maryland
health services
cost review commission

Evaluation of the Maryland Primary Care Program

Joint Chairmen's Report, Page 128

October 2022

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Executive Summary

The 2022 Joint Chairmen's Report (JCR) directed the Health Services Cost Review Commission (HSCRC) to analyze the effectiveness of the Maryland Primary Care Program (MDPCP or the Program) with a comparison between cost savings, utilization, and the additional payments provided to primary care practices, in addition to focusing on racial equity within the Program and primary care in general. The JCR also asks HSCRC to comment on the relationship between outcome-based credits and MDPCP. Specifically, the JCR included the following language:

> Given the role of the Maryland Primary Care Program (MDPCP) in transforming care in the State under the Total Cost of Care (TCOC) model, the budget committees request information on the effectiveness of the program. In particular, this evaluation should focus on cost savings from MDPCP reducing unnecessary utilization or hospitalization for patients participating in MDPCP over the increased expenditures from provider incentives. The evaluation should include reporting on the racial and ethnic diversity of the program, any efforts to improve minority representation in the program, and improve data collection on racial and ethnic diversity of providers. The evaluation should also consider existing disparities in primary care access and ways in which the State can address these disparities. Further, given the anticipated benefits that the outcome-based credits have against MDPCP's care management fees, the committees are interested in aggregate costs of the care management fees against TCOC, the amount that outcome-based credits have discounted these expenses, and MDPCP's contribution to the achievement and maximization of the current and future outcome-based credits and other population health goals.

MDPCP, which began in 2019, is a voluntary program open to all qualifying Maryland primary care providers. MDPCP is a component of the Total Cost of Care Model Agreement with the Center for Medicare and Medicaid Innovation (CMMI). MDPCP provides funding and support for the delivery of advanced primary care throughout the State. MDPCP supports the overall health care transformation process. MDPCP allows primary care providers to play an increased role in prevention and management of chronic disease and prevention of unnecessary hospital utilization, including avoidable hospitalizations and emergency department visits as well as readmissions. MDPCP practices integrate behavioral health with primary care, identify patients' chronic conditions and social needs, and provide appropriate data-driven care management and referrals. MDPCP gives practices the resources needed to expand the hours that primary care services are available to patients and works to improve transitions of care between different health care facilities and the patient's home. Since the spring of 2020, the PMO has worked with enrolled primary care practices to provide education, vaccinations, and care for patients during the COVID-19 pandemic.

MDPCP has made progress towards the goals of integrating primary care with the larger health care delivery system to coordinate care, provide advanced care, and lower unnecessary utilization and cost. MDPCP was effective in reducing hospital utilization in each of its first three years of the program. However, MDPCP increased payments to primary care practices by more than 10% for the purpose of establishing team-based care, and the savings from lower utilization was not sufficient to fully offset those additional payments over the three-year period in aggregate. This analysis indicates that, when comparing the cost of MDPCP practices with non-MDPCP practices in Maryland, MDPCP has demonstrated a small amount of

additional cost ($72 million) over the first three years of program operation. MDPCP has reduced hospital utilization, but the savings resulting from the reduced hospital utilization does not fully offset the costs of additional payments to participating practices and Care Transformation Organizations. There has been substantial volatility in the savings rate over the first three years of the Program, especially given abnormal health care utilization patterns resulting from the COVID-19 pandemic. Given the year-to-year volatility in the growth rate, more time will be needed to assess whether these results are due to statistical variation or a meaningful program impact.

HSCRC also analyzed the racial diversity of patients in MDPCP. The MDPCP patient population is slightly less racially diverse than the overall Medicare population in Maryland. MDPCP is making program changes to increase diversity in MDPCP, including adding more Federally Qualified Health Centers (FQHCs) as participants and working closely with CMMI and Maryland Medicaid to develop an aligned program for Medicaid enrollees. In addition, MDPCP has numerous initiatives in place to address disparities within the MDPCP patient population. MDPCP has begun collecting data on diversity in the MDPCP provider population and that data is included in this report.

This report also includes information on outcome-based credits (OBCs), which are an opportunity for Maryland to earn financial credits for improvements in population health under the TCOC Model that are applied to the State's TCOC savings target. Maryland received a credit of $5,084,785 for diabetes based on 2020 data that adds to the State's 2021 TCOC savings. HSCRC is also in the process of developing methodologies for outcome-based credits related to opioid use disorder and hypertension. The OBCs are aligned with the population health goals identified in the Statewide Integrated Health Improvement Strategy (SIHIS) and other State public health priorities. SIHIS is an agreement with CMMI that includes specific population health goals related to diabetes, opioids, and maternal and child health.

