receive a base inflation increase of 3.24 percent.
- Provide an overall increase of 3.24 percent for inflation to rates of hospitals not under Global Budgets (freestanding psychiatric hospitals and Mount Washington Pediatric Hospital).

The HSCRC recently approved the FY 2026 Update Factor for a July 1, 2025 implementation date. The Commission will continue to closely monitor performance targets for Medicare, including Medicare's growth

in TCOC and Hospital Cost of Care per beneficiary during the performance year. As always, the Commission has the authority to adjust rates as it deems necessary.

Section III: Hospital Quality Programs & Performance

HSCRC has four programs for measuring hospital quality of care and incentivizing improved outcomes during CY 2024. These include the Quality-Based Reimbursement (QBR) program, the Readmission Reduction Incentive Program (RRIP), which includes a measure to reduce socioeconomic disparities, the Maryland Hospital Acquired Conditions (MHAC) program, and the Potentially Avoidable Utilization (PAU) Savings program. Each of these programs is described below. HSCRC also continues work on analyzing emergency department wait times and improvement opportunities. Within this workstream, a new policy for CY 2025, ED-Hospital Throughput Best Practices, was approved.

Quality-Based Reimbursement (QBR) Program

Established in FY 2010, the QBR program adjusts hospital payments based on their performance on a number of quality-of-care measures. These include clinical care measures, patient and community engagement measures, and safety measures. Each domain is then weighted to determine hospitals' final scores on the program (Table 3).

Table 3. QBR Measure Domain Weights for FY2026

Measure Domain	Weight
Safety (Healthcare-Associated Infections and Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicator (PSI) 90 Composite measure.	0.30
Clinical Care (Inpatient Survival and 30-Day Survival)	0.10
Patient and Community Engagement (HCAHPS survey and Timely Follow Up after Acute Exacerbation of Chronic Conditions, ED Length of Stay).	0.60

In FY 2026, the HSCRC modified the measurement domains and weights to target areas of needed improvement for Maryland. Specifically, due to the poor performance on Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) compared to the nation, and the inclusion of the Emergency Department Length of Stay measure, the PCE domain was increased from 50 percent to 60 percent of the total QBR score. In FY 2026, the amount of total hospital inpatient revenue at-risk for scaling was held to a two percent maximum penalty, and the maximum reward was correspondingly maintained at two percent. Maryland does not include an efficiency measure as a component of the QBR Program, but it does apply a PAU savings adjustment to hospital global budgets and evaluates Medicare payments based on hospitals' Total Cost of Care performance under the MPA.

Since FY 2019, the QBR reward and penalty adjustments to global budgets have been determined based on a preset scale rather than relatively ranking hospital performance and penalizing those with less than average performance. This was designed to provide hospitals with predictable revenue adjustments and predetermined quality improvement targets.

Updated Data Trends

Maryland's QBR program is similar in design and detail to the federal Medicare Value-Based Purchasing Program. Data trends for the most recently available specified performance periods are presented below. Staff notes that the performance periods differ across measures based on data availability.

Safety Domain

For the healthcare-associated infection measures in the Safety domain, as illustrated in Figure 2 below, Maryland is performing worse (lower rate is better) than the nation on CAUTI, SSI-Hysterectomy, and C.Diff, performs better than the nation on SSI-Colon and MRSA, and performs on par with the nation on CLABSI.[4]

Figure 2. Maryland Performance VS Nation on Healthcare Associated Infections

Base Year*: CY 2019 **Performance Year**: CY 2023*

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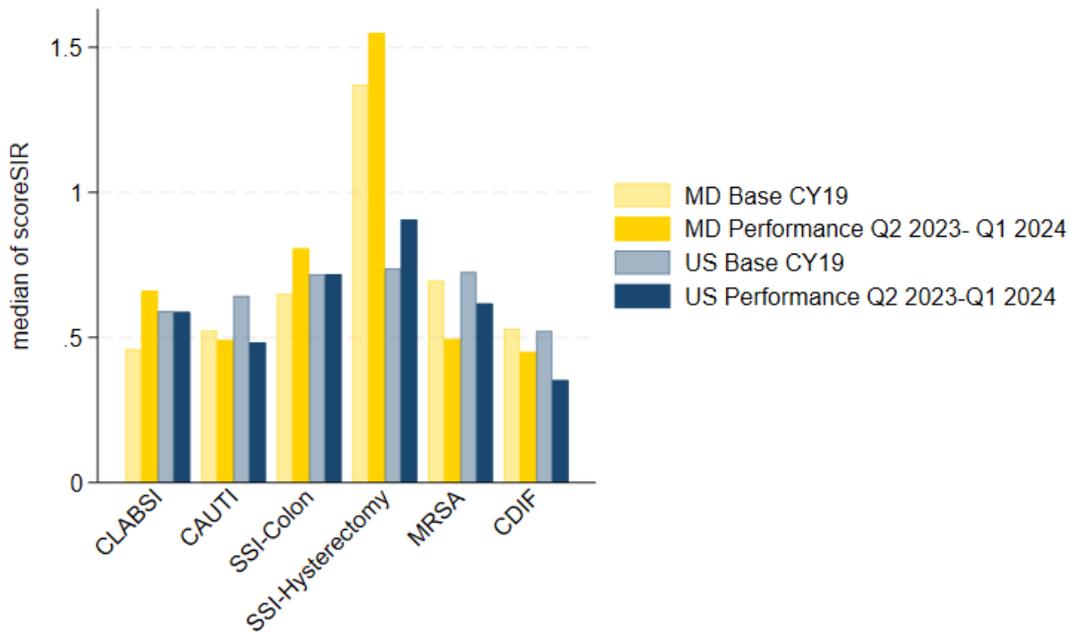
[4] Catheter-associated urinary tract infections (CAUTI), Surgical Site Infection (SSI) - Colon, Clostridioides difficile (C. Diff), Central Line-associated Bloodstream Infection (CLABSI), Surgical Site Infection (SSI) - Hysterectomy, and Methicillin-resistant Staphylococcus aureus (MRSA).

On the all-payer PSI-90 composite measure and the component indicators, Maryland's statewide performance has improved (lower rate is better) from FY 2023 compared to CY 2024 for all measures except PSI08- Fall with Hip Fracture, PSI10- Postoperative Kidney Injury with Dialysis, PSI13- Postoperative Sepsis, and PSI11- Postoperative Respiratory Failure as illustrated in Figure 3 below. Improvements have been made on the other six components of PSI-90 and the composite PSI-90 rate.

Figure 3. Maryland All-Payer, AHRQ PSI 90 Composite Measure Performance FY 2023 VS CY 2024
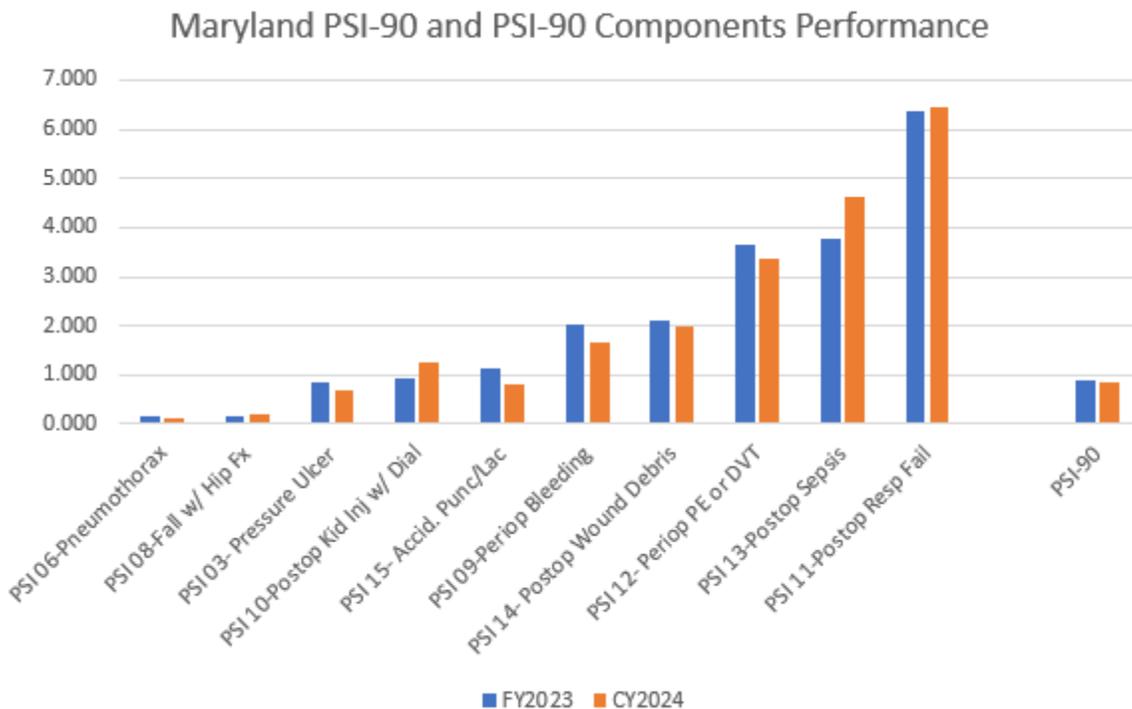
Source: HSCRC Case-Mix Data

Clinical Care Domain

The Clinical Care domain consists of Inpatient Mortality and the 30-Day Mortality measure. Ten of 40 hospitals have worsened slightly in CY 2024 when compared to FY 2023 on the Inpatient Mortality measure (Figure 4); 16 hospitals saw a decline in their performance in CY 2024 when compared to FY 2023 on the 30-day Mortality measure (Figure 5).

Figure 4. RY 2025 QBR Risk-Adjusted Survival Rate

Risk-Adjusted Survival Rate FY 2023 vs CY 2024

Source: HSCRC Case-Mix Data

Figure 5. RY 2026 QBR Risk-Adjusted 30-Day Survival Rate

Risk-Adjusted 30-Day Survival Rate, FY 2023 vs CY 2024
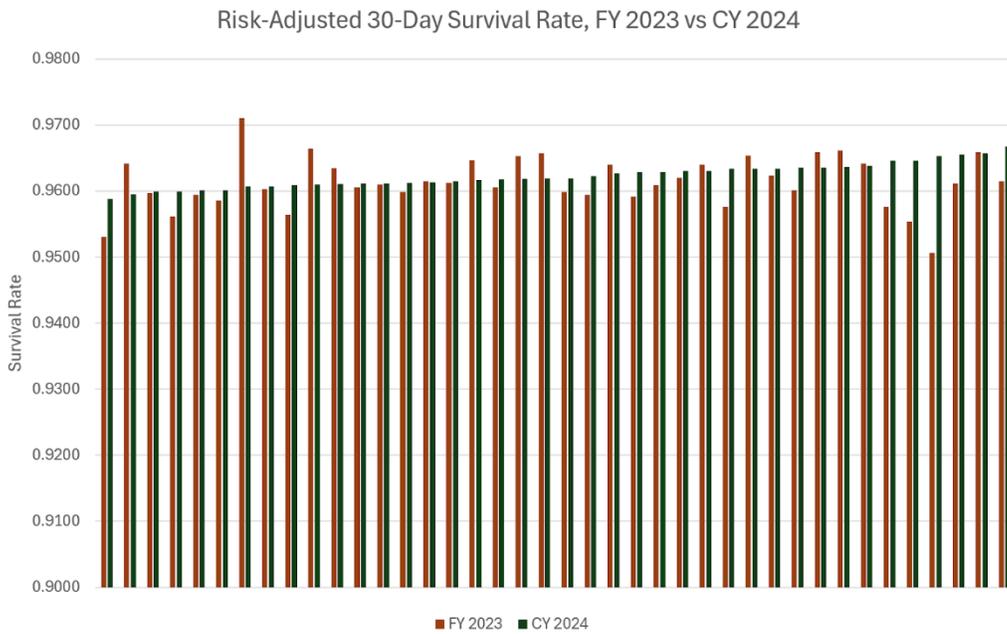
Patient and Community Engagement (PCE) Domain

Maryland continues to lag the nation in performance on the HCAHPS patient experience measures (Figure 6). HSCRC staff remains concerned about Maryland HCAHPS performance. In the FY 2026 QBR policy, the HSCRC increased the weighting of the HCAHPS measures in determining hospitals' overall scores to incentivize improvement in patient experience. To incentivize incremental improvements, the HSCRC incorporates the use of linear scores weighted at 10 percent of the PCE domain. Starting in December 2024, an HCAHPS Learning Collaborative was started in collaboration with the Maryland Hospital Association. The initial HCAHPS Collaborative meetings have included presentations from national experts, examined Maryland-specific HCAHPS data, and collected information from members of the collaborative about how their hospitals are approaching improving patient experience scores. A report on the findings of the Learning Collaborative is anticipated by the end of CY 2025 and will be shared publicly.

Figure 6. HCAHPS - Maryland HCAHPS Top Box Scores Compared to the Nation, April 2023-March 2024
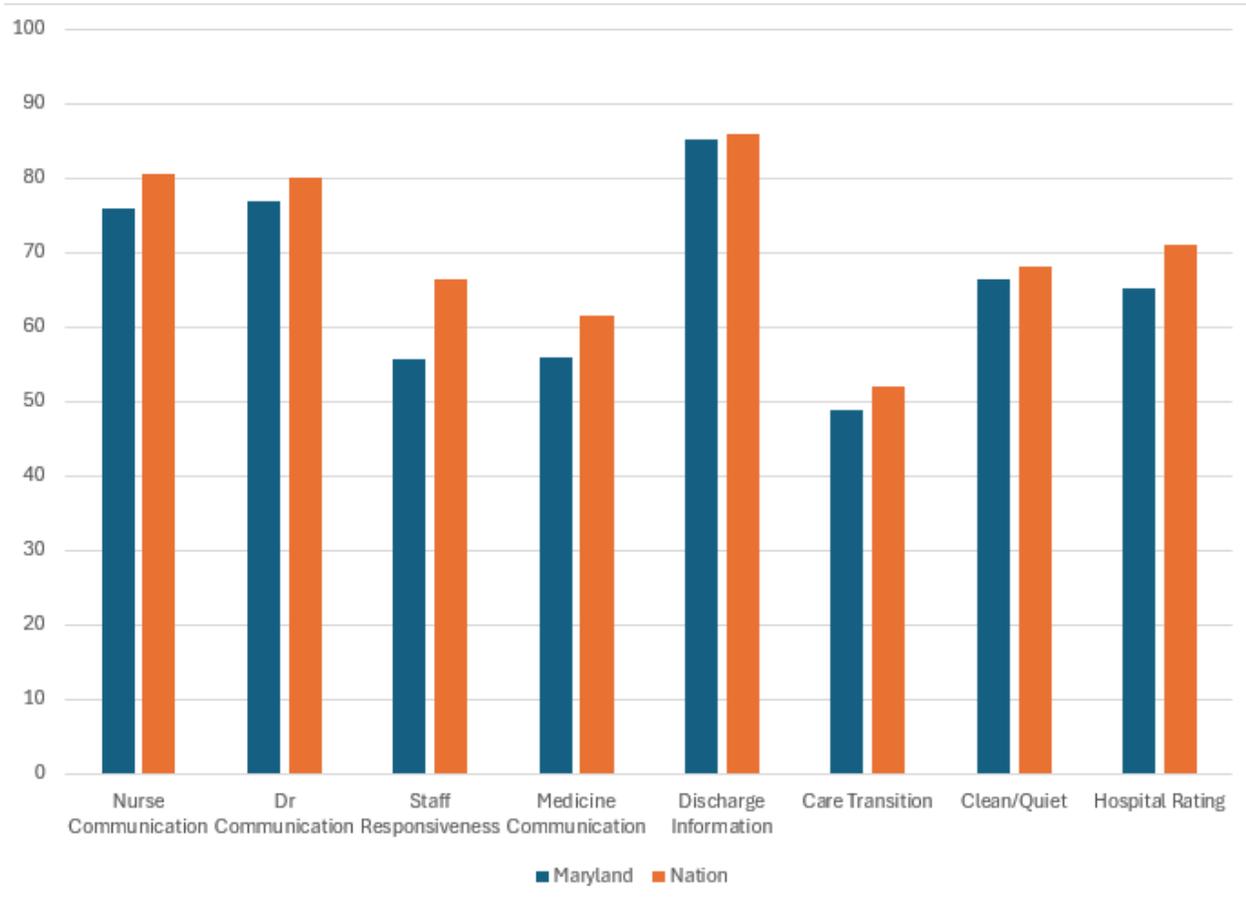
Source: CMS Compare Data

Timely Follow-Up measures whether a patient has received necessary follow-up care within a specific timeframe after a healthcare event, like a hospital discharge, for specific diagnoses. Between FY 2023 and CY 2024, overall performance for Timely Follow Up improved slightly from 71.56 percent to 71.68 percent. Asthma saw the most notable improvement (+2.06%), followed by a small gain in COPD (+0.34%). The other four conditions saw minor declines, with CAD declining by 0.57 percent, diabetes declining by 0.25 percent, HTN declining by 0.31 percent, and CHF declining by 0.01 percent) (Figure 7).

Figure 7. Timely Follow-Up Following Acute Exacerbation for Patients with Chronic Conditions[5]
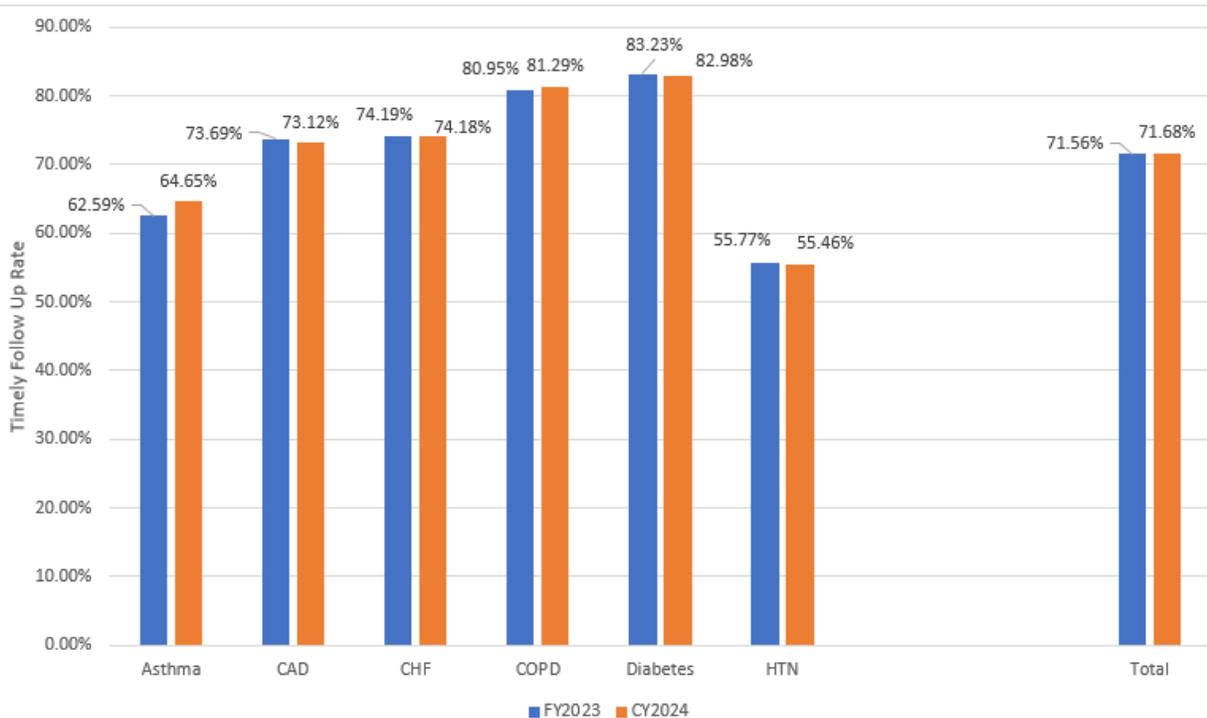
Source: CMS Claims and Claims Line Feed (CCLF) Data

Maryland Hospital Acquired Conditions (MHAC) Program

Maryland measures Hospital Acquired Conditions (HACs) using a list of potentially preventable complications (PPCs) developed by Solventum, previously known as 3M Health Information Systems (HIS). PPCs are defined as post-admission harmful events (*e.g.,* accidental laceration during a procedure) or negative outcomes (*e.g.,* hospital-acquired pneumonia) that may result from the process of care and

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[5] Chronic Condition Acronyms: Coronary artery disease (CAD), congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), hypertension (HTN)

treatment rather than from a natural progression of underlying disease. The MHAC program provides hospital rewards and penalties for case-mix adjusted rates of PPCs for all-payers.

By the end of the All-Payer Model (APM) in 2018, Maryland had achieved a 51.50 percent reduction in all-payer, case-mix adjusted PPC rates, far exceeding the required 30 percent reduction requirement. The HSCRC worked with hospitals to build on the State's commendable work under the APM to incentivize further reductions and attainment of high quality in PPCs under the TCOC Model in the updated RY 2021 MHAC Policy. During CY 2019, the overhauled MHAC policy focused on a narrower list of clinically recommended PPCs that are clinically significant, actionable, and in general have higher statewide rates and variation across hospitals. Beginning in RY 2021, the MHAC policy also only rewards hospitals for achieving low PPC rates and no longer rewards them specifically for improvements in PPC rates over time until they reach the attainment standards. The approved RY 2026 policy maintains the same methodology but added encephalopathy to the payment program due to increases in the observed to expected (O/E) ratio since CY 2016.

Based on CY 2024 final data, there has been an improvement in the PPCs included in the payment program, with fewer PPCs overall compared to the 2018 base year.[6] However, there have also been increases in the case-mix adjusted PPC rate for monitoring PPCs (*i.e.,* those not included in the payment program). While this is not surprising, since the monitoring PPCs generally have lower numbers or clinical/coding concerns, staff continue to monitor all PPCs and will add back into payment PPCs that meet the inclusion criteria (as was done in RY 2025 with the re-inclusion of encephalopathy).

Figure 8. Case-Mix Adjusted PPC Rate CY 2018-CY 2023

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[6] There has been a 40.87 percent decrease in the ratio based on the most recent data available (CY 2018 O/E ratio = 1.15 and CY 2024 O/E ratio = 0.68). A ratio lower than one means that fewer PPCs than expected were observed.

All-Payer Case-Mixed Adjusted PPC Rate by Quarter

	Monitoring All-Payer Case-Mix Adjusted PPC Rate		Payment All-Payer Case-Mix Adjusted PPC Rate	
	2018	0.82	2018	1.15
	2024	0.88	2024	0.68
% Change		7.32%	% Change	-40.87%
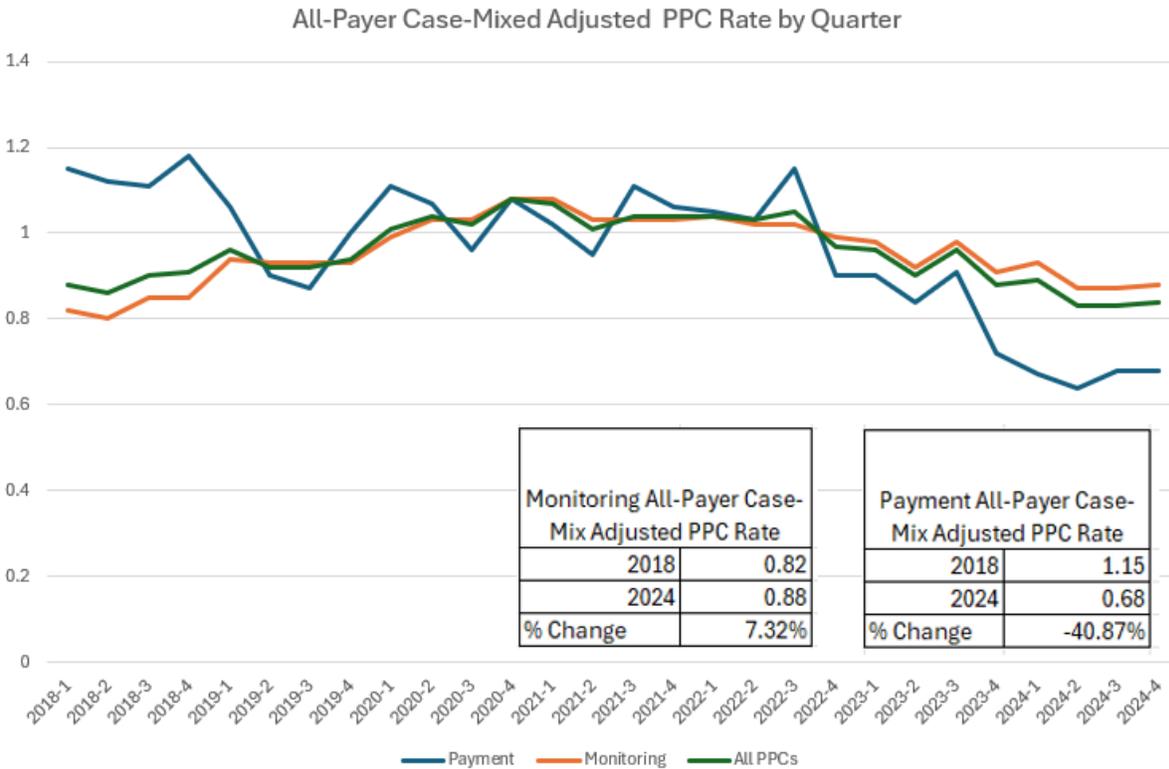
Source: HSCRC Case-Mix Data

Readmission Reduction Incentive Program (RRIP)

The APM required Maryland's hospital readmission rate for Medicare FFS beneficiaries to be at or below the national readmission rate by the end of 2018, which Maryland successfully achieved. When the APM concluded in December 2018, the Maryland Medicare FFS Readmission Rate was 0.05 percentage points lower than the National Medicare FFS Readmission Rate (Maryland: 15.40 percent; nation: 15.45 percent). In 2019 and 2020, Maryland maintained the State's achievements under the APM. However, starting in CY 2021 the Maryland Medicare unadjusted readmission rate was above the nation. This increase in the unadjusted readmission rate over the course of the model was not unanticipated given that Maryland hospitals had strong incentives to care for lower acuity patients outside of the inpatient setting when appropriate. Thus, the HSCRC staff had been in discussions with CMMI since the start of the TCOC model to move to a risk-adjusted measure. Starting in CY 2023, CMMI moved to a risk-adjusted measure similar to the CMS Hospital-Wide Readmission (HWR) measure with a few modifications. Maryland and the Nation's performance on the CMMI adapted HWR measure is presented in Figure 9. The presented statistic is the Standardized Risk Ratio (SRR) which indicates how observed readmission rates compare to expected readmission rates; a ratio less than one indicates lower than expected readmission rates. Since Maryland's SRR and confidence intervals for all years are below one, the State performed statistically significantly

better than the nation on this measure in CYs 2018-2023. In the future, HSCRC staff anticipate that CMMI may include observation stays into the readmission measure. This aligns with the HSCRC staff's strategic plan to monitor both observation and emergency department revisits as part of the all-payer Readmission Reduction Incentive Program (RRIP). Although no longer a contractual requirement, Figure 10 presents how the State performs on an unadjusted basis compared to the Nation. In November 2024, Maryland performed better than the Nation with an unadjusted readmission rate of 15.27 percent vs 15.75 percent, respectively.

Figure 9. Maryland vs National Risk-Adjusted Readmission Rates, CY 2018 and CY 2023
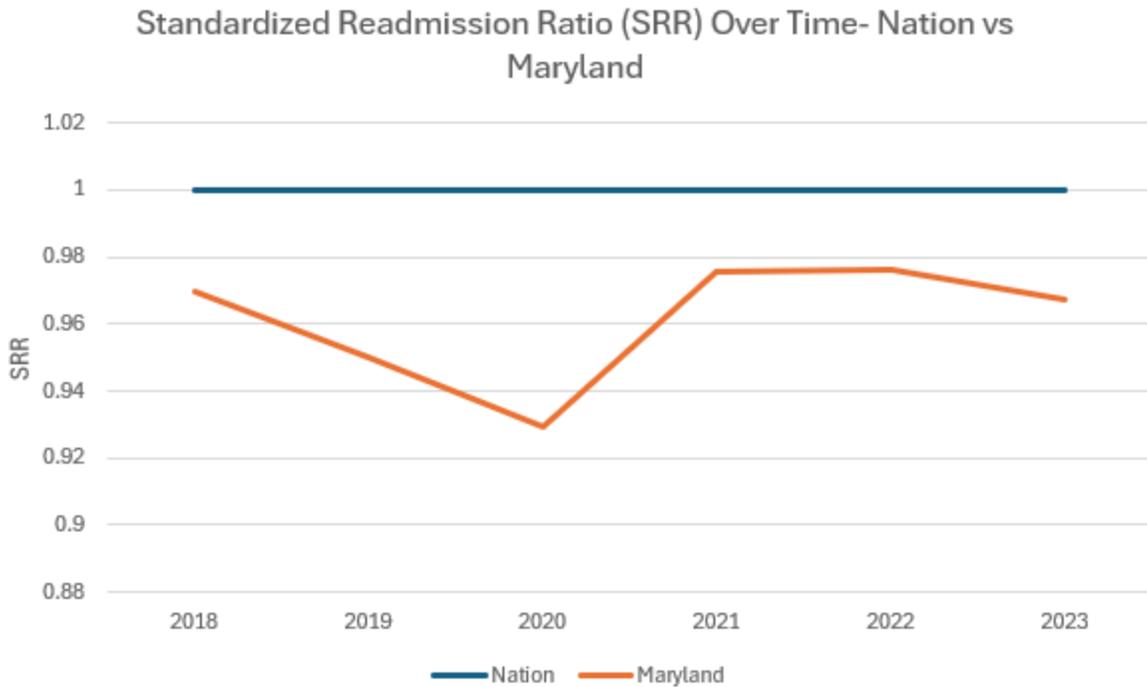
Figure 10. Maryland vs National Unadjusted Readmission Rates, CY 2012- November 2024

Unadjusted Medicare Readmissions - Through November 2024

	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%	15.75%
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%	15.27%
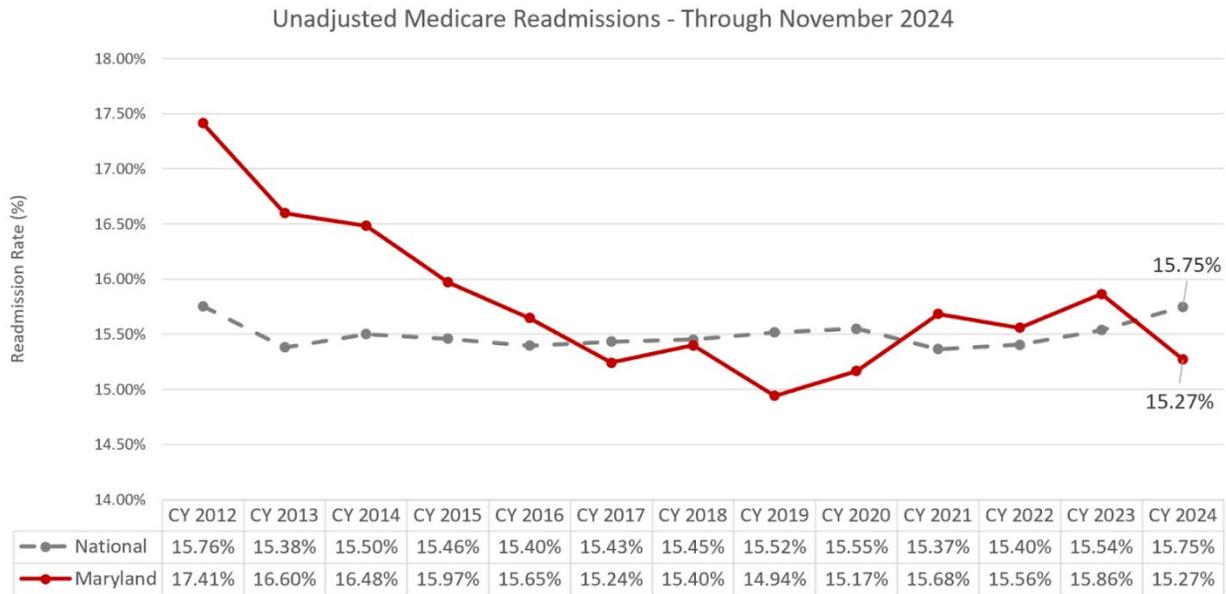
Source: Chronic Conditions Warehouse (CCW) Database

Potentially Avoidable Utilization (PAU) Shared Savings Policy

The PAU Savings policy measures the revenue associated with readmissions as well as per capita avoidable admissions as defined under the Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicator (PQI) logic. For FY 2025, the Commission amended the PAU Shared Savings Policy from solely a savings generator to recognizing and providing a zero-percent reward (no reduction) for hospitals that have successfully reduced PAU relative to the statewide performance. Thus, the Commission implemented an incremental prospective savings requirement of 0.02 percent of total hospital revenue, for those hospitals that have not successfully reduced PAU relative to the statewide performance which is distributed based on the hospital's share of revenue deemed to be potentially avoidable.

Emergency Department (ED) Initiatives

The HSCRC has prioritized examining root cause drivers of ED wait times, as well as opportunities for driving improvement. In addition, the Maryland Emergency Department Wait Time Reduction Commission was established during the 2024 legislative session and went into effect on July 1, 2024. The MDH Secretary and the HSCRC Executive Director are co-chairs of this new ED Commission. The new ED Commission and the HSCRC are committed to working to address the longer ED wait times experienced in the State.

HSCRC ED Policies

The HSCRC approved the addition of an Emergency Department Length of Stay (ED LOS) measure into the RY 2026 QBR program in December 2023, in recognition of the need for Maryland to reduce ED LOS. Since the Commission approval, staff has convened a data subgroup to develop the data submission requirements and a measure and incentive methodology to assess improvement in ED LOS from CY 2023 to CY 2024. HSCRC staff are still finalizing measure results with stakeholders, and the continued use of this measure was approved for RY 2027 QBR policy. The payment incentive measures the amount of time a patient spends in the ED from the time of ED arrival to the time of physical departure from the ED room for non-psychiatric patients who are admitted to the hospital from the ED.

In March 2025, the Commission approved an ED-Hospital Throughput Best Practice policy focused on process and structural opportunities for improvement that impact patient flow and throughput across the hospital continuum of care. The policy specifications are as follows:

1. Building upon the ongoing work of staff and key stakeholders, refine the specifications developed by the Best Practice subgroup on a set of six Hospital Best Practices that are designed to improve the ED and hospital throughput and reduce ED LOS.
   a. For each best practice identified, three weighted tiers were developed with corresponding measures that reflect the fidelity and intensity of each best practice.
2. Require hospitals to select two Best Practices to implement and report data on for RY 2027.
   a. Failure to implement and report data to the Commission by October 2025 will result in a 0.1 percent penalty on all-payer inpatient revenue to be assessed in January 2026. The HSCRC will follow its extraordinary circumstances exception policy to address any unforeseen events (*e.g.,* cyberattack, natural disaster, etc.).
3. HSCRC proposed that subsequent rate years include a +/- 0.25 percent inpatient hospital revenue at risk tied to performance on these best practice metrics. However, the HSCRC intends to evaluate the impact of the Year 1 best practices and make a final recommendation for future rate years based on that assessment.

Maryland Emergency Department Wait Time Commission

In addition to HSCRC-led programs focused on ED LOS, House Bill 1143—establishing the Maryland Emergency Department Wait Time Reduction Commission—went into effect on July 1, 2024, and will remain in effect until June 30, 2027. Annual reports are due in November 2025 and November 2026. The Commission's purpose is to address system-wide factors contributing to increased ED wait times.

The specific focus is to develop strategies and initiatives to recommend to state and local agencies, hospitals, and health care providers to reduce ED wait times, including initiatives that:

- Ensure patients are seen in the most appropriate setting;
- Improve hospital efficiency by maximizing flow of ED and Inpatient (IP) throughput;
- Improve post discharge resources to facilitate timely ED and IP discharge;
- Identify and recommend improvements for the collection and submission of data; and
- Facilitate sharing of best practices

The ED Wait Time Reduction Commission met for the first time in October 2024. Four subgroups were established to report their specific scope of work to the ED Wait Time Reduction Commission. The four subgroups include:

1. Best Practices Subgroup - The pre-existing HSCRC Best Practice workgroup transitioned into this subgroup, focusing on developing a set of hospital best practices and scoring criteria to improve overall hospital throughput and reduce ED length of stay, advise on revenue at-risk and scaled financial incentives, and provide input on data collection and auditing.

2. Access to Non-Hospital Care Subgroup - This subgroup is focused on integration and optimization of best practices and data analytics for advanced primary care, specialty care, home health, post-acute care, and ancillary services in an effort to reduce avoidable ED and hospital utilization and improve care transition workflows throughout the continuum of care. The initial priority area of focus is on healthcare settings that may continue to care for patients after discharge from inpatient or Emergency Department care, referred to collectively as Post Acute Care.

3. Data Subgroup - This subgroup is focused on identifying, developing and integrating different data sources across healthcare platforms to include ambulatory, acute care, post-acute care, and third-party data.

4. Capacity, Operations & Staffing Subgroup - This subgroup is focused on assessing access and capacity across the care continuum throughout the State, collaborating with commercial payers, Medicare, and Medicaid, and optimizing workforce development opportunities.