Finally, this report describes MDPCP activities that support the population health measures in the OBCs and SIHIS. MDPCP practices support SIHIS and OBCs through their work to reduce avoidable hospital admissions, improve care coordination for patients with chronic conditions, manage weight and refer patients to diabetes prevention programs and the use of Screening Brief Intervention and Referral to Treatment (SBIRT) to identify and intervene with patients at risk for opioids and other substance use disorders.

Introduction

The 2022 Joint Chairmen's Report (JCR) directed the Health Services Cost Review Commission (HSCRC) to analyze the effectiveness of the Maryland Primary Care Program (MDPCP or Program) with a comparison between cost savings, utilization, and the additional payments provided to primary care practices, in addition to focusing on racial equity within the Program and primary care in general. The JCR also asks HSCRC to describe the relationship between outcome-based credits and MDPCP. Specifically, the JCR included the following language:

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HSCRC completed similar evaluations in 2020 and 2021.[1] The 2021 evaluation found that MDPCP generated a small amount of savings in the first two years of the Program, even after including the additional MDPCP investments. The 2021 evaluation also found that the MDPCP patient population is slightly less racially diverse than the overall Medicare population.

This report, submitted in response to the 2022 JCR, contains background information on the TCOC Model and MDPCP, a description of HSCRC's approach to evaluating MDPCP cost and utilization, information on the racial diversity of patients and providers in MDPCP, an update on outcome-based credits (OBCs), and a description of MDPCP activities to support statewide population health goals, including the measures used for the OBCs.

Background

MDPCP and outcome-based credits are both components of the TCOC Model agreement between the State of Maryland and the Center for Medicare and Medicaid Innovation (CMMI), a Center within the federal

[1] Health Services Cost Review Commission, "Evaluation of the Maryland Primary Care Program : Joint Chairmen's report", October 2021, available at http://dlslibrary.state.md.us/publications/JCR/2021/2021_119b_2021.pdf;
Health Services Cost Review Commission, "Evaluation of the Maryland Primary Care Program : Joint Chairmen's report", October 2020, available at http://dlslibrary.state.md.us/publications/JCR/2020/2020_122.pdf

Centers for Medicare and Medicaid Services (CMS). This section describes the TCOC Model, MDPCP, and OBCs.

The Total Cost of Care Model

The TCOC Model aims to improve quality and reduce costs in hospital and non-hospital settings through increased coordination of care, broad healthcare delivery reform, and investments in population health. The TCOC Model is an agreement between the State of Maryland and CMMI. The TCOC Model began in 2019 and is expected to run through 2028.

Under the TCOC Model agreement, Maryland is accountable for meeting the following five targets on an annual basis:

1. **Annual Medicare TCOC Savings:** The State must meet annual Medicare total cost of care (Medicare Part A and Part B) savings targets. In 2021, this savings target was $222 million. OBCs provide Maryland with an opportunity to earn financial credits that are applied to the State's TCOC savings target for improvements in population health.
2. **TCOC Guardrail Test:** In any year, Medicare spending in Maryland may not grow at a rate that is more than 1% above the national Medicare growth rate in spending per beneficiary. Maryland may not exceed the national spending growth rate in two consecutive years.
3. **All-Payer Hospital Revenue Growth per Capita:** Hospital revenue growth must remain equal to or less than 3.58% per capita annually.
4. **Reductions in Readmissions for Medicare:** Hospital readmissions rates for Medicare beneficiaries in Maryland must match or be lower than national and previous Maryland Medicare Readmission rates.
5. **All-Payer Reductions in Hospital Acquired Conditions:** All-payer potentially preventable condition (PPC) rates in Maryland must match or be lower than previous rates in Maryland.
6. **Hospital Revenue under a Population-Based Payment Methodology:** Maryland must ensure that 95% or more of hospital revenue is under a population-based payment methodology (e.g, global budget revenues, or GBRs) over the course of the TCOC model.