Figure 11. Maryland Emergency Department Wait Time Reduction Commission
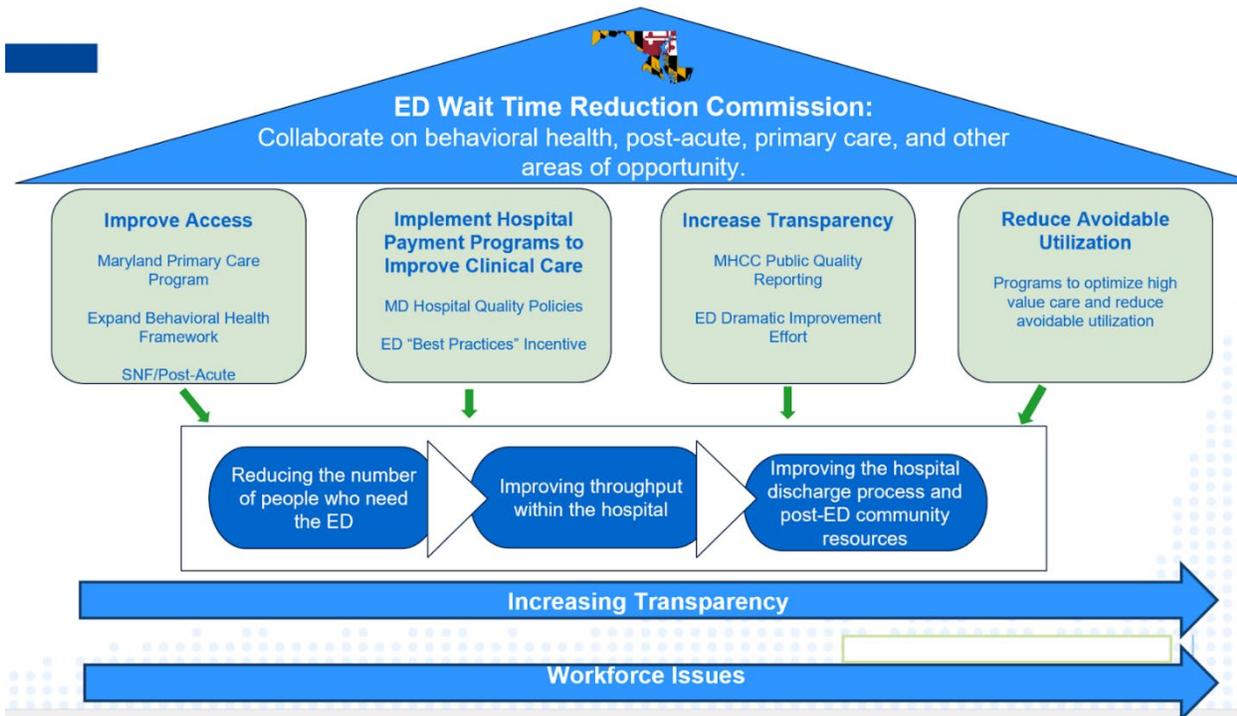
The Emergency Department Wait Time Reduction Commission continues to meet, tour emergency departments, and assess subgroup recommendations. The first report detailing the Emergency Department Commission's findings and progress is due to the General Assembly in November 2025.

Section IV: Population Health

Statewide Integrated Health Improvement Strategy

In 2021, CMMI approved Maryland's Statewide Integrated Health Improvement Strategy (SIHIS). This strategy was designed to improve health outcomes, achieve health equity, and control the total cost of care for Marylanders. Maryland established improvement goals across three domains: Hospital Quality, Care Transformation, and Total Population Health. Total Population Health encompasses diabetes, opioid use disorder, and maternal and child health. For each domain, the SIHIS proposal provided a Model Year 3 milestone that was measured on CY 2021 data, a Model Year 5 interim target that was measured on CY 2023 data, and a Model Year 8 final target that will be measured on CY 2026 data.

Table 4 outlines the goals for each SIHIS domain and indicates whether Maryland met the Year 5 interim targets. Overall, the State has seen mixed results. Maryland met the Year 5 target or outperformed national benchmarks for five of the eight goals. Performance on the remaining three goals either fell short of the target or is still being evaluated.

Table 4. Performance Results against Year 5 Targets

Domain Area	Goal(s)	Met Year 5 Goal?
Domain 1 – Hospital Quality	Reduce avoidable admissions	Yes
	Improve Readmission Rates by Reducing Within-Hospital Disparities	No
Domain 2 – Care Transformation Across the System	(1) Increase the amount of Medicare TCOC or number of Medicare beneficiaries under Care Transformation Initiatives (CTIs), Care Redesign Program, or successor payment model	Yes
	(2) Improve care coordination for patients with chronic conditions	No, but exceeded the nation
Domain 3 – Total Population Health "Diabetes"	Reduce the mean Body Mass Index (BMI) for adult Maryland residents compared to a control group of similar states	Determining performance
Domain 3 - Total Population Health "Opioid Use Disorder"	Improve overdose mortality when compared to a control group of similar states	No, but exceeded the nation
Domain 3 - Total Population Health "Maternal and Child Health"	Reduce severe maternal morbidity rate	No
	Decrease asthma-related emergency department visit rates for ages 2-17	Yes, within 2 months of performance period

HSCRC and MDH continue to implement a broad array of programs and interventions aimed at improving performance across the SIHIS domains. As part of the AHEAD Model, the State is in the process of updating its population health strategy, which will establish new goals and targets that may differ from those outlined in SIHIS. HSCRC will continue to monitor progress on the current SIHIS goals during this transition. A detailed view of performance over time for all SIHIS measures is available in the SIHIS Directional Indicators Dashboard, included in the Appendix.

Outcomes Based Credits

Under the TCOC Model, the State can receive credit for savings generated by addressing health conditions that affect Marylanders in large numbers. By improving the health of the population, the State can also reduce all-payer healthcare spending, a key goal of the Model. This unique opportunity recognizes that the State is investing in programs that prevent and delay chronic health conditions over the long term but may not immediately result in cost savings. Under the Model, if Maryland is able to address diabetes, opioid use

disorder, and hypertension as outlined below, the State will receive financial credit to offset federal investment in Maryland. This innovative approach supports Maryland's efforts to further incentivize health system transformation and public health intervention alignment.

Diabetes

Slowing or reducing the growth in diabetes incidence represents a huge opportunity for the State. Type 2 Diabetes remains a high-burden, high-cost condition that is avoidable with medical, lifestyle, and other interventions. As of 2024, approximately 578,400 adults in Maryland (10.5% of the adult population) have diagnosed diabetes and every year, nearly 35,000 adults in Maryland are diagnosed with diabetes. In Maryland, diagnosed diabetes is estimated to cost around $8 billion annually, including $6 billion in direct medical expenses.

Importantly, a reduction in diabetes incidence represents a statewide opportunity to improve health equity as acknowledged in nearly all community health needs assessments and hospital community benefit reports. Successful interventions can promote healthy lifestyles, address economic barriers to adequate health care, and improve primary care access. HSCRC is working to incentivize hospitals' work with community partners, including local health departments and other healthcare-focused organizations, to prevent diabetes, which will ultimately help hospitals reduce healthcare spending under the TCOC Model.

In July 2019, CMS approved Maryland's first outcomes-based credit (OBC) for aversion of diabetes incidence. Under the OBC methodology, if the diabetes incidence rate changes from baseline more favorably in Maryland than in a group of control states, Maryland is eligible to receive a financial credit that will help the State meet its TCOC savings targets. The State of Maryland was not entitled to a diabetes outcomes-based credit in 2023 based on the established methodology, but did qualify for an alternate credit from CMS under the Complementary Measure Supplement due to reductions in statewide Body Mass Index (BMI). The State received $1,136,838 for its performance in CY 2023.

Opioids

The use of and addiction to opioids is a public health and economic crisis, with increased costs in healthcare, lost productivity, and criminal justice involvement. Maryland continues a statewide focus on addressing the State's opioid epidemic. Recognizing the impact of opioid use on the healthcare system, the HSCRC is developing an outcomes-based credit methodology focused on opioid use disorder (OUD). As in the diabetes credit, CMS would provide the State with financial credit for federal TCOC Model investments if Maryland can make progress on reducing opioid use disorder (OUD). The credit will enable hospitals to invest additional dollars into OUD prevention and treatment as part of their global budgets, which may be reinforced with additional pay-for-performance measures related to substance use. The OUD credit methodology involves two workstreams: a cost-per-case analysis, and an approach to measuring OUD

performance over time against a control group. The HSCRC has completed work on the cost methodology and retained a contractor to develop the performance methodology. The HSCRC encountered significant data access challenges due to the COVID pandemic but has recently acquired national all-payer opioid-related claims data. The HSCRC anticipates submitting the opioid methodology to CMS in 2025.

Hypertension

Hypertension, and chronic diseases that are sequelae of hypertension, represent a major source of disease burden and cost in Maryland. During 2021, the HSCRC applied a credit selection methodology that evaluated diseases and risk factors across four domains: burden, preventability, cost, and health equity impact. That analysis, along with conversations with stakeholders, resulted in identification of hypertension as the State's third outcome credit focus. HSCRC and its contractors have concluded that analyzing all-payer, all-setting claims is the most feasible way to track year-to-year changes in hypertension incidence. The State is in the final phase of acquiring data to complete development on the methodology and expects to submit a credit proposal in 2025.

Revenue for Reform

Revenue for Reform was approved in July 2023 as part of the HSCRC's Integrated Efficiency Policy (see Section VII). The primary objective of Revenue for Reform is to allocate hospital-retained revenue toward community-based population health initiatives, thereby supporting broader health improvement efforts. The policy is designed to create a safe harbor for population health investments—protecting them from potential revenue reductions under the Integrated Efficiency Policy, which withholds funds from hospitals identified as inefficient compared to their peers. Under the current framework, hospitals are required to sustain these investments annually on an ongoing basis, though the specific use of the funds may evolve over time.

In FY 2024, $26 million was directed to community health and expanding/maintaining access to physicians in Baltimore City, the Eastern Shore, and the DC Metro region. Hospitals reported program activities and highlighted key performance outcomes, as shown in Table 5.

Table 5. FY 2024 Hospital-Reported Program Activities and Highlights

Category	Intervention Goal
Physician Spending: Primary Care & Behavioral Health	• Increases in care management program enrollment • Expansion of diabetes resources and bilingual options • Increasing telehealth offerings and access to timely and urgent visits • Expansion of community partners to address health-related social needs
Community Health: Primary Care & Behavioral Health	• Expanding access to psychiatric appointments and increasing unique patients served

Category	Intervention Goal
	- Expansion of primary care services to low-income and uninsured individuals - Launch of new pediatric and OBGYN programs - Expansion of community partners to address health-related social needs
Community Health: Care Management	- Reductions in total cost of care and readmission rates for patients with congestive heart failure enrolled in clinic post-hospital discharge - Reductions in ED visits, IP admissions, and OBS for high-utilizer patients - Reductions in per member per month and total cost of care for patients enrolled in care management
Community Health: Post-Acute and Uninsured Care	- Saved inpatient days – 16,795 saved IP days through transitions to appropriate post-acute settings - Reductions in ED visit rates and average cost-per-visit post program enrollment - Reduction in ED visits, hospitalizations, and readmissions for Medicaid patients enrolled in ACIS pilot

In FY 2025, $60.1 million was directed to community health and expanding and maintaining access to physicians in Baltimore City, Prince George's County, Montgomery County, and the Eastern Shore. Examples of approved intervention goals are shown in Table 6 below.

Table 6. FY 2025 Revenue for Reform Approved Investments

Category	Intervention Goal
Physician Spending: Primary Care & Behavioral Health	- Increase the number of primary care (including pediatric and OBGYN) and behavioral health providers in HPSAs/MUAs - Expand telehealth access - Recruit new providers
Community Health: Primary Care & Behavioral Health	- Expand primary care (including pediatric and OBGYN) and/behavioral health to underinsured and uninsured populations through FQHC support - Reduce substance use disorder and overdose deaths - Increase patient-self management of chronic diseases
Community Health: Care Management	- Expand post-discharge care for high-risk patients (infectious diseases, advanced chronic conditions) - Increase health-related social needs (HRSN) screening and community referral partners

Category	Intervention Goal
	• Provide wraparound services to high-risk patients with advanced chronic disease
Community Health: Post-Acute Care and Housing Supports for Uninsured Populations	• Expand access to post-acute care (home health, SNF care) for uninsured and underinsured patient populations • Expand temporary housing for high-needs patients experiencing housing instability

Section V: Care Transformation & Partnership Programs

Provider Alignment Programs

A key strategy to achieving the goals of the TCOC Model is implementing care redesign strategies to help hospitals and other providers gain access to new tools and resources so that they can better meet the needs of patients and improve population health. To achieve this, the HSCRC develops, operates, and supports Provider Alignment Programs to foster collaboration between hospitals and non-hospital providers (e.g., physicians, skilled-nursing facilities, home health agencies, nurses, etc.), payers (e.g., Medicare Advantage plans), and community-based organizations (e.g., non-profits, faith-based organizations, etc.)

Care Redesign Program (CRP)

The Maryland Care Redesign Program (CRP) aims to support effective care management and population health activities and deliver high quality, efficient, well-coordinated episodes of care, with a focus on high and rising-risk populations. An episode of care groups all relevant healthcare services related to a specific health condition or procedure within a defined timeframe to better manage cost and outcomes. CRP is designed for hospitals to engage non-hospital providers, such as physicians and post-acute care providers, to improve care delivery, quality of care, and control TCOC growth. The Chesapeake Regional Information System for our Patients (CRISP) serves as the administrator of CRP. During 2025, the State is operating two care redesign tracks: the Episode Quality Improvement Program (EQIP) and the Episode Care Improvement Program (ECIP).

Clinicians who participate in CRP tracks can become Qualified Practitioners (QPs) under the CMS Quality Payment Program if they meet either payment or patient participation thresholds. QPs receive the following benefits: Advanced Alternative Payment Model incentive payments paid two years after the performance period; exclusion from Merit-based Incentive Payment Program (MIPS) reporting; and exclusion from MIPS payment adjustments.

EQIP directly engages specialist physicians in care transformation and value-based payment through an episode-based approach. Physicians can earn a portion of the Medicare savings they create through delivering efficient and high-quality patient care. Each EQIP entity must designate at least one care redesign intervention per clinical episode category. Beyond that requirement, EQIP entities design and implement care redesign interventions based on their knowledge and expertise regarding what will be of most value to their patients and the State.

In 2023, the second year of the program, EQIP generated $36.7 million in savings. This is an increase of 81.6 percent from $20.2 million in 2022. EQIP continues to add specialty areas each program year. In CY 2025, 128 EQIP entities are participating, reflecting 3,362 care partners across 38 specialties.

ECIP allows a hospital to link payments across providers during an episode of care and share incentives with care partners. Maryland modeled ECIP on the CMS Bundled Payments for Care Improvement Program Advanced (BPCI Advanced) Model. ECIP's bundled payment approach aligns incentives across hospitals, physicians, and post-acute care facilities to generate savings and improve quality through better care management during episodes.

ECIP has 15 hospitals participating in 2025, with 4,432 individual care partners and 16 facility care partners. The HSCRC made policy changes to ECIP for CY 2023, aligning ECIP with Care Transformation Initiatives and requiring hospitals to share incentives with care partners and/or provide significant resource sharing to care partners. In 2023, the most recent year of available results, ECIP earned $5.6 million in savings.

Episode Quality Improvement Program (EQIP)

The Episode Quality Improvement Program (EQIP) is a voluntary program that engages specialist physicians who treat Maryland Medicare beneficiaries in care transformation and value-based payment through an episode-based approach. This program is specific to Maryland and customized to meet the needs of Maryland's health care delivery system and specialist physicians. EQIP offers Maryland providers the opportunity to coordinate care through clinical episodes focused on increasing accountability for patients throughout specialty-led disease courses and treatments. Participating providers elect to have their performance on improving quality and reducing costs of care across an episode measured and can earn incentive payments based on positive performance. The first Performance Year of EQIP began on January 1, 2022, focused on the specialty areas of cardiology, gastroenterology, and orthopedics. The second Performance Year, which began January 1, 2023, expanded the program to include Allergy, Dermatology, Emergency Department, Ophthalmology and Urology episodes. No additional specialties were added in the third Performance Year, which started on January 1, 2024. After extensive analysis and meetings with specialty stakeholders, the HSCRC moved forward with utilizing Patient-Centered Episodes of Care System (PACES) for EQIP, starting in PY4 (CY2025). While many PACES episodes are undergoing final clinical review and updates, the system offers much more complete coverage than the prior system,

PROMETHEUS, and paves the way for easier, more seamless program expansion in future years. Current EQIP episode categories are well-covered by finalized PACES categories and overall, a high degree of alignment has been found for episodes currently available under EQIP. HSCRC has engaged stakeholders to develop and refine EQIP. MedChi leads an EQIP workgroup that meets to discuss technical details of the program, including policy design. Workgroup membership includes hospitals, specialist physicians, health policy leaders, and industry representatives.

As of January 1, 2025, there are 128 EQIP entities participating, reflecting 3,362 care partners across 38 specialties.

EQIP entities may be practitioner groups or administrative organizations that facilitate practitioner participation in the program. Over forty practitioner specialties are represented in the program and there is participation in all 50 available EQIP episodes.

Table 8. EQIP Clinical Episode Categories, CY 2025

Clinical Category	Episode Name	Clinical Category	Episode Name
Blood and Blood Forming Organs	Anemia Chronic	**Muscoskeletal System & Connect, Orthopedics**	Carpal Tunnel Surgery
	Aplastic Anemia		Cervical Fusion
	Neutropenia (Acute)		Cervical Replacement
Burns	1st/2nd Degree Burn		Fracture/Dislocation Treatment Arm/Wrist/Hand
Circulatory System, Cardiology	Acute Myocardial Infarction		Fracture/Dislocation Treatment Knee
	Atrial Fibrillation/Flutter (Chronic)		Hip Replacement
	AV Fistula Creation and Revision		Hip/Femur/Pelvis Fracture Repair
	CABG And/Or Valve Procedures		Joint Nos Ganglion/Cyst
	Heart Failure (Acute)		Knee Arthroscopy
	Heart Failure (Chronic)		Knee Replacement
	Hypertension Complic, Malig Acute		Low Back Pain
	Hypertension Essential (Chronic)		Lumbar And Sacral Spine Surgery OTHER
	Hypertension Secondary (Chronic)		Lumbar And Sacral Spine Surgery OTHER
	Leg Vein Angioplasty		Lumbar Decompression
	Pacemaker/Defibrillator		Lumbar Fusion
	Percutaneous Cardiac Intervention		Osteoarthritis
	Pericarditis, Inflammatory		Paraplegia
Digestive System, Hepatobiliary, Gastroenterology	Anal/Rectal Fissure/Ulcer		Rheumatoid Arthritis
	Bariatric Surgery		Rotator Cuff Repair
	Cholecystectomy		Shoulder Arthroscopy/Tendon Repair

Clinical Category	Episode Name	Clinical Category	Episode Name
	Colectomy	Neoplasms and Myeloproliferative	Mastectomy
	Colonoscopy	Nervous System	Acute Ischemic Stroke
	Crohn's Disease		Dementia
	Diverticulitis Of Colon		Parkinsons Ds
	Diverticulosis Of Intestine (Chronic)		Transient Ischemic Attack
	EGD Endoscopy	Respiratory System, Pulmonary/Critical Care	Deep Vein Throm/Pulmonary Embolism
	ERCP		Pneumonia
	Esophageal Varices (Chronic)		Sepsis
	Esophagitis (Chronic)		COPD
	Sigmoidoscopy		Acute Uri Simple
	Small Bowel Resection	Skin, Subcutaneous Tissue, Dermatology	Dermatitis, Urticaria
Ear, Nose, Mouth & Throat, Allery	Asthma		Decubitus Ulcer, Unspecified
	Allergic Rhinitis/Chronic Sinusitis		Cellulitis, Skin Infection
	Epistaxis	Eye, Ophthalmology	Cataract Surgery IOL
	Sinusitis Acute		Glaucoma
Endocr, Nutritional & Metabolic	Diabetes		Glaucoma Surgery
	Diabetic Circulatory Complications		Macular Degeneration
	Diabetic Ketoacidosis Dka (Acute)		Macular Pucker
	Diabetic Neuropathy	Female Reproductive System	Breast Biopsy
	Diabetic Retinopathy		Breast Reconstruction
	Ds Of Lipoid Metabolism	General	Appendectomy
	Hemochromatosis		Repair Inguinal Hernia
	Hyperosmolarity Non-Ketotic Coma (Acute)		Repair Umbilical Or Ventral Hernia
	Hypoglycemia (Acute)		Repair Ventral Hernia
	Obesity Hypoventilation Syndrome	Kidney and Urinary Tract Disease, Urology	Acute Kidney Failure
	Osteoporosis		Chronic Kidney Disease - Dialysis Dependent (Chronic)
Infectious Disease	Cellulitis, Trunk and Extremities		Chronic Kidney Disease - Not Dialysis Dependent (Chronic)
			TURP
			Gu Device/Catheter Complications
Mental Behavioral Health, Behavioral Health	Anxiety Ds (Chronic)		UTI
			Prostatectomy

EQIP Primary Care

The EQIP Primary Care (EQIP-PC) is a $19 million initiative made possible through HSCRC's MPA savings. Funding supports expanding primary care access in underserved communities across the state. Through EQIP-PC, 11 primary care organizations from eight counties were granted infrastructure funding to build new practices or expand existing practices.

EQIP-PC is part of a larger umbrella of programs aiming to increase access to advanced primary care throughout Maryland under the state's new AHEAD model. EQIP-PC awardees are expected to build advanced primary care capabilities and apply to join AHEAD primary care models by the end of their grant term. EQIP-PC began on January 1, 2025, and is expected to operate for three years.

Care Transformation Initiatives (CTIs)

In FY 2022, the HSCRC launched Care Transformation Initiatives Care Transformation Initiatives (CTI). CTIs assign Medicare beneficiaries to hospitals that have enrolled those beneficiaries in a care management program. The CTI holds hospitals accountable for the total cost of care for those beneficiaries assigned to them and rewards hospitals for any savings created by their care management programs. The program ensures that a single entity is accountable for managing patient care across the delivery system and that providers are paid on a population specific-basis, rather than on fee-for-service. The program allows HSCRC to develop a systematic understanding of best practices for improving care, account for the savings and improvements attributed to care transformation, incentivize initiatives that produce savings under the TCOC Model, and articulate Maryland's success stories in transforming care. To date, HSCRC in collaboration with its stakeholder workgroups, has approved six CTI categories: (1) Care Transitions, (2) Palliative Care, (3) Primary Care, (4) Geographic, (5) Emergency Care and (6) Hospital Outpatient Services. Forty-two hospitals are participating in a cumulative total of 235 active CTIs for FY 2025.

Maryland Primary Care Program (MDPCP)

Maryland is also continuing efforts to implement the Maryland Primary Care Program (MDPCP), which is a component of the TCOC agreement with CMS. The MDPCP is voluntary to all qualifying Maryland primary care practices and provides funding and support for the delivery of advanced primary care throughout the State, driving improved health outcomes at lower costs for Medicare beneficiaries. The MDPCP supports the overall health care transformation process and allows primary care providers to play an increased role in prevention, management of chronic disease, and preventing unnecessary hospital utilization.

The program is governed by CMMI with support from the Office of Advanced Primary Care (OAPC) within MDH, formerly known as the Maryland Primary Care Program Management Office. The OAPC partners with CMMI on policy and operations, while providing resources and technical assistance to practices including data analytics, practice transformation coaching, and education that align with the State's public health

priorities under the SIHIS. HSCRC provides policy consultation and strategic support to the OAPC as needed.

In 2024, Maryland successfully negotiated the continuation of the MDPCP through at least 2028, with the possibility of extension through 2034, under the new AHEAD State Agreement, which is scheduled to go into effect in 2026.

As of January 2025, there are 481 practices (533 sites) participating in the program with approximately 346,000 attributed Medicare FFS beneficiaries. Participants also include 13 Federally Qualified Health Centers representing 65 sites from across the State. In total, these practices employ over 2,000 primary care providers including physicians, clinical nurse specialists, nurse practitioners, and physician assistants across all 24 Maryland jurisdictions. Since 2020, CareFirst, the state's largest commercial insurer, has participated with MDPCP, aligning its advanced primary care programs and sharing resources with practices, in close partnership with OAPC.

To ensure practices have the resources and capabilities necessary to deliver comprehensive primary care, MDPCP established Care Transformation Organizations (CTOs) to provide infrastructure support to practices. CTOs provide technical support and resources for practices, such as multi-disciplinary care management staff, partnerships to address health related social needs, and data-driven guidance. There are currently 25 CTOs, of which seven provide services in every county and 17 CTOs are hospital-based.

The MDPCP continues to support statewide population health goals under SIHIS through its diabetes and opioid-related initiatives. First, the program tracks performance, which is used to drive quality improvement. All MDPCP practices focus quality efforts on improving four electronic clinical quality measures (eCQM) related to: diabetes control, hypertension control, BMI screening and follow-up, and depression screening and follow-up in 2023. However, for the program year (PY) 2024, practices were not required to report data for the BMI screening and follow-up measure due to technical issues with the measure specifications. This focus on the State's population health priorities has made a difference for MDPCP practice patients. In 2023, a significant majority of MDPCP practices scored above the national median for both the Controlling High Blood Pressure (80.42%) and Diabetes Control (82.35%) measures, demonstrating the program's success in promoting high-quality care and improving health outcomes for patients with these conditions.

MDPCP monitors progress on one of the core features of advanced primary care, integrating behavioral health services within the primary care setting to foster holistic and comprehensive primary care. As of the fourth quarter of 2024, all MDPCP practices had, at a minimum, developed a strategy for integrating behavioral health into their practice workflows, utilizing the Care Management or Collaborative Care Model, the Primary Care Behaviorist Model, or another approach for addressing behavioral health needs in primary care settings. Similarly, 351 MDPCP practices had implemented Screening, Brief Intervention, and Referral to Treatment (SBIRT) to identify and appropriately refer patients with substance use disorders for treatment,

far exceeding the 2021 SIHIS goal of implementing SBIRT in 200 MDPCP practices. In addition, 188 practices report implementing the Collaborative Care Model.

Building on the performance data monitoring, in 2024 the OAPC developed and began implementation of the MDPCP Comprehensive Chronic Disease Strategy, after obtaining buy-in and feedback from State leadership. The MDPCP Comprehensive Chronic Disease Strategy is OAPC's ongoing approach of alignment, collaboration, and initiatives addressing diabetes, hypertension, heart failure, COPD/asthma, and Alzheimer's/dementia. One key accomplishment in CY 2024 was the hiring of a Chronic Disease Prevention Coordinator through a CDC grant awarded to the Cancer and Chronic Disease Prevention Bureau. The CDC grant is called "The National Cardiovascular Health Program," which supports state investments in implementing and evaluating evidence-based and evidence-informed strategies to prevent and manage cardiovascular disease. The Chronic Disease Prevention Coordinator effectively enhances the OAPC's capacity to provide quality improvement support and technical assistance to practices.

More broadly, the OAPC provides the education infrastructure for the program through a variety of activities. A key component of the education is live, virtual learning events connecting back to MDPCP's mission and vision. In 2024 the OAPC successfully executed an event called MDPCP Orientation and Refresher for about 50 attendees, including new and existing participants. The OAPC also successfully executed an Advanced Primary Care Staff Training Academy, designed for primary care practice staff to gain skills and knowledge through a half-day, virtual training event. In 2024 91.7% of Staff Training Academy participants expressed commitment to applying knowledge gained. Also, there was a 30 percent increase of non-clinical staff attendees. Another key component of this education infrastructure is technical assistance, which the OAPC provides to MDPCP participants through quality improvement initiatives, process improvement efforts, and educational material creation and design. Much of this technical assistance is through hands-on assistance by the OAPC's team of Practice Transformation Coaches. The OAPC continues to collaborate with CMMI on shared events and communications, such as the MDPCP Today monthly newsletter, a Care Management user group, as well as program guides and resources.

In addition to its aims to reduce avoidable hospitalizations, improve quality, and reduce costs, MDPCP has a concerted focus on advancing health equity and reducing disparities at the primary care level. Beginning in 2022 MDPCP began pioneering a payment to primary care based on beneficiary social risk level, called the HEART Payment. The HEART Payment provides additional resources to practices each quarter to support medical and social needs of patients with high clinical and social risk. Approximately $29.9 million was invested in this effort in 2024. HEART Payment investments have enabled primary care practices to make measurable impacts to patients' lives beyond the clinic setting. For example, one practice has partnered with a local farm co-op to deliver fresh produce packages to patients with food insecurity. Another practice successfully addressed patient social isolation by arranging regular visits from home aides and companions. Outside of this investment, MDPCP is focusing on health equity through a robust reporting

suite including outcomes data stratified by socio-demographic variables; an emphasis on social needs screening and referrals; and more.

Special Funding Programs

Maryland's ability to transform its statewide healthcare delivery system is critical to the success of the TCOC Model. This requires hospitals and their community partners to focus on initiatives that reduce avoidable hospital utilization, improve access to key healthcare services designed to address chronic conditions, and create innovative partnerships that emphasize community-based services. Maryland's unique hospital finance system enables special funding programs that direct funds from the hospital rate setting system to target specific goals of the TCOC Model. These special funding programs provide seed funding for numerous initiatives and enable hospitals and their partners to collaborate on statewide delivery system transformation activities.

Regional Partnership Catalyst Program

The Regional Partnership Catalyst Program provides funding to hospital-led teams that work across statewide geographic regions to build infrastructure for interventions that align with goals of the TCOC Model and support population health goals in the SIHIS. As noted earlier, the SIHIS population health domain focuses on diabetes, opioid overdose mortality, and maternal and child health. This program prioritized diabetes prevention and management, specifically implementing the National Diabetes Prevention Program (DPP) and Diabetes Self-Management Education and Support (DSMES), as well as behavioral health crisis programming.

The HSCRC awarded a total of $136.9 million through nine grants to eight Regional Partnerships. Five grants, totaling $57.8 million, supported diabetes prevention and management across 24 hospitals through June 2024, covering Western, Central, Southern Maryland, and the Capital Region (Table 9). Three grants, totaling $79.1 million, support behavioral health crisis services across 24 hospitals through December 2025, spanning Central Maryland, parts of the Capital Region, and the Lower Eastern Shore (Table 10).

The HSCRC funding was intended as seed funding, an initial investment in program development and growth. The HSCRC anticipated that these programs would establish sustainable funding streams to continue operations beyond the period of HSCRC support. At the close of CY 2023, the HSCRC made the difficult decision to end funding for diabetes programs earlier than planned, citing concerns about the long-term sustainability of these initiatives. Funding for diabetes programming to Regional Partnerships officially concluded on June 30, 2024. However, Regional Partnerships were provided the full calendar year to transition their programs—whether by restructuring, scaling, or discontinuing—to better align with hospital strategic goals and ongoing operational priorities.

All Regional Partnerships continue to offer some form of diabetes programming, leveraging the infrastructure and collaborations developed since the start of HSCRC funding in 2021 and have successfully restructured their program offerings. Although the early termination of funding has influenced the scale and design of these programs, diabetes remains a critical health priority. Hospitals are committed to addressing diabetes in ways that are both organizationally and financially sustainable for their communities.

Table 9. Regional Partnerships (Diabetes) Revised Funding Amounts

Regional Partnership	Final Funding Amount	Program End Date
Baltimore Metropolitan Diabetes Regional Partnership	$32,730,418	June 30, 2024
Western Regional Partnership	$10,996,156	June 30, 2024
Nexus Montgomery	$4,121,123	December 31, 2022
Totally Linking Care - Maryland	$4,463,519	June 30, 2024
St. Agnes and LifeBridge Health Diabetes Care Collaborative	$4,081,555	June 30, 2024
Full Circle Wellness for Diabetes in Charles County	$1,425,078	June 30, 2024
Total	$57,817,849	

The behavioral health crisis services funding stream supports development and implementation of infrastructure and interventions consistent with the "Crisis Now: Transforming Services is Within Our Reach" action plan developed by the National Action Alliance for Suicide Prevention.

Table 10. Regional Partnerships (Behavioral Health) Funding Amounts

Regional Partnership	Total Funding Amount	Program End Date
Greater Baltimore Region Integrated Crisis System (GBRICS)	$44,862,000	December 31, 2025
Totally Linking Care (TLC)	$22,889,722	December 31, 2025
Tri-County Behavioral Health Engagement (TRIBE)	$11,316,332	December 31, 2025
Total	$79,069,054	

In 2024, Regional Partnerships receiving behavioral health funding met significant programmatic milestones and continued to support scaled up programs and centers. On the Eastern Shore, TRIBE continued to grow patient volumes for its two crisis centers by expanding follow-up care, screenings, and insurance navigation. TLC, in Prince George's County, expanded and strengthened its behavioral health crisis system by launching the Call Center module, enhancing Mobile Crisis Teams operations, and opening the Dyer Care Center as Maryland's first Crisis Now model stabilization facility. GBRICS and TLC both continued to use care traffic control software as part of their local 988 call centers and expanded mobile response teams in their areas. GBRICS is partnering with 988 providers to implement new ways to connect callers to behavioral health case management. GBRICS, through their Open Access Pilot, has increased access to same day behavioral health appointments by providing technical support to 17 behavioral health sites in addition to 13 other clinic sites already operating. In addition, Regional Partnerships have actively participated in efforts (*e.g.,* workgroups and advocacy) to ensure the programs they implement within communities are aligned with sources of funding to support long term sustainability, and maintain partnerships with community efforts to improve workflow and access. The increase in Regional Partnership efforts across Maryland has significantly enhanced the behavioral health crisis response system and participating hospitals have shown reductions in behavioral health emergency department utilization.

Maternal and Child Health Funding Initiative

In 2021 the Health Services Cost Review Commission (HSCRC) approved cumulative funding of $40 million across four years (FY 2022-FY 2027) to support maternal and child health (MCH) investments led by MDH's Medicaid program and the Prevention and Public Health Administration (PHPA), in conjunction with the Medicaid HealthChoice Managed Care Organizations (MCOs) and local health departments. This

funding will scale existing statewide evidence-based programs and promising practices, and support the expansion of new services for mothers and children.

Funding supports the following MCH initiatives within Maryland Medicaid:

- Home Visiting Services pilot expansion;
- Reimbursement for doula services;
- CenteringPregnancy, a clinic-based group prenatal care model;
- HealthySteps, a clinic-based intensive prenatal and postpartum case management framework; and
- Maternal Opioid Misuse (MOM) model expansion/intensive case management for high-risk pregnancies.

Funding to PHPA supports the expansion and/or implementation of mutually-reinforcing programs:

- Medicaid's asthma home visiting program;
- Community-based asthma home visiting initiatives (all-payer); and
- Community-based home-visiting services and CenteringPregnancy implementation (all-payer).

In FY 2024 Medicaid and MDH prioritized growing enrollment in these programs and interventions. Medicaid and MDH recently released the Maternal and Child Health Population Health Improvement Fund Annual Report (FY 2024) showing the impact to date. The programs listed above were strategically designed to provide services to underserved populations, and to individuals who are at greater risk for severe maternal morbidity and severe asthma. The HSCRC will continue to monitor and support MDH and Medicaid as they focus on these efforts throughout 2025.

HSCRC and MDH determined that additional time was needed to fully utilize the Fund balance, as early years were spent building the infrastructure necessary to implement the approved programs. During the 2025 legislative session the Maryland General Assembly (MGA) passed House Bill 170 / Senate Bill 229, extending the Fund's sunset date from December 31, 2025 to December 31, 2027. The 2025 Budget Reconciliation and Financing Act authorized the transfer of $13.1 million from the MCH Fund to the General Fund in FY 2026, so the final funding amount is reduced to $26.9 million.

Stakeholder Engagement

HSCRC Workgroup Activities

The HSCRC continued to engage broadly with stakeholders in guiding policy and methodology development through various workgroup meetings throughout CY 2023. All HSCRC workgroups are comprised of a wide range of healthcare industry stakeholders, including hospitals, clinicians, payers, consumer representatives, and community organizations. All workgroup meetings are conducted in public sessions, and comments are solicited from the public at each meeting. There are also several sub-

workgroup meetings and task forces to discuss technical, data-driven matters related to specific policies, which report back to the larger workgroups. Input is also solicited in informal meetings with stakeholders. All proceedings and reports of workgroup activities, as well as membership rosters, may be found on the Workgroups page on the HSCRC website.[7]

Payment Models Workgroup

The Payment Models Workgroup is charged with vetting potential recommendations for HSCRC consideration on the structure of payment models and how to balance its approach to payment updates. Staff and workgroup members meet between January to June of each calendar year to discuss the annual update factor policy (discussed in Section II). This policy is voted on by the Commission in the June meeting and provides updates to hospitals that includes: inflation, volume, quality, and other adjustments while considering and projecting that the update will meet the financial requirements of the TCOC Model.

Performance Measurement Workgroup

The Performance Measurement Workgroup (PMWG) develops recommendations for HSCRC consideration on pay-for-performance quality measures that are important, reliable, informative, and feasible for assessing a number of important quality and efficiency issues. Throughout the fall of 2024 and into the spring of 2025 the Workgroup reviewed and updated the MHAC and QBR program RY 2027 policies and will continue to implement the RY 2026 RRIP policy for RY 2027 with an adjustment made to the base period due to feedback from this workgroup.

Total Cost of Care Workgroup

The Total Cost of Care Workgroup is charged with providing feedback to the HSCRC on the development of specific methodologies for managing the Medicare Total Cost of Care, as required by the contract with CMS. The TCOC Workgroup met throughout 2024 to further refine methodologies related to Medicare TCOC policy. Additionally, the TCOC Workgroup discussed the source of cost drivers in Maryland and future benchmarking methodologies.

Other Stakeholder Engagement

In addition to formal workgroups, HSCRC staff regularly engage with representatives of hospitals, payers, hospital and payer trade organizations, consumer representatives, state and federal agencies and other healthcare stakeholders through scheduled standing meetings or in response to specific requests.

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[7] HSCRC Workgroups. https://hscrc.maryland.gov/Pages/Workgroups-Home.aspx

Section VII: Methods of Rate Determination

Global Budget Overview

Under the TCOC Model 95 percent of regulated hospital revenues must remain under global (or "population-based") budget structures. With 98 percent of regulated hospital revenues under global budget structures since CY 2016, Maryland currently exceeds this target level. The two percent of revenue not included in GBR accounts for drug costs, which are based on volume. All regulated acute-care Maryland hospitals operate under Global Budget Revenue (GBR) agreements. The HSCRC continues to work with stakeholder workgroups (discussed in Section VI) to refine the GBR methodology and develop a number of policies discussed in this section.

Volume Methodologies

Market Shift Policy

The Market Shift Adjustment (MSA) provides criteria for increasing or decreasing the approved regulated revenue of Maryland hospitals operating under global revenue caps in response to shifts in cases between regulated hospitals. Specifically, the MSA provides the criteria to reallocate funding when patients increasingly choose to seek care at a given hospital, with the objective of ensuring that funding follows the patient and that hospitals continue to have a competitive interest in serving patients efficiently and effectively. The MSA does not currently address all volume changes, only those the Commission can quantify as shifts between hospitals and only volume the Commission deems appropriate to evaluate, *i.e.,* the Commission does not evaluate readmissions and preventable admissions in the MSA because doing so would incentivize competing for care that is potentially avoidable.[8]

The MSA works by first defining distinct markets and then evaluating growth and declines in those markets among hospitals that provide services in those areas. To do so, the HSCRC developed an algorithm to calculate MSAs for a specific service area (*e.g.,* orthopedic surgery) and a defined geographic location (*e.g.,* ZIP code). The algorithm compares the growth in volumes at hospitals with utilization increases to the decline in volumes at hospitals with utilization decreases. Adjustments are capped at the lesser of the growth for volume gains or the decline for volume losses, *i.e.,* what can be quantified as a market shift versus overall changes in utilization. As such, the net MSA for the State is typically near breakeven, with funds awarded to hospitals receiving cases and funds taken from hospitals losing cases.

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[8] The Market Shift evaluates about 70% of all hospital revenues attributable to in-state hospital volume only. Volumes attributable to Potential avoidable Utilization (PAU) 11%, Non-Maryland Residents 9%, Outpatient Oncology 8%, Categorical Exclusions 2% and Chronic 0.4% are not evaluated within the Market Shift Policy. These volumes, however, get accounted for in other methodologies and policies.

Demographic Adjustment

The Demographic Adjustment methodology provides funding increases or decreases to recognize anticipated changes in hospital volume based upon projected age-adjusted population changes at the ZIP code level, while disallowing increases in utilizations due to potentially avoidable utilization (PAU). This adjustment is used to prospectively amend acute hospitals' GBRs for the forthcoming fiscal year and capped by the Maryland Department of Planning estimates of statewide population changes to align with the per capita constraint of the TCOC Model parameters.

Deregulation of Services

Deregulation is the movement of a hospital service from an HSCRC regulated space to an unregulated space. Deregulation is a desirable outcome of the TCOC Model as it moves services to less costly settings for patients, reduces total cost of care and can reduce the burden on hospital emergency rooms. Service movement can be initiated by payers, the hospital itself, or physician practices. In some cases, the deregulation may simply be a function of service discontinuation or cross-border movement to an unregulated setting. If services are shifted to an unregulated setting, global budgets generally must be reduced to prevent excess billing. HSCRC staff have worked with hospitals to make necessary adjustments to their global budgets when necessary. The Commission suspended deregulation adjustments in FY 2021 and FY 2022 due to the COVID-19 public health emergency. The Commission recognized that hospitals had to suspend certain services and that the public was reluctant to use hospital services during the pandemic. The HSCRC reinstated deregulation adjustments in FY 2023.

CDS-A Drug Funding

As stated previously, 98 percent of hospital revenue is currently under the global budget system. The remaining two percent of revenue accounts for drug costs, which are funded based on volume. The HSCRC makes retrospective adjustments to hospital GBRs based on changes in volume between expected and actual utilization during the prior year in order to address any under or overpayment that may have occurred. As part of the FY 2026 Update Factor, a portion of that funding has been earmarked to continue funding these high-cost drugs.

Integrated Efficiency Policy

HSCRC staff developed an Integrated Efficiency (IE) Policy to evaluate and scale global budgets based on hospital efficiency. The policy evaluates hospital cost per case and total cost of care efficiency and then formulaically penalizes or rewards hospitals based on that performance. Overall, this policy will ensure that the limited resources of the GBR system are distributed to cost-efficient hospitals that are advancing the goals of the TCOC Model.

The IE Policy was approved in 2021 and was used to scale the FY 2022 Annual Update Factor and subsequent rate years. In effect, inefficient hospitals received a reduced inflation factor starting in FY 2022. This funding was then redistributed to efficient hospitals. Staff also used the IE Policy to assess budget enhancement requests from efficient hospitals that sought additional funding. The criteria hospitals submit must demonstrate that they have been financially disadvantaged by a Commission methodology or will make population health investments that will further reduce total cost of care and improve health outcomes.

In July 2023 Commissioners approved an updated IE policy that incorporated the Revenue for Reform policy (discussed in Section IV). The Revenue for Reform policy safe harbors dollars that would otherwise be removed from hospitals deemed inefficient under the IE policy if those dollars are directed to population health investments.

Capital Policy

Over the course of the HSCRC's 40-year rate setting history, allotments have been made in rates to fund large-scale capital replacement projects to ensure that hospitals can provide high-quality care and have updated, modern infrastructure. The need for this policy is greater under the GBR system because hospitals can no longer grow volume to fund capital projects and instead must reduce avoidable utilization, which is not an opportunity that is spread evenly among all hospitals.

As such, the Commission has adopted a capital methodology that will utilize various evaluations of capital cost efficiency, hospital cost per case efficiency, total cost of care efficiency, presence of potentially avoidable utilization (or lack thereof) and excess capacity to determine the reasonableness of a hospital's capital request. Capital funding is restricted to the most efficient hospitals to ensure that the best-performing hospitals are recapitalized. Additionally, to ensure that hospitals expend funding from capital reserves when implementing large scale capital projects, capital funding is limited to major capital projects that are 35 percent of the hospital's permanent revenue for hospitals larger than the average global budget (~$300 million) and 50 percent of the hospital's permanent revenue for hospitals smaller than the average global budget (~$300 million).

Full Rate Reviews

Historically, the HSCRC has had a full rate application methodology to assess hospitals' efficiency. The methodology allowed staff to review a hospital's entire regulated rate structure and was employed:

- When a hospital submitted a full rate application for an increased rate structure; or

- When HSCRC staff identified a hospital with high-cost inefficiency in order to reduce the hospital's rate structure.

Full rate application assessments have historically been based on the Interhospital Cost Comparison (ICC) methodology, which measures a hospital's cost per case efficiency relative to a peer group standard, i.e., a hospital's revenue base compared to average peer group cost per case with profit removed. This evaluation adheres to the Commission's statutory mandate (Maryland Health-General Article, An. Code Ann. § 19-219(a)) to assure each purchaser of hospital services that:

1. The total costs of all hospital services offered by or through a facility are reasonable;
2. The aggregate rates of the facility are related reasonably to the aggregate costs of the facility and;
3. The rates are set equitably among all purchasers or classes of purchasers without undue discrimination or preference.

However, given the incentives of the TCOC Model and the broader cost accountability hospitals now face, the Commission developed total cost of care metrics that complement the Commission's cost review methodology in a TCOC Model. Specifically, the Commission developed a TCOC algorithm that assesses total cost of care performance relative to attainment and growth standards that then modifies a hospital's ICC result.

Complexity and Innovation Policy

The cornerstone methodology of the TCOC Model is the hospital GBR system, which reimburses hospitals for baseline volume plus or minus market shifts and demographic changes. This methodology removes incentives for hospitals to increase utilization in order to drive profitability. Historically, hospitals had funded high-intensity cases or health care innovation, such as organ transplants or gene therapies, by increasing lower-acuity volume, thereby generating more revenue while maintaining the same fixed costs.

This economic behavior has been particularly important for the State's two academic medical centers, the University of Maryland Medical Center and the Johns Hopkins Hospital. To ensure that these two national leaders in academic research and innovation remain at the forefront of quaternary care, the HSCRC developed a standalone volume policy that reimburses the academic medical centers for growth deemed to be high complexity and/or innovative.

Funding for Complexity and Innovation is provided prospectively in rates through the annual update factor and is established by the historical average growth rate of these services. Allotted funding reflects increases due to emerging technologies and declines as these services shift to community hospitals once procedures become more mainstream. In a given fiscal year, academic medical centers are at financial risk should the prospective budgeted amounts diverge from actual experience; however, future budgetary allotments will account for changes in historical growth rates, thereby providing a stable funding source that comports with the tenets of a population-based system.

Section VIII: Reporting Requirements to CMS

Under the TCOC Model, the HSCRC is required to report to CMS on relevant policy and implementation developments. The HSCRC provides annual monitoring reports to CMS on patient experience of care, population health and health care expenditures. The HSCRC submitted an annual report on CY 2024 healthcare expenditures to CMS in July 2025. The HSCRC submitted a second report on the State's CY 2023 performance on quality measures, inclusive of measures on patient experience of care and population health performance, in February 2025. The HSCRC submitted a summary of SIHIS performance in April 2025. The following reports are included with this submission.

1. Annual Monitoring Report - Expenditures

2. Annual Monitoring Report – Quality

3. Quantitative Summary – SIHIS 2023 & 2024 Performance

Section IX: Adverse Consequences

A number of policies developed over the course of the Model guard against potential adverse consequences that HSCRC staff and stakeholder workgroups identified as possible unintended outcomes of implementation. For example, the GBR agreements initiated by the HSCRC to implement the global budgets contained consumer protection clauses. In addition, the HSCRC implemented a Market Shift Policy (discussed in Section VII) and a Transfer Adjustment Policy to help ensure that "the money will follow the patient" when shifts in utilization occur between hospitals or other health care settings. These policies aim to guard against hospitals inappropriately limiting the number of high-cost, high-risk cases admitted and to provide open access and resources when patients need to be transferred to receive highly specialized care offered in academic medical centers.

As mentioned earlier in the report, one area of caution for the current contract is the fluctuation in trends of the total cost of care. Under the TCOC Contract, CMMI monitors the total cost of care in Maryland to ensure that reductions in hospital potentially avoidable utilization do not result in unreasonable increases in the total cost of care. More detail on total cost of care performance is provided in Section II.

As mentioned in Section III in the report earlier, House Bill 1143 took effect on July 1, 2024 and established the Maryland Emergency Department Wait Time Reduction Commission. The Commission will develop strategies and initiatives to recommend to State and local agencies, hospitals, and health care providers that address factors throughout the health care system that contribute to increased emergency department wait times.

Section X: Hospital Financial Performance

Hospital Profitability

The HSCRC monitors hospital financial performance of regulated hospitals through hospital financial data submissions. Specifically, the HSCRC conducts monthly monitoring of unaudited data and annual monitoring of audited data. The financial data provide a metric to monitor the efficiency and effectiveness of hospitals, pursuant to the HSCRC's statutory charge. While each hospital may adjust and correct its unaudited data throughout the year, the unaudited data provide a good indicator of the direction of trends in statewide hospital revenue, expenditures, utilization, and profitability. Below is a summary of key data regarding the profitability of hospitals on an audited basis in FY 2024 and on an unaudited basis for FY 2025 through February of 2025.

The HSCRC only regulates inpatient and outpatient hospital services located at the hospital (referred to as "regulated services"). HSCRC does not regulate all aspects of hospital business such as outpatient services provided at locations distant from the hospital campus or physician rates (referred to as "unregulated services.") It also does not regulate revenue-producing activities which, while not related directly to the care of patients, are business-like activities commonly found in hospitals for the convenience of employees, physicians, patients, and/or visitors (*e.g.,* parking garages and gift shops).

Audited Financial Data – FY 2024

Data for FY 2024 show an increase in margins for services regulated by the HSCRC, operating margins, and total operating and non-operating margins.

Profitability based on audited data for total operations (hospital operations regulated by the HSCRC plus unregulated hospital operations), and for total hospital activities (both operating and non-operating activities) is presented below:

- The operating margin for services regulated by the HSCRC was 7.85 percent (6.60 percent in FY 2023).

- The total combined audited regulated and unregulated operating margin was 0.90 percent (0.06 percent in FY 2023).
- The total margin, i.e., the combined operating and non-operating margins, was 3.80 percent (1.69 percent in FY 2023).

Total operating margins are heavily influenced by unregulated services that are not controlled by the HSCRC. Both hospital regulated operating and total profit margins increased over FY 2024. In addition, despite lower total combined operating margins, Maryland's regulated hospital industry remained profitable.

Unaudited Financial Data – FY 2025

FY 2025 total operating margin for both services regulated by the HSCRC and services not regulated by the HSCRC increased over FY 2024, as shown by unaudited year-to-date financial data. Total profit margins increased by 0.47 percentage points versus unaudited results for the same period last year due to better non-operating returns so far in FY 2025. Hospital total margins are shown below. Final audited data, when available, may result in adjustments to these margins:

- The operating margin for services regulated by the HSCRC was 6.80 percent (6.13 percent for the equivalent YTD FY 2024 unaudited results).
- The total combined unaudited regulated and unregulated operating margin was 1.99 percent (1.30 percent for the equivalent YTD FY 2024 unaudited results).
- The total margin, (the combined operating and non-operating margins), was 5.06 percent (4.60 percent for the equivalent YTD FY 2024 unaudited results).

Uncompensated Care

Uncompensated Care (UCC) is care provided for which no compensation is received and typically reflects a combination of charity care and bad debt. Maryland recognizes the financial burden hospitals take on when providing quality care to patients who are unable to pay. Unlike in other states, Maryland's rate setting system factors the cost of UCC into the State's hospital rate setting structure. This provision increases access to hospital services for patients who cannot readily pay for care while hospitals get credited for the care provided.

The HSCRC's current policy provides for uncompensated care statewide at the level of the most recent year's actual statewide experience. Hospital-specific UCC provisions are determined by a blend of a hospital's most recent year's actual experience and its predicted performance determined by way of a regression analysis.

Figure 13 below shows the actual total UCC rate for all regulated Maryland hospitals between FY 2010 and FY 2023. Uncompensated care steadily declined between FY 2010 and FY 2012; however, FY 2013 saw a 0.40 percent increase in uncompensated care. The HSCRC believes this can be partially explained by the increasing prevalence of commercial health insurance plans with high deductibles, coinsurance- and copayments, which leave patients to pay a higher portion of a bill out-of-pocket. Additionally, outpatient hospital service utilization, for which commercially insured patients tend to be responsible for paying a higher portion of the bill out-of-pocket, has increased in recent years. Periods of low UCC rates occurred from FY 2014 and continued to FY 2017, driven by coverage expansions brought on with the implementation of the Affordable Care Act (ACA). From FY 2018 to FY 2020 there was a slight uptick in uncompensated care rates as the effects of the ACA appear to have mitigated. The probability of a patient subsequently deemed as having UCC is historically highest amongst commercial patients presenting

through the ED. Thus, the significant declines in ED utilization by commercial patients having a write-off to UCC during the pandemic subsequently resulted in the decline in UCC experienced in FY 2021. UCC seems to be leveling back up to pre-pandemic levels in FY 2023 given the slight up-tick.

Figure 13. Uncompensated Care as a Percentage of Gross Patient Revenue, FY 2010-2023
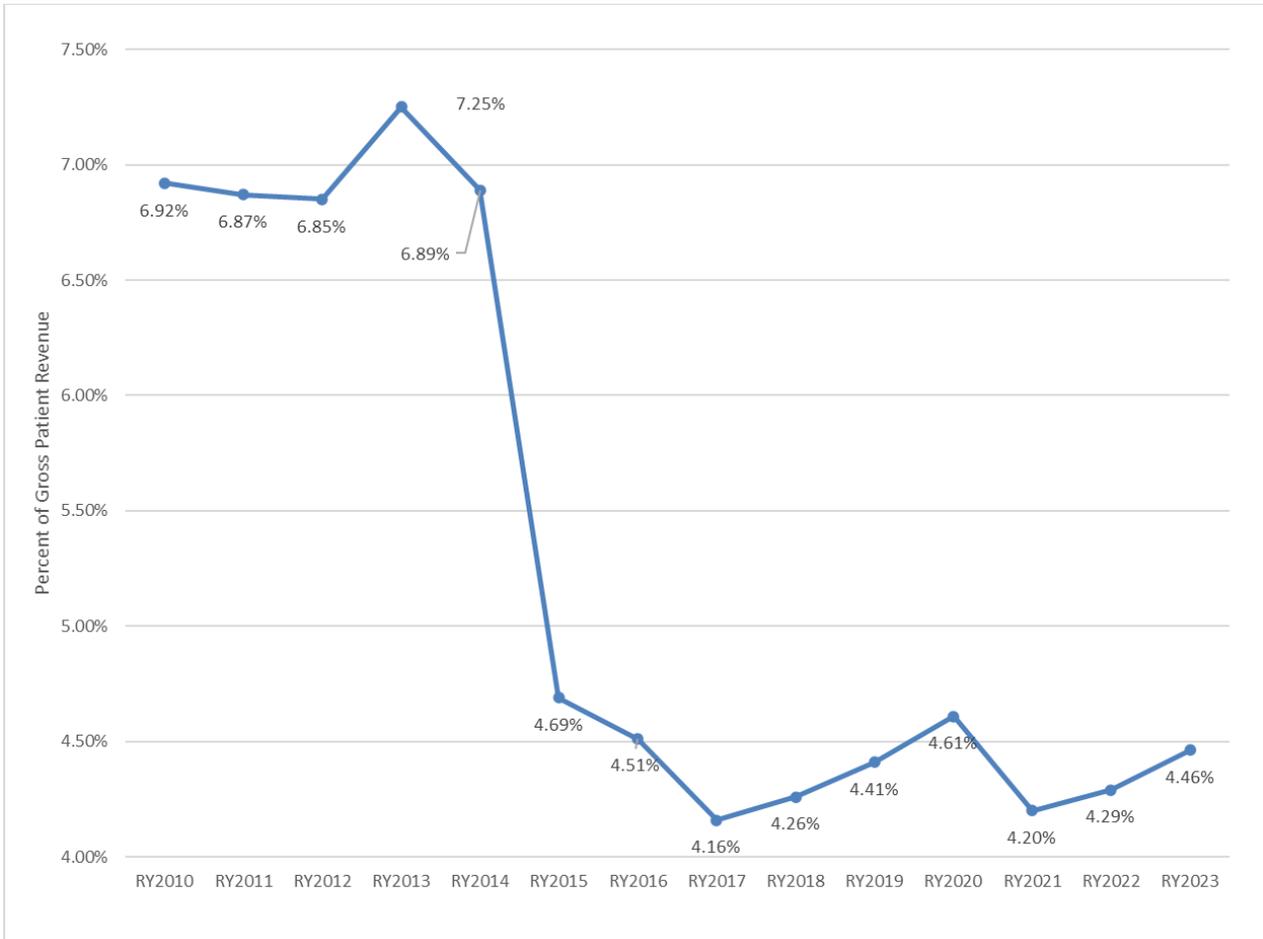
Source: HSCRC Case-mix and Financial Data

Community Benefits

The Internal Revenue Code requires nonprofit organizations to report the amount of community benefits that they provide in exchange for not having to pay federal, state, or local taxes. Maryland law also requires hospitals to report similar data and qualitative information on community benefit expenditures and operations to the HSCRC. Community benefits are defined as activities that are intended to address

community needs and priorities primarily through disease prevention and improvements in health status, including:

- Health services provided to vulnerable or underserved populations;
- Financial or in-kind support of public health programs;
- Donations of funds, property, or resources that contribute to a community priority; and
- Health education screening and prevention services.

HSCRC posts the data provided by hospitals along with a summary report on hospital community benefit activities on the HSCRC website. The most recently available data reflects community benefits for FY 2023. Maryland hospitals reported $2.28 billion in total community benefit in FY 2023, an increase of around 11 percent from FY 2022. This is equivalent to more than 11 percentof Maryland's hospital's operating expenses.

HSCRC includes 42 percent of the total hospital community benefit expenses in hospital rates. This includes funding for financial assistance as well as programs like the Regional Partnership Program and the Nurse Support Programs. This means that $1.3 billion of hospital community benefits comes from hospital profits and the rest are funded by payers through hospital rates.

Since 2012, federal law requires nonprofit hospitals to conduct a community health needs assessment every three years. Beginning with FY 2022 data, the Commission required hospitals to submit to HSCRC annual information on each hospital's community health needs assessments and how their community benefits expenditures relate to their community health needs assessment. Hospitals reported that 37.2 percent of their community benefits spending in FY 2023 was associated with their Community Health Needs Assessments.

Section XI: Statutory and Regulatory Updates

Legislative Reports

In 2024 HSCRC submitted the following reports, as required by the Maryland General Assembly:

- Hospital Outpatient Services Report, as required by Health General Article § 19-349.2(h)(1) of the Annotated Code of Maryland, on March 1, 2024.
- HSCRC FY 2023 Annual Report, as required by Health General Article § 19-207(b)(9), submitted July 24, 2024.
- Evaluation of Findings and Recommendations from the Commission to Study Trauma Center Funding in Maryland, requested by the 2024 Joint Chairmen's Report page 135-136, submitted December 16, 2024.

- Facility Fees and Facility Fee Notices, as required by Chapter 142 (2024) §§ 2 and 3, submitted December 26, 2024
- Summary of University of Maryland Medical System Board of Directors Financial Disclosure Information for FY 2023, as required by Education Article §13-304(I)(4), May 21, 2024

All of the reports listed above are available through the legislative library.

2025 Statutory Updates

During the 2025 Legislative Session, the Legislature passed a number of bills with a direct impact on HSCRC operations.

Budget Bill (HB 350)

The Budget Bill for Fiscal Year 2026 funded HSCRC's operations, including the uncompensated care fund. The Budget Bill also required HSCRC to submit a report on the alignment of incentives between Medicare Advantage plans and hospitals in Maryland under AHEAD model and efforts to support Medicare Advantage plans operating in underserved communities. The Budget bill conditioned $250,000 of HSCRC's budget on the submission of this report, which is due October 1, 2025.

Budget Reconciliation and Financing Act (HB 352)

The Budget Reconciliation and Financing Act (BRFA) had three provisions relevant to HSCRC:

1. The BRFA established a Medicaid Primary Care Fund which uses $31 million from a one-time adjustment to the Medicare fee-for-service payments to hospitals.
2. The BRFA increased the Medicaid Deficit Assessment by $50 million in FY 25 and $100 million in FY 26. These funds are assessed by the Commission and ultimately paid to the Maryland Medicaid program. In response to the increased assessment, the Commission approved a corresponding increase in hospital rates as part of the FY 2026 Update Factor recommendation. Going forward, 85.5 percent of the Medicaid Deficit Assessment will be incorporated into hospital rates, while the remaining 14.5 percent will be funded through hospital profits.
3. The BRFA reduced the Maternal and Child Health Population Improvement Fund by $13.1 million in FY 2026 through a transfer to the general fund.

Health Services Cost Review Commission – User Fee Assessment – Repeal of Sunset (HB 54 / SB 229)

The HSCRC is an independent state agency funded entirely through user fee assessments on hospitals. One hundred percent of the user fee assessment is built into hospital rates, and this amount covers HSCRC's operational costs such as staffing, contractors, and overhead. In 2022, the Maryland General

Assembly established a funding formula that capped the user fee assessments at 0.1 percent of the prior fiscal year's regulated hospital revenue, and established a sunset provision set for 2025. HB 54/SB 229 removed the sunset, so the funding formula and assessment cap remains in law. Importantly, HSCRC only collects what is necessary for its operational expenses. User fees are not necessarily assessed at the maximum value of the cap and have historically been reduced when feasible.

Maternal and Child Health Population Health Improvement Fund (HB 170 / SB 213)

This bill provided two additional years (FY 2026 and FY 2027) for MDH to spend funds on maternal and child health programs. These funds were collected through assessments on hospitals. These assessments ended in FY 2025.

AHEAD Model Implementation Electronic Health Care Transactions and Population Health Improvement Fund (HB 1104)

This bill facilitated the implementation of the AHEAD Model. The bill allowed electronic health care transaction information to be used to support the State's participation in the AHEAD Model. The bill also established a Population Health Improvement Fund to invest in population health improvements that support the statewide population health targets under the AHEAD Model. The Population Health Improvement Fund will be funded, in part, through an assessment on hospitals.

Regulatory Updates

The Commission proposed and/or adopted amendments to the following existing regulations in 2024.

COMAR 10.37.01.03

In 2024, the Commission proposed to amend regulation .03 under COMAR 10.37.01 for the purpose of updating non-substantive reporting requirements and instructions for the report entitled "Annual Nonprofit Hospital Community Benefit Report." This regulation became adopted and effective.

COMAR 10.37.01.02, Accounting System; Hospitals

In 2024, the Commission proposed to amend regulation .02 under COMAR 10.37.01 for the purpose of updating the Commission's manual entitled "Accounting and Budget Manual for Fiscal and Operation Management (August 1987)." The proposal included revisions to remove outdated contents and add the Annual Filing Modernization initiative. This regulation became effective October 1, 2024.

Section XII: Commission Infrastructure

Commissioners

The HSCRC is the only agency in the country with the mission of setting all-payer rates for hospital services within a state. The HSCRC functions as an independent Commission within MDH. Seven Governor-appointed Commissioners oversee the HSCRC. Below is a list of current Commissioners.

Table 11. Current HSCRC Commissioners

Commissioner	Term Start Date	Term End Date
Joshua Sharfstein, MD, Chairman	July 1, 2023	June 30, 2026
James N. Elliott, MD, Vice-Chair	July 1, 2018	June 30, 2026
Jon Blum, MPP	July 1, 2025	June 30, 2030
Ricardo Johnson, JD	July 1, 2023	June 30, 2027
Maulik Joshi, DrPH	July 1, 2021	June 30, 2025
Nicole McCann	July 1, 2023	June 30, 2027
Farzaneh (Fazi) Sabi, MD	July 1, 2024	June 30, 2028

Staff

The State charges the HSCRC with regulatory authority over the rates and revenues of Maryland's forty-three acute care hospitals, eight Freestanding Medical Facilities, four psychiatric hospitals (commercial rates only), and one pediatric specialty hospital (commercial rates only), an industry with annual revenues in excess of $21 billion. This responsibility is accomplished by a relatively small and highly-skilled staff of 47 full-time equivalents and several contractual employees. To meet the demands of the TCOC Model, the Commission organized its staff structure under five centers:

1. Medical Economics and Data Analytics;
2. Revenue and Compliance;
3. Quality and Population-Based Methodologies;
4. Healthcare Data Management and Integrity; and
5. Administration and Operations.

As the State continues under the TCOC Model, the HSCRC continues to hire new staff to provide needed expertise and support to design and implement new programs, methodologies, and analyses.

Budget

A small user fee assessed on hospital rates in Maryland supports Commission staff salaries and operations. Due to the technical nature of the work of the Commission, expenses are driven primarily by personnel costs and contracts. The total user fee assessment in FY 2024 was $18.2 million and the fund balance at the end of the fiscal year was $9.4 million.

Section XIII: Future Outlook

In 2025, the HSCRC will continue laying the groundwork for Maryland's transition to the next iteration of the Maryland Model—the AHEAD Model. Although the current TCOC Model remains in effect through December 2026, Maryland anticipates transitioning to the AHEAD Model by January 2026. At the time of this report, the Governor and MDH are leading negotiations with the federal government to revise the AHEAD Model's terms and agreements before its implementation.

Maryland remains a national leader in health care innovation by holding hospitals accountable for cost growth and quality through global budgets, expanding access to advanced primary care and supporting investments in population health initiatives. By shifting focus upstream from traditional hospital care, Maryland aims to improve health outcomes while containing long-term health care costs. Achieving these goals is a collaborative effort between the State, hospitals, non-hospital providers, payers, and a broad spectrum of community partners, all working together to create long-term health improvements and cost savings for Marylanders.

Appendices

1. Annual Monitoring Report – Expenditures
2. Annual Monitoring Report – Quality
3. SIHIS Quantitative Summary – 2024
4. SIHIS Directional Indicators Dashboard
5. Maternal and Child Health Improvement Fund Report – FY 2024

Maryland Total Cost of Care Model

Annual Monitoring Report: Expenditures

July 2024

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Introduction

The State of Maryland is leading a transformative effort to improve care and lower healthcare spending growth through the Maryland Total Cost of Care (TCOC) Model. The TCOC Model builds on the successes of the All-Payer Model, a 5-year demonstration project with the Centers for Medicare and Medicaid Services (CMS), which began on January 1, 2014, and ended on December 31, 2018. The TCOC Model, which began on January 1, 2019, aims to control total healthcare costs, enhance the quality of care, and improve health by progressively transforming care delivery across the healthcare system.

While the All-Payer Model (APM) focuses primarily on hospitals, the Total Cost of Care (TCOC) Model focuses on transforming care across the entire healthcare system. The Model will continue through 2028 so long as Maryland meets the following spending and quality requirements included in the TCOC State Agreement:

- Average annual hospital revenue growth per capita must stay at or below 3.58 percent on a cumulative basis since 2013;
- Reach annual savings in Maryland Medicare TCOC per Beneficiary of $120 million by (2019) and reach $300 million in annual savings by 2023;
- The State's Medicare TCOC per Beneficiary growth cannot exceed national Medicare FFS growth by more than 1 percent in any given year or exceed the national growth two years in a row;
- The State must maintain the improvements made in certain hospital quality measures; and
- Ninety-five percent of in-state hospital-regulated revenue must be under population-based budget agreements.

The Maryland TCOC Model agreement requires the State to limit its compounded average annual all-payer hospital per capita revenue growth rate to 3.58 percent. This number is based on the average growth in per capita Gross State Product (GSP) for the period 2002 through 2012. In 2023 under the TCOC Model, the State continued its favorable performance. The State's average growth per capita is 2.68 percent since 2013, 0.90 points below the limit.

As noted in last year's report, the Maryland Department of Planning restated the Maryland population in 2020, revising population figures by about 2 percent. To account for this change, the HSCRC modified the CY 2020 numbers used in the calculation of the all-payer hospital per capita revenue growth, resulting in improved performance compared to what was reported last year.

The TCOC Model requires that the State reach an annual total cost of care savings of $300 million relative to the national growth rate by 2023, compared to a 2013 base year. Thus, there must be sustained improved performance over time to meet the new TCOC Medicare Savings Requirements. In CY 2023, the

annual TCOC run rate in Maryland was $269 million. Current estimates put the CY 2023 annual TCOC run rate between $504 million, which is above the required run rate of $ 300 million.

While the State maintained quality improvements for potentially preventable complications (PPCs) in 2022, Maryland did not maintain the required improvements for readmissions. The Maryland Medicare unadjusted readmission rate was higher than the National Medicare unadjusted readmission rate by 0.17 percentage points (15.53 percent for Maryland vs.15.36 percent for the Nation). However, on a risk-adjusted basis, Maryland does perform better than the nation for Medicare readmissions.

Under the TCOC Model, Maryland must maintain improvements achieved under the All-Payer Model and not exceed the CY 2018 potentially preventable complication (PPC) rates for fourteen payment program PPCs. In CY 2022, Maryland experienced a lower, case mix-adjusted rate than in CY 2018, for both all-payer and Medicare FFS, signifying that Maryland has met the contractual obligation of improving rates from CY 2018.

Finally, 97.9 percent of in-state regulated revenue remained under population-based payment methodologies, ensuring Maryland met the TCOC Model requirement of 95 percent.

Measures Included in Monitoring Report

The purpose of this report is to provide performance information on expenditure growth across Medicare, Medicaid, and all payers.

Results for the measures were developed using hospital unaudited financial data and claims-based files obtained from CMS, MHCC, and Maryland hospitals (e.g., HSCRC Hospital Abstract Data). This report presents available data for January through December 2023, for the goals and measures outlined in Table 1, as required by Appendix D of the Total Cost of Care State Agreement. Growth is calculated against 2013 per capita charges. For illustrative purposes under the TCOC Model, CY 2020-2023 data are presented in this report, and growth is compared to 2013. Data has been revised to reflect the most up-to-date information available from the data sources and may differ from last year's report. Additionally, the Medicare data presented in Goal 19.b is payment data that includes non-claims-based payments or adjustments for CY 2020 - 2023.

Table 1. Monitoring Report Measures - Expenditures

	Goal	Description
19.a	Control Expenditure Growth - Hospital	Per capita hospital charges and expenditures (inpatient and outpatient) by payer category for which there is available and reliable data
19.b	Control Expenditure Growth – All Health Services	Per capita health expenditures and expenditures (hospital and non-hospital) by payer category for which is there available and reliable data

Key Findings

Goal 19a. Control Expenditure Growth – Hospital

This report evaluates hospital expenditure growth by tracking per-capita Maryland hospital charges in five payer categories: (A) All-payer hospital charges, (B) Medicare hospital charges, (C) Medicaid hospital charges, (D) Private Payer hospital charges, and (E) Medicare/Medicaid dually eligible hospital charges.

Goal 19a. Control Expenditure Growth - Hospital	
Goal Summary	Controlling hospital expenditure growth is one of the primary metrics on which the Maryland TCOC Model is assessed. Data on hospital expenditures are available across all payers, as well as for Medicare FFS (including dually eligible), Medicaid (including dually eligible), Medicare/Medicaid dually eligible separately, and for those with Private insurance only. The data for each category captures in-state spending on Maryland residents.
Measurement Methodology	**All-payer Maryland Hospital Per Capita Charges for Maryland Residents:** (Total inpatient and outpatient charges for all Maryland residents) ÷ (Total population in the state of Maryland) **Medicare Maryland Hospital Per Beneficiary Charges for Maryland Residents:** (Inpatient expenditures for Medicare beneficiaries with Part A ÷ Maryland Part A Beneficiaries) + (Outpatient expenditures for Medicare beneficiaries with Part B ÷ Maryland Part B Beneficiaries) **Medicaid Maryland Hospital Per Beneficiary Charges for Maryland Residents:** (Total fee-for-service and managed care expenditures for Maryland Medicaid beneficiaries) ÷ (Total number of Medicaid member months ÷ 12) **Medicare/Medicaid Dually Eligible Maryland Hospital Per Beneficiary Charges for Maryland Residents:** (Total inpatient and outpatient hospital expenditures for dually eligible beneficiaries) ÷ (Total number of Medicaid Duals member months ÷ 12) **Private Payer Maryland Hospital Per Beneficiary Charges for Maryland Residents:** (Total inpatient and outpatient costs for private payer Maryland beneficiaries) ÷ (Total estimated private payer beneficiaries) *The denominator for the 2023 commercial hospital per capita data is not available until 2025.* **Data Sources:** **Hospital Expenditures:** HSCRC Financial Data (All-payer and Medicare) and Inpatient and Outpatient Abstract Data (Medicaid, Commercial, and Dual). **Population Estimates:** All-payer (Maryland Department of Planning), Medicare (CMS), Medicaid and Dual Eligible (Maryland Medicaid eHealth Statistics), Private Payer (State Health Access Data Assistance Center (SHADAC)).

Monitoring Results (See Table 2)	Between 2013 and 2023, all-payer per capita hospital charges grew by 30.60 percent. Medicare per beneficiary hospital charges increased by 11.15 percent between 2013 and 2023, from $6,979 to $7,758. During the same time period, per beneficiary hospital charges increased for Medicaid by 10.64 percent (this data is preliminary and subject to change). Between 2013 and 2023, per-beneficiary hospital charges for Medicare/Medicaid dually eligible beneficiaries increased by 22.19 percent (this data is preliminary and subject to change). Per beneficiary hospital charges for private payers increased by 13.99 percent between 2013 and 2022.

Table 2. Goal 19a: Hospital per Capita Total Charges, by Payer, 2020-2023

Measures	Population		2013	2020	2021	2022	2023
All-payer Maryland Hospital per capita total charges for MD residents	Maryland	Total Hospital Charges ($)	14,070,827,137	16,428,322,903	17,406,740,884	19,117,136,665	18,417,641,607
		Population	5,932,654	6,055,802	6,165,129	6,164,660	6,180,253
		Per capita charges ($)	2,372	2,713	2,823	3,101	2,980
		% Change from 2013		**14.24%**	**18.89%**	**25.81%**	**30.60%**
Medicare FFS Maryland hospital per capita total charges per Beneficiary[1]	Maryland	Total Inpatient Charges ($)	3,577,606,896	3,899,905,840	3,841,928,786	4,030,900,222	4,020,300,286
		Part A Beneficiaries	792,589	914,701	893,075	879,945	866,955
		Part A Per capita charges ($)	4,514	4,264	4,302	4,581	4,637
		Total Outpatient Charges ($)	1,704,310,983	2,079,768,401	2,145,686,067	2,255,714,334	2,250,211,558
		Part B Beneficiaries	691,255	779,568	756,289	740,708	723,951
		Part B Per capita charges ($)	2,466	2,668	2,837	3,045	3,108
		Total Hospital Per capita charges ($)	6,979	6,931	7,139	7,626	7,746
		% Change from 2013		**(0.69%)**	**2.29%**	**9.10%**	**11.15%**
Medicaid Maryland hospital per capita total charges per Beneficiary[2]	Maryland	Total Charges ($)	2,595,383,354	3,628,304,162	3,753,659,158	3,983,983,1799	4,181,078,531
		Total Enrollees	1,240,517	1,599,812	1,702,578	1,806,318	1,911,456
		Per capita charges ($)	2,092	2,268	2,205	2,206	2,084
		% Change from 2013		**8.40%**	**5.38%**	**5.42%**	**10.64%**

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[1] Medicaid Enrollment was restated back to CY 2015 to remove beneficiaries with limited hospital benefits.