Achieving these targets requires hospital and non-hospital stakeholders to work together to improve outcomes across the care spectrum. Accordingly, in addition to hospital GBRs,[2] Maryland has worked with

[2] Each year, HSCRC sets a revenue target (Global Budget Revenue, or GBR) for each hospital. The hospital's GBR is adjusted annually for inflation, changes in population, the hospital's performance on quality and efficiency metrics, and other factors. The hospital must meet, but not exceed the GBR. GBRs have fundamentally changed hospitals' incentives. Rather than attempting to increase the number of services provided to increase income, under GBRs, hospitals are incentivized to improve care coordination and population health. The high level of hospital participation in GBRs (all general acute care hospitals in Maryland participate) allows Maryland to meet TCOC model requirements related to population-based payments. The TCOC model includes a waiver of federal law that allows Maryland to continue to include Medicare in the State's unique all-payer rate setting system for hospitals, including the use of GBRs.

CMMI to align opportunities for non-hospital providers with the value-based incentives of the TCOC Model. These efforts include the development of Care Redesign programs, which share value-based opportunities with non-hospital care providers, including specialty physicians, as well as MDPCP, which aligns incentives for primary care providers with TCOC Model goals.

Efforts to improve population health are also critical to the State's performance under the TCOC Model. One of the initiatives aimed at improving health under the Model is the Statewide Integrated Health Improvement Strategy (SIHIS).[3] The SIHIS is an agreement between the State of Maryland and CMMI that engages State agencies and private-sector partners in focused efforts to improve health, address disparities, and reduce costs for Marylanders. SIHIS includes three domains: hospital quality, care transformation across the system and total population health. Within population health, there are three focus areas: diabetes prevention and management, opioid use, and maternal and child health. State agencies and private-sector partners, including hospitals and other health care providers, are concentrating attention and investments to these areas. MDPCP practices are important partners in this effort. For example, by the end of 2021, 321 MDPCP practices implemented Screening, Brief Intervention and Referral to Treatment (SBIRT), an evidence-based process that physicians use to identify patients who are at risk for harmful use of substances and connect them to appropriate resources and treatment. As part of the diabetes goal, MDPCP practices are measured for their performance on completing BMI measurement for all patients and, for patients with an elevated BMI, documenting a follow-up plan.

Outcome-based credits are a method through which the State can earn financial credits for progress in advancing population health goals under the TCOC Model. The credits are a unique opportunity from the federal government incentivizing investments to prevent common health conditions. The credits are applied to the State's TCOC savings target described above.[4] Outcome-based credits are separate from SIHIS, although there is synergy between the two programs.

Maryland Primary Care Program

The Maryland Primary Care Program (MDPCP) is a voluntary program that supports participating primary care practices by providing funding and support for the delivery of "advanced primary care" services to their patients. The advanced primary care model is intended to provide comprehensive and holistic primary care services to optimize individual and population health outcomes.

A core feature of MDPCP is the attribution of Medicare beneficiaries to primary care practices. Attribution means that primary care practices are assigned a panel of Medicare beneficiaries and are tasked with providing advanced primary care to these attributed beneficiaries. MDPCP Medicare beneficiaries are free to see any Medicare provider and are assigned to the primary care practice that provides the plurality of their primary care services.

[3] https://hscrc.maryland.gov/Pages/Statewide-Integrated-Health-Improvement-Strategy-.aspx
[4] The outcome-based credits are not tied to the amount of spending under MDPCP.

Practices may partner with a Care Transformation Organization (CTO). CTOs are "private entities that hire and manage interdisciplinary care management teams that provide care coordination services at the direction of the participating practices. CTOs also offer support for care transitions, standardized beneficiary screening, data tools and informatics, and practice transformation."[5] CTOs provide resources that practices may not be able to support on their own, such as pharmacist services, health and nutrition counseling, behavioral health specialists, social services support, health educators, and community health workers. For practices that align with a CTO, CMMI pays a percent of the care management fees (described below) for that practice to the CTO. CTOs also receive a Performance-Based Incentive Payment (PBIP) from CMMI.