Measures	Population		2013	2020	2021	2022	2023
Medicare/ Medicaid Dual Eligible Maryland hospital per capita total charges per Beneficiary[2]	Maryland	Total Charges ($)	1,047,382,694	1,403,377,323	1,524,465,306	1,765,118,689	1,695,334,467
		Total Enrollees	111,430	172,263	178,916	190,867	198,438
		Per capita charges ($)	9,399	8,147	8,521	9,248	8,543
		% Change from 2013		11.91%	17.04%	22.01%	22.19%
Private Payer (SHADAC)	Maryland	Total Charges ($)	4,844,844,194	5,005,521,217	5,389,301,224	5,542,548,157	Not Available
		Total Enrollees	3,762,456	3,837,279	3,767,087	3,776,102	Not Available
		Per capita charges ($)	1,288	1,304	1,431	1,468	Not Available
		% Change from 2013		1.30%	11.10%	13.99%	Not Available

Goal 19b. Control Expenditure Growth – All Health Services

This report evaluates the expenditure growth of all health services by tracking per-capita Maryland health services expenditures in four payer categories: (A) Medicare total expenditures, (B) Medicaid total expenditures, (C) Dually Eligible Medicaid-only total expenditures, and (D) Private Payer total expenditures. The HSCRC is not able to provide an accurate estimate for the All-Payer total expenditure for the foreseeable future given data limitations.

Goal 19b: Control Expenditure Growth - All Health Services	
Goal Summary	Total health expenditure growth is used to monitor potential shifting of costs between categories of health services under the new model agreement.
Measurement Methodology	Separate estimates are generated for the following populations:
	Medicare Per Beneficiary Health Expenditures: The sum of (Part A per capita expenditures for Medicare beneficiaries with Part A) and (Part B per capita expenditures for Medicare beneficiaries with Part B)
	Medicaid Per Beneficiary Health Expenditures: (Total fee-for-service and managed care expenditures for Maryland Medicaid recipients) ÷ (Total number of Medicaid member months ÷ 12)
	Dually Eligible Medicaid/Medicare per Beneficiary Health Expenditures: (Total Medicaid costs for dually eligible beneficiaries) ÷ (Total number of Medicaid Duals member months ÷ 12)
	Private Payer per Beneficiary Health Expenditures: (Total Costs for private payer Maryland residents) ÷ (Total member insured months ÷ 12). **Note:** The total cost for Private payers is limited to Maryland Private payers that report to the Maryland Health Care Commission (MHCC), which excludes most self-insured employers and the Federal Employee Health Benefit Plan (approximately two-thirds Maryland Private Payer population).

	Data Sources:
	Health Expenditures: Medicare (CMS Financial Reports), Medicaid and Dual-Eligible (Maryland Medicaid), Private Payer (MHCC All-Payer Claims Database); **Population Estimates:** Medicare (CMS); Medicaid and Dual-Eligible (Maryland Medicaid); Private Payer (MHCC All-Payer Claims Database).
Monitoring Results (**See Table 3**)	Maryland Medicare per capita health expenditures increased by 26.18 percent between 2013 and 2023, compared to an increase of 31.30 percent for the U.S.
	Total Maryland Medicaid per beneficiary health expenditure increased by 31.91 percent between 2013 and 2023 (this data is preliminary and subject to change).
	Medicare/Medicaid dually eligible health expenditures per beneficiary has grown by 18.33 percent, from $14,572 to $17,243 (this data is preliminary and subject to change).
	Per beneficiary health expenditures for private payer beneficiaries increased from $3,132 in 2013 to $4,728 in 2022.

Table 3. Per Capita Annual Health Expenditures, by Payer, 2020-2023

Measures	Population		2013	2020	2021	2022	2023
Medicare per capita total expenditure [2]	Maryland	Total Part A Expenditures ($)	4,419,176,140	4,969,631,567	5,083,958,586	5,250,119,094	5,116,751,054
		Part A Beneficiaries	792,589	914,701	893,075	879,945	866,955
		Part A Per capita expenditures ($)	5,576	5,433	5,693	5,966	5,902
		Total Part B Expenditures ($)	3,847,620,277	4,906,867,374	5,605,501,507	5,692,150,102	5,904,865,384
		Part B Beneficiaries	691,255	779,568	756,289	740,708	723,951
		Part B Per capita expenditures ($)	5,566	6,294	7,412	7,685	8,156
		Total Per capita expenditures ($)	11,142	11,727	13,104	13,651	14,058
		% Change since 2013		**5.26%**	**17.62%**	**22.52%**	**26.18%**
	National	Total Part A Expenditures ($)	178,838,635,359	179,750,269,026	179,251,115,898	177,447,091,310	173,792,259,923
		Part A Beneficiaries	36,435,042	36,574,202	35,133,571	33,998,630	33,045,719
		Part A Per capita expenditures ($)	4,908	4,915	5,102	5,219	5,259

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[2]These figures do include adjustments for non-claims-based payment data for CYs 2019- 2022.

Measures	Population		2013	2020	2021	2022	2023
		Total Part B Expenditures ($)	152,511,071,263	178,721,164,102	197,714,858,353	196,599,726,176	206,603,383,344
		Part B Beneficiaries	32,927,792	32,078,442	30,672,371	29,486,989	28,429,755
		Part B Per capita expenditures ($)	4,632	5,571	6,446	6,667	7,267
		Total Per capita expenditures ($)	9,540	10,486	11,548	11,887	15,526
		% Change since 2013		**9.92%**	**21.05%**	**24.60%**	**31.30**
Medicaid per capita total expenditure (includes Dually eligible)[3]	Maryland	Expenditures ($)	7,575,448,645	11,724,020,419	12,966,147,686	14,362,659,534	15,177,929,416
		Yearly Average Total Enrollment	1,275,913	1,630,129	1,733,937	1,838,399	1,937,951
		Per capita expenditures ($)	5,937	7,192	7,478	7,813	7,832
		% Change since 2013		**21.13%**	**25.95%**	**31.59%**	**31.91%**
Medicare/ Medicaid dual eligible per capita total expenditure (Medicaid expenditures only)[4]	Maryland	Expenditures ($)	2,055,772,516	2,588,841,113	2,728,286,058	3,046,203,521	3,421,603,535
		Yearly Average Total Enrollment	141,075	172,263	178,916	190,867	198,438
		Per capita expenditures ($)	14,572	15,028	15,249	15,960	17,243
		% Change since 2013		**3.13%**	**4.64%**	**9.52%**	**18.33%**
Private Payer per capita total expenditure	Maryland	Expenditures ($)	7,760,817,042	6,864,583,981	8,234,167,855	8,018,091,324	Not Available
		Yearly Average Total Members	29,722,861	1,693,011	1,773,278	1,694,224	Not Available
		Per capita expenditures ($)	3,132	4,056	4,644	4,728	Not Available
		% Change since 2013		**29.50%**	**48.28%**	**50.96%**	Not Available

Conclusion

The Total Cost of Care Model continues to incentivize broad collaboration among hospitals and non-hospital providers to increase patient satisfaction, improve health outcomes and population health, and slow growth in healthcare spending. As Maryland transitions to a new model, the HSCRC will continue to lead efforts to meet the ambitious goals of curbing healthcare cost growth, improving population health, and advancing health equity through supporting provider-led innovation efforts, leveraging the State's unique

[3]Expenditures and enrollment data for Medicaid beneficiaries for CY 2022 is preliminary and subject to change.

[4] Expenditures and enrollment data for Medicaid/Medicare Dual beneficiaries for CY 2022 is preliminary and subject to change.

global budget system, and engaging stakeholders in a proactive and meaningful way. Through this work, the HSCRC can help effectuate long-term health improvements and cost savings for Marylanders in the State's healthcare system.

Total Cost of Care Model

CY 2023
Annual Monitoring Report

Submitted February 2025

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Introduction

The State of Maryland is leading a transformative effort to improve care and lower the growth of healthcare spending. The Total Cost of Care (TCOC) Model agreement between the State and the Centers for Medicare and Medicaid Services (CMS) aims to control total healthcare costs, enhance the quality of care, and improve health by progressively transforming care delivery across the healthcare system. As the State's hospital rate-setting authority, the Maryland Health Services Cost Review Commission (HSCRC) plays a vital role in the implementation of this innovative approach to healthcare reform, including administering global budgets, providing incentives and rate support to hospitals and other providers to transform care, and administering quality pay-for-performance programs.

Under the TCOC State Agreement the State is required to meet the following spending and quality requirements:

- Maintain average annual hospital revenue growth per capita at or below 3.58 percent
- Achieve annual savings in Maryland Medicare TCOC per Beneficiary totaling $300 million by Model Year 5 (MY 5) (CY 2023)
- Ensure that the State's Medicare TCOC per Beneficiary growth does not exceed national Medicare FFS growth by more than one percent in any given year or exceed the national growth two years in a row.
- Maintain the improvements made in certain hospital quality measures during the All-Payer Model.
- Include ninety-five percent of in-state hospital regulated revenue under population-based budget agreements.

The State met all financial requirements included in the TCOC Model agreement for CY 2023. For more information on the financial performance of the Maryland Model during Model Year 5, please refer to the Annual Monitoring Report – Expenditures (submitted July 2024). For quality, in CY 2023, the State did not backslide on the potentially preventable complication (PPC) measures. Maryland maintained a 0.80 Case-mix Adjusted PPC Rate per 1,000 discharges in CY 2023 for the 15 PPCs that comprise the Maryland's Hospital Acquired Condition (MHAC) pay-for-performance program, a reduction from the CY 2018 rate of 1.16. In CY 2023, Maryland's Medicare unadjusted readmission rate of 15.86 percent is above the national rate of 15.54 percent. However, on a risk-adjusted basis the State performs better than the Nation in readmission, which is now used as the "Waiver Test" and therefore CMMI did not require a corrective action plan for CY 2023 performance. Given the differences between the unadjusted and adjusted results, staff is

pleased that CMMI has developed a risk-adjusted readmissions measure to take into account the patient acuity in Maryland and the Nation.

Report Submission in fulfillment of TCOC Model Requirements

In addition to the above-listed goals, the submission of this report completes the Maryland Model Agreement requirement that the State provide an annual monitoring report to CMS (14.c.ii, 16.b., and Appendix D, Table 1). This report is intended to document State performance with respect to selected quality and financial goals as outlined in the TCOC Model Agreement Appendix D under three domains: Patient Experience of Care, Population Health, and Costs and Efficiency. The "Maryland Total Cost of Care Model Annual Monitoring Report: Expenditures" was submitted in July 2024 in fulfillment of the Costs and Efficiency Goals of the Annual Monitoring Report; the CY 2023 Annual Monitoring Report, containing data for Patient Experience and Population Health Goals, is submitted herewith.

Measures included in support of Goal Achievement

The HSCRC aims to ensure that CMS has the data it needs to show that the Maryland TCOC Model is effective at achieving the goals of delivering better care and better health at lower costs. Performance on several of the goals is tracked using multiple (i.e., two or more) measures. Due to International Classification of Diseases, 10th edition (ICD-10) implementation, some measure data in this report should not be trended across the ICD-9 and ICD-10 time periods (pre- and post- October 2015).

Goals to Improve Patient Experience of Care

Maryland believes that a TCOC Model can simultaneously control costs while improving the quality and patients' experience of care. Through the course of the TCOC Model, Maryland expects to enhance care transitions, sustain high levels of physician participation in public programs, and broaden provider engagement in innovative models of care throughout the State. Through these efforts, as well as ongoing initiatives to reduce complications and readmissions, Maryland will improve both quality outcomes and patient experience.

Goal 1 - Increase Patient Satisfaction - Hospital

Goal 1. Increase Patient Satisfaction with Hospital	
Goal Summary	Patient experience with inpatient hospital care is monitored using the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. The HCAHPS survey is a standardized tool that allows comparisons across hospitals for

	Goal 1. Increase Patient Satisfaction with Hospital
	public reporting and is used by CMS as part of its Value-Based Purchasing (VBP) pay-for-performance program. The HSCRC also uses the HCAHPS results to reward or penalize hospitals for patient experience as part of its state-level VBP equivalent, the Quality-Based Reimbursement (QBR) program. The Rate Year (RY) 2026 QBR policy was redesigned to increase the weight of the Person and Community Engagement (PCE) domain to 60 percent (which is higher than the 25 percent weight in the CMS VBP program), but also incorporates scoring of both the top box and the linear measures that are available from CMS Hospital Compare, as well as other measures such as Emergency Department length of stay since this is highly correlated with patient experience. Providing credit for linear scores (i.e., scores that take into account the full distribution of performance) is designed to further incentivize improvements in HCAHPS survey results. Overall, HCAHPS results (top-box, consistency and linear scores) are weighted at 40 percent of the QBR program. For this report, we include top-box results on overall satisfaction with the hospital, as well as the composite scores for communication with doctors and nurses.
Measurement Methodology	HCAHPS Survey Questions[1] Overall patient satisfaction "9 or 10" - This is a global item with one survey question. The measure is the percentage of survey respondents reporting a "9" or "10" when asked the following: "Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?" Doctors "always" communicated well - This is a composite measure combining responses from three survey questions. The measure is the percentage of survey respondents reporting "always" for each of the following questions: • During this hospital stay, how often did doctors treat you with courtesy and respect? • During this hospital stay, how often did doctors listen carefully to you? • During this hospital stay, how often did doctors explain things in a way you could understand? Nurses "always" communicated well - This is a composite measure combining responses from three survey questions. The measure is the percentage of survey respondents reporting "always" for each of the following questions: • During this hospital stay, how often did nurses treat you with courtesy and respect? • During this hospital stay, how often did nurses listen carefully to you? • During this hospital stay, how often did nurses explain things in a way you could understand?

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[1] For official HCAHPS Survey Question wording, please visit:
https://www.hcahpsonline.org/globalassets/hcahps/survey-instruments/mail/effective-july-1-2020-and-forward-discharges/2020_survey-instruments_english_mail.pdf

Goal 1. Increase Patient Satisfaction with Hospital

	Additional information on the HCAHPS survey (e.g., number of surveys collected, survey methods, and exclusion criteria) can be found at: https://www.hcahpsonline.org/.
Monitoring Results	• Across all years (2013–2023), patients in Maryland indicated lower levels of hospital satisfaction than patients across the United States. In 2023, approximately 66 percent of Maryland patients rated their hospital experience as a "9" or "10", compared to 72 percent of patients nationwide. Both Maryland and the Nation increased from 2022. • Patient experience with physician communication was also rated higher in the U.S. than in Maryland. In 2023, Maryland decreased by 1.4 percentage points from 2022 with 73.6 percent of patients expressing a high level of satisfaction with physician communication; this compares to 78 percent of patients nationwide which decreased by 1 percentage point from 2022 • Experience with nurse communication increased by 1 percentage point in 2023, with 75 percent of Maryland patients expressing a high level of satisfaction with nurse communication; this compares to 79 percent for the Nation which remained the same since 2022.

CMS Hospital Consumer of Healthcare Providers and Systems (HCAHPS) Results

Measures	Popul-ation	2013	2014	2015	2016	2017	2018	2019	2020*	2021	2022	2023
Patient's rating of hospital: Percentage of survey respondents reporting a 9 or 10 (10 being best)	Maryland	64%	65%	65%	65%	67%	65%	66%	66%	65%	64%	66%
	National	71%	71%	72%	73%	73%	73%	73%	72%	72%	70%	72%
Communication with doctors: Percentage of survey respondents reporting "always" on three questions (composite measure)	Maryland	77%	78%	78%	77%	78%	77%	77%	77%	76%	75%	73.6%
	National	82%	82%	82%	82%	82%	81%	82%	81%	80%	79%	78%
Communication with nurses: Percentage of survey respondents reporting "always" on six questions (composite measure)	Maryland	75%	76%	76%	75%	76%	76%	76%	75%	74%	74%	75%
	National	79%	79%	80%	80%	80%	81%	81%	81%	80%	79%	79%

*During the COVID-19 Public Health Emergency, CMS announced the suspension of Jan-Jun 2020 quality reporting. Therefore, the CY 2020 data in this annual report reflects Jul 2020-Dec 2020, as is available in the Care Compare flat files from October 2021.

Goal 2 – Increase Patient Satisfaction – Home Health

Goal 2. Increase Patient Satisfaction – Home Health	
Goal Summary	Patient experience with home health care is assessed using the Home Health CAHPS (HHCAHPS) survey. As with the hospital survey, the HHCAHPS is a standardized survey that allows comparisons across home health agencies for public reporting. For this report, we include results on overall satisfaction with home health, the composite score for communication with the home health team, and the composite of discussions regarding medicines, pain, and home safety.
Measurement Methodology	HHCAHPS Survey Questions[2]
	Overall patient experience with home health agency
	This is a global item with one survey question. The measure is the percentage of survey respondents reporting a "9" or "10" when asked the following: "Using any number from 0 to 10, where 0 is the worst home health care possible and 10 is the best home health care possible, what number would you use to rate your care from this agency's home health providers?"
	Home Health team always communicated well
	This is a composite measure combining responses from six survey questions. The measure is the percentage of survey respondents reporting "always" to each of the following questions:
	● When you first started getting home health care from this agency, did someone from the agency tell you what care and services you would get?
	● In the last two months of care, how often did home health providers from this agency keep you informed about when they would arrive at your home?
	● In the last two months of care, how often did home health providers from this agency explain things in a way that was easy to understand?
	● In the last two months of care, how often did home health providers from this agency carefully listen to you?
	● In the last two months of care, when you contacted this agency's office did you get the help or advice you needed?
	● When you contacted this agency's office, how long did it take for you to get the help or advice you needed?
	Home Health team discussed medicines, pain, and home safety
	This is a composite measure combining responses from seven survey questions. The measure is the percentage of survey respondents reporting "yes" to each of the following questions:
	● When you first started getting home health care from this agency, did someone from the agency talk with you about how to set up your home so you can move around safely?

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[2] For more information on the HHCAHPS survey questions, please visit -
https://homehealthcahps.org/Portals/0/SurveyMaterials/HHCAHPS_Questionnaire_English.pdf

Goal 2. Increase Patient Satisfaction – Home Health

- When you started getting home heath care from this agency, did someone from the agency talk with you about all the prescription medicines and over-the-counter medicines you were taking?
- When you started getting home health care from this agency, did someone from the agency ask to see all the prescription medicines and over-the-counter medicines you were taking?
- In the last two months of care, did you and a home health provider from this agency talk about pain?
- In the last two months of care, did home health providers from this agency talk with you about the **purpose** for taking your new or changed prescription medicines?
- In the last two months of care, did home health providers from this agency talk with you about **when** to take those medicines?
- In the last two months of care, did home health providers from this agency talk with you about the **side effects** of these medicines?

Additional information on the HHCAHPS survey (e.g., number of surveys collected, survey methods, and exclusion criteria) may be found at: https://homehealthcahps.org/Home.aspx.The survey results are updated quarterly; results for CY2020 restate CY2019 HHCAHPS results.

Monitoring Results	
	• In 2023, 83 percent of Maryland residents indicated that they received the best home health care possible (up 1 percentage point from 2022, but the same percent as was seen in 2018) compared to 85 percent nationwide (nationwide score increased by 1 percent since 2018).
	• Maryland residents' experience ratings of the home health team communication remained the same at 83 percent while the US residents increased by 1 percentage point from 85 percent to 86 percent.
	• Patients who reported that their home health team discussed medicines, pain, and home safety with them were similar in 2023 compared to 2022, with scores of 80 percent for Maryland and 82 percent for the nation, both experiencing an increase of 1 percentage point from 2022.

CMS Home Health CAHPS Survey Results

Measures	Popul-ation	2018	2019	2020*	2021	2022	2023
Patient's rating of home health agency: percentage of survey respondents reporting a 9 or 10 (10 being the best)	Maryland	83%	82%	82%	82%	82%	83%
	National	84%	84%	84%	84%	84%	85%
Patients who reported that their home health team communicated well with them	Maryland	85%	85%	85%	84%	83%	83%
	National	85%	85%	85%	85%	85%	86%
Percent of patients who reported that their home health team discussed	Maryland	81%	82%	82%	80%	79%	80%

Measures	Popul-ation	2018	2019	2020*	2021	2022	2023
medicines, pain, and home safety with them	National	83%	83%	83%	81%	81%	82%

Source: CMS Home Health Compare

*For CY 2020, CMS Home Health Compare is restating CY 2019 HHCAHPS survey results.

Goal 3 – Increase Patient Satisfaction – Nursing Homes

Goal 3. Increase Patient Satisfaction – Nursing Homes	
Goal Summary	Ongoing review of nursing home data has become even more important as hospitals and nursing homes increasingly collaborate to improve care for patients across settings. This report provides Maryland quality measures from Nursing Home Compare data and the Maryland Nursing Home Family Experience of Care Survey, to evaluate patient care performance in nursing homes in Maryland.
Measurement Methodology	**Nursing Home Quality Measures** For 2018 to 2023, Maryland is presenting Nursing Home quality measures derived from the Minimum Data Set (MDS) and Medicare claims data to measure the quality of care provided in nursing homes. The data are collected from publicly available data on Nursing Home Compare. The measures have been broadly vetted and endorsed as valid and reliable, important, and influenced by facility practice. Maryland has focused on a subset of the Nursing Home Compare measures for this report, which are listed below. HSCRC believes that measures of performance in 1) patient independence and functionality; 2) negative occurrences such as falls resulting in major injury, UTIs, and pressure ulcers; 3) the use of prescriptions, including anti-anxiety medications and antipsychotics; and 4) vaccination prevalence are key indicators of patient experience and quality of care in nursing homes. Additional information on the Nursing Home Quality Measures (e.g., measure specifications, data availability, archived data, etc.) may be found at: https://data.medicare.gov/data/nursing-home-compare. ● QM-407 – Percentage of long stay residents with a urinary tract infection ● QM-410 – Percentage of long stay residents experiencing one or more falls with major injury ● QM-415 – Percentage of long stay residents assessed and appropriately given the pneumococcal vaccine ● QM-419 – Percentage of long stay residents who received an antipsychotic medication ● QM-434 – Percentage of short stay residents who newly received an antipsychotic medication ● QM-452 – Percentage of long stay residents who received an antianxiety or hypnotic medication

	Goal 3. Increase Patient Satisfaction – Nursing Homes
	- QM-453 – Percentage of high risk long stay residents with pressure ulcers - QM-454 – Percentage of long stay residents assessed and appropriately given the seasonal influenza vaccine - QM-471 – Percentage of short stay residents who made improvements in function **Maryland Nursing Home Family Experience of Care Survey** For 2018 to 2023, Maryland is presenting Nursing Home patient satisfaction measures as reported in the Maryland Nursing Home Family Experience of Care Survey. All nursing facilities in Maryland with one or more residents that had a 100 day stay or longer are included in the sample. All nursing homes were asked to provide a list of the designated family members of each of their current residents. The designated family members were asked to complete a survey about their experience and satisfaction with the facility and care provided to residents. The survey contains two overall measures of satisfaction and 31 items which assess seven domains or aspects of residents' life and care: 1. Staff and Administration of the Nursing Home 2. Care Provided to Residents 3. Food and Meals 4. Autonomy and Residents' Rights 5. Physical Aspects of the Nursing Home 6. Activities 7. Security and Residents' Personal Rights Beginning with the 2020 survey, three Overall COVID-19 Measures are included: - Percentage who said staff of the nursing home "Always" or "Usually" kept them informed of how the COVID-19 outbreak was affecting their loved one - Percentage who said staff of the nursing home "Always" or "Usually" kept them involved in the resident's care decisions during the COVID-19 outbreak - Overall rating of care received at the nursing home in response to the COVID-19 outbreak These questions were sunsetted in the CY 2022 survey. - Additional information on the Maryland Nursing Family Experience of Care Survey (e.g. survey questions, methods, etc.) may be found at: https://healthcarequality.mhcc.maryland.gov/3e923db3396c3e1ff53b0a1cb3cfae65.pdf

Goal 3. Increase Patient Satisfaction – Nursing Homes	
Monitoring Results	**Nursing Home Quality Measures** ● Of the nine measures, Maryland performs on par or better than the Nation in CY 2023 in all but three measures. ● Maryland performs worse than the Nation by 1.57 percentage points on the percentage of short-stay residents who improved in their ability to move around on their own, 1.87 percentage points worse on the percentage of long-stay high-risk residents with pressure ulcers, and 2.66 percentage points worse on the percentage of long-stay residents who needed and got a vaccine to prevent pneumonia **Maryland Nursing Home Family Experience of Care Survey** ● Of the nine domains in the 2023 survey, Maryland's performance increased from CY 2022 to CY 2023 in seven domains (i.e., Staff and Administration of the Nursing Home, Care Provided to Residents, Autonomy and Resident Rights, Physical Aspects of the Nursing Home, Activities, Overall Rating of Care Received all increased by 0.1 points; Percentage that Would Recommend the Nursing Home increased by 2 percentage points). ● Two domains (Food and Meals and Security and Residents' Personal Rights) saw no change in performance in 2023 compared to 2022.

Nursing Home Quality of Care Measures

Measures	Population	2018	2019	2020*	2021	2022	2023
Percentage of short-stay residents who improved in their ability to move around on their own. [QM-471]	Maryland	66.58%	66.25%	71.82%	73.77%	73.77%	74.43%
	Nation	67.41%	67.99%	72.12%	74.14%	74.14%	76.00%
Percentage of short-stay residents who got antipsychotic medication for the first time. [QM-434]	Maryland	1.57%	1.47%	1.71%	1.59%	1.59%	1.71%
	Nation	1.80%	1.79%	1.89%	1.76%	1.76%	1.40%
Percentage of long-stay residents experiencing one or more falls with major injury. [QM-410]	Maryland	2.67%	2.64%	3.00%	2.66%	2.66%	2.53%
	Nation	3.37%	3.36%	3.41%	3.39%	3.39%	3.36%
Percentage of long-stay residents with a urinary tract infection. [QM-407]	Maryland	2.47%	2.32%	2.22%	2.11%	2.11%	2.09%
	Nation	2.76%	2.65%	2.49%	2.36%	2.36%	2.24%

Measures	Population	2018	2019	2020*	2021	2022	2023
Percentage of long-stay high-risk residents with pressure ulcers. [QM-453]	Maryland	8.96%	8.89%	10.52%	10.04%	10.04%	9.83%
	Nation	7.32%	7.32%	8.35%	8.13%	8.13%	7.96%
Percentage of long-stay residents who got antianxiety or hypnotic medication. [QM-452]	Maryland	15.49%	14.88%	14.89%	14.31%	14.31%	14.29%
	Nation	20.17%	19.70%	19.70%	19.47%	19.46%	19.40%
Percentage of long-stay residents who needed and got a flu shot for the current flu season. [QM-454]	Maryland	96.60%	96.52%	96.36%	95.60%	95.60%	95.14%
	Nation	95.76%	95.98%	95.94%	95.16%	95.17%	94.72%
Percentage of long-stay residents who needed and got a vaccine to prevent pneumonia. [QM-415]	Maryland	94.12%	93.93%	93.32%	90.77%	90.77%	89.17%
	Nation	93.66%	93.87%	93.58%	92.39%	92.40%	91.83%
Percentage of long-stay residents who got an antipsychotic medication. [QM-419]	Maryland	12.21%	12.52%	13.23%	13.06%	13.06%	13.12%
	Nation	14.48%	14.20%	14.42%	14.47%	14.47%	14.66%

*Source: CMS Nursing Home Compare. State and National MDS measures are reported from October or November archived files, in accordance with corresponding CY quarters in the by-facility reports. QM-453 is restated from historical QM-403, and QM-454 is restated from historical QM-411. All data represent Calendar Years except where specified. 2020 data is sourced from the Nursing Home Compare Flat Files, refreshed November 2021 (Source: NH_StateUSAverages_Oct2021). Please see caveats from the FY 2022 SNF PPS Final Rule.

The HSCRC continues its partnership with the Maryland Health Care Commission (MHCC), which administers an annual **Maryland Nursing Home Family Experience of Care Survey** and reports the results on a statewide basis.

Maryland Nursing Home Family Experience of Care Survey Results

Measures	Population	2018	2019	2020	2021	2022	2023
Staff and Administration of the Nursing Home*	Maryland	3.4	3.4	3.4	3.3	3.2	3.3
Care Provided to Residents*	Maryland	3.4	3.3	3.4	3.1	3.1	3.2
Food and Meals*	Maryland	3.1	3	3.1	3.0	2.9	2.9

Measures	Population	2018	2019	2020	2021	2022	2023
Autonomy and Residents' Rights*	Maryland	3.3	3.3	3.1	3.1	3.1	3.2
Physical Aspects of the Nursing Home*	Maryland	3.2	3.2	3.2	3.2	3.0	3.1
Activities*	Maryland	3.0	3.0	2.7	2.6	2.7	2.8
Security and Residents' Personal Rights*	Maryland	3.3	3.3	3.3	3.3	3.2	3.2
Overall Rating of Care Received at the Nursing Home (0-10)	Maryland	7.7	7.6	7.8	7.5	7.2	7.3
Percentage that said "Definitely Yes" Or "Probably Yes" to "Would you recommend the nursing home?"	Maryland	81%	78%	80%	75%	69%	71%
Percentage who said staff of the nursing home "Always" or "Usually" kept them informed of how the COVID-19 outbreak was affecting their loved one	Maryland			81%	80%	80%	
Percentage who said staff of the nursing home "Always" or "Usually" kept them involved in the resident's care decisions during the COVID-19 outbreak	Maryland			79%	75%	74%	
Overall rating of care received at the nursing home in response to the COVID-19 outbreak	Maryland			81%	80%	52%	

*Starred Domains within the Maryland Nursing Home Family Experience of Care Survey are assessed on a scale of 1-4.

*MHCC discontinued collecting COVID-19 data for the 2023 Maryland Nursing Home Family Experience of Care Survey.

Goal 4- Increase Patient Satisfaction - Ambulatory Care

Goal 4. Increase Patient Satisfaction - Ambulatory Care	
Goal Summary	At present, the HSCRC reports one measure of patient satisfaction from the Clinician and Group CAHPS (CG-CAHPS) to assess patient experience with ambulatory care. Estimates for the state of Maryland are not reported separately by CG-CAHPS and are not specifically presented in this report. Rather, Maryland patients' assessment of

	Goal 4. Increase Patient Satisfaction - Ambulatory Care
	ambulatory care satisfaction is represented in data for the southern region of the United States. Data in this monitoring report are the "top box" scores for patients' ratings of their providers by region of the country. The HSCRC has added to this report results for multiple years (2018-2023) of the Maryland Health Care Commission's (MHCC) "Maryland Freestanding Ambulatory Surgical Facility Survey". The MHCC and HSCRC staff believe that areas particularly pertinent to the ongoing success of the TCOC Model include the proportion of Medicare and Medicaid patients served at Maryland ASCs and surgeries that are gradually shifting from inpatient settings to ASCs.
Measurement Methodology	**CG-CAHPS Survey Question Reported[3],[4]** Global Ratings ● Using any number from 0 to 10, where 0 is the worst doctor possible and 10 is the best doctor possible, what number would you use to rate this doctor? The by-region analysis presents the percentage of respondents who responded "9" or "10". Additional information on the CG-CAHPS database is available here: https://www.cahpsdatabase.ahrq.gov/CGSurveyGuidance.aspx In 2021, AHRQ suspended new data submission for the CG-CAHPS due to a decline in participation. **Maryland Freestanding Ambulatory Surgical Facility Survey** In 2018, the HSCRC's "Sister Commission", the Maryland Health Care Commission (MHCC), updated the data collection website and questions for its annual "Maryland Freestanding Ambulatory Surgical Facility Survey". The data collected is self-reported for over 300 ambulatory surgical centers (ASCs) across the state. The survey gathers data along the following five domains: 1. Facility Contact Information, Ownership, and Operational Status 2. Services and Staffing 3. Utilization 4. Financing 5. Patient Safety Activities
Monitoring Results	● The percentage of ambulatory surgical facilities that administer patient satisfaction surveys has increased by 2 percentage points from 2022 to 2023.

[3] CG-CAHPS information was accessed via the CG-CAHPS Report Builder, which may be found here: https://cahpsdatabase.ahrq.gov/CAHPSIDB/CG/RptBuilder.aspx

[4] CY 2017 Aggregated total was accessed via the CG-CAHPS 2017 Executive Summary, which may be found here: https://cahpsdatabase.ahrq.gov/files/2017_CG_CAHPS_Chartbook_Executive_Summary.pdf

Goal 4. Increase Patient Satisfaction - Ambulatory Care
- The percentage of facilities that maintain an antimicrobial stewardship program that aligns with the CDC or AHRQ guidelines has increased in 2023 by 14 percentage points from 2018 and 5 percentage points from 2022.   - The percentage of facilities that participate in the CDC's NHSN surveillance system for reporting infections has increased in 2023 by 21 percentage points from 2018 and 5 percentage points from 2022.

CG-CAHPS Survey Results

Measures	Population	2016	2017	2018	2019	2020	2021	2022	2023
Patient's rating of provider: percent with top box scores ("9" or "10")	Maryland (South)			83%	83%				
	Northeast	83%		81%	78%				
	Midwest	82%		82%	81%				
	West	82%		77%	77%				
	National	82%	80%	80%	79%				

Quality Metrics from the MHCC: Maryland Freestanding Ambulatory Surgical Facility Survey[5]

Domain	Measure	2018	2019	2021	2022	2023
Facility Counts	Total Facilities	315	322	344	324	321
	Physician Outpatient Surgery Center (2 or less operating rooms)	95%	95%	95%	95%	95%
	Ambulatory Surgery Facility (3 or more operating rooms)	5%	5%	5%	5%	5%
Patient Satisfaction	Answered "Yes" to: Does your facility administer a patient satisfaction survey?	88%	88%	88%	91%	93%
	If yes, frequency of survey:					
	After each surgery	87%	81%	87%	87%	89%
	Quarterly	8%	14%	9%	8%	7%
	Annually	2%	2%	2%	2%	1%
	Other	3%	3%	2%	3%	3%
Accreditation	Answered "Yes" to: Is your facility accredited by any of the following organizations?[6]	96%	95%	93%	96%	95%
	If yes, which organization?					
	The Joint Commission (JTC)	17%	18%	18%	18%	19%

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[5] The survey was not administered for CY2020 due to the COVID pandemic.
[6] A freestanding ambulatory surgical facility can be accredited by multiple organizations, some years may equate to greater than 100%

Domain	Measure	2018	2019	2021	2022	2023
	Accreditation Association for Ambulatory Health Care (AAAHC)	51%	51%	50%	53%	53%
	American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF)	20%	18%	18%	17%	16%
	Accreditation for Podiatric Surgical Facilities (AAPSF)	9%	9%	9%	9%	8%
Healthcare Worker Influenza Vaccination[7]	Overall Healthcare Worker Influenza Rate	85%	86%	84%	82%	78%
	Does your organization have a mandatory influenza vaccination policy?					
	Yes-Mandatory policy	35%	30%	36%	43%	41%
	No- No mandatory policy	59%	63%	58%	49%	47%
	No- Not planning to implement	6%	7%	6%	7%	12%
Miscellaneous	Answered "Yes" to: Does your facility maintain an antimicrobial stewardship program (ASP) that aligns with the CDC or AHRQ guidelines (i.e. core elements)?	46%	49%	51%	55%	60%
	Answered "Yes" to: Does your facility participate in the CDC National Healthcare Safety Network (NHSN) surveillance system for reporting infections	40%	42%	49%	56%	61%
	Percentage of facilities that serve Maryland Medicare Patients[8]	85%	90%	86%	93%	90%
	Percentage of facilities that serve Maryland Medicaid Patients[9]	70%	70%	73%	77%	76%

Goal 5 - Enhance Care Transitions - Hospital

Goal 5. Enhance Care Transitions - Hospital	
Goal Summary	The three-item Care Transition Measure (CTM-3) assesses overall patient experience with hospital care transitions. The CTM-3 includes three major domains: 1) patients' understanding of their role in self-care, 2) patients' understanding of their medications' purpose, and 3) patients' perception that their preferences and those of their families were taken into account when discharge plans were being made.

These three items were added to the HCAHPS survey, and hospitals in Maryland and nationwide began reporting them in January 2014. The CTM-3 item has been added to Maryland's QBR programs beginning in FY 2018. The HSCRC is particularly interested in this measure due to the importance of empowering patients to access and maintain the post-discharge care they will need to reduce potentially avoidable hospital utilization. |

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[7] The survey responses represent the flu season prior to the survey (e.g., 2021 survey would encompass October 2020- May 2021); denominator excludes facilities that closed within the survey year
[8] Derived from the presence of Medicare payments received within the Calendar Year (CY)
[9] Derived from the presence of Medicaid payments received within the Calendar Year (CY)

		Goal 5. Enhance Care Transitions - Hospital	
Measurement Methodology	This is a composite measure combining responses from three questions on the HCAHPS survey.[10] The measure is the linear transformation score of survey respondents reporting "Strongly Agree" for each of the following questions: ● During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left. ● When I left the hospital, I had a good understanding of the things I was responsible for in managing my health. ● When I left the hospital, I clearly understood the purpose for taking each of my medications. Additional information on the CTM-3 and HCAHPS survey (e.g., number of surveys collected, survey methods, and exclusion criteria) can be found at: https://www.hcahpsonline.org/.
Monitoring Results	● The CTM-3 transition scores for Maryland of respondents who "Strongly Agree" that they understand post-discharge care are four percent below national scores (48 v. 52 percent) in 2023. ● Since 2016, the scores for "Strongly Agree" has increased by 1 percentage point while the Nation has not seen any improvement. ● When "Strongly Agree" and "Agree" are combined, Maryland is much closer in performance to the Nation, at 92% compared to 94.3%. ● Maryland respondents are higher at the rate at which they "Disagree" or "Strongly Disagree" that they understand their post-discharge care, 7 percent (MD) compared to 5.3 percent (Nation) in 2023.

Measures		Population	2016	2017	2018	2019	2020*	2021	2022	2023
Three Item Care Transition Measure	Strongly Agree	Maryland	47%	49%	49%	49%	48%	47%	47.3%	48%
		National	52%	53%	53%	54%	52%	52%	51.3%	52%
	Agree	Maryland	46%	45%	44%	45%	45%	45%	45%	44%
		National	43%	42%	42%	41%	42%	42%	42.3%	42.3%
	Disagree or Strongly Disagree	Maryland	7%	6%	7%	6%	7%	8%	7.7%	7%
		National	5%	5%	5%	5%	6%	6%	6.3%	5.3%

*During the COVID-19 Public Health Emergency, CMS announced the suspension of Jan-Jun 2020 quality reporting. Therefore, the CY 2020 data in this annual report reflects Jul 2020-Dec 2020, as is available in the Care Compare flat files from October 2021.

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[10] For official HCAHPS Survey Question wording, please visit: https://www.hcahpsonline.org/globalassets/hcahps/survey-instruments/mail/effective-july-1-2020-and-forward-discharges/2020_survey-instruments_english_mail.pdf

Goal 6 - Enhance Care Transitions - Coordination with Primary Care; Other settings of Care

Measures used to assess the improvement of care transitions consist of (A) the rate of timely physician follow-up after discharge and (B) implementation of Care Transformation Initiatives (CTIs). The hospitals also continue to improve alignment with practices in the MD Primary Care Program (MDPCP).

Goal 6. Enhance Care Transitions- Coordination with Primary Care; Other settings of Care	
Goal Summary	The successful management of transitions of care—particularly following an hospital visit—is a key strategy to improve quality of patient care, including the reduction of hospital readmissions. Of particular importance is appropriate and timely outpatient physician follow-up to ensure a patient's post-discharge care needs are being addressed. This goal tracks the rate of physician follow-up after discharge. Finally, hospitals continue to improve alignment with practices in the MD Primary Care Program (MD-PCP). For more information on the MDPCP, please refer to the MDPCP Annual Report.
Measurement Methodology	**Timely Follow-up after Acute Exacerbations of Chronic Conditions** State of Maryland has adopted the National Quality Forum (NQF) endorsed measure of Timely Follow-Up after Acute Exacerbations of Chronic Conditions (NQF# 3455). This measure was developed as a health plan measure by IMPAQ International on behalf of CMS, and Maryland has adapted the measure to calculate rates of follow-up after discharge for Medicare beneficiaries who visit the hospital in Maryland. In CY 2023, the HSCRC, in collaboration with CRISP and Maryland Medicaid, was able to expand the measurement to include Medicaid patients. The measure assesses the percentage of emergency department visits, observation stays, and inpatient admissions after which a non-emergent outpatient follow-up visit was received within the timeframe recommended by clinical practice guidelines for the following conditions: • Hypertension: Within 7 days of the date of discharge • Asthma: Within 14 days of the date of discharge • Heart Failure: Within 14 days of the date of discharge • Coronary Artery Disease: Within 14 days of the date of discharge • Chronic Obstructive Pulmonary Disease: Within 30 days of the date of discharge • Diabetes: Within 30 days of the date of discharge NQF endorsed this measure for three main reasons: the overall importance of timely follow-up in favorable health outcomes; clinical evidence that timely follow-up is associated with reduced readmission rates for specific conditions; and in alignment with strong clinical practice guidelines to receive follow-up following discharge.

Goal 6. Enhance Care Transitions- Coordination with Primary Care; Other settings of Care	
	Starting with CY 2021 performance, Maryland included a by-hospital incentive to improve the rates of timely follow-up for Medicare patients in the QBR program; hospitals are provided with monthly updates. In CY 2022, hospitals began receiving reports for Medicaid patients; the Medicaid measure was included in the QBR program beginning with CY 2023 performance. In RY 2026, which evaluates CY 2024 performance, the TFU disparity gap measure was added to the QBR; this measure incentivizes reductions in disparities in TFU based on race, ADI, and dual-eligibility status.
	Maryland is including improvement on this measure as a Goal under Domain 2: Care Transformation across the System, of the SIHIS proposal. Despite not meeting the CY 2021 SIHIS milestone target, Maryland is committed to achieving the SIHIS goal of 75% timely follow-up by Year 8 of the Model for Medicare patients. Finally, disparities in follow-up rates by race, ADI, and dual enrollment status in Medicaid was added to the QBR program for Medicare patients starting in 2024. The methodology for measuring within-hospital disparities in follow-up uses the same general methodology as is used for readmissions.
Monitoring Results	**Follow-up After Discharge for Acute Exacerbation of Chronic Condition** ● In CY 2018, Maryland had an overall Medicare Timely Follow-Up rate across all six conditions of 70.85 percent; during CY 2020, the overall rate of timely follow-up dropped to its lowest rate at 67.90% for Maryland but has been recovering each year since then with the CY 2023 rate increasing to 71.21% ● Maryland's Timely Follow-Up rate has remained higher than the contemporaneous National Timely Follow-Up rate. In CY 2023, Maryland performed a little over four percent better than the Nation. ● In CY 2023, Maryland Medicare Timely Follow-Up rates for all conditions were higher than the Nation. ● Results for Medicaid indicate much lower follow-up rates than for Medicare with only 47.64% of patients receiving Timely Follow-Up in CY 2023 following a hospital visit and this rate is slightly lower than what was seen in CY 2018 and CY 2022. This lower rate and stagnant performance led to the Commission approval of the Medicaid measure in the QBR program. The lower rate also may be due to a younger and more healthy population, and also is why staff did not combine Medicare and Medicaid.

Follow-up After Discharge for Acute Exacerbation of Chronic Condition- Medicare

Measures	Population	2018	2019	2020	2021	2022	2023
Overall	Medicare MD	70.85%	71.45%	67.90%	70.07%	70.59%	71.21%
	Medicare Nat'l	66.82%	69.00%	64.75%	67.68%	67.26%	68.35%
Asthma	Medicare MD	61.79%	60.84%	56.57%	58.30%	61.60%	64.36%

Measures	Population	2018	2019	2020	2021	2022	2023
	Medicare Nat'l	57.34%	59.73%	54.27%	58.63%	59.51%	62.72%
CAD	Medicare MD	73.86%	74.89%	71.55%	74.05%	73.82%	72.40%
	Medicare Nat'l	68.23%	70.58%	67.32%	70.70%	70.37%	69.96%
CHF	Medicare MD	72.10%	73.23%	68.93%	72.20%	72.56%	73.48%
	Medicare Nat'l	67.25%	69.21%	64.46%	69.56%	69.05%	70.47%
COPD	Medicare MD	79.32%	79.67%	74.41%	77.60%	79.66%	80.98%
	Medicare Nat'l	73.96%	77.67%	72.52%	75.58%	76.05%	77.96%
Diabetes	Medicare MD	80.60%	80.77%	78.77%	80.68%	81.83%	83.22%
	Medicare Nat'l	75.80%	79.21%	74.31%	78.27%	77.71%	79.94%
HTN	Medicare MD	55.04%	55.94%	54.15%	55.44%	54.73%	56.06%
	Medicare Nat'l	52.59%	53.66%	51.98%	53.16%	52.42%	53.38%

Follow-up After Discharge for Acute Exacerbation of Chronic Condition- Medicaid

Measures	Population	2018	2019	2020	2021	2022	2023
Overall	Medicaid MD	48.66%	49.92%	49.42%	50.43%	48.24%	47.64%
Asthma	Medicaid MD	38.51%	38.38%	36.56%	37.67%	37.31%	37.43%
CAD	Medicaid MD	58.39%	62.31%	59.87%	62.98%	59.17%	54.92%
CHF	Medicaid MD	57.24%	57.75%	55.37%	57.77%	56.93%	52.97%
COPD	Medicaid MD	62.04%	63.83%	61.97%	64.68%	62.22%	62.71%
Diabetes	Medicaid MD	65.52%	67.24%	66.51%	68.92%	66.40%	65.38%
HTN	Medicaid MD	37.61%	39.56%	39.79%	41.94%	40.39%	39.38%

Goal 7 - Improve Process of Care - Inpatient

Goal 7. Improve Process of Care – Inpatient	
Goal Summary	Inpatient process of care measures report how often hospitals delivered recommended care processes in the following areas: blood clot prevention (venous thromboembolism or VTE) and treatment, stroke treatment (STK), Emergency Department (ED) wait times for admitted patients, and Sepsis (SEP) care. HSCRC gathered data on these measures from publicly reported data from CMS CareCompare, where the measures are published in accordance with CMS' Hospital Inpatient Quality Reporting (IQR) requirements. Of note, the HSCRC has reported relevant measures for which CMS CareCompare published recent results. As with most process measures, CMS "retires"

	Goal 7. Improve Process of Care – Inpatient
	measures that are "topped off" and may no longer be meaningful. The HSCRC reviews available process measures to update for the most relevant measures each year. Currently the remaining process measures focus on the Sepsis bundle.

Measurement Methodology	Sepsis Care
	 • SEP_1 - Percentage of patients who received appropriate care for severe sepsis and septic shock composite measure: Applies to patients 18 years and older with a diagnosis of severe sepsis or septic shock. As reflected in the data elements and their definitions, these elements should be performed in the early management of severe sepsis and septic shock.
	 • SEP_SH_3HR - Septic Shock 3-Hour Bundle:
	    - Measure serum lactate
	    - Obtain blood cultures prior to antibiotics
	    - Administer antibiotics
	    - Resuscitation with 30mL/kg crystalloid fluids
	 • SEP_SH_6HR - Septic Shock 6-Hour Bundle
	    - Repeat volume status and tissue perfusion assessment
	    - Vasopressor administration (If hypotension persists after fluid
	 • SEV_SEP_3HR - Severe Sepsis 3-Hour Bundle:
	    - Measure serum lactate
	    - Obtain blood cultures prior to antibiotics
	    - Administer antibiotics
	 • SEV_SEP_6HR - Severe Sepsis 6-Hour Bundle.
	    - Repeat serum lactate if initial lactate is >2
	 For more information on the detailed CMS Sepsis Measures specifications, please see the links on the Quality Net website.
	
	 For more information on the CMS Inpatient Process of Care measures, please see CMS Care Compare website.

Monitoring Results	Sepsis Care • The SEP_1 measure first became available on CMS CareCompare in CY 2017. In 2023, Maryland shows a higher percentage of patients who received appropriate care for severe sepsis and septic shock compared to 2017 (55 percent vs 66 percent) • When compared to the Nation on the SEP_1 measure, Maryland outperforms by 4 percentage points (66 percent for Maryland compared to 62 percent nationally). • In 2019, four other sepsis bundles became available on CMS CareCompare. In 2023, Maryland performed on par with the Nation for Severe Sepsis 6-hour bundle, but better than the Nation on the three other measures. The inclusion of sepsis related deaths in the QBR All-Cause mortality measure is an important outcome that should improve with better adherence to the sepsis process measures.

CMS Inpatient Process Measures: Sepsis Bundle Compliance

Measures	Population	2017	2018	2019	Jul20-Dec20*	2021	2022	2023
Percentage of patients who received appropriate care for severe sepsis and septic shock [SEP_1]	Maryland	55	57	59	59	59	64	66
	National	50	57	60	57	57	59	62
Septic Shock 3-Hour Bundle [SEP_SH_3HR]	Maryland			86	85	81	77	82
	National			86	85	78	68	70
Septic Shock 6-Hour Bundle [SEP_SH_6HR]	Maryland			73	87	87	88	88
	National			69	82	83	84	85
Severe Sepsis 3-Hour Bundle [SEV_SEP_3HR]	Maryland			79	80	79	81	81
	National			80	78	78	78	80
Severe Sepsis 6-Hour Bundle [SEV_SEP_6HR]	Maryland			88	89	89	89	90
	National			89	89	89	89	91

Goal 8 - Improve Process of Care - Outpatient

Goal 8. Improve Process of Care - Outpatient	
Goal Summary	Per the terms of the TCOC Model Agreement, the HSCRC continues to monitor additional measures to support continued quality improvement. In this report, the HSCRC has included three outpatient process of care measures related to Timely and Effective Care: for appropriate ED care, for stroke care,and for follow-up related to colonoscopy care. As with the Inpatient Process of Care measures, the HSCRC reviews available process measures to update for the most relevant measures each year.
Measurement Methodology	The HSCRC is reporting the following quality measures of Outpatient Process of Care: ● OP-18b – Average (median) time patients that are not admitted spent in the emergency department before leaving from the visit ● OP-23 – Percentage of patients who came to the emergency department with stroke symptoms who received brain scan results within 45 minutes of arrival ● OP-29 – Percentage of patients receiving appropriate recommendation for follow-up screening colonoscopy For more information on these measures, please see CMS Care Compare.

Goal 8. Improve Process of Care - Outpatient	
Monitoring Results	• Maryland's wait times/length of stay for the OP-18b ED wait time for discharged (i.e., not admitted) patients are longer than National wait times, 250 to 163 minutes. Increases from CY 2022 are lower for Maryland than the nation, eight minutes compared to two minutes. Starting in June of 2023, staff was requested by the Commission to report monthly hospital self-reported data on OP18 and ED1 as part of the Emergency Department Dramatic Improvement Effort. Furthermore an ED length of stay measure for inpatients was added into the QBR program in CY 2024. • The percentage of patients with stroke symptoms who received brain scan results within 45 minutes of arrival remained the same in Maryland since 2022 at 66. Nationally there was an increase, from 69% in 2022 to 70% in 2023. • In 2023, the percentage of Maryland patients receiving an appropriate follow-up colonoscopy screening was 96% compared to 92% of patients in the Nation. Both the State and the Nation have seen increases from 2015.

CMS Maryland and National Outpatient Process Measures Results: ED Wait Times for Discharged Patients, ED Timely Stroke Care, and Percent Patients Receiving Appropriate Colonoscopy Screening Recommendation

Measures	Popul-ation	2014	2015	2016	2017	2018	2019	Jul20-Dec20*	2021	2022	2023
Average (median) time patients spent in the emergency department before leaving from the visit [OP-18b]	Maryland	192	203	218	202	202	212	223	240	242	250
	National	140	141	138	141	135	142	148	157	161	163
Percentage of patients who came to the emergency department with stroke symptoms who received brain scan results within 45 minutes of arrival [OP-23]	Maryland	62%	69%	75%	74%	69%	72%	76%	69%	66%	66%
	National	65%	68%	71%	73%	72%	72%	72%	70%	69%	70%
Percentage of patients receiving appropriate recommendation for follow-up screening colonoscopy [OP-29]	Maryland		85%	91%	80%	96%		95%	96%	95%	96%
	National		74%	85%	88%	89%		91%	90%	91%	92%

Goal 9 - Improve Inpatient Care - Hospital-Acquired Complications

Goal 9. Improve Inpatient Care - Hospital-Acquired Complications

Goal Summary	Progress in reducing high-priority hospital complications is assessed using the rate of National Healthcare Safety Network (NHSN) Hospital-acquired infections, and 3M-defined Potentially Preventable Complications (PPCs). PPCs are defined as harmful events or negative outcomes that may result from the process of care and treatment rather than from a natural progression of an underlying disease. Under the TCOC Model, Maryland is expected to maintain the reductions in PPCs achieved during the All-Payer Model (2014-2018).
Measure-ment Method-ology	**CDC National Health Safety Network (NHSN) Healthcare-Associated Infections** The NHSN collects six measures of hospital-acquired infections and reports these using a standardized infection ratio (SIR), comparing observed and predicted infections. Maryland performance is compared to a national SIR of "1", as recalibrated in CY 2015. For comparison, a national SIR is approximated using the Sum of Observed Infections in a given year (NUMERATOR) / Sum of Predicted Infections using the 2015 base (ELIGCASES) for the same given year. For more information on the NHSN Safety Measures, please visit the CMS Care Compare website. **PPC Rate per 1,000 At-Risk Discharges and Case-Mix Adjusted PPC Rate** The PPC rate per 1,000 discharges is calculated by dividing the number of observed PPCS by the number of at-risk discharges (one discharge may be at-risk for multiple PPCs) * 1,000 discharges. This is an unadjusted PPC rate that does not take into account changes in case-mix that may occur over time. For the purposes of the waiver test, the HSCRC reports additional data on the case-mix adjusted PPC rate. The case-mix adjusted PPC rate is calculated as the Statewide Observed / Expected ratio. The expected number of PPCs for each hospital is calculated by taking the statewide PPC rate for each diagnosis and severity of illness category and multiplying it by the number of discharges at each hospital in each category. For additional information regarding the PPC measures, please refer to the MHAC Policy on the HSCRC Quality – MHAC website, https://hscrc.maryland.gov/Pages/init_qi_MHAC.aspx. PPC Data reflects most recent data submitted to CMS for MY 5 Performance Certification.
Monitoring Results	• Maryland SIRs decreased (i.e., better performance) for four measures (CLABSI, CAUTI, C.Diff, MRSA), but increased for two (SSI-Hyst, SSI-Colon) from 2018 to 2023. • National SIRs, approximated from CMS CareCompare by-hospital data, suggest that Maryland has room to improve on four of the NHSN measures. During 2023, the Nation saw a decrease in NHSN rates from 2022 on three of the six NHSN measures (i.e., CAUTI, SSI-Colon, SSI-Hyst were the NHSN measures with an increase). • The PPC rates per 1,000 at-risk discharges, which are unadjusted, have decreased during the past year and since 2018. • The case mix-adjusted PPC rates have decreased since 2018 for All-Payers, Medicaid, and Medicare.

NHSN Hospital Healthcare-Associated Infection Rates

Measures	Population	2016	2017	2018	2019	2020*	2021	2022	2023
CLABSI	Maryland	1.125	0.874	0.792	0.694	0.851	1.092	0.953	0.833
	National	0.891	0.813	0.742	0.685	0.867	0.985	0.844	0.717
CAUTI	Maryland	1.034	0.846	0.784	0.731	0.895	0.974	0.732	0.681
	National	0.94	0.873	0.801	0.717	0.766	0.793	0.670	0.684
C.Diff.	Maryland	0.998	0.925	0.805	0.607	0.592	0.64	0.565	0.502
	National	0.922	0.804	0.71	0.581	0.538	0.497	0.482	0.416
MRSA	Maryland	1.154	0.962	0.921	0.75	0.716	0.982	0.766	0.575
	National	0.948	0.867	0.848	0.821	0.923	1.089	0.907	0.752
SSI - Colon Surgery	Maryland	1.032	0.937	0.937	0.946	0.941	0.87	0.956	1.011
	National	0.931	0.908	0.895	0.866	0.843	0.845	0.877	0.899
SSI - Abdominal Hysterectomy	Maryland	1.02	1.165	1.656	1.242	1.308	1.377	1.281	1.796
	National	0.869	0.863	0.902	0.93	0.925	0.983	.934	1.047

NOTE: National SIRs are calculated using the HAI Flat Files, Sum(Numerator)/Sum(EligCases).

* 2020 includes data Jul 1, 2019-Dec 2019, and Jul 1, 2020-Dec 2020, per Care Compare

Maryland PPC Rates per 1,000 Discharges and and Risk Adjusted: Medicare, Medicaid and all Payer

Measures	Population	2018	2019	2020	2021	2022	2023
All Payer Potentially preventable complications per 1,000 at-risk discharges	Maryland	0.89	0.75	0.87	0.90	0.88	0.69
Medicare Potentially preventable complications per 1,000 at-risk discharges	Maryland	1.30	1.12	1.30	1.28	1.23	0.93
Medicaid Potentially preventable complications per 1,000 at-risk discharges	Maryland	0.56	0.44	0.54	0.57	0.56	0.40
All Payer Case Mix-Adjusted PPC rate	Maryland	1.16	0.97	1.08	1.07	1.05	0.80
Medicare Case Mix-Adjusted PPC rate	Maryland	1.34	1.13	1.25	1.19	1.14	0.85

Measures	Population	2018	2019	2020	2021	2022	2023
Medicaid Casemix-Adjusted PPC rate	Maryland	1.07	0.84	0.97	0.97	0.96	0.69

Goal 10 - Reduce Readmissions

Goal 10. Reduce Readmissions	
Goal Summary	This report evaluates hospital readmissions in two statewide measures, 30-day all-hospital, all-cause, case-mix adjusted readmission rates under the RY 2024 readmission incentive program measure logic; and observed readmissions per 1,000 Maryland residents (under the same measure definition). The All-Payer Model (2014-2018) required Maryland to reduce Medicare FFS readmissions to at or below the national rate by 2018. Maryland achieved this rate, concluding CY 2018 with an unadjusted readmission rate of 15.40%, compared to the national readmission rate of 15.45%. The costs of 30-day readmissions at the receiving hospital are also included in the HSCRC measure of potentially avoidable utilization, which is used to adjust global budgets. The HSCRC has a Readmission/Potentially Avoidable Utilization Savings program and a Readmission Reduction Incentive program designed to incentivize hospitals to invest resources to reduce readmissions. In RY 2023, the HSCRC first implemented the Readmissions Disparity Gap Program which is a reward-only program that incentivizes reductions in hospital disparities in readmission rates. Reducing readmissions remains an important quality improvement goal under the TCOC Model, and research shows that addressing disparities will improve the quality of care received for all patients.
Measurement Methodology	**Case-Mix Adjusted 30-Day All-Cause Readmission** = (Number of Observed Readmissions within 30 days of discharge ÷ Number of Expected Readmissions) x Statewide Unadjusted Readmission Rate in base period. Expected readmissions are estimated by applying the statewide rates by APR-DRG and severity of illness category to each hospital's discharges, using V41 of the APR-DRG grouper per the RY 2026 logic. **Readmissions per 1,000 Maryland Residents** = (Number of 30-Day Readmissions ÷ Total Maryland Resident Population) x 1,000. **Data:** Population estimates, which were used in estimating readmissions per 1,000 population, were obtained from the Maryland Department of Planning.

Goal 10. Reduce Readmissions

Monitoring Results	- The Maryland 30-day case-mix adjusted, all-cause readmission rate fell from 12.46 percent in 2018 to 11.64 percent in 2023, a reduction of 6.58 percent.[11] - Readmissions per 1,000 Maryland residents fell by 11.63 percent from 8.86 per thousand in 2018 to 7.83 per thousand in 2023.

Maryland Readmissions: Risk Adjusted 30-day Readmissions Rate and Rates per 1,000 Marylanders

Measures	Population	2018	2019	2020	2021	2022	2023
30-day all-hospital, all-cause, case-mix adjusted readmission rate	Maryland	12.46%	12.06%	11.36%	11.35%	11.28%	11.64%
Readmissions per 1,000 Maryland residents	Maryland	8.86	8.43	7.04	7.40	7.29	7.83

Goal 11 - Reduce Readmissions from various Post-Discharge Settings

Goal 11. Reduce Readmissions from various Post-Discharge Settings

Goal Summary	Readmissions from Home Health Home health agencies may be able to assist hospitals in reducing potentially avoidable inpatient and ED utilization. It is important to monitor admissions from home health agencies to identify potential quality of care/care coordination issues. CMS Home Health Compare publicly reports the quality of care provided by Medicare-certified home health agencies, including measures on admission rates to acute inpatient hospitals and unplanned urgent visits to the ED for those receiving home health care. Measures of home health readmission included: (1) the percent of home health patients who had to be admitted to the hospital and (2) the percent of home health patients who had an unplanned urgent visit to an ED. Readmissions from Nursing Home Readmissions among patients discharged to a nursing home may be relatively high, due in part to the medical complexity of these patients; many nursing home patients are elderly and have multiple chronic conditions or physical limitations. In addition to their medical complexity, however, readmission rates may be high due to patients being discharged from the hospital earlier than recommended by best practices, complications that develop post-discharge, or deficiencies in quality of care. Coordination between the

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[11] The rates presented are based on RY2026's RRIP program which uses APR-DRG Grouper v41.

	Goal 11. Reduce Readmissions from various Post-Discharge Settings	
	hospital and nursing home prior to and after discharge or transfer should reduce potentially avoidable readmissions.	
Measurement Methodology	**Readmissions from Home Health** Data to estimate these measures were obtained from the CMS Home Health Compare website. They present the percentage of home health patients who had to be admitted to the hospital and the percentage who had an unplanned urgent visit to an ED. These two measures are no longer reported on the Care Compare website, therefore CY 2023 performance is unavailable. Additional information on Home Health Compare can be found at: http://www.medicare.gov/homehealthcompare/search.html. Data is restated for CY 2020, using CY 2019 data due to COVID PHE. Results for CY 2023 are not yet available on the CMS Care Compare website. **Readmissions from Nursing Home** **Numerator:** The number of All-Payer inpatient hospital stays where the patient was discharged to a nursing home but was readmitted to any hospital within 30 days of the initial hospital discharge date. **Denominator:** The total number of hospital discharges that have a nursing home or skilled nursing facility as discharge disposition. **Note:** These data are not case-mix adjusted. **Data Source:** HSCRC inpatient discharge case-mix data with CRISP unique patient enterprise identifiers (EIDs) for 2018-2023. Maryland does not presently have a National comparison for this measure.	
Monitoring Results	● Between 2018 and 2022, the Maryland admission rate from home health agencies to hospitals decreased by two percentage points from 15.1 percent to 13.1 percent. The national admission rate decreased by 1.5 percentage points from 15.6 percent to 14.1 percent from 2018 to 2022. ● Maryland home health patients' rate of unplanned urgent care visits to the ED decreased by 1.5 percentage points from 13.1 percent in 2018 to 11.6 percent in 2022. The national rate slightly decreased by 0.9 percentage points from 12.8 percent to 11.9 percent during the same time period. Thus Maryland now performs slightly better than the nation, on an unadjusted basis. ● Readmissions of Maryland patients discharged to a nursing home slightly increased by 0.22 percentage points from 17.46 percent in 2018 to 17.68 percent in 2023.	

CMS Rates of Admissions and ED Visits from Home Health, and Readmissions from Nursing Homes

Measures	Population	2018	2019	2020*	2021	2022	2023
Admission rate from home health agencies to acute inpatient hospital	Maryland	15.1%	15.5%	15.5%	13.2%	13.1%	
	National	15.6%	15.4%	15.4%	14.2%	14.1%	
Unplanned urgent visits to the ED for patients receiving home health	Maryland	13.1%	13.6%	13.6%	11.7%	11.6%	
	National	12.8%	13.0%	13.0%	11.6%	11.9%	
Readmission rates for inpatient discharges to nursing homes	Maryland	17.46%	16.81%	16.43%	17.43%	17.28%	17.68%

Source: CMS Care Compare and HSCRC Inpatient Discharge Case-Mix Data
*Data from CMS (Home Health) Care Compare restates 2019 results due to COVID.

Goal 12 - Reduce Readmissions - Condition-Specific

Goal 12. Reduce Readmissions - Condition-Specific

Goal Summary	This report further evaluates readmissions on an all-payer basis using five condition-specific measures, including: ● Heart Failure readmission rates; ● Acute Myocardial Infarction readmission rate; ● Pneumonia readmission rates; ● Chronic Obstructive Pulmonary Disease readmission rates; and ● Hip/Total Knee Arthroplasty readmission rates.
Measurement Methodology	**Condition Specific Readmission Rates** = (Number of 30-Day Readmissions for Selected Condition ÷ Number of Condition Specific Discharges Eligible for a Readmission) x 100. Condition-specific readmission rates are not risk-adjusted and may not reflect changes in the patient population over time. Rates correspond to the following conditions: ○ Heart Failure (HF) ○ Acute Myocardial Infarction (AMI) ○ Pneumonia (PNA) ○ Chronic Obstructive Pulmonary Disease (COPD) ○ Hip/Total Knee Arthroplasty (THA/TKA) **Note**: The condition-specific readmission rates reflect full CY 2018-2023 all-payer case-mix data.

Goal 12. Reduce Readmissions - Condition-Specific	
Monitoring Results	• Between 2018 and 2023, readmission rates for HF and COPD decreased by 3.88% and 5.61%, respectively. • Between 2018 and 2023, readmission rates for AMI and Pneumonia have increased by 27.68% and 28.13%, respectively. These rates are not risk adjusted. • Between 2018 and 2023, the readmission rate for the procedure Hip/Knee Arthroplasty increased by 73.08 percent (2.60% in 2018 vs 4.50% in 2023). Again, these rates are not risk-adjusted and with recent changes to site of care for these services, changes over time should be interpreted with caution since the patients remaining in the hospital for these procedures may be more complex than those who get shifted to other settings.

Measures	Population	2018	2019	2020	2021	2022	2023
Heart Failure readmission rate	Maryland	20.60%	19.76%	19.62%	19.24%	19.13%	19.80%
Acute Myocardial Infarction readmission rate	Maryland	10.73%	10.87%	9.90%	9.91%	9.55%	13.7%
Pneumonia readmission rate	Maryland	12.80%	12.27%	13.12%	14.04%	13.51%	16.4%
Chronic Obstructive Pulmonary Disease readmission rate	Maryland	19.60%	18.61%	18.85%	20.52%	20.00%	18.5%
Total Hip/Knee Arthroplasty readmission rate	Maryland	2.60%	2.61%	2.82%	4.58%	3.95%	4.5%

Maryland All-Payer Condition Specific 30-day Readmission Rates

Goals to Improve Population Health

Maryland believes that the TCOC model can establish incentives that improve population health outcomes and reduce health disparities. As broad population health measures, progress will take time, long-term investment, and commitment to achieve results.

Goal 13- Reduce Potentially Avoidable Hospital Admissions

Goal 13. Reduce Potentially Avoidable Hospital Admissions	
Goal Summary	Prevention Quality Indicators (PQIs) are a set of measures developed by the Agency for Healthcare Research and Quality (AHRQ) that flag hospitalizations for ambulatory care sensitive conditions. These conditions and hospitalizations are preventable if patients have access to high-quality outpatient care. Examples of these conditions

Goal 13. Reduce Potentially Avoidable Hospital Admissions

	include pneumonia, diabetes and its associated complications, and heart failure. The individual PQI measures can be collapsed into composite measures; here we have included the overall PQI Composite Rates. These measures are population-based and are adjusted for covariates such as sex and age. The HSCRC uses the PQI measures to identify potentially avoidable utilization (PAU). Tracking PAU aims to incentivize hospitals to work within their communities to improve care coordination outside the hospital and thus reduce potentially avoidable hospital utilization. With the advent of the TCOC Model, the HSCRC implemented the AHRQ risk-adjusted PQI rate logic, and is presenting risk-adjusted PQI rates per 100,000 CYs 2018-2023.
Measurement Methodology	The method for calculating the risk-adjusted PQI rate per 100,000 is as follows: Observed PQIs (HSCRC Case-mix Data) / Expected PQIs * National PQI Rate per 100,000. The PQI **overall** composite includes admissions in both the acute and chronic composites. The PQI **acute** includes admissions with diagnosis codes for bacterial pneumonia, or urinary tract infection. The PQI **chronic** includes admissions with diagnosis codes for one of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, and heart failure. **Data Sources:** PQIs are identified using the HSCRC Inpatient Discharge Abstract data. The expected values are calculated using population estimates and applying the AHRQ risk-adjustment methodology.
Monitoring Results	• The PQI Risk-Adjusted Rate for Maryland decreased from 1,324 per 100,000 in CY 2018 to 1086.7 per 100,000 in CY 2023, about a 17.92 percent decrease.[12] • An increase was seen in rates in 2023 compared to 2022. The State is concerned that post-covid we may continue to see additional increases in rates due to delays in care during the COVID-19 PHE. HSCRC staff is drilling into these trends to understand sources of increases.

Maryland All-Payer AHRQ Prevention Quality Indicator Rates

Measures	Population	2018	2019	2020	2021	2022	2023
Preventive quality indicator **overall** composite rate per 100,000 population, age 18 and over	Maryland	1,324	1,287	1,002	990	1010.25	1086.7

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[12] Monitoring performed using AHRQ v2023 methodologies.

Goal 14 - Reduce Potentially Avoidable ED Visits

	Goal 14. Reduce Potentially Avoidable ED Visits
Goal Summary	**Condition-specific ED Visit Rates** The Maryland State Health Improvement Process (SHIP) monitors diabetes, cardiovascular disease, asthma, and behavioral health emergency department visit rates as indicators of population health, and encourages the utilization of local health improvement coalitions (LHICs) to address these chronic conditions outside of the emergency department. ED visits related to complications with these chronic conditions may indicate that these conditions are not well controlled and, as with PQIs, may represent lack of access to or poor quality outpatient care. The TCOC Model works in tandem with the SHIP objective of reducing condition-specific emergency department visits, and builds off of related SHIP measures to create the HSCRC measure methodology outlined below; accordingly, rates will differ between this report and those displayed on the SHIP website.
Measurement Methodology	**Condition-specific Emergency Department Rates** The method for calculating the rate of condition-specific ED visits per 1,000 Maryland residents is as follows: The total number of ED visits related to the condition divided by the total number of Maryland residents multiplied by 1,000. These rates are not risk-adjusted. **Numerator**: HSCRC outpatient data of relevant condition-specific ICD-10 codes, as defined by the Agency for Healthcare Research and Quality (AHRQ) Clinical Classification Software Refined (CCSR) categories. The CCSR Categories are as follows: • Asthma - 128 • Behavioral Health - 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 670 • Diabetes - 49, 50 • Hypertension - 98, 99 **Denominator**: Updated Maryland Department of Planning population estimates through 2023.
Monitoring Results	• The Maryland Asthma-related ED visit rate decreased by 27.81 percent between 2018 and 2023, decreasing from 5.61 to 4.05 per 1,000 Maryland residents.

Goal 14. Reduce Potentially Avoidable ED Visits

- Maryland Behavioral Health-related ED visit rates have decreased by 19.19 percent between 2018 and 2023, decreasing from 13.76 to 11.12 per 1,000 Maryland residents.
- The Maryland Diabetes-related ED visit rate decreased by 8.71 percent between 2018 and 2023, decreasing from 7.12 to 6.50 per 1,000 Maryland residents.
- The Maryland Hypertension-related ED visit rate decreased by 2.31 percent, decreasing from 7.78 to 7.60 per 1,000 Maryland residents.

Maryland Condition-Specific Emergency Department Rates

Measures	2018	2019	2020	2021	2022	2023
Asthma-related ED visit rate per 1,000 population	5.61	5.30	2.82	3.10	3.71	4.05
Behavioral Health-related ED visit rate per 1,000 population	13.76	13.57	11.39	11.57	10.99	11.12
Diabetes-related ED visit rate per 1,000 population	7.12	7.09	5.79	6.19	6.06	6.50
Hypertension-related ED visit rate per 1,000 population	7.78	8.24	6.41	6.95	7.04	7.60

Goal 15 - Other Measures of Population Health

Goal 15. Other Measures of Population Health	
Goal Summary	The TCOC Model seeks to improve life expectancy for Maryland residents over time. Maryland remains concerned about declines in life expectancy as well as ongoing disparities in the life expectancy of white and black residents.
Measurement Methodology	Life expectancy is calculated by the Maryland Vital Statistics Administration, a bureau of MDH. Please note that Maryland Life Expectancy at birth data are preliminary, until such time as the Annual Reports are posted to the Maryland Vital Statistics website, at the link below: https://health.maryland.gov/vsa/Pages/reports.aspx Data are currently finalized through CY 2022 for Maryland. https://www.cdc.gov/nchs/products/databriefs/db492.htm#fig1 Data are currently finalized through CY 2022 for the Nation.

Monitoring Results	• Maryland saw a decrease of 0.6 percentage points from 79.1 in 2016 to 78.5 in 2022. The Nation saw a decrease in life expectancy of 1.6 percentage points from 78.7 in 2016 to 76.1 in 2021, double that seen in Maryland. • There are persistent disparities in life expectancy by race, at both the national and state levels.

Life Expectancy Age in Years By Race and Compared to Nation (CDC)

Measure	Population	2016	2017	2018	2019	2020	2021	2022
Average life expectancy at birth	Maryland	79.1	79.1	79.2	79.3	78.6	77.8	78.5
	White (MD)	79.8	79.7	80	80.2	79.6	78.5	79
	Black (MD)	76.8	76.9	76.9	76.9	75.9	74.3	75.4
	National	78.7	78.6	78.7	78.8	77.8	76.1	77.5
	White			78.6	78.8	78.0	76.4	
	Black			74.7	74.7	72.0	70.8	

Goals to Control Expenditure Growth

For additional information on the progress toward achieving the Goals to Control Expenditure Growth (at the hospital and total cost of care levels), please refer to the **"Annual Monitoring Report on Expenditures"** submitted July 2024.

Conclusion

The State of Maryland and the HSCRC demonstrated meaningful progress towards the aims of the Total Cost of Care Model in MY 5 (CY 2023) of the Model's implementation. This report also outlines the ways in which the State of Maryland and the HSCRC have evolved programs, incentives, and measures to ensure the ongoing fulfillment of the requirements of the TCOC Model. We have benefited from a motivated and resilient healthcare delivery system in Maryland, and the flexibility and financial guarantees from the global budget system. We appreciate the opportunity to continue to work with CMMI to improve the patient experience, population health, and cost efficiency in the Maryland health care system. During the last year of the TCOC Model, the State of Maryland and the HSCRC will continue to strive to meet the ambitious goals of the TCOC Model while preparing for the AHEAD model and the creation of the statewide quality and equity targets. Through this work, Maryland can effectuate long-term health improvements and cost savings for Marylanders in the State's healthcare system.

health services
cost review commission

Statewide Integrated Health Improvement Strategy (SIHIS)

Performance Results against Year 5 Targets*

Domain Area	Goal(s)	Met Year 5 Goal?
Domain 1 – Hospital Quality	Reduce avoidable admissions	Yes
	Improve Readmission Rates by Reducing Within-Hospital Disparities	No
Domain 2 – Care Transformation Across the System	(1) Increase the amount of Medicare TCOC or number of Medicare beneficiaries under Care Transformation Initiatives (CTIs), Care Redesign Program, or successor payment model	Yes
	(2) Improve care coordination for patients with chronic conditions	No, but exceeded nation
Domain 3 – Total Population Health "Diabetes"	Reduce the mean Body Mass Index (BMI) for adult Maryland residents compared to a control group of similar states	Determining performance
Domain 3 - Total Population Health "Opioid Use Disorder"	Improve overdose mortality when compared to a control group of similar states	No, but exceeded the nation
Domain 3 - Total Population Health "Maternal and Child Health"	Reduce severe maternal morbidity rate	No Reference 2024 presentation from MDH and HSCRC on maternal health interventions and the State's Women's Health Action Plan
	Decrease asthma-related emergency department visit rates for ages 2-17	Yes, within 2 months of performance period

DOMAIN 1: HOSPITAL QUALITY

Goal 1: Reduce Avoidable Admissions	
Measure	AHRQ Risk-Adjusted PQIs
2018 Baseline[1]	1335 admits per 100,000
2021 Year 3 Milestone (Both Met)	8 percent improvement 1228 admits per 100,000 **Actual Performance:** ● 26.23 percent improvement ● 985 admits per 100,000
2023 Year 5 Target	15 percent improvement 1135 admits per 100,000 **Actual Performance:** ● 1103 admits per 100,000 ● 18.1% improvement
2026 Year 8 Final Target	25 percent improvement 993 admits per 100,000

Goal #2: Improve Readmission Rates by Reducing Within-Hospital Disparities	
Measure	Readmission disparity gap
2018 Baseline	Hospital-specific risk difference for readmissions across levels of Patient Adversity Index (PAI)
2021 Year 3 Milestone (Met)	Establish and monitor a measurement methodology and payment incentive for reducing within hospital readmission disparities and set a 2023 and 2026 target
2023 Year 5 Target (Not Met)	Half of eligible hospitals achieving 25% improvement in disparity **Actual Performance:** 2 hospitals achieving a 25% improvement in disparity
2026 Year 8 Final Target	Half of eligible hospitals achieving 50% improvement in disparity

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[1] Recalculated using AHRQ PQI v2021; results vary somewhat from the older PQI rate of 1,335 per 100,000 reported in the original SIHIS proposal.