Once a Medicare beneficiary has been attributed to a participating primary care practice, that practice is expected to provide their attributed beneficiaries with "advanced primary care." This concept is based on the patient-centered medical home model where primary care physicians act as the quarterback of a patient's care. It is important to note that the care transformation that occurs within the practices is for all patients, regardless of the payer type. Practices are evaluated by CMMI based on their performance for all patients regarding quality and patient experience. CMMI also evaluates practices on hospital and emergency department (ED) utilization for attributed Medicare beneficiaries. For the purposes of MDPCP, advanced primary care is defined as providing the following five primary care functions:

- **Care Management:** Practices are required to provide care management for high-risk, high-need, and rising-risk Medicare beneficiaries by integrating a care manager into practice operations. Practices must risk stratify all attributed beneficiaries to determine each beneficiaries' care-management needs. Practices are required to provide long-term care management to beneficiaries with chronic conditions and episodic care management to beneficiaries with acute needs.
- **Access and Continuity:** Participating MDPCP practices are required to expand access to care through expansion of hours and telehealth. Practices in MDPCP are also required to empanel each Medicare beneficiary attributed to their practice to a provider or care team.
- **Planned Care for Health Outcomes:** Practices develop interventions that engage high-risk beneficiaries, before they require hospitalization, through health coaches and educators (including community health workers) and partnerships with the non-clinical community. All practices are required to utilize evidence-based protocols for screening, diagnosis, and treatment of patients.
- **Beneficiary and Caregiver Experience**: Practices must improve care processes using a Patient-Family/Caregiver Advisory Council to involve beneficiaries and their families in developing the practice's care redesign plans.
- **Comprehensiveness and Coordination across the Continuum of Care:** MDPCP practices integrate behavioral health services into their practices, work with patients to identify and address

[5] https://www.milbank.org/wp-content/uploads/2020/10/IssueBrief_MarylandPC_final.pdf

social needs of their patients, and provide advanced medication management. Practices receive care notifications from Maryland's State-designated health information exchange when their patients visit an ED or are admitted or discharged from the hospital. Practices are expected to identify high-volume/high-cost specialists serving their beneficiaries and strengthen their referral and/or co-management relationships with specialists and with community and social services.

To facilitate advanced primary care in participating practices, MDPCP significantly revises the payment system for primary care practices. MDPCP offers practices three different payment streams:

1. **Care Management Fees** - an additional per-beneficiary per-month (PBPM) payment directly to participating practices from CMMI intended to cover care-management services and expanded team-based care,
2. **Performance-Based Incentive Payments -** payments that reward practices that are successful at reducing hospital utilization, improving patients' experience of care, and improving the quality of patient care, and
3. **Comprehensive Primary Care Payments** - payments to practices that transition to a more stable funding stream than the current fee-for-service (FFS) system (Track 2 practices only).

Combined, these payment streams incentivize primary care practices to transform primary care delivery by investing in necessary care management and care-coordination resources.

As indicated in Table 1 below, a substantial number of practices have enrolled in MDPCP since the beginning of the Program in 2019. As of January 2022 (program year 4), there were 508 participating practices (545 sites) participating in the Program. In 2021, seven Federally Qualified Health Centers (FQHCs) representing 44 sites joined MDPCP. In total, participating practices employ over 2,100 providers including physicians, clinical nurse specialists, nurse practitioners, and physician assistants across all 24 Maryland counties. CMMI has attributed approximately 374,000 Medicare FFS beneficiaries (approximately 50% of the eligible Medicare beneficiaries in the State) to MDPCP practices.

Table 1: MDPCP Payments by Year

	Practices	Number of Physicians	Number of Attributed Beneficiaries	MDPCP Payments[6]
2019	380	1,569	206,000	$65 million
2020	476	1,886	309,000	$129 million
2021	525	2,150	396,000 (Q1)	$181 million
2022	508	2,150[7]	374,000 (Q1)	$188 million (projected)

[6] MDPCP payments include care management fees, performance-based payments, and comprehensive primary care payments.
[7] Some of the reduction in the number of practices is due to practice mergers. No new practices were added in 2022 as CMMI did not release a Request for Applications that year.

Payment Reform in MDPCP

Advanced primary care involves a substantial expenditure of time on services that are traditionally not covered as a billable service by Medicare, such as non-in-person visit-based care or enhanced behavioral health services. Additionally, the billable services that are covered by Medicare tend to reward the provision of high-volume services, rather than services that have the biggest impact on reducing unnecessary utilization or improving the quality of care. MDPCP transitions primary care payments towards reimbursement that is based on the number of patients attributed to the practice rather than the number of services provided by the practice. The following section lays out the different types of payments CMMI makes to MDPCP practices.