DOMAIN 2: CARE TRANSFORMATION ACROSS THE SYSTEM

Goal #1: Increase the amount of Medicare TCOC or number of Medicare beneficiaries under Care Transformation Initiatives (CTIs), Care Redesign Program, or successor payment model		
Measure	Percent of TCOC under Care Transformation	Number of beneficiaries under Care Transformation
2018 Baseline	$0	0
2021 Year 3 Milestone (Both Met)	12.5% of Medicare TCOC under a CTI or CRP or successor payment model **Actual Performance: 33.01%**	7.5% of Medicare Beneficiaries covered under a CTI or CRP or successor payment model **Actual Performance: 25.62%**
2023 Year 5 Target (Both Met)	37% of Medicare TCOC under a CTI or CRP or successor payment model **Actual Performance:** 62.56% of Medicare TCOC	22% of Medicare Beneficiaries covered under a CTI or CRP or successor payment model **Actual Performance:** 37.5% of Medicare beneficiaries
2026 Year 8 Final Target	50% of Medicare TCOC under a CTI or CRP or successor payment model	30% of Medicare Beneficiaries covered under a CTI or CRP or successor payment model

Goal #2: Improve care coordination for patients with chronic conditions	
Measure	Timely Follow-up After Acute Exacerbations of Chronic Conditions (NQF#3455)
2018 Baseline	70.85%
2021 Year 3 Milestone (Milestone Not Met)	72.38% 2.16 percent improvement **Actual Performance: 70.07%**
2023 Year 5 Target (Target Not Met)	73.42% 3.62 percent improvement **Actual Performance:** Maryland did not meet the performance improvement goal, but did exceed national performance ● Maryland: 71.23% ● National: 68.35%

Goal #2: Improve care coordination for patients with chronic conditions	
2026 Year 8 Final Target	75.00% 5.86 percent improvement or 0.50 percent better than the national rate

DOMAIN 3: TOTAL POPULATION HEALTH

Goal: Improve overdose mortality[2]	
Measure	Annual change in overdose mortality as compared to a cohort of states with historically similar overdose mortality rates and demographics.
2018 Baseline	Age-adjusted death rate of 37.2/100,000
2021 Year 3 Milestones ***All Milestones Complete***	Identify the cohort of states that will serve as the synthetic control group to measure progress. Launch the Behavioral Health Crisis Programs grants track of the HSCRC Regional Catalyst Grants Program. Expand Screening Brief Intervention and Referral to Treatment (SBIRT) to 200 practices participating in the Maryland Primary Care Program (MDPCP)
2023 Year 5 Target	Achieve a more favorable trend in overdose mortality rate as compared to the weighted average of control states. **Actual Performance:** Maryland did not achieve a more favorable trend than the weighted average of control states, but did exceed national performance. ● 3.1% decrease in Maryland ● 12.6% decrease in control states ● 36.2% increase nationally
2026 Year 8 Final Target	Achieve a more favorable trend in overdose mortality rate as compared to the weighted average of control states

Goal #1: Reduce severe maternal morbidity rate	
Measure	Severe Maternal Morbidity Rate per 10,000 delivery hospitalizations

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[2] Maryland uses CDC data that measure age-adjusted overdose rates based on ICD-10 codes.

2018 Baseline	243.1[3] SMM Rate per 10,000 delivery hospitalizations
2021 Year 3 Milestone (All Met)	Re-launch the Perinatal Quality Collaborative. Pilot a Severe Maternal Morbidity Review Process with eight Birthing hospitals. Complete Maryland Maternal Strategic Plan. Launch Regional Partnership Catalyst Grant for MCH.
2023 Year 5 Target	9.6% decrease in SMM Rate per 10,000 delivery hospitalizations **Actual Performance**: 31.2% increase in SMM Rate (319)
2026 Year 8 Final Target	18.7% decrease in SMM Rate per 10,000 delivery hospitalizations

Goal #2: Decrease asthma-related emergency department visit rates for ages 2-17	
Measure	Annual ED visit rate per 1,000 for ages 2-17
2018 Baseline	9.2 ED visit rate per 1,000 for ages 2-17
2021 Year 3 Milestone **(All Milestones Met)**	Obtain Population Projections. Development of Asthma Dashboard. Launch Regional Partnership Catalyst Grant for MCH. Asthma-related ED visit is a Title V State Performance Measure and shift some of the Title V funds for Asthma-related interventions.
2023 Year 5 Target	Achieve a rate reduction from 2018 baseline to 7.2 in 2023 for ages 2-17 **Actual Performance:** 7.3 ED Visit Rate *State performance declined to 7.2 by February 2024*
2026 Year 8 Final Target	Achieve a rate reduction from the 2018 baseline to 5.3 in 2026 for ages 2-17

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[3] Chesapeake Regional Information System for our Patients Inc. (CRISP) analysis of Health Services Cost Review Commission (HSCRC) data, including blood transfusions. Accessed 3 November 2023.

Avoidable Admissions

Introduction:

The official SIHIS measure aims to capture the risk adjusted rate of PQI events per 100k Maryland residents. This measure uses the PQI-90 composite rate per 100k to measure PQI events.

This report aligns with the specifications of the formal SIHIS measure.

Maryland's success in the measure is defined as meeting improvement milestones for the PQI event rate. Refer to the User Guide for information about the data sources, parameters, and condition-specific follow-up timeframes for this measure.

Key Findings:
- Across all PQI's, Maryland has a PQI rate of 1,103 per 100K residents, which is a 2.1% increase from 2018 baseline. The current PQI rate is -293 admits per 100K (or 36.2%) above the 2026 year 8 target rate.
- By Race/Ethnicity across all PQI events, Other has the highest disparity index with a PQI rate that is 2.4 times greater than the Non-Hispanic White population.
- The PQI rate of Other is 1,325 PQI admits per 100K higher than the NH White population.

Data available through November 2024

Avoidable Admissions Rate Compared to 2026 Target

	2018 Baseline	Most Recent 12 Months	2026 State Target	Difference from State Target
Admits/100K - Statewide	1,081	1,103	810	36.2%
Total count of PQIs	62,044	54,104		

Avoidable Admissions Rate by Month

Measure
Rate
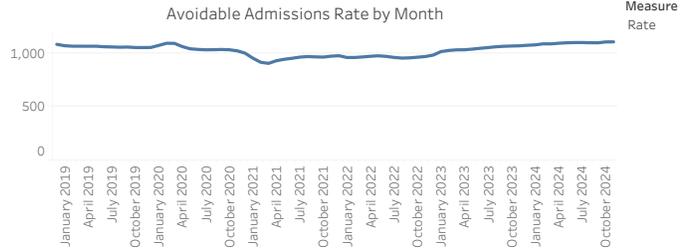
Avoidable Admissions Rate by PQI Category Most Recent 12 Months

	Acute	Chronic	Diabetes	Overall Composite
Admits/100K - Statewide	244	860	238	1,103
Total count of PQIs	11,988	42,116	11,566	54,104

Avoidable Admissions Rate by PQI Category

PQI Category
All

PQI Category
- Acute
- Chronic
- Diabetes
- Overall Composite
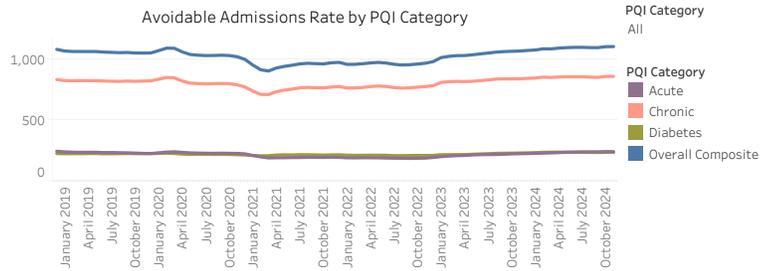
Avoidable Admissions Rate by Race

Race/Ethnicity	2018 Baseline	Most Recent 12 Months	Disparity Index
NH White	907	920	1.0
NH Black	1,733	1,706	1.9
Hispanic	609	766	0.8
NH Asian	248	287	0.3
Other	1,838	2,245	2.4
Statewide Total	1,081	1,103	1.2

Avoidable Admissions Rate by Race

Race/Ethnicity
All

PQI Category
- Acute
- Chronic
- Diabetes
- Overall Composite

Race/Ethnicity
- NH White
- NH Black
- Hispanic
- NH Asian
- Other
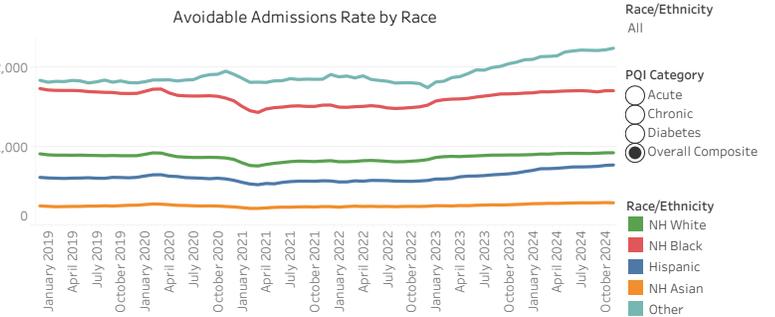
The SIHIS Annual Report released in March 2024 and the SIHIS Directional Indicators Dashboard report different goals due to differences in the AHRQ version used. Please note that the SIHIS Directional Indicators Dashboard displays the current performance and goal based on the AHRQ v2023.

Readmission Disparity Gap

Introduction:
The official SIHIS measure aims to capture the number of hospitals that reduce readmission disparities by 50% or more by 2026. Readmissions rates by hospital are examined according to levels of patient adversity as measured by the Patient Adversity Index (PAI) as defined by the HSCRC.
This report aligns with the specifications of the formal SIHIS measure.

Reported Measure:
The number of hospitals that have achieved at least a 50% reduction in their readmission disparities from their 2018 baseline. By 2026 it is expected that at least 50% of hospitals will have a 50% reduction.

Key Findings

- Given current trends, 4 Maryland hospitals are on track to meet the target (50% reduction from baseline) by 2026. Of the hospitals on track, 0 Maryland hospitals have already met their 2026 target.
- Readmission disparities have been reduced the most amongst High-ADI with a percent change reduction of 9.45%.

Data available through October 2024

Hospital Overall Summary Relative To Baseline

	On Track for 50% reduction by 2026	Achieved 50% reduction in most recent 12 months	2026 Target	Difference from Target
% of Hospitals	9.30%	0.00%	50%	50.00%
Number of Hospitals	4	0	21	17

Hospitals On Track for 50% reduction by month

Rate
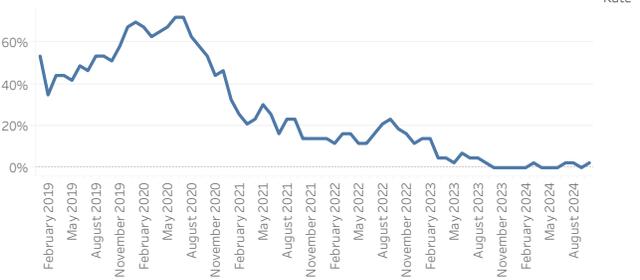
The trend charts and disparity indices are only displayed for one hospital at a time. Select a hospital from the Disparity Gap By Hospital table to update all charts.

Hospital   None

Disparity Gap By Hospital

Disparity Gap By Hospital by Year Month

None

Casemix Adjusted Readmission Rate and Disparity Index

None

Casemix Adjusted Readmission Rate

Category
ADI

Measure Names

Care Transformation Across the System

Introduction:

The official SIHIS measure aims to capture the percent of Maryland's fee for service beneficiaries and total cost of care (TCOC) covered by statewide care transformation programs. These programs include Care Transformation Initiatives (CTIs), Care Redesign Programs (ECIP, EQIP), or any successor payment models as they are developed. Maryland's success in the measure is defined as exceeding the measures target.

This report aligns with the specifications of the formal SIHIS measure.

Refer to the User Guide for information about the data sources, parameters, and condition-specific follow-up timeframes for this measure.

Reported Measure:

The proportion of Medicare fee for service beneficiaries enrolled in a care transformation program and their associated total cost of care.

Key Findings:
- Maryland has enrolled 74.52% of its Medicare fee-for-service beneficieries in a Care Transformation Program year to date. This is 44.52% percentage points above the 2026 target of 30%. The 2023 target rate was 22%.
- Beneficieries enrolled in a Care Transformation Program account for 90.66% of Maryland's Medicare Total Cost of Care year to date. This is 40.66% percentage points higher than the 2026 target of 50%. The 2023 target rate was 37%.
- By Race/Ethnicity, 71.55% of Other are enrolled in a Care Transformation Program, which is the lowest proportion among all race/ethnicities.

Some Care Redesign programs allow for panel-based episodes that begin on the first day of the performance period. Therefore, all beneficiaries included in these panel-based episodes will be included in January or July (depending on whether the program runs on a calendar or fiscal year basis), the first month of each new performance period, and will produce significant spikes in enrollment. As measures are calculated on a calendar year to date basis, state performance is understated until July data are available.

Data available through October 2024

Benes Under Care Transformation Programs

	2023 CY	2024 YTD	2026 Target	Difference from Target
Percent	37.50%	74.52%	30%	44.52%
Benes under Care Transformation Program	322,205	584,953		
Total Medicare Beneficieries	859,293	784,923		

Cumulative Benes Under Care Transformation Programs
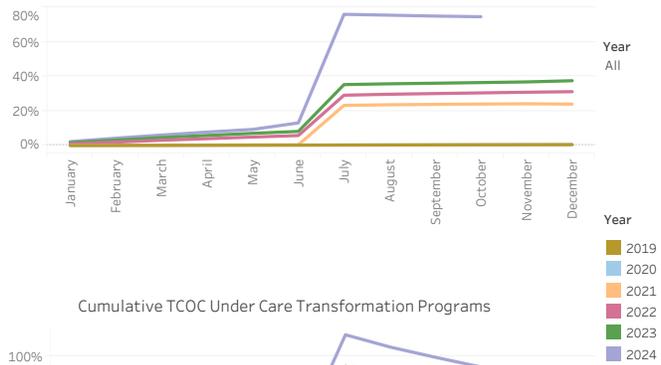
Measure
Rate

Year
All

Year
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024

TCOC Under Care Transformation Programs

	2023 CY	2024 YTD	2026 Target	Difference from Target
Percent	62.56%	90.66%	50%	40.66%
Dollars under Care Transformation Program	$6,951,207,972	$8,229,685,684		
Total Medicare Total Cost Of Care	$11,110,525,196	$9,077,041,411		

Cumulative TCOC Under Care Transformation Programs
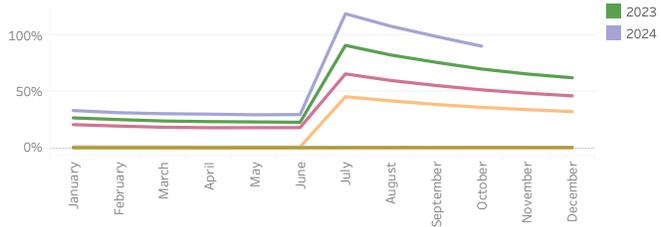
Benes Under Care Transformation Programs by Race/Ethnicity

Race	Bene Count	Total Medicare Beneficiaries	% of Benes in Care Transformation Programs	Disparity Index
NH White	386,027	519,857	74.26%	1.00
NH Black	134,021	176,558	75.91%	1.02
Hispanic	16,446	22,779	72.20%	0.97
NH Asian	23,887	31,386	76.11%	1.02
Other	24,572	34,343	71.55%	0.96
Total	584,953	784,923	74.52%	1.00

Cumulative Benes Under Care Transformation Programs by Race/Ethnicity

Year
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024

Race
All

Race
- NH White
- NH Black
- Hispanic
- NH Asian
- Other
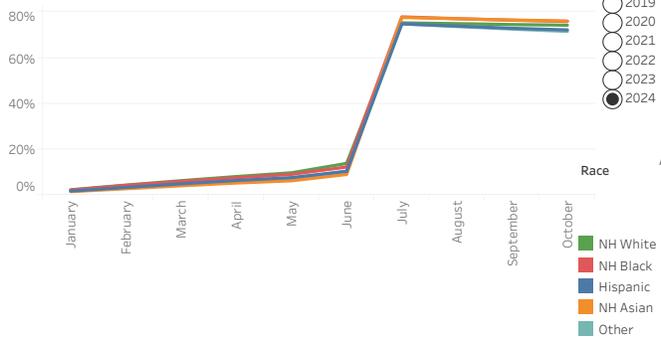
Timely Follow-up

Introduction:

The official SIHIS measure aims to capture the rate in which outpatient follow-up is received following emergency department visits, observation stays, and inpatient admissions. This measure includes specific chronic conditions, each with their own recommended timeframe for follow-up.

HSCRC will be conducting the final measure assessment. Therefore, while this report attempts to track the official SIHIS measure, the results presented in this report may differ from the official SIHIS measure performance. Refer to the User Guide for information about the data sources, parameters, and condition-specific follow-up timeframes for this measure.

Reported Measure:

The rate in which outpatient follow-up is received following emergency department visits, observation stays, and inpatient admissions, as reported in the Claim and Claim Line Feed (CCLF) data. Maryland's success in the measure is defined as meeting milestones based on the national follow-up rate.

Key Findings:
- Across all conditions, Maryland has a follow-up rate of 70.76% which is 4.2% lower than the 2026 target rate of 75.00%. The 2023 target rate was 73.42%.
- Diabetes has the highest follow up rate of 82.85% , while Hypertension has the lowest follow up rate of 54.30%.
- By Race/Ethnicity across all conditions, NH Black has the lowest follow-up rate which is 63.69%. This is 11.09% lower than the Non-Hispanic White population.

Data available through November 2024

Hospital   All

Measure
Rate

Timely Follow-up Rate Compared to 2026 Target

	Baseline	Most Recent 12 Months	2026 Target	% Difference by hospital
Follow Up Rate	70.85%	70.76%	75.00%	-4.2%
Number of Follow Up	31,288	20,148		
Eligible Discharges	44,160	28,475		
Statewide Follow-up Rate	70.85%	70.76%	75.00%	-4.2%

Timely Follow-up For Rolling 12 Month

- Follow Up Rate
- Statewide Follow Up Rate
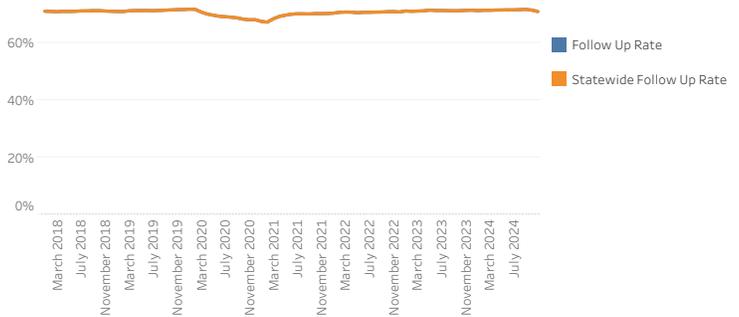
Timely Follow-up Rate by Condition Most Recent 12 Months

	Asthma	COPD	Coronary Artery Disease	Diabetes	Heart Failure	HTN
Follow Up Rate	64.39%	80.94%	72.53%	82.85%	73.83%	54.30%
Number of Follow Up	1,029	3,558	3,775	3,082	5,077	3,627
Eligible Discharges	1,598	4,396	5,205	3,720	6,877	6,679
Statewide Follow Up Rate	64.39%	80.94%	72.53%	82.85%	73.83%	54.30%

Timely Follow-up For Rolling 12 Month by Condition
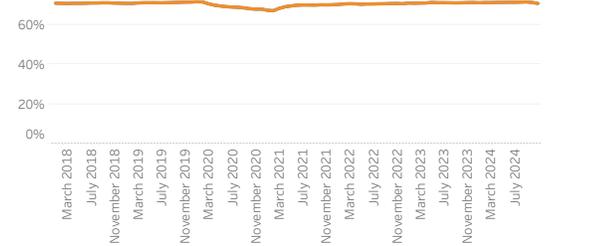
Condition
All

Timely Follow-up Rate by Condition Most Recent 12 Months : Race/Ethnicity and Disparity Index

Race	2018 Baseline	Follow Up Rate	Follow Up Count	Eligible Discharges	Disparity Index
NH White	75.17%	74.78%	12,569	16,809	1.00
NH Black	64.44%	63.69%	5,990	9,405	0.85
Hispanic	67.07%	68.51%	509	743	0.92
NH Asian	70.01%	70.64%	515	729	0.94
NH Other	72.73%	71.61%	565	789	0.96
Statewide Total	70.85%	70.76%	20,148	28,475	0.95

Timely Follow-up For Rolling 12 Month by Race/Ethnicity

Race/Ethnicity
All

Race
- NH White
- NH Black
- Hispanic
- NH Asian
- NH Other
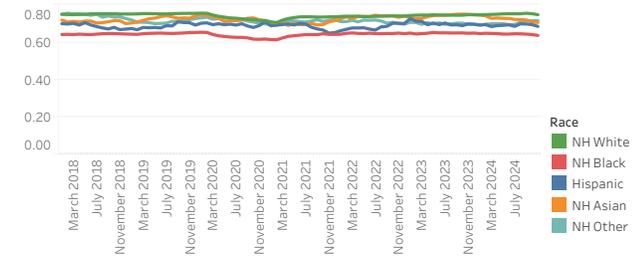
Opioids Domain

Introduction:

The official SIHIS measure aims to capture the annual change in overdose mortality as compared to a cohort of states with historically similar overdose mortality rate and demographics.

HSCRC will be conducting the final measure assessment. This report presents a proxy measure from which stakeholders can assess measure performance to date. Therefore, the results presented in this report may differ from the official SIHIS measure performance.

Proxy Measure:

Annual change in overdose mortality in Maryland as compared to a matched cohort of states.
Refer to the User Guide for information about the data sources and parameters for the official and proxy measure.

Key Findings:
  • Maryland has experienced a -3.1% decrease in Overdose Fatality per 100k population since 2018. This rate of change is faster than the comparison population, which has experienced a -12.6% decrease over the same time period.
  • By Race/Ethnicity, overdose fatality among the Non-Hispanic Black population is 1.6 times higher than the Non-Hispanic White population.

*The "Comparison Population" consists of the following four states in accordance with the formal measure; DC, DE, MA, and NJ.

Data available through June 2024

Overdose Fatalities Compared to National Average

	2018 MD Baseline (A)	Most Recent Rolling 12 Months (B)	Percent Change (B-A/A)	National Comparison Change	Comparison Population
Rates per 100K	38.5	37.3	-3.1%	36.2%	-12.6%
Total Count	2,324	2,256	-2.9%	38.7%	-10.3%

Overdose Fatalities By Month

Measure value
- Rate / 100 K
- Count
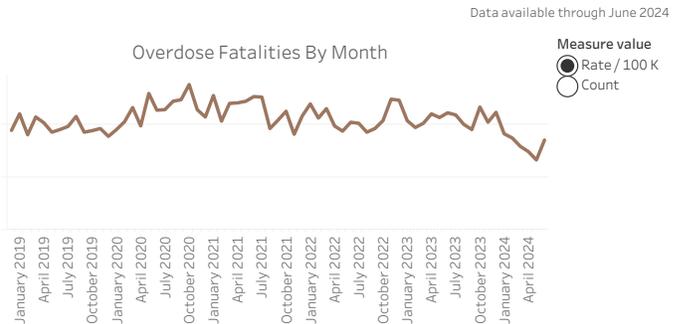
Overdose Fatality Rates per 100K: Race/Ethnicity & Disparity Index

Race/Ethnicity	2018 Baseline (A)	Most Recent Rolling 12 Months (B)	Percent Change (B-A/A)	Disparity Index(Race: NH White)
NH White	47.19	34.75	-26.4%	1.0
NH Black	44.21	56.51	27.8%	1.6
Hispanic	8.86	10.39	17.2%	0.3
*Other	NA	19.99	NA	0.6
Statewide Total	38.5	37.3	-3.1%	1.1

*The baseline data for the "Other" race/ethnicity category is unavailable.

Change in Overdose Fatalities By Month By Race/Ethnicity

Race/Ethnicity
All

Race/Ethnicity
- NH White
- NH Black
- Hispanic
- *Other

Maternal and Child Health Domain
Severe Maternal Morbidity Rate

Introduction:

The official SIHIS measure aims to capture the annual rate of severe maternal morbidity (SMM) per 10,000 delivery hospitalizations. Maryland's success in the measure is defined as having an SMM rate per 10,000 deliveries that is lower than the target.

HSCRC will be conducting the final measure assessment. Therefore, while this report attempts to track the official SIHIS measure, the results presented in this report may differ from the official SIHIS measure performance. Refer to the User Guide for information about the data sources and parameters for both the official measure and any modifications made for this report.

Reported Measure:

Annual severe maternal morbidity rate per 10,000 delivery hospitalizations among women ages 12-55. The official targets have been established to represent an improvement from the 2018 baseline.

Key Findings:
- Maryland had 314.3 SMM-related hospitalizations per 10,000 delivery discharges over the last 12 months. This rate is -116.6 hospitalizations per 10,000 higher than the 2026 target. It is also 71 hospitalizations per 10,000 higher than 2018 baseline. The 2023 target rate was 219.3
- By Race/Ethnicity, NH Black population has the SMM hospitalization rate per 10,000 deliveries, which is currently 1.7 times higher than the Non-Hispanic White population.
- NH Black population experienced the largest annual growth in SMM hospitalization rate per 10,000 deliveries, with an increase of 79.2 SMM hospitalizations per 10,000 deliveries since 2018 .

Data available through November 2024

Category
Overall

SMM Hospitalizations Compared to 2026 Target

	2018 Baseline	Most Recent 12 Months (% Change from Baseline)	2026 Target (% Change from Baseline)	Change Required to Achieve Target from Most Recent 12 Months
SMM Rate	243.1	314.3 (+29.3%)	197.6 (-18.7%)	-116.6
Count of SMM Events	1,585	1,883 (+18.8%)		
Eligible Deliveries	65,199	59,913 (-8.1%)		

SMM Hospitalizations for Rolling 12-Months

Measure value
- Rate / 10K
- Count

- Blood Transfusion Only Excluded
- Blood Transfusion Only
- Overall
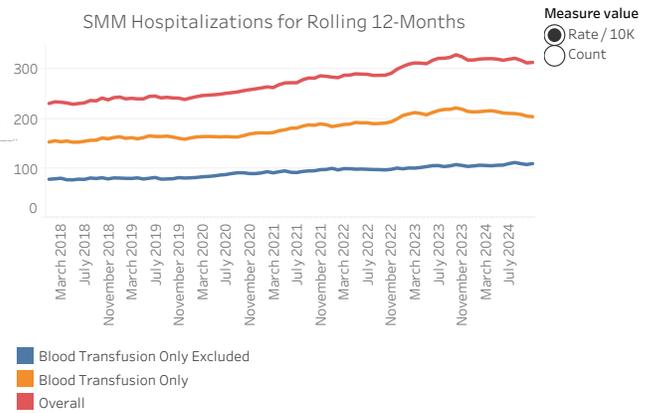
SMM Rates Compared to 2026 Target & Disparity Index, by Race/Ethnicity

Race/Ethnicity	2018 Baseline	Most Recent 12 Months (% Change from Baseline)	2026 Target (% Change from Baseline)	Change Required to Achieve Target from Most Recent 12 Months (%)	Disparity Index
NH White	181.4	249.2 (+37.4%)	154.2 (-15.0%)	-95.1 (-38.1%)	1.0
NH Black	334.2	413.4 (+23.7%)	267.4 (-20.0%)	-146.0 (-35.3%)	1.7
Hispanic	242.0	314.2 (+29.9%)	193.6 (-20.0%)	-120.7 (-38.4%)	1.3
NH Asian	249.0	349.8 (+40.5%)	199.2 (-20.0%)	-150.6 (-43.0%)	1.4
Other	205.2	261.7 (+27.5%)	164.2 (-20.0%)	-97.5 (-37.3%)	1.0
Total	243.1	314.3 (+29.3%)	197.6 (-18.7%)	-116.6 (-37.1%)	1.3

SMM Hospitalizations for Rolling 12-Months by Race/Ethnicity

Race/Ethnicity
All

Race/Ethnicity
- NH White
- NH Black
- Hispanic
- NH Asian
- Other
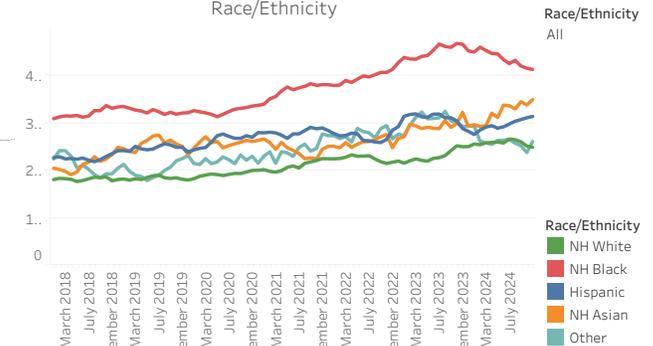
Maternal and Child Health Domain
Childhood Asthma

Introduction:

The official SIHIS measure aims to capture the annual rate of childhood asthma-related emergency department (ED) visits. Maryland's success in the measure is defined as having an ED visit rate per 1,000 children that is lower than the target.

HSCRC will be conducting the final measure assessment. Therefore, while this report attempts to track the official SIHIS measure, the results presented in this report may differ from the official SIHIS measure performance. Refer to the User Guide for information about the data sources and parameters for both the official measure and any modifications made for this report.

Reported Measure:

Annual rate of asthma-related emergency room department visits for children 2-17. The official targets have been established to represent an improvement from the 2018 baseline.

Key Findings:
- Maryland had 7.1 asthma-related emergency department visits per 1,000 children over the last 12 months. This rate is 1.8 visits per 1,000 children higher than the 2026 target. The 2023 target rate was 7.2
- By Race/Ethnicity, NH Black population has the highest asthma-related emergency department rate per 1,000 children, which is currently 4.3 times higher than the Non-Hispanic White population. However, this rate is still 4.0 visits per 1,000 children higher than the 2026 race/ethnicity target of 9.60.

Data available through November 2024

Childhood Asthma-Related ED Visits Compared to 2026 Target

	2018 Baseline	Most Recent 12 Months	2026 Target	Difference - Most Recent 12 months to Target
Rates per 1K	9.2	7.1	5.3	1.8
Total Count	10,974	8,463		

Childhood Asthma-Related ED Visits for Rolling 12-Months

Measure value
- Rate / 1K
- Count
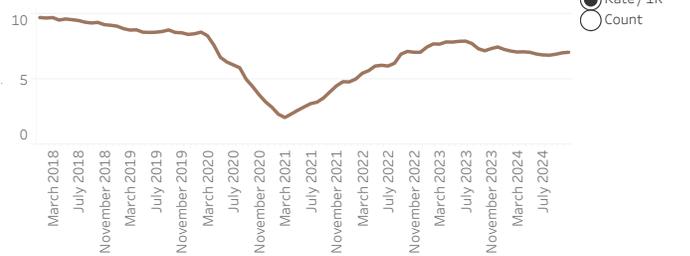
Childhood Asthma-Related ED Visit Rates per 1K Compared to 2026 Target: Race/Ethnicity & Disparity Index

Race/Ethnicity	2018 Baseline	Most Recent 12 Months	2026 Target	Difference - Most Recent 12 months to Target	Disparity Index
NH White	4.1	3.1	3.0	0.1	1.0
NH Black	19.1	13.6	9.6	4.0	4.3
Hispanic	5.5	5.7	4.0	1.7	1.8
NH Asian	2.6	3.2	2.5	0.7	1.0
Other	10.3	8.5	5.5	3.0	2.7
Statewide Total	9.2	7.1	5.3	1.8	2.3

Childhood Asthma-Related ED Visits for Rolling 12-Months by Race/Ethnicity

Race/Ethnicity
All

Race/Ethnicity
- NH White
- NH Black
- Hispanic
- NH Asian
- Other
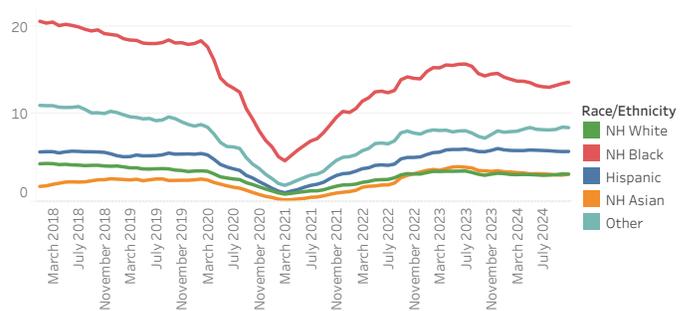
Maternal and Child Health Population Health Improvement Fund

Program Year Three – FY 2024

Annual Report

November 2024

Table of Contents

Background

In 2019, the State of Maryland collaborated with the Center for Medicare and Medicaid Innovation (CMMI) to establish the domains of healthcare quality and delivery that the State could impact under the Total Cost of Care (TCOC) Model. The collaboration also included an agreed upon process and timeline by which the State would submit proposed goals, measures, milestones, and targets to CMMI. In December 2020, the State submitted its proposal for population health priorities of the TCOC Model, which aligns statewide efforts across three domains: hospital quality, care transformation across the system, and total population health. Under the third domain, total population health, the State identified three key health priority areas for improvement: diabetes, opioid use, and maternal and child health (MCH). CMMI approved the State's proposal on March 17, 2021.

While the State identified diabetes and opioid use as key population health priority areas in the first year of the TCOC Model, the third priority area—MCH—was not selected until fall 2020. Consistent with the State's guiding principle to select goals, measures, and targets that are all-payer in nature, maternal and child health was deliberately considered as a priority area even though it is not primarily Medicare-focused. The selection of maternal and child health as a priority area reflects its importance in the State and acknowledges both the longstanding history of disparities, as well as the potential for improvement.

The U.S. faces higher maternal and infant mortality rates[1] compared to other industrialized countries, with large racial/ethnic disparities for each outcome. Between 2016 and 2020, Black non-Hispanic women had a maternal mortality ratio (MMR) 2.6 times greater than White non-Hispanic women, a disparity that has persisted since the 1940s. In Maryland, similar disparities in rates were observed for 2016-2020; the Black non-Hispanic MMR was 2.3 times the White non-Hispanic MMR.[2]

In addition, pediatric asthma contributes to increased healthcare utilization and spending, missed school days, and sub-optimal overall health and well-being in Maryland children. Pediatric asthma also has a significant impact on parental productivity. In Maryland, approximately 6.8 percent of children have asthma.[3]

As part of the proposal, the State identified two areas to improve MCH as measured by both overall reduction, as well as stratified by race and ethnicity:

- Severe maternal morbidity rate; and
- Asthma-related emergency department (ED) visit rates for ages 2-17.

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[1] A maternal death is defined by the World Health Organization (WHO) as "the death of a female from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy." Source: World Health Organization. (n.d.). https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4622

[2] Maryland Department of Health. (2022). *Maryland Maternal Mortality Review: 2022 Annual Report Health – General Article §13-1212.* https://health.maryland.gov/phpa/mch/Documents/MMR/2022%20MMR%20Report.pdf

[3] Centers for Disease Control. (2023). *Table C1: Child Current Asthma Prevalence and Weighted Numbers* [Data file]. Retrieved from https://www.cdc.gov/asthma/brfss/2021/child/tableC1.html

Table 1A. SMM Rates per 10,000 Deliveries, Including Blood Transfusions, 2018 Baseline, Targets, and Observed 2023 Rates, Maryland by Race/Ethnicity

Race	Baseline 2018[4,5]	2023 Year 5 Target	2023 Rate (% Change)	2026 Year 8 Target
NH White	181.4	7.5% decrease	250.7 (+38.2%)	15% decrease
NH Black	334.2	10% decrease	452.3 (+35.3%)	20% decrease
Hispanic	242	10% decrease	282.8 (+16.9%)	20% decrease
NH Asian	249	10% decrease	293.1 (+17.7%)	20% decrease
Other	205.2	10% decrease	294.3 (+43.4%)	20% decrease
Total	243.1	9.6% decrease	319.0 (+31.2%)	18.7% decrease

Table 1B. SMM Rates per 10,000 Deliveries, Excluding Blood Transfusion-Only Events, 2018 Baseline, Targets, and Observed 2023 Rates, Maryland by Race/Ethnicity

Race	Baseline 2018[4,5]	2023 Year 5 Target	2023 Rate (% Change)	2026 Year 8 Target
NH White	59.0	7.5% decrease	83.8 (+42.0%)	15% decrease
NH Black	124.3	10% decrease	168.7 (+35.7%)	20% decrease
Hispanic	57.2	10% decrease	66.1 (+15.6%)	20% decrease
NH Asian	93.4	10% decrease	68.4 (-26.8%)	20% decrease
Other	59.5	10% decrease	94.7 (+59.2%)	20% decrease
Total	80.7	9.6% decrease	103.9 (+28.7%)	18.7% decrease

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[4] There is a slight variation from what was presented in 2021, because the SMM analysis was analyzed by CRISP with an updated CASE mix file and with code/analysis that is updated by AIM/HRSA and the CDC.