In general, CMMI's payments to practices vary by track. Participating practices are divided into two tracks. Track 1 practices are required to meet a minimum standard of advanced primary care and are expected to progressively increase their level of sophistication within related functional areas, eventually transitioning to Track 2. Track 1 practices are allowed up to three years in the Program to meet the advanced care requirements and to transition to Track 2. Track 1 practices that do not make this transition in three years are eliminated from MDPCP. Track 2 practices provide a higher level of advanced primary care.

In 2023, MDPCP will add a Track 3 that will build on the care delivery and performance requirements of Track 2 with enhanced financial risk for practices' Medicare FFS payments, including negative and positive adjustments based on utilization, costs, and quality of care. Track 3 was added to further align MDPCP with the hospital global budgets in Maryland and with the national movement to add more financial risk into value-based payment models. More information can be found in the 2023 Request for Applications.

1. Care Management Fees

CMMI provides participating MDPCP practices a monthly care-management fee for each beneficiary attributed to a participating practice. The amount of the care-management fee provided to a practice depends on two factors: 1) the track in which the practice participates, and 2) the risk score of the attributed beneficiary. Due to the higher level of services provided by the Track 2 practices, they receive a higher care-management fee amount. Risk is measured by the CMS hierarchical clinical conditions (HCC) algorithm, which assigns a risk score based on the age of the beneficiary and on the number of chronic conditions that beneficiary has. The risk score measures both the expected cost of the beneficiary over the course of a year and the complexity of managing that beneficiary's care. Beneficiaries with more chronic conditions receive a higher care-management fee, based on the assumption that they require more care-management services.

Table 2 below shows the amount of the monthly care-management fees paid to the practices for each attributed beneficiary, according to the beneficiaries' risk tier.

Table 2: Care Management Fees by Beneficiary Risk Tier

Risk Tier	Criteria	Track 1	Track 2
Tier 1	01-24% HCC	$6	$9
Tier 2	25-49% HCC	$8	$11
Tier 3	50-74% HCC	$16	$19
Tier 4	75-89% HCC	$30	$33
Complex	90+% HCC or dementia[8]	$50	$100

Starting in 2022, CMMI added a new component to the care-management fees received by MDPCP practices and CTOs to address social needs of beneficiaries. The Health Equity Advancement Resource and Transformation (HEART) Payment is a $110 PBPM payment on top of existing care-management fees for beneficiaries with both high clinical risk and high social risk. Practices receive HEART payments for beneficiaries who 1) are in the 4th HCC risk score tier or the complex HCC risk tier and 2) fall into the highest deprivation quintile of Area Deprivation Index (based on the MDPCP beneficiary population). The Area Deprivation Index is a commonly used and validated measure that quantifies and compares social disadvantage across geographic neighborhoods.

By targeting beneficiaries with complex clinical and social needs, the HEART Payment aims to provide resources for practices and CTOs to address health equity. The HEART Payment is paid to practices in both Tracks 1 and 2 and shared with CTOs on a quarterly basis. Practices and CTOs must use the HEART payment to target social determinants of health for these high-need beneficiaries.

2. Performance-Based Incentive Payments

MDPCP also includes a Performance-Based Incentive Payment (PBIP) that is designed to encourage and reward accountability for beneficiary experience, clinical quality, and utilization measures that drive total cost of care. The maximum PBIP is $2.50 PBPM for a Track 1 practice and $4.00 PBPM for a Track 2 practice.

The PBIP is prepaid, meaning that CMMI pays the full amount at the beginning of the annual performance period. Participating practices that meet annual performance thresholds retain all of the PBIP. The Program recoups some or all of the PBIPs from practices that do not meet all annual performance thresholds. CMMI believes that the potential loss of repaying the PBIP is a greater motivator for practices than the possibility of earning an incentive payment.

3. Comprehensive Primary Care Payments for Track 2 Practices

[8] Prior to PY2022 the Complex risk tier included 90+ HCC or persistent and severe mental illness, substance use disorder or dementia.

Practices in Track 2 receive a substantial portion (up to 60%) of their Medicare payments as a non-visit-based PBPM payment. This is a substantial transformation in the way that CMMI pays primary care physicians for care provided to Medicare beneficiaries. CMMI pays participating practices in a hybrid fashion: part of the payment is an upfront PBPM that is paid quarterly (the Comprehensive Primary Care Payment or CPCP), and part is a reduced fee-for-service (FFS) amount that is paid based on claims submission. This payment approach moves a portion of primary care practice revenue into value-based reimbursement in the form of a capitated payment. This allows practices to focus on providing the right care to their attributed beneficiaries rather than providing high volumes of services to obtain higher reimbursement. During COVID-19, this was an important source of cash flow for practices that could not see patients in-person. Track 1 practices receive regular Medicare fee-for-service payments and do not receive Comprehensive Primary Care Payments.