[5] Chesapeake Regional Information System for our Patients Inc. (CRISP) analysis of Health Services Cost Review Commission (HSCRC) data, including blood transfusions. Accessed November 3, 2023.

Table 2. Childhood Asthma-ED Visit Rates per 1,000, Maryland by Race/Ethnicity

Race	Baseline 2018[6,7]	2023 Year 5 Target	2023 Rate (% Change)	2026 Year 8 Target	2026 Year 8 Target
NH White	4.1	3.5	3.3 (-19.5%)	3.0	26% decrease
NH Black	19.1	14.36	14.6 (-23.6%)	9.6	50% decrease
Hispanic	5.4	4.7	6.1 (+13.0%)	4.0	25% decrease
NH Asian	2.7	2.6	3.5 (+29.6%)	2.5	9% decrease
Other	10.6	7.3	8.1 (-23.6%)	5.5	48% decrease
Total	9.2	7.2	7.5 (-21.7%)	5.3	42% decrease

In 2021, the Health Services Cost Review Commission (HSCRC) approved cumulative funding of $40 million across four years (Fiscal Year (FY) 2022 through FY 2025) to support MCH investments led by Medicaid and the Prevention and Public Health Administration (PHPA) under the Maryland Department of Health ("the Department"), in conjunction with the Medicaid HealthChoice managed care organizations (MCOs). This funding has supported the scaling of existing statewide evidence-based programs and promising practices, as well as the expansion of new services for mothers and children. Additionally, using the funding in this manner creates an opportunity for the State to receive federal match funding to nearly double the investment, specifically for the Medicaid programs. Approval of this investment was contingent upon Commissioner approval of the proposed programs (outlined below); the Department and HSCRC staff work in close partnership to oversee and monitor implementation.

Funds are added to hospital annual rates as temporary adjustments through a uniform, broad-based assessment. Hospitals transfer funds to the Maternal and Child Health Population Health Improvement Fund ("the Fund"). The Fund, created through the 2021 Budget Reconciliation and Financing Act (BRFA), receives funding from hospital rates to invest in maternal and child health initiatives, as approved by Commissioners. The Fund is currently slated to sunset in 2025; as of fall 2024, the HSCRC and Department leadership are preparing a formal extension request to the Maryland General Assembly.

The Fund committed $8 million in annual funding from FY 2022 through FY 2025 to support Medicaid initiatives to address severe maternal morbidity, in alignment with the inclusion of MCH as a population health priority area. As noted earlier, these monies are eligible for federal matching dollars, bringing the combined total to $16 million annually. An additional $2 million in annual funding is directed to PHPA to support childhood asthma initiatives and additional interventions to address severe maternal morbidity.

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[6] There is a slight variation from what was presented in 2021, because the SMM analysis was analyzed by CRISP with an updated CASE mix file and with code/analysis that is updated by AIM/HRSA and the CDC.
[7] CRISP analysis of HSCRC data, including blood transfusions. Accessed November 3, 2023.

Funding supports the following MCH initiatives within Maryland Medicaid:

- Home Visiting Services pilot expansion;

- Reimbursement for doula services;

- CenteringPregnancy, a clinic-based group prenatal care model;

- HealthySteps, a clinic-based intensive prenatal and postpartum case management framework; and

- MOM Program (formerly the Maternal Opioid Misuse (MOM) Model) expansion/intensive case management for high-risk pregnancies.

Funding to PHPA supports the expansion and/or implementation of mutually-reinforcing programs:

- Asthma home visiting program (Medicaid partnership);

- Community-based asthma home visiting initiatives (all-payer); and

- Community-based perinatal home-visiting services and CenteringPregnancy implementation (all-payer).

The initiatives were selected to build, expand, and sustain existing evidence-informed innovations in the state to ensure a continuum of support services to improve maternal and child health outcomes. These initiatives, while selected previously in FY 2022, support more recently-released action plans such as the Moore-Miller Administration 2024 State Plan, the Department's Women's Health Action Plan (May 2024) and Maryland's State Health Improvement Plan (State Health Improvement Plan).

The Memorandum of Agreement (MOA) between the HSCRC and the Department that governs the Fund requires the Department to submit an annual report that will outline progress toward the Fund's goals.

This document serves as the annual report for the second year of funding and details the progress of the five Medicaid programs and the initiatives under Public Health Services; further outcome measures will be incorporated into future reports as data become available. The report culminates with a report on FY 2024 expenditures and spending plans for upcoming years.

Medicaid Programs

This section presents an overview and implementation update for each of the Medicaid programs supported by the Fund, followed by a synopsis of preliminary data from calendar year (CY) 2023, due to claims run-out.[8]

Home Visiting Services Expansion

Program Overview

In 2017, the Department established a Medicaid Home Visiting Services (HVS) Pilot under the authority of the §1115 HealthChoice demonstration to test a service expansion initiative in Maryland aimed at improving both maternal and child health. This pilot included reimbursement for two evidence-based home visiting models, Healthy Families America (HFA) and Nurse Family Partnership (NFP). Both models employ specific developmental and health screenings, and have an established track record of improving the health

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[8] Run-out refers to the length of time that providers are allowed to submit claims after a service has been provided. Providers submitting claims to MCOs have six months following provision of a service for their run-out period.

and well-being of both the birthing parent and the child. Sites requesting coverage for this service must maintain certification of accreditation or fidelity by the national HFA or NFP organization. Effective January 13, 2022, as catalyzed by the Fund, Maryland promulgated regulations that provided coverage for both models to shift from a pilot to a new statewide benefit for Medicaid participants.

Implementation Update-PY3

As of September 2024, there are 16 sites enrolled as Medicaid providers for home visiting services, covering 14 of 24 Maryland jurisdictions. The Department continues to serve as a resource for home visiting programs as they enroll as Medicaid providers and implement Medicaid billing mechanisms.

In CY 2023, there were 5,412 HVS services delivered to 627 unique participants, for an average of 8.6 per participant. The demographic breakdowns of these participants are below. Note: for the tables below and throughout the document, small cell values (counts between one and 10) are suppressed with an asterisk in accordance with CMS' guidelines to protect Medicaid participant confidentiality.

Table 3. Medicaid Home Visiting Services (HVS) Utilization, CY 2023

HVS Utilization	
Total Participants	627
Number of Services	5,412
Services per Participants	8.6

Table 4A. Medicaid Home Visiting Services (HVS) Participant Demographics: Age Groups, CY 2023

Age Groups	HVS
Under 2	398
03 to 11	61
12 to 15	0
16 to 21	30
Over 21	84
Total	573

Table 4B. Medicaid Home Visiting Services (HVS) Participant Demographics: Race/Ethnicity, CY 2023

Race/Ethnicity	HVS
Asian	*
Black	119
White	204
Hispanic	220
Native American	*
Other	28
Total	573

Table 4C. Medicaid Home Visiting Services (HVS) Participant Demographics: Regions, CY 2023

Region	HVS
Baltimore City	*
Baltimore Suburban	40
Eastern Shore	142
Southern Maryland	34
Washington Suburban	131
Western Maryland	219
Out of State	*
Total	573

Doula Reimbursement

Program Overview

Effective February 21, 2022, the Department began Medicaid coverage for doula/birth worker services to Medicaid participants. A doula, or birth worker, is a trained professional who provides continuous physical, emotional and informational support to birthing parents before, during and after birth. Certified doulas serving Medicaid participants provide person-centered, culturally competent care that supports the racial, ethnic and cultural diversity of members while adhering to evidence-based best practices.

Under Maryland Medicaid's reimbursement model, doulas provide three kinds of services: prenatal visits, attendance at labor and delivery, and postpartum visits. Medicaid provides coverage for up to eight perinatal (*i.e.,* prenatal and postpartum) visits, as well as attendance at labor and delivery, known as the 8:1 model. The 8:1 model allows for any combination of prenatal and postpartum visits that equals eight or fewer visits per birthing parent. Doulas can enroll as individual providers or be affiliated with a doula

practice that bills for provided services on their behalf. To recruit more doula providers and, in line with other states' rates, Maryland Medicaid increased the reimbursement rate for attendance at labor and delivery in July 2023. All doulas must be trained by one of 30 Medicaid-approved doula certifying organizations. The Department is continually expanding this list to increase the number of enrolled doulas, as detailed below.

Doula Implementation - PY3 Update

As of the beginning of October 2024, there are 26 doulas enrolled as Medicaid providers. During the year, the Department monitored doula provider enrollment and implemented several measures to build out the network. First, the Department permitted MCOs to use single case agreements with doulas until network adequacy requirements are reached. Second, the Department updated its regulations, effective June 2024, to: 1) facilitate quicker expansion of the number of approved doula certification organizations; and 2) make the doula benefit self-referral until 2025–a temporary removal of an administrative step for the doulas, *i.e.,* contracting with MCOs after registering Medicaid providers with the Department. Third, Medicaid implemented a bi-annual nominations process to add additional certification programs, in order to increase the number of doulas who are eligible to become Medicaid providers. As of September 2024, there are 30 approved certification organizations. Lastly, as noted earlier, the Department increased the rate for attendance at labor and delivery from $350 to $800 on July 1, 2023.

In CY 2023, 220 doulas services were delivered to 69 unique Medicaid participants, for an average of 3.2 services per participant. The demographic breakdowns of these participants are below. Maryland Medicaid will continue its efforts to partner with the Department's Maternal and Child Health Bureau (MCHB) to promote the doula benefit and bolster the doula workforce across the state.

Table 5. Medicaid Doula Services Utilization, CY 2023

Doula Utilization				
	Prenatal	**Labor and Delivery**	**Postpartum**	**Total**
Total Participants	55	*	*	**69**
Number of Services	188	*	*	**220**
Services per Participants	3.4	*	*	**3.2**

Table 6A. Medicaid Doula Services Participant Demographics: Age Groups, CY 2023

Age Groups	Doulas
Under 2	0
03 to 11	0
12 to 15	*
16 to 21	*
Over 21	59
Total	61

Table 6B. Medicaid Doula Services Participant Demographics: Race/Ethnicity, CY 2023

Race/Ethnicity	Doulas
Asian	*
Black	42
White	*
Hispanic	*
Native American	*
Other	*
Total	61

Table 6C. Medicaid Doula Services Participant Demographics: Regions, CY 2023

Region	Doulas
Baltimore City	*
Baltimore Suburban	23
Eastern Shore	*
Southern Maryland	*
Washington Suburban	23
Western Maryland	*
Out of State	0
Total	61

CenteringPregnancy

CenteringPregnancy
Starting in 2022, the Department utilized the Fund to expand access to innovative approaches to prenatal care through CenteringPregnancy. CenteringPregnancy is an evidence-based group prenatal care model for low-risk pregnancies. The model focuses on three core components: health assessment, interactive learning and community building. Facilitators support a cohort of eight to 10 individuals of similar gestational age through a curriculum of 10, 90- to 120-minute interactive group prenatal care visits that largely consist of discussion sessions. Discussion topics include medical and non-medical aspects of pregnancy, such as nutrition, common discomforts, stress management, labor and birth, breastfeeding and infant care. Studies have shown that CenteringPregnancy improves health outcomes, such as decreased risk of preterm birth, as well as improves patient satisfaction. [9]

CenteringPregnancy Implementation - PY3 Update
Following an MCO infrastructure support program in CY 2022, effective January 1, 2023, the Department began paying an enhanced rate to CenteringPregnancy providers for prenatal care visits. The enhanced payment supports the overall operations of CenteringPregnancy practices and may be billed alongside the typical prenatal care procedure code for up to 10 perinatal care visits per pregnancy (*i.e.,* the period from conception to 60 days postpartum).

There are three active CenteringPregnancy practices in Maryland as of October 2024, including one funded by the MCHB's grant (additional detail under 'Public Health Programs', below). Medicaid anticipates that the rest of MCHB's funded providers will work towards the CenteringPregnancy model implementation, and enroll as Medicaid providers in 2025 due to the partnership and grants from the Department's MCHB.

In CY 2023, 777 CenteringPregnancy services were billed for 357 unique participants, for an average of 2.2 per participant, the demographic breakdown is below. The Department believes these numbers may be artificially low due to underbilling, as CY 2023 was the first year of implementation of the enhanced rate. To increase uptake and monitor adherence, Medicaid and the Centering Healthcare Institute, CenteringPregnancy's parent organization, continue to partner to support providers. Medicaid attends the bi-annual Centering Consortium of Maryland to connect with providers, answer Medicaid-related questions, and encourage provider enrollment in Medicaid. The Centering Healthcare Institute and Medicaid collaborate in the event that issues arise between Consortium meetings.

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[9] Centering Healthcare Institute. (2020). *Centering Saves Lives & Money.* Centering Healthcare Institute: Payment Policy & Advocacy. Downloaded from: https://centeringhealthcare.org/why-centering/payment.

Table 7. Medicaid CenteringPregnancy Utilization, CY 2023

CenteringPregnancy Utilization	
Total Participants	345
Number of Services	864
Services per Participants	2.5

Table 8A. Medicaid CenteringPregnancy Participant Demographics: Age Groups, CY 2023

Age Groups	Centering Pregnancy
Under 2	0
03 to 11	*
12 to 15	*
16 to 21	66
Over 21	281
Total	357

Table 8B. Medicaid CenteringPregnancy Participant Demographics: Race/Ethnicity, CY 2023

Race/Ethnicity	Centering Pregnancy
Asian	*
Black	127
White	49
Hispanic	164
Native American	*
Other	12
Total	357

Table 8C. Medicaid CenteringPregnancy Participant Demographics: Regions, CY 2023

Region	Centering Pregnancy
Baltimore City	61
Baltimore Suburban	48
Eastern Shore	32
Southern Maryland	*
Washington Suburban	158
Western Maryland	56
Out of State	*
Total	357

HealthySteps

Program Overview

Starting in 2022, the Department utilized the Fund to expand access to innovative approaches to early childhood well-being through HealthySteps. HealthySteps, a program of the national accrediting body ZERO TO THREE[10], is a pediatric primary care model that promotes positive parenting and healthy development for babies and toddlers. Under the model, all children ages zero to three and their families are screened and placed into a tiered model of services of risk-stratified supports, including care coordination and on-site intervention at accredited, or pending accreditation HealthySteps sites. The HealthySteps Specialist, a child development expert, joins the pediatric primary care team to ensure universal screening, provide referrals to external services, and follow-up to the whole family.

HealthySteps Implementation - PY3 Update

Similar to CenteringPregnancy, on January 1, 2023 the Department began providing an enhanced payment for evaluation and management (E&M) services rendered by providers at a HealthySteps sites categorized as accredited or pending accreditation, following an MCO infrastructure support program. Like CenteringPregnancy, the enhanced payment supports the overall operations of HealthySteps practices, including the salary of the HealthySteps Specialist. The enhanced payment should be billed alongside each well-child visit or E&M service the child receives, regardless of the tier the child is placed into.

There is one eligible provider in Maryland (University of Maryland Pediatrics Associates) and three in DC (MedStar Georgetown - MedStar Medical Group at Fort Lincoln, Children's National - Children's Health Center at THEARC, and Anacostia locations), however in 2023 only one provider billed HealthySteps

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[10] What We Do. (n.d.). https://www.healthysteps.org/what-we-do/

services. In addition, Kaiser Permanente transformed its practices in South Baltimore and Woodlawn into HealthySteps sites to comply with the new Medicaid requirement in late 2023. Maryland's implementation of the HealthySteps program, including the enhanced Medicaid payment, was recognized by the Prenatal-to-3 Policy Impact Center at Vanderbilt University in 2023.[11]

Maryland's efforts align closely with recent CMS guidance,[12] clarifying Early and Periodic Screening, Diagnosis and Treatment requirements for Medicaid and CHIP, in its emphasis on improving care for children with specialized needs, early identification, and family-centric treatment of pediatric mental health disorders.

In CY 2023, 3,176 HealthySteps services were billed for 1,372 unique participants, for an average of 2.3 services per participant, the demographic breakdown is below. The Department believes these numbers may be artificially low due to underbilling, as CY 2023 was the first year of implementation of the enhanced rate. In tandem, the University of Maryland conducted a quality improvement study on its HealthySteps site that demonstrated a variable, but improved rate of reimbursement of the HealthySteps service over the course of the year, after monthly reminders and education of residents and attending physicians.13 Maryland Medicaid will continue to work closely with ZERO TO THREE, along with HealthySteps providers, to promote the enhanced payment of rendered HealthySteps services.

Maryland Medicaid staff continue this engagement with partners through external opportunities, including presenting at the 2024 Pediatric Mental Health Summit, and updating policy experts on Maryland's strategy to support HealthySteps practices. Moreover, Maryland Medicaid staff work alongside HealthySteps providers in the State by serving on the advisory board for the Health Resources and Services Administration's (HRSA) Transforming Pediatrics for Early Childhood (TPEC), University of Maryland and Johns Hopkins University High Five for P-5: Improving Health Equity Through Early Child Development Supports.

It is important to note that the reimbursement model allows for an enhanced payment service to be billed alongside each well-child visit provided at a HealthySteps site. However, this reimbursement model–and the resulting Medicaid data–do not reflect the intensity of services received by each patient according to their tier; therefore, a 'dose-response' evaluation cannot be used for HealthySteps services.

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[11] Prenatal-to-3 Policy Impact Center. 2023 Maryland Roadmap Summary. https://pn3policy.org/pn-3-state-policy-roadmap-2023/md/

[12] State Health Office Letter [#24-005]: RE: Best Practices for Adhering to Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Requirements. September 26, 2024. https://www.medicaid.gov/federal-policy-guidance/downloads/sho24005.pdf

[13] Onigbanjo M, Connors, K, and Edwards, S "Using Enhanced Rates to Support and Financially Maintain a HealthSteps Program at a Primary Care Practice". Poster Presentation. Pediatric Academic Societies Region IV Annual Meeting, Charlottesville, VA. February 24, 2024

Table 9. Medicaid HealthySteps Utilization, CY 2023

HealthySteps Utilization	
Total Participants	1,370
Number of Services	3,171
Services per Participants	2.3

Table 10A. Medicaid HealthySteps Participant Demographics: Age Groups, CY 2023[14]

Age Groups	HealthySteps
Under 2	974
03 to 11	395
12 to 15	0
16 to 21	*
Over 21	*
Total	1,370

Table 10B. Medicaid HealthySteps Participant Demographics: Race/Ethnicity, CY 2023

Race/Ethnicity	HealthySteps
Asian	*
Black	1,162
White	60
Hispanic	46
Native American	*
Other	73
Total	1,370

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[14] As HealthySteps services are for those ages zero to three, any claim for individuals above aged 4 is considered a billing error.

Table 10C. Medicaid HealthySteps Participant Demographics: Regions, CY 2023

Region	HealthySteps
Baltimore City	981
Baltimore Suburban	365
Eastern Shore	*
Southern Maryland	*
Washington Suburban	13
Western Maryland	*
Out of State	0
Total	1,370

MOM Case Management Services (MOM Program)

Program Overview

The MOM program addresses fragmentation in the care of pregnant and postpartum Medicaid participants with opioid use disorder (OUD) through enhanced case management services, with an emphasis on increasing health service utilization, as well as screening and referral for social determinants of health.

Initially funded as part of a CMMI demonstration, the MOM program has supported efforts in increasing provider capacity to treat the maternal OUD population; in addition, in FY 2022, the demonstration funded a per member, per month (PMPM) payment to MCOs for the enhanced case management services. Starting July 1, 2022, the payments transitioned to the Fund, with federal matching dollars authorized under the §1115 HealthChoice demonstration. As of January 1, 2023, Maryland has ceased its participation in the federal CMMI demonstration; implementation of MOM case management services continued seamlessly.

MOM Program Implementation - PY3 Update

MOM program services started on July 1, 2021 as a pilot in St. Mary's County, continuing for one year before expanding to select counties a year later. Starting January 1, 2023, the MOM program became available statewide, open to all eligible HealthChoice members. As of the end of September 2024, there have been 106 participants in the MOM program; the demographic breakdown of those who participated in CY 2023 is below. Program participants to date have demonstrated an interest in engaging in treatment for their OUD, as well as efforts to change life circumstances, including enrolling in educational courses, learning to drive and securing stable housing. The program experienced a sharp increase in enrollment following the statewide expansion.

In CY 2023, the Department leveraged support from both the Fund and CMMI to continue two partnerships–with the Maryland Addiction Consultation Service (MACS) and Bowie State University–to augment MOM's impact. Through the partnership, MACS continued the MACS for MOMs program to build provider capacity to better treat the maternal OUD population. The program includes teleECHO clinics, a warmline for phone consultations, and a variety of trainings, including those for receiving a DATA 2000 Waiver which allows providers to prescribe buprenorphine. To strengthen the MOM program by making it more attractive to communities of color, the Department partnered with Historically Black Colleges and Universities (HBCUs), led by Bowie State, to tailor the program to be more culturally responsive to Maryland's Black population.

Bowie State University finished their research in December 2023. Their study examined wrap-around social service providers who were outside of the MOM program, but who have successfully recruited and retained women from similarly stigmatized populations. Many participants praised the MOM program and expressed beliefs about its value and potential to be impactful to the clients it aims to serve. Funding for MACS for MOMs has since transitioned over to MCHB. During this year, MACS for MOM is conducting a needs assessment to understand what further challenges and resources are needed.

Table 11. Medicaid MOM Program Utilization, CY 2023

MOM Utilization	
Total Participants	57
Number of Services	250
Services per Participants	4.4

Table 12A. Medicaid MOM Participant Demographics: Age Groups, CY 2023

Age Groups	MOM
Under 2	0
03 to 11	0
12 to 15	*
16 to 21	*
Over 21	56
Total	57

Table 12B. Medicaid MOM Participant Demographics: Race/Ethnicity, CY 2023

Race/Ethnicity	MOM
Asian	0
Black	*
White	46
Hispanic	*
Native American	*
Other	*
Total	57

Table 12C. Medicaid MOM Participant Demographics: Regions, CY 2023

Region	MOM
Baltimore City	*
Baltimore Suburban	16
Eastern Shore	*
Southern Maryland	*
Washington Suburban	*
Western Maryland	24
Out of State	0
Total	57

PY3 Medicaid Performance

To assess the outcomes of the Maryland Medicaid MCH Initiatives, the Hilltop Institute at the University of Maryland, Baltimore County analyzed the administrative data from the program participants, based off of several relevant HEDIS measures. For the purposes of the analysis, all program participants were identified based on FFS claims and MCO encounters that include the program-specific procedure codes, provider types, and ICD-10 diagnosis codes designated by the Department.

Due to enrollment increases, the PY3 report is the first year that there is a sufficient number of participants for the metrics to be reported at the program level. Results are presented for enrollees who had at least one qualifying visit as well as enrollees who met the minimum evaluation inclusion criteria. To meet the inclusion criteria for the evaluation, HVS, HealthySteps, doula services, and CenteringPregnancy participants

were required to have at least three visits, and MOM program participants had to be enrolled in the program for at least three months. All enrollees who met the inclusion criteria and were enrolled after their respective programs' start dates were flagged as evaluation-eligible. It is important to note that many of the measure criteria also include a delivery in 2023, which reduces the number of participants included below.

All records were deduplicated so that each enrollee had one record that contained their enrollment start date, the number of program visits or number of months enrolled, and the evaluation eligibility flag. Each enrollee was then sorted into a cohort by calendar year according to the enrollment start date. Thereafter, the demographic variables birth data, sex, and region were obtained and merged from Hilltop Medicaid data sets. The 1184 newborn data set was used to merge infants to their mothers and mothers to their infants where possible, keeping the infants' birth weight, sex, and date of birth.

Separately, Hilltop used the diagnoses and the revenue and procedure codes provided by the Department to identify claims and encounters for cesarean section deliveries, SMM, and birth complications. Identified claims and encounters were collapsed so that there was only one record per enrollee with flags indicating if they experienced the above medical conditions. HEDIS software was used to provide the flags indicating whether enrollees had timely prenatal visits, postpartum care, childhood immunizations, child well-care visits and neonatal intensive care unit (NICU) admission for CY 2023. Medical and procedure flags were then merged with the cohort data sets to create a data set of mother and infant pairs with enrollee demographics and evaluation and measure flags.

It should be noted that although enrollment has increased, the sample size is small for certain programs. Therefore, care should be used when interpreting some of the results. Again, for the tables below and throughout the document, small cell values (less or equal to 10) are suppressed with an asterisk in accordance with CMS' guidelines to protect Medicaid participant confidentiality.

Data Results

Note: In the tables below, 'denom' stands for denominator, and 'numer' stands for numerator.

Timely Initiation of Prenatal Care
> Prenatal care plays a crucial role in supporting healthier pregnancies and infants; the early initiation of prenatal care - ideally in the first trimester - is particularly important. The preliminary data presented in the PY 2 report identified the timely attendance at a prenatal visit metric as a potential place for growth. The three benefits that had sufficient CY 2023 data to report ranged from a 36.1 percent (HVS) to a 58.1 percent completion rate (doula services), indicating that there is still room for improvement.

Table 13. Deliveries in where Participant had a Prenatal Visit in the First Trimester, on or before the Enrollment Start Date or within 42 Days of Enrollment in the Organization, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	13	36.1%	28	*	*
Doula Services	31	18	58.1%	18	*	*
CenteringPregnancy	73	40	54.8%	60	34	56.7%
MOM	25	*	*	22	*	*

Postpartum Care Visits - Seven through 84 Days

> After giving birth, a postpartum care visit provides an important opportunity to evaluate the birthing individual's healing from labor and delivery, in addition to screening for postpartum depression. The PY 2 report also identified timely attendance at a postpartum visit metric as another potential place for improvement. This year's data shows a similar trend, reinforcing the idea that there is opportunity for growth in this area. The two benefits that had sufficient data to publish, doula services and CenteringPregnancy, ranged from 56.7 percent to 60.0 percent completion of a timely postpartum visit within 7 and 84 days of delivery.

Table 14A. Deliveries in where Participant had a Postpartum Care Visit on or between 7 and 84 days after Delivery, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	*	*	28	*	*
Doula Services	31	17	54.8%	18	*	*
CenteringPregnancy	73	42	57.5%	60	36	60.0%
MOM	25	*	*	23	*	*

Postpartum Care Visits - Seven through 84 Days

> As part of discussions to improve timely attendance at a postpartum visit, stakeholders raised the possibility that participants are attending postpartum visit beyond the 84 day postpartum period due to lack of appointment availability. To account for this, the analysis added an additional metric which extended the time period of postpartum visit to 120 days following the birth. The CY 2023 data shows a minimal improvement for HVS and CenteringPregnancy data and no change for the doula services.

Table 14B. Deliveries in where Participant had a Postpartum Care Visit on or between 7 and 120 days after Delivery, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	11	30.6%	28	*	*
Doula Services	31	17	54.8%	18	*	*
CenteringPregnancy	73	44	60.3%	60	37	61.7%
MOM	25	*	*	22	*	*

Cesarean Births

> While cesarean births can be warranted in some cases, reducing unnecessary cesareans is a priority in maternal health. In CY 2023 only one of the benefits, CenteringPregnancy, had a reportable number of cesarean births. There was a notable difference between the groups that had any services and those who met evaluation criteria.

Table 15. Deliveries that were Cesarean Section among Participants, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	*	*	28	*	*
Doula Services	31	*	*	18	*	*
CenteringPregnancy	73	44	60.3%	60	24	40.0%
MOM	25	*	*	22	*	*

Severe Maternal Morbidity

> As outlined above (see *Background*), SMM is an area of particular importance to the State. The CY 2023 data shows preliminary positive results for this metric: two of the benefits had no instances of SMM and the remaining two each had very few instances of it.

Table 16. Pregnancies Associated with Severe Maternal Morbidity among Participants, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	*	*	28	*	*
Doula Services	31	0	0.0%	18	0	0
CenteringPregnancy	73	*	*	60	*	*
MOM	25	0	0.0%	22	0	0

Birth Complications

Birth complications, while related to SMM, refer to any problems that occur during labor and delivery that affect the birthing parent or baby.[15] As with any type of medical complication, reducing ones that occur during birth are a priority. The CY 2023 data is extremely promising - none of the benefits had a single instance of a birth complication during this time.

Table 17. Percentage of Deliveries that had Birth Complications among MCH Participants, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	0	0.0%	28	0	0.0%
Doula Services	31	0	0.0%	18	0	0.0%
CenteringPregnancy	73	0	0.0%	60	0	0.0%
MOM	25	0	0.0%	22	0	0.0%

Infant Birth Weight

Infant birth weight can be a good indicator of the newborn's overall health. Low birth weight (less than 2,500 grams) and very low birth weight (less than 1,500 grams)[16] can be caused by a variety of factors including gestational age, multiple gestation pregnancies, maternal health, and environmental factors.

In CY 2023, the proportion of infants of normal birth weight whose birthing parent was enrolled in HVS, doula services, and CenteringPregnancy ranges from 89.3 percent to 94.4 percent. The proportion of infants of normal weight whose birthing parent was enrolled in in the MOM program

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[15] Only around 3 percent of the birth complication ICD-10 codes appear on the list of SMM codes, primarily ones related to anesthesia complications.

[16] Centers for Disease Control. (2024). *Birthweight and Gestation.* https://www.cdc.gov/nchs/fastats/birthweight.htm

increased from 80 percent to 86.4 percent when any dose was compared with those who meet inclusion criteria. The reason that a smaller proportion of individuals in the MOM program have an infant of a normal birth weight may be related to the fact that those with prenatal exposure of opioids are at a greater risk of being of low birth weight.[17]

Table 18A. Newborns who are Normal, Low, or Very Low Birth Weight for all Participants Enrolled before Delivery, CY 2023

	CY 2023				
	Denom	Very Low Birth Weight	Low Birth Weight	Normal Birth Weight	
				Counts	Percent
HVS	36	*	*	33	91.7%
Doula Services	31	*	*	28	90.3%
CenteringPregnancy	73	*	*	68	93.2%
MOM	25	*	*	20	80.0%

Table 18B. Newborns who are Normal, Low, or Very Low Birth Weight for all Participants Enrolled before Delivery and who meet the Inclusion Criteria, CY 2023

	CY 2023				
	Denom	Very Low Birth Weight	Low Birth Weight	Normal Birth Weight	
				Counts	Percent
HVS	28	*	*	25	89.3%
Doula Services	18	*	*	17	94.4%
CenteringPregnancy	60	*	*	55	91.7%
MOM	22	*	*	19	86.4%

Neonatal Intensive Care Unit (NICU) Admissions

In cases where a newborn is experiencing health issues following its birth, they may be admitted to a NICU of a hospital. While important for treatment, these admissions can be stressful for the family and newborn, as well as costly. The CY 2023 data appears promising regarding NICU hospitalizations. For any participants of any dose, two of the four benefits had zero NICU admissions and for those who met evaluation criteria, only one benefit had any participants admitted to the NICU.

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[17] Yen, E., & Davis, J. M. (2022). The immediate and long-term effects of prenatal opioid exposure. Frontiers in pediatrics, 10, 1039055. https://doi.org/10.3389/fped.2022.1039055

While MOM did have some infants admitted to the NICU, it was a very small number. This is notable as infants exposed to opioids or medications for the treatment of OUD are at risk for a condition called neonatal abstinence syndrome (NAS) which often requires them to be admitted to the NICU.

Table 19. Percentage of Infants with a NICU Admission near Date of Birth, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	36	0	0.0%	28	0	0.0%
Doula Services	31	*	*	18	0	0.0%
CenteringPregnancy	73	0	0.0%	60	0	0.0%
MOM	25	*	*	22	*	*

Child Well-Care Visits

An important tool for keeping children healthy is that they receive a well-child visit from a provider at the cadence recommended by the American Academy of Pediatrics. The CY 2023 data shows that around one quarter of HVS participants and up to 43 percent of HealthySteps participants had received a well-care visit during the calendar year. The Department's Health Choice evaluation shows that, for 2022, 57 percent of Medicaid participants received their well-child visits in the first 15 months.[18] The Department will continue to investigate these rates, and work with MCOs and providers to increase the rate of well-child visits among its participants.

Table 20. Number of Children with at least one Qualifying Visit who Received a Well-Care Visit during the Calendar Year by Program Enrollment, CY 2023

	At Least One Qualifying Visit			Meets Eval. Inclusion Criteria		
	CY 2023					
	Denom	Numer	Percent	Denom	Numer	Percent
HVS	361	87	24.1%	297	74	24.9%
HealthySteps	1,151	495	43.0%	394	73	18.5%

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[18] The Hilltop Institute. (2024, June 30). Evaluation of the Maryland Medicaid HealthChoice program: CY 2018 to CY 2022. https://health.maryland.gov/mmcp/healthchoice/Documents/HealthChoice%20Monitoring%20and%20Evaluation/HealthChoice%20Post-Award%20Forum/2024/Final%20HealthChoice%20Evaluation%20CY%202018-CY%202022.docx.pdf

Childhood Immunizations

As part of the well-care visits described above, children receive immunizations against a variety of diseases at a set schedule. By the age of two, children should have received the following vaccines: diphtheria, tetanus, and acellular pertussis (DTAP); polio (IPV); measles, mumps, and rubella (MMR); haemophilus influenzae type B (HiB); hepatitis B (HepB); chicken pox (VZV); pneumococcal conjugate (PCV); hepatitis A (HepA); rotavirus (RV); and influenza (Influ); several of which are combined into "combination 3". In CY 2023, MMR had the largest completion rate and influenza had the smallest.

Table 21A. Number of Children Aged 2 Years Old Enrolled in Home Visiting Services (HVS) that Received Childhood Immunizations, CY 2023

| | CY 2023 | | | | | | | | | | | | |
| | | DTAP | | IPV | | MMR | | HiB | | HepB | | VZV | |
	Denom	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
At Least One Qualifying Visit	49	29	59.2%	37	75.5%	40	81.6%	39	79.6%	30	61.2%	40	81.6%
Meets Eval. Inclusion Criteria	40	21	52.5%	29	72.5%	32	80.0%	31	77.5%	24	60.0%	32	80.0%

Table 21A. Cont.

| | CY 2023 | | | | | | | | | | |
| | | PCV | | HepA | | RV | | Influ | | Combo 3 | |
	Denom	Count	%	Count	%	Count	%	Count	%	Count	%
At Least One Qualifying Visit	49	33	67.3%	39	79.6%	31	63.3%	19	38.8%	23	46.9%
Meets Eval. Inclusion Criteria	40	25	62.5%	31	77.5%	23	57.5%	15	37.5%	17	42.5%

Table 21B. Vaccination Acronym List

DTAP	Diphtheria, Tetanus and Acellular Pertussis	**PCV**	Pneumococcal conjugate
IPV	Polio Vaccine	**HepA**	Hepatitis A
MMR	Measles, Mumps and Rubella Vaccine	**RV**	Rotavirus
HiB	Haemophilus Influenzae type B Vaccine	**Influ**	Influenza
HepB	Hepatitis B	**Combo 3**	Combination 3 (DTaP, IPV, MMR, HiB, HepB, VZV, PCV)
VZV	Chicken Pox Vaccine		

Public Health Programs

The Public Health Services/Prevention and Health Promotion Administration administers funds to improve maternal and child health. Specifically, for the Fund, the MCHB implements the maternal health initiatives, and the Environmental Health Bureau (EHB) implements initiatives related to asthma.

Maternal Health Initiatives

Home Visiting Expansion

Program Overview
Home visiting programs can impact maternal morbidity in different ways, including: 1) creating human- to-human relationships that enable home visitors to provide tailored support based on the specific needs of each family; 2) reducing pregnancy induced hypertensive disorders, preterm birth, and maternal depression; 3) creating connections between mothers and health practitioners in the community, breaking down barriers to care, and strengthening the link between healthcare resources and the families who need them; 4) providing screenings for maternal depression both prenatal and postpartum and connecting mothers in need with the appropriate community-based behavioral health care; 5) providing referrals for mothers when certain risk factors, including trauma or domestic violence, are present in the home; and 6) targeting social determinants of health (SDOH) affecting families, such as social support, parental stress, access to health care, income and poverty status and environmental conditions.[19]

The Maternal, Infant and Early Childhood Home Visiting Program (MIECHV) funds 12 jurisdictions and 15 programs that meet federal evidence-based criteria across Maryland. Maryland Medicaid reimburses three MIECHV sites operating under the Nurse-Family Partnership and Healthy Families America models. As part of the Department's efforts to improve maternal and population health, the Department is awarding a total of $2.26 million over three years (August 15, 2022 through June 30, 2025) to four sites through the Fund.

Implementation Update

Since Fall 2022, the Department has supported four sites to provide expanded home visiting models. Two sites (Montgomery County and Washington County) are utilizing funds to expand existing home visiting programs, while the other two sites (Baltimore Healthy Start and Family Tree) utilize funds to pilot a new, evidence-based home visiting curriculum. What follows is a brief description of each of the four sites.

> **Montgomery County Health Department** utilizes funding to expand its Babies Born Healthy (BBH) program, a prenatal care coordination initiative that connects its participants to home visiting services and offers the March of Dimes Becoming Mom (BAM) curriculum for all BBH participants who wish to participate through group classes or individual sessions. This program enhances maternal understanding through a collaborative community-based model of care, offering prenatal education and ensuring access to quality prenatal care. The program focuses on providing services to

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[19] American Academy of Pediatrics. Home visiting to Reduce Maternal Mortality and Morbidity Act. https://www.socialworkers.org/LinkClick.aspx?fileticket=7mhUWCPtNL4%3D&portalid=0

the following high-risk zip codes in Montgomery County: 20903, 20904, 20906, and 20912.