Management of the Maryland Primary Care Program

CMMI, the MDPCP Management Office (PMO) within the Maryland Department of Health (MDH), and the Maryland Health Care Commission (MHCC) all play a role in management of MDPCP. In addition to these entities, HSCRC also contributes to the management of the overarching TCOC Model, which includes MDPCP. For MDPCP to be successful, CMMI, the PMO, MHCC, and HSCRC must work collaboratively to set policy, engage practices, and monitor results that have an impact on the State's overall TCOC Model performance. This section describes each entity's role.

Centers for Medicare and Medicaid Services

The Maryland Primary Care Program is run by CMMI as part of the Total Cost of Care Model. To participate in the Program, practices and CTOs must sign an MDPCP Participation Agreement with CMMI. CMMI attributes beneficiaries to MDPCP practices and monitors practice performance. CMMI pays care management fees, Performance-Based Incentive Payments, and Comprehensive Primary Care Payments. CMMI also sets the metrics that determine program success and evaluates the Program. If CMMI determines that MDPCP is not achieving savings or improving health care quality, CMMI has the authority to end the Program.

MDPCP Project Management Office in the Maryland Department of Health

The State, represented by the PMO, provides technical assistance to practices participating in MDPCP, and represents the State in discussions with CMMI regarding the Program. The PMO's technical assistance takes the form of education,[9] support for practices,[10] and linkages to community partners. The PMO also

[9] Educational offerings include regular webinars focused on topics that are core to MDPCP (including COVID-19), staff training programs, and provider leadership academies in locations across the State
[10] Practice support includes support for the implementation of the evidence-based program known as Screening, Brief Intervention, and Referral to Treatment (SBIRT) to address the opioid epidemic, chronic-disease technical assistance, COVID-19 testing support, an online referral system for testing and monoclonal antibody referrals, and guidance on COVID-19-related workflows.

provides data analysis tools for practices and CTOs.[11] The PMO has been a leader in coordinating primary care practices in response to COVID-19.[12]

Maryland Health Care Commission

MHCC convenes and staffs the MDPCP Advisory Council, which provides recommendations to CMMI regarding the structure and design of MDPCP in the State's annual report to the Centers for Medicare and Medicaid Services on the Program.

Maryland Health Services Cost Review Commission

HSCRC is an independent State agency responsible for regulating the quality and cost of hospital services. HSCRC administers the TCOC Model and ensures that the State has met its financial obligations to the Medicare program, inclusive of both hospital and MDPCP costs.

Evaluation of MDPCP Cost and Utilization

MDPCP is an important part of Maryland's efforts to transform its statewide healthcare delivery system. The Program is also critically important to the success of the TCOC Model. As directed by the Committees, HSCRC analyzed the impact of MDPCP on both the Medicare total cost of care and inpatient utilization.

Evaluation Approach

To perform the required evaluation, HSCRC attributes Medicare beneficiaries to both MDPCP and to non-MDPCP primary care practices in the State. HSCRC then risk adjusts the populations attributed to MDPCP practices and to non-MDPCP practices to ensure the two groups of beneficiaries are comparable. HSCRC then uses a difference-in-difference analysis to estimate the impact of MDPCP on Medicare total cost of care and inpatient utilization. This approach is consistent with CMMI's approach to evaluating MDPCP as CMMI also uses a difference-in-difference analysis.[13]

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[11] Data analytics tools provide information in MDPCP practice cost, utilization, quality indicators, an avoidable hospitalizations tool, a tool that helps identify patients at risk for COVID.

[12] Nearly 300 MDPCP practices participated in the State's primary care vaccination program .https://health.maryland.gov/mdpcp/Pages/News-and-Announcements.aspx. See also "Improving COVID-19 Outcomes for Medicare Beneficiaries: A Public Health–Supported Advanced Primary Care Paradigm." https://www.milbank.org/publications/improving-covid-19-outcomes-for-medicare-beneficiaries-a-public-health-supported-advanced-primary-care-paradigm/

[13] CMMI has contracted with Mathematica to conduct an evaluation of the TCOC Model – including the primary care program. Mathematica will use a difference-in-difference analysis to evaluate the impact of MDPCP. Mathematica may use a different comparison group in the difference-in-difference analysis than HSCRC uses to evaluate MDPCP. This evaluation is expected to be released in 2023. The first CMMI evaluation, Evaluation of the Maryland Total Cost of Care Model: Implementation Report was released in 2021.