Washington County Health Department began the expansion of their existing home visiting services via the local program affiliate of HFA, which is currently funded by MIECHV. The program successfully organized and conducted three virtual family groups, with an average monthly attendance of 18 families. The virtual family groups have proven invaluable, facilitating meaningful connections among families, providing essential parenting insights, and creating a platform for the sharing of experiences. The Washington County Health Department is a Medicaid-enrolled HVS provider, meaning that the expansion will further benefit the Fund's Medicaid investments as well.[20]

Baltimore Healthy Start (BHS) collaborated with Chase Brexton Glen Burnie Health Center, Total Health Care, and with the Administrative Care Coordination Unit (ACCU) of the Anne Arundel County Department of Health to expand home visiting services to postpartum women in the following zip codes: 20724, 21060, 21061, 21225 and 21226. This initiative utilizes the Great Kids curriculum, designed for home visits to commence from prenatal to when a child reaches 36 months of age. In addition to the home visits, families who are in need of the services are offered the standard BHS case management and care coordination services through Baltimore Healthy Start's clinical partner. In summer 2024, BHS shifted its partnership from Chase Brexton Glen Burnie to Total Health Care, with which it has existing relationships in Baltimore City.

The Family Tree facilitated the expansion of home visiting services in Baltimore City through the Parents as Teachers (PAT) model. Home visitors conduct regular visits, supporting families from pregnancy through their child's kindergarten year. The PAT curriculum addresses critical areas including mental health, nutrition, maternal depression, substance use and domestic violence. In FY 2023, the program received certification to operate as a PAT-affiliated site from the Parents as Teachers National Center, successfully recruited and onboarded staff to empower the growth of the PAT home visiting initiative. The program's collaborative efforts extended to partnerships with the following organizations: Health Care Access Maryland (HCAM), Urban Strategies, and The Parent Helpline.

Collectively between FY 2022 and FY 2024, Fund-supported Home Visiting Expansion Initiatives enrolled over 109 families to home visiting programs in priority jurisdictions. Table 22 indicates the number of those enrolled by race and ethnicity and Table 23 indicates the number of enrolled by insurance provider. The majority of the home visiting sites experienced challenges with recruitment of staff for the expansion of their programs. The Department will continue to provide technical support to its Fund grantees in FY 2025 to enhance the enrollment of all home visiting sites to improve SMM rates in the state.

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[20] Washington County Health Department is an approved Medicaid HVS provider therefore solely Medicaid funds were used for Medicaid participants.

Table 22: Number of Enrolled in Fund-Supported Home Visiting Expansion by Race/Ethnicity

Race/Ethnicity	No. Enrolled
non-Hispanic White	*
non-Hispanic Black	82
Hispanic	14
Asian	*
Native American/ Alaska Native	*
Multiracial NOT Hispanic	*
Multiracial and Hispanic	*

Table 23: Number of Enrolled in Fund-Supported Home Visiting Expansion by Insurance

Enrolled Insurance Type	No. Enrolled
Medicaid	93
Private	*
Uninsured	13
Other	*

Increasing Access to CenteringPregnancy Sites

Program Overview

The effectiveness of CenteringPregnancy is shown most dramatically among Black birthing persons in Maryland, who disproportionately experience adverse maternal outcomes. In response to the disproportionate (SMM) severe maternal morbidity rates affecting Black birthing persons in Maryland, the Department has reserved a total of $429,197 for a period of three years (from FY 2022 to FY 2025) to fund the implementation of CenteringPregnancy in seven additional sites across Maryland. In alignment, participating practices may be eligible for Medicaid's CenteringPregnancy enhanced reimbursement benefit, detailed above.

Implementation Update

During FY 2022 to FY 2025, funding was allocated to expand CenteringPregnancy in five new sites across Maryland. In FY 2024 and FY 2025, the MCHB also braided funding with its BBH program, to fund an

additional six sites. This expansion will result in a total of 11 funded sites and aims to enhance quality maternal healthcare access, particularly for at-risk populations.

Mercy Health Foundation received funding in FY 2022 through April 2024. Funds supported the launch of CenteringPregnancy at one of their OB/GYN practices in downtown Metropolitan Baltimore. As of April 2024, Mercy Health Foundation has successfully enrolled 156 individuals and hosted 29 Centering cohorts over two years. They achieved accreditation in July 2024.

Since 2022, the Department has partnered with the **Centering Healthcare Institute** to support the recruitment and provision of start-up funds to sites interested in implementing the CenteringPregnancy model. Based on an open application process and assessment of readiness, four prenatal clinics, strategically located in Baltimore County, Montgomery County, and Prince George's County, were recruited in FY 2023 and FY 2024. Utilizing the braided BBH funding, Centering Healthcare Institute recruited an additional four sites in FY 2024, located in Baltimore City, Frederick, and Montgomery Counties. The eight currently-funded clinics are:

- Kaiser Gaithersburg in Montgomery County
- Mary's Center Silver Spring in Montgomery County
- University of Maryland St. Joseph's Women's Health Associates in Baltimore County
- Luminis Health Greenbelt in Prince George's County
- Frederick Health in Frederick County
- Baltimore Medical System at Yard 56 in Baltimore City
- CCI Health Silver Spring in Montgomery County
- Lifebridge Sinai Hospital in Baltimore City

Currently, St. Joseph's is enrolled with Medicaid to bill for the enhanced rate. The Department anticipates that sites will complete their implementation plans, apply for accreditation, and enroll Medicaid providers between November 2024 and July 2025. Site timelines may differ depending if they entered during the two-year Centering Implementation Plan, or the one-year Centering365 model. All sites receive the same high-quality technical assistance, training, and support from the Centering Healthcare Institute. Once accredited or pending accreditation, Maryland Medicaid provides enhanced reimbursement to CenteringPregnancy-certified providers and MCOs that are enrolled in the CenteringPregnancy model, thus allowing for sustainability.

Improving Childhood Asthma Initiatives

Program Overview

Environmental home visiting programs have been shown to improve asthma outcomes, including adolescent asthma, by addressing asthma triggers in the home and other related environments. This section describes the efforts of the Department to improve childhood asthma outcomes. The Childhood Lead Poisoning & Asthma Prevention and Environmental Case Management Program benefits children suffering from moderate to severe asthma by providing up to six home visits from a local health department (LHD) community health worker (CHW), facilitated by a supervising case manager. The

program emphasizes cooperative goal setting with the family to reduce or eliminate asthma triggers such as environmental tobacco smoke, pets, fabrics, the presence of vermin due to inadequate sanitation, or other critical objectives.

In addition to the identification of environmental triggers, the follow up visits include parent education and provision of supplies shown to reduce asthma severity, including a high efficiency particulate air (HEPA) vacuum cleaner and other interventions demonstrated to improve outcomes for children with moderate to severe asthma.

Implementation Update

The Department has utilized funds from Maryland Medicaid's CHIP Health Services Initiative (HSI) to support the Childhood Lead Poisoning & Asthma Prevention and Environmental Case Management Program operating in 11 jurisdictions: Anne Arundel, Baltimore, Charles, Dorchester, Frederick, Harford, Montgomery, Prince George's, St. Mary's, and Wicomico Counties, as well as Baltimore City.

The program also ensures care coordination amongst providers who interact with the child through the use of asthma action plans. In FY 2024, 897 children with asthma received services through this program. In support of the goal of addressing health disparities, 72 percent of the children with asthma served in the program were Black or African American.

Table 24. Children with moderate to severe asthma served in the Medicaid/CHIP Home Visiting program, by jurisdiction (2020-2024)[21]

Jurisdiction	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Anne Arundel*	-	-	-	92	158
Baltimore	*	*	14	122	146
Baltimore City	17	40	183	251	331
Charles	46	*	*	11	*
Dorchester	86	17	24	57	32
Frederick	13	12	*	18	24
Harford	263	109	82	96	59
Montgomery*	-	-	-	23	72
Prince George's	49	31	84	36	12
St. Mary's	0	53	36	35	35
Wicomico	54	38	85	66	22
Total	530	315	521	807	897

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[21]The addition of Anne Arundel and Montgomery County, and expanded staffing of the 9 original jurisdictions, was made possible in 2022 with additional funding through the Health Services Cost Review Commission. That funding ends in 2025.

Improving Referrals to Local Health Department Asthma Home Visiting Programs

One of the most significant challenges to the Childhood Lead Poisoning & Asthma Prevention and Environmental Case Management Program is recruiting families into the program. The Department developed several strategies to improve the referral process, including:

- Finder files developed by the Hilltop Institute using fee-for-service (FFS) claims as well as MCO encounters to identify children who may be eligible for services, which are then distributed to LHD nurse case managers;
- Care alerts to health care providers through the state's health information exchange, Chesapeake Regional Information System for our Patients (CRISP);
- Direct electronic referrals to LHDs of children recently discharged from emergency departments or inpatient admissions for asthma exacerbations through CRISP; and
- Direct referrals from hospitals and managed care organizations to LHD home visiting programs.

Taken together, these strategies have significantly increased referrals to LHD home visiting programs and improved the recruitment of families into the program. In particular, on September 8, 2022, the first direct electronic referrals of children with recent emergency department visits or hospitalizations due to asthma were from CRISP to LHDs and have continued at the rate of at least 10 children per LHD per week. Table 25 below shows the growth in and impact of CRISP referrals on asthma enrollment in the home visiting program over time. It should be noted that the decrease in 2024 is due in part to the fact that it includes totals only through June 30, 2024, and a technical programming error that resulted in several weeks of interrupted referrals to the LHDs that have since been corrected.

Table 25. Number and Status of Children Referred to Local Health Department Home Visiting Programs by CRISP, 2022-2024

Status of Child/Family	CY 2022	CY 2023	CY 2024	Total
Attempting to enroll/determine eligibility	53	64	63	180
Could not contact family	360	787	349	1,496
Family/child discharged from Program	205	307	147	659
Family/child eligible and enrolled in Program	24	163	140	327
Family/child eligible but declines participation in Program	234	770	356	1,360
Family/child lost to follow up	106	228	69	403
Family/child NOT eligible for Program	92	301	168	561
Family/child pending eligibility determination	*	*	*	*
Total	1,075	2,622	1,293	4,990

Community-Based and Other Programs Focused on Asthma

In addition to the $1 million from the Fund used to strengthen the LHD-operated Childhood Lead Poisoning & Asthma Prevention and Environmental Case Management Program, the Department released a $250,000 competitive request for applications for community-based programs to address pediatric asthma. The Green and Healthy Homes Initiative, Inc. (GHHI) received funding for two programs, one in Baltimore City, the other in Prince George's County, two jurisdictions with high numbers of children with more severe asthma. With these funds, GHHI is addressing asthma through both educational interventions and home-based interventions and will also expand the number of children and families in the state who may be eligible for services.

The GHHI program is using a tiered intervention approach to conduct interventions to reduce exposures to home-based environmental asthma triggers such as dust-borne antigens, mold and other asthma triggers. All properties approved to participate in the program receive a resident education, an environmental assessment and an asthma trigger reduction prevention supplies kit (cleaning supplies to control dust and other triggers). Based on the home environment and the severity of the child's asthma, additional supplies and services may also be provided, including air purifiers, dehumidifiers or air conditioners, mold remediation, as well as Tier I Plus services by GHHI Environmental Health Educators, Environmental Assessors and Hazard Reduction Workers. Those receiving Tier II services will receive Tier I Plus services as well.

Tier I Asthma Trigger Reduction Interventions include:

- HEPA Vacuum
- Simple Green
- Buckets (2)
- Gloves
- Sponges
- Mop
- Mop Refill
- Pillowcases (2)
- Mattress cover
- Smoke Detector
- Carbon Monoxide Detector
- Basic IPM—Integrated Pest Management

Tier II Higher Level Asthma Trigger Reduction Interventions include:

- Air purifying machine installation
- Dehumidifier installation
- Air conditioner installation
- Intermediate to Severe IPM-Integrated Pest Management
- Mold remediation
- Plumbing repair
- CO/smoke detector installation

- Door replacement
- Gutter replacement
- Stabilization of baseboards
- Air filter replacement
- Caulk building corners
- R-9 Fiberglass
- Dryer vent install
- Drain cleaning

There were delays at the Department in making both awards to GHHI from the original intended start date of August 19, 2022 to the actual contract award letter in April 2023. This resulted in delays in starting the project that have affected enrollment numbers described subsequently. The most recent GHHI interim report for Prince George's County summarizes the performance measures and progress to date.

> Objectives: The original intention was to enroll a total of 210 children in the Program over 42 months (3.5 years). In the initial six months, GHHI planned to enroll and serve 30 asthma-diagnosed children and their households. After the conclusion of the initial six months, GHHI would enroll and provide services to 60 clients annually for the next 36 months. In total, 210 children would receive full services including in-home asthma prevention resident education and case management, asthma trigger environmental assessment, and Tier I Plus and Tier II asthma trigger reduction housing interventions.

> Interim Report Update: GHHI received 2,300 referrals of Prince George's County children ages two to 17 who are diagnosed with asthma and whose asthma is deemed to be uncontrolled. GHHI started serving clients in Prince George's County after receiving their award letter in April 2023 and hiring staff. Because of these delays from the originally planned start date of August 2022, MDH agreed to consolidate the deliverables of Years 1 and 2. As of April 30, 2024, GHHI had met its original goal for Years 1-2 of the award (90 families served). The Year 3 goal of 60 clients served by June 30, 2024 was not met; only 50 clients were enrolled and served. GHHI has ten unserved clients from its Year 4 goal of 60 clients, which then increased the target to 70 clients. As of October 22, 2024, 19 of 70 clients had been completed.

In Baltimore City, GHHI has also had some challenges in receiving referrals from its primary source (a large managed care organization).

Objectives: A total of 280 children will be enrolled in the Program over 42 months. In the initial six months, GHHI planned to enroll and serve 40 asthma diagnosed children and their households. After the conclusion of the initial six months, GHHI would enroll and provide services to 80 clients annually for the next 36 months. In total, 280 children would receive full services including in-home asthma prevention resident education and case management, asthma trigger environmental assessment, and asthma trigger reduction housing interventions.

Interim Report Update: GHHI received 1,900 referrals of Baltimore City children ages two to 17 who are diagnosed with asthma and whose asthma is deemed to be uncontrolled. From the date of the grant award in April 2023, through August 31, 2023, GHHI met its target of serving 120 clients. From August 31, 2023 through February 28, 2024, GHHI met its Year 3 target of 80 clients served. For Year 4, GHHI's goal for Baltimore City is to serve 80 clients in total; as of October 10, 2024 they have served 67 of 80.

Asthma Community of Practice (CoP) and Provider Education

The Asthma Community of Practice (CoP) was created by EHB with the vision that all people and families living with asthma in Maryland receive the best possible care so that asthma does not affect their quality of life, and with the mission of improving practice through information and resource sharing. The purpose of the Asthma CoP is to:

1. Serve as a forum to exchange best practices and information regarding asthma treatment, management, and prevention;
2. Improve collaboration among stakeholders involved in asthma care; and
3. Ensure that Marylanders with asthma get the best possible care and access to prevention services.

In FY 2024 EHB successfully held three Asthma CoP meetings (August and November of 2023, and March 2024). More than 100 people now receive invitations to the meetings, and represent asthma stakeholders across the state, including care providers, academic researchers, parents, insurance companies and MCOs, medical systems, local health departments, school health personnel, and community health workers.

Public Health Program Performance

The Department's staff closely monitor performance on the SMM and childhood asthma goals as part of their ongoing implementation responsibilities under the Fund. COVID-19 has had an undeniable impact on SMM and childhood asthma goals.

Pandemic lockdowns led to a notable decrease in ED visits for asthma exacerbation. This decline can be attributed to reduced exposure to viral infections, environmental allergens, limited access to primary physicians, and families being hesitant to seek ED care. At the onset of the pandemic, the CDC categorized individuals with moderate to severe asthma as a high-risk group vulnerable to severe COVID-19 outcomes.[22] Consequently they advocated for strategies to mitigate asthma exacerbation risks, including avoiding triggers, adhering to prescribed medications, following personalized asthma action plans.

The Department remains committed to closely monitoring childhood asthma rates across pre- pandemic,

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[22] Moore WC, Ledford DK, Carstens DD, Ambrose CS. Impact of the COVID-19 Pandemic on Incidence of Asthma Exacerbations and Hospitalizations in US Subspecialist-Treated Patients with Severe Asthma: Results from the CHRONICLE Study. J Asthma Allergy. 2022 Aug 31;15:1195-1203. doi: 10.2147/JAA.S363217. PMID: 36068863; PMCID: PMC9441176.

pandemic, post pandemic periods to ensure optimal improvement in asthma management and child health, while improving overall well-being and reducing asthma related issues.

Severe Maternal Morbidity Performance

Statewide Performance

The State's SMM rate has increased since 2018 and remains above the State's 2018 baseline. In FY 2023, an SMM literature review was conducted to better understand the continued rise in SMM cases. The literature review suggested that blood-transfusion-only events may artificially inflate the prevalence of SMM and in 2021 Federal partners (HRSA) updated the SMM indicators to exclude blood transfusions alone, due to lack of specificity.[23] Other significant contributors of elevated SMM rates revealed in the literature review included: COVID-19, comorbidities, hypertension, mental health, racial disparities, clinical level, and patient factors.
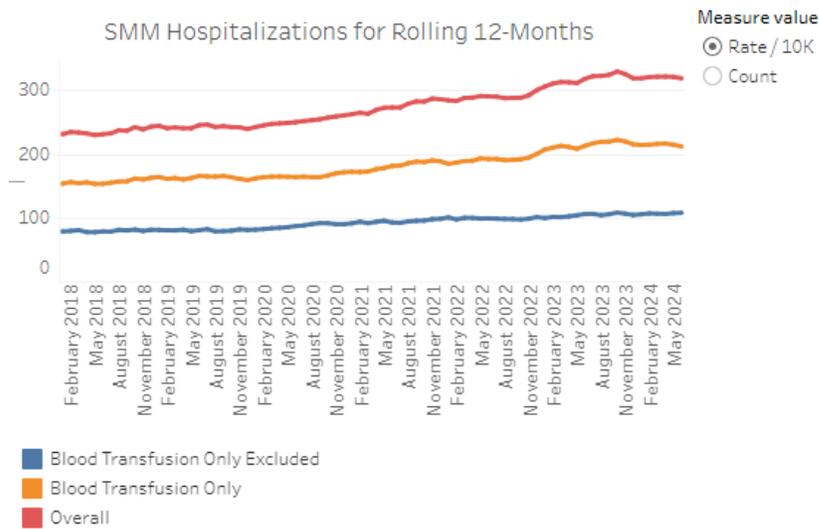
In FY 2024, the Department began working with CRISP to understand the impact of blood transfusions on the state SMM rate. This is in response to an update made by HRSA to remove blood transfusions as one of the procedure codes in its definition of SMM. Upon further analysis, the Department and CRISP discovered that blood-transfusion-only events account for 66 percent of all SMM events. In January 2024 CRISP updated their dashboard to show SMM rates with blood transfusion and SMM rates excluding blood-transfusion-only events.

Based on data through June 2024, Maryland had 319.0 SMM-related hospitalizations per 10,000 delivery discharges over the prior 12 months. This rate is 99.7 hospitalizations per 10,000 higher than the 2023 target (219.3) and 75.9 hospitalizations per 10,000 higher than the 2018 baseline (243.1). Over the same period, approximately two thirds of the SMM events that occurred involved blood transfusions only. Removing these events, the SMM rate of cases with blood transfusions excluded was 107.3 events per 10,000 delivery discharges.

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[23] Federally Available Data (FAD) Resource Document for FY25/FY23 Application/Annual Report. (2024, July 10). https://mchb.tvisdata.hrsa.gov/Admin/FileUpload/DownloadContent?fileName=FadResourceDocument.pdf&isForDownload=False

Figure 1. SMM Hospitalizations for Rolling 12- Months, 2018 - June 2024

Table 26A. SMM Rates per 10,000 Deliveries, Including Blood Transfusions, 2018 Baseline, Targets, and Observed July 2023-June 2024 Rates, Maryland

	2018 Baseline	2023 Target	Most Recent 12 Months	2026 Target	Change Required to Achieve 2026 Target from Most Recent 12 Months
Rate per 10,000	243.1	9.6% decrease (Not Met)	319.0	197.6	-121.4
SMM Events	1,585	-	1,900	-	-
Eligible Deliverables	65,199	-	59,557	-	-

Table 26B. SMM Rates per 10,000 Deliveries, Excluding Blood Transfusion-Only Events, 2018 Baseline, Targets, and Observed July 2023-June 2024 Rates, Maryland

	2018 Baseline	2023 Target	Most Recent 12 Months	2026 Target	Change Required to Achieve 2026 Target from Most Recent 12 Months
Rate per 10,000	80.7	9.6% decrease (Not Met)	107.3	65.6	-41.7
SMM Events	526	-	639	-	-
Eligible Deliverables	65,199	-	59,557	-	-

Health disparities are also increasing due to challenges discussed earlier in this report, further illustrating the critical need to invest in evidence-based interventions dedicated to addressing maternal health.

Figure 2A, Figure 2B, Table 27A, and Table 27B show SMM rates disaggregated by race and ethnicity. While disparity gaps have decreased slightly compared to last year's report, substantial progress is still required to meet the 2026 target rates.

Figure 2A. SMM Hospitalizations, Including Blood Transfusions, for Rolling 12-Months by Race/Ethnicity, January 2018-June 2024

Figure 2B. SMM Hospitalizations, Excluding Blood Transfusion-Only Events, for Rolling 12-Months by Race/Ethnicity, January 2018-June 2024

Table 27A. SMM Rates per 10,000 Deliveries, Including Blood Transfusions, 2018 Baseline, Targets, and Observed July 2023-June 2024 Rates, Maryland by Race/Ethnicity

| Race/Ethnicity	2018 Baseline	2023 Target	Most Recent 12 Months	2026 Target	Change Required to Achieve 2026 Target from Most Recent 12 Months	Disparity Index - Most Recent 12 Months
NH White	181.4	7.5% decrease (Not Met)	259.3	15% decrease	-105.1	1.0
NH Black	334.2	10% decrease (Not Met)	435.4	20% decrease	-168.0	1.7
Hispanic	242.0	10% decrease (Not Met)	290.3	20% decrease	-96.7	1.1
NH Asian	249.0	10% decrease (Not Met)	338.4	20% decrease	-139.2	1.3
Other	205.2	10% decrease (Not Met)	265.8	20% decrease	-101.6	1.0
Statewide Total	243.1	9.6% decrease (Not Met)	319.0	18.7% decrease	-121.4	1.2

Table 27B. SMM Rates per 10,000 Deliveries, Excluding Blood Transfusion-Only Events, 2018 Baseline, Targets, and Observed July 2023-June 2024 Rates, Maryland by Race/Ethnicity

| Race/Ethnicity	2018 Baseline	2023 Target	Most Recent 12 Months	2026 Target	Change Required to Achieve 2026 Target from Most Recent 12 Months	Disparity Index - Most Recent 12 Months
NH White	59.0	7.5% decrease (Not Met)	50.2	15% decrease	-42.0	1.0
NH Black	124.3	10% decrease (Not Met)	99.5	20% decrease	-63.9	1.8
Hispanic	57.2	10% decrease (Not Met)	45.8	20% decrease	-25.8	0.8
NH Asian	93.4	10% decrease (Met)	74.7	20% decrease	-16.7	1.0
Other	59.5	10% decrease (Not Met)	47.6	20% decrease	-43.5	1.0
Statewide Total	80.7	9.6% decrease (Not Met)	65.6	18.7% decrease	-41.7	1.2

Performance by Payer

Staff is also monitoring SMM performance by payer. Both Medicaid and commercial payers are trending upward for SMM rates including blood transfusions, in line with Statewide performance (Figure 3A). However, when excluding blood transfusion-only events, rates among Medicaid participants have remained fairly stable in recent years (Figure 3B). Additionally, while Medicaid SMM rates are higher than commercial SMM rates, both including and excluding blood transfusions, Medicaid SMM rates have grown at a slower pace than commercial SMM rates since 2018. SMM rates and percent increases are highest among individuals with Medicare, though counts are low and rates may be unstable; interpret with caution (Tables 28A and 28B).

Figure 3A. SMM Rates, Including Blood Transfusions, by Payer, 2018-2023, Excluding Medicare[24,25]
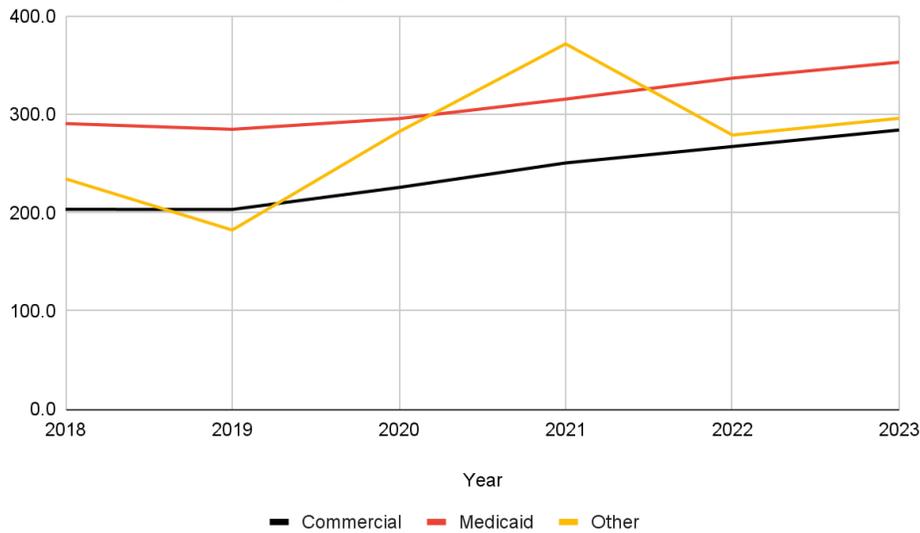
Figure 3B. SMM Rates, Excluding Blood Transfusion-Only Events, by Payer, 2018-2023, Excluding Medicare[24,25]
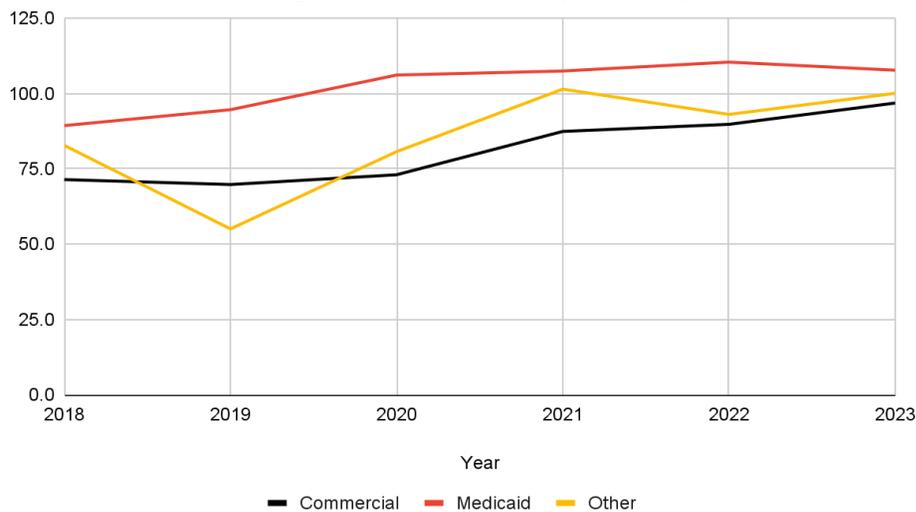
Table 28A. SMM Rate, Including Blood Transfusions, by Payer, 2018 – 2023[28,29]

Payer	2018	2019	2020	2021	2022	2023	% Change Since 2018
Commercial	203.5	203.4	225.8	250.8	267.5	284.3	+39.7%
Medicaid	290.9	285.0	295.9	315.8	337.1	353.3	+21.5%
Medicare	692.3	641.5	848.7	962.3	717.5	1315.8	+90.1%
Other	234.6	182.4	282.5	372.1	279.2	296.2	+26.3%

[24] Source: MCHB Data & Epidemiology Program analysis of Health Services and HSCRC in-patient case-mix as of September 2024.

[25] Note: Medicare data are not shown in the figure due to low counts of SMM events, and to allow better visualization.

Table 28B. SMM Rate, Excluding Blood Transfusion-Only Events, by Payer, 2018 – 2023[26,27]

| Payer	2018	2019	2020	2021	2022	2023	% Change Since 2018
Commercial	71.4	69.8	73.1	87.4	89.8	96.9	+35.7%
Medicaid	89.4	94.6	106.1	107.5	110.4	107.8	+20.6%
Medicare	423.1	*	516.6	502.1	*	684.2	+61.7%
Other	82.8	55.1	80.7	101.5	93.1	100.1	+20.9%

Childhood Asthma Emergency Department (ED) Visit Rate

As is true for hospitals nationally, Maryland hospitals saw sharp declines in ED volumes in 2020 and early 2021 due to COVID-19. Understandably, Maryland's asthma-related ED visit rate for ages 2-17 declined during this period. While 2022 volumes are trending back to 2018 baselines, they are still artificially low. Despite lower ED volumes, staff believe that the underlying dynamics of childhood asthma in Maryland did not change and is working in earnest to implement interventions that will reduce childhood asthma and associated health disparities.

Statewide Performance

Based on data through August 2022, Maryland had 6.2 asthma-related emergency department visits per 1,000 children over the prior 12 months. This rate is 1.0 visits per 1,000 children lower than the 2023 target.

Figure 4. Childhood Asthma-Related ED Visits for Rolling 12-Months

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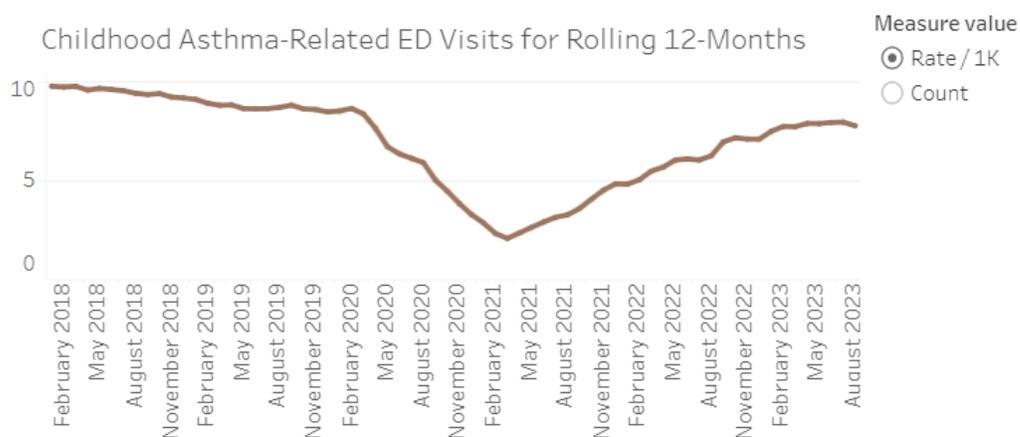
[26] Source: MCHB Data & Epidemiology Program analysis of Health Services and HSCRC in-patient case-mix as of September 2024.
[27] Note: Medicare data are not shown in the figure due to low counts of SMM events, and to allow better visualization.

Table 29. Childhood Asthma-Related ED Visits Compared to 2023 Target

	2018 Baseline	Most Recent 12 Months	2023 Target	Different - Most Recent 12 months to Target
Rates per 1,000	9.2	7.8	7.2	0.6
Total Count	10,974	9,258	-	-

As with the SMM rate, the impacts of COVID-19 have had a deleterious impact on health disparities, most notably with the non-Hispanic Black population. Continued investment in initiatives and programs to address childhood asthma is critical to eliminating these disparities and putting Maryland back on a path to reach the improvement goals.

Figure 5. Childhood Asthma-Related ED Visit Rates by Race/Ethnicity, 2018-August 2023
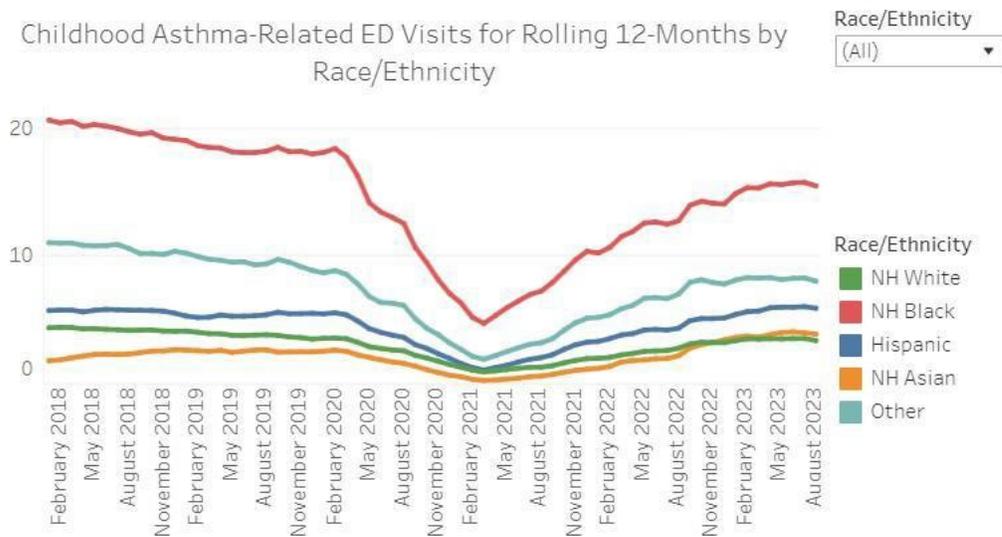
Table 30. Childhood Asthma-Related ED Visit Rates by Race/Ethnicity, 2018-August 2023

Race	2018	2023 Year 5 Target	2026 Year 8 Target	Absolute Change	Relative Percentage Change
Total	9.2	7.2	5.3	3.9	42%
NH White	4.1	3.5	3.0	1.1	26%
NH Black	19.1	14.36	9.6	9.6	50%
Hispanic	5.4	4.7	4.0	1.4	25%
NH Asian	2.7	2.6	2.5	0.2	9%
Other	10.6	7.30	5.5	5.1	48%

Performance by Payer

The State is also monitoring performance by payer. As stated earlier in the report, the State believes these declines in the asthma-related ED visit rate in Maryland mirror both State and national reductions in overall ED visits due to COVID-19. Continued and expanded interventions to address childhood asthma are critical to preventing further growth in health disparities resulting from patients potentially not seeking care during the pandemic.

Table 31. Childhood Asthma-Related ED Visit Rate per 1,000 by Payer, 2018-September 2022

Payer	2018	2019	2020	2021	2022	% Change since 2018
Medicaid	13.3	12.5	5.0	7.1	6.8	-49%
Non - Medicaid	5.4	4.8	1.7	2.6	3.0	-44%

Year Three Spending

The Medicaid program devoted its efforts in FY 2024 to continuing expansion of all implemented benefits. As detailed above, implementation efforts spanned benefit design, systems changes for both payment and provider enrollment, and development and approval of regulations (state authority) and Medicaid State Plan Amendments (federal authority), in addition to provider enrollment and education. The Medicaid program intends to continue to maximize the Fund's contribution by pulling down federal matching funds, which relies

on service implementation.

Utilization of some services was lower than desired. Therefore, Medicaid developed flexibilities for new doula providers that decrease the administrative burden of provider enrollment, with the goal of increasing the number of providers, and therefore access. Similarly, Medicaid reached out to the Centering Healthcare Institute and ZERO TO THREE to discuss strategies to troubleshoot low rates of claiming for CenteringPregnancy and HealthySteps services.

The Medicaid program is building the full $16 million into its budget for CY 2025 and expects service delivery to increase as provider networks continue to grow and additional participants become aware of the new benefits. Medicaid will continue to work with PHPA to support the conversion of the MPRA–a major referral source for MCH programs–from paper to electronic, and increase outreach and awareness amongst the IMHS pilot sites.

PHPA dedicated FY 2024 to providing technical support to grantees as they continue the implementation of the asthma and maternal health initiatives.

Table 32. PHPA Grant Funds Expenditures - FY 2024

Initiative	FY 2024 Spending
Asthma Home Visiting Program	$427,408
Community-Based Asthma Programs	$233,558
Maternal Home Visiting	$866,613
CenteringPregnancy	$188,280
Program Total	**$1,715,859**

Compared to FY 23, spending by all sites increased substantially. Staffing challenges continued to impact all grantees, which contributed to sites not being able to spend their full award. The Department is working with all sites to address these challenges and will support the sites in their final year as they begin planning for sustainability and continuation of grant activities in FY 25.

Conclusion

In FY 2024, the Department remains committed to strategically investing in maternal and child health initiatives, through these evidence-based initiatives. Preliminary data shows positive outcomes for several key measures, in addition to identifying some measures in need of further monitoring. The Department will actively use its programmatic data to improve the delivery of the services and tailor strategies effectively, ensuring that resources reach those who need them most.

The various interventions align with priorities of the State and the Department as well as national

recommendations to improve the prenatal-to-childhood system of care in Maryland[28]. The Department will continue to facilitate seamless coordination and collaboration among various stakeholders. Fostering peer-to-peer learning opportunities to offer guidance and support to home visiting sites and community-based asthma programs will allow further alignment, collaboration, and integration amongst home visiting sites, LHDs, and community-based health organizations, which ultimately lead to improved outcomes and better care.

Finally, the Department looks forward to continued partnership with the HSCRC to strengthen maternal child health across the State. The commissioners and key stakeholders identified improving MCH as a critical priority for Maryland, and the Department remains a committed partner in this important work.

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[28] Prenatal-to-3policy.2023 Maryland Roadmap Summary. https://pn3policy.org/pn-3-state-policy-roadmap-2023/md/ Accessed 6 December 2024