Selection of a Comparison Group

For this evaluation, HSCRC is using Maryland primary care practices that do not participate in MDPCP as the comparison group to evaluate the impact of MDPCP. A limitation of using non-participating practices as the comparison group is that there is potential selection bias between participating and non-participating practices. Physician practices that choose to participate in MDPCP might be different from those that do not participate in ways that impact their relative costs. This selection bias may influence the results of this evaluation. From a scientific perspective, a better comparison group would be one with no selection bias. However, no such group exists in Maryland, as all primary care practices have the option to participate in MDPCP. In addition, the HSCRC does not have enough data on non-Maryland Medicare beneficiaries to construct an out-of-state comparison group. Thus, non-participating providers in Maryland are the best available comparison group for this analysis.

Attribution

In MDPCP, CMMI attributes beneficiaries to the primary care practices that are participating in the Program. Beneficiaries were attributed to the primary care practice that provided the plurality of their primary care services. CMMI does not release their attribution algorithms, so the HSCRC recreated the algorithm based on extensive technical documentation released by CMMI. The HSCRC attributed beneficiaries to all primary care providers in the State. The HSCRC then divided the primary care providers between the MDPCP providers and a comparison group made up of all eligible providers who did not participate in MDPCP.

Risk-Adjustment

It is possible that differences in outcomes may be due to changes in the risk profile of the attributed beneficiaries. For example, if the rates of high-cost chronic conditions increase from one year to the next, then costs are also likely to grow substantially. Therefore, it is crucial to risk adjust the two populations. CMS's Hierarchical Condition Category (HCC) scores were developed to predict the total cost of care based on the number and complexity of chronic conditions. The HSCRC used the CMS-HCC scores to adjust the analysis to ensure an equivalent risk mix in the MDPCP population and the comparison group.

Difference-in-Difference Analysis

To measure the impact of MDPCP, HSCRC used a difference-in-difference analysis. Difference-in-difference analysis is an approach that compares the changes in outcomes over time between a population enrolled in a program and a population that is not in a program (the comparison group). For this evaluation HSCRC is comparing MDPCP with non-participating primary care practices in Maryland.

The difference-in-difference approach ensures that the impact of MDPCP is isolated from any exogenous impacts that affect both the MDPCP population and the non-MDPCP population. An example of an exogenous factor is the COVID-19 pandemic. The pandemic caused decreases in health utilization and costs fell for the entire population. The difference-in-difference analysis removes the impact of the

pandemic and other exogenous factors that impact both groups from the results, to provide a better comparison between the Program and non-program groups.

Evaluation Results

This section reports on the realized costs and savings related to MDPCP to date and does not consider the Program's impact on longer-term cost savings associated with population health improvement.

MDPCP has driven a reduction in inpatient utilization, a primary goal of the TCOC Model. However, the savings from those utilization reductions have been offset by higher payments made to MDPCP practices over the full span of the Program. In net, these payments have increased the total cost of care by approximately $72 million in 2021, relative to 2018, the base year used for this analysis.

The impact of MDPCP on the total cost of care has varied each year. In 2019, total cost of care in MDPCP increased slightly; while in 2020, total cost of care decreased slightly. In 2021, the total cost of care increased slightly. While the impact on total cost of care has been inconsistent, the impact on inpatient utilization is apparent. The Program has demonstrated a clear and growing reduction in hospital utilization.

Table 3 below shows the results of that analysis. The impact of MDPCP on utilization has grown significantly since the beginning of the Program. MDPCP fees have generally grown as additional practices have entered and progressed from Track 1 to Track 2 of the Program. Additional time will be necessary to assess whether the Program will fully offset MDPCP costs once all practices are fully mature.

Table 3: MDPCP Evaluation Results, 2019-2021 (relative to 2018)[14]

	MDPCP Performance Results		
	2019	**2020**	**2021**
Impact on Costs	-$14,133,567	-$72,085,570	-$110,405,846
MDPCP Fees	+$65,876,182	+$129,664,551	+$181,968,083
Net Impact on Costs	+$51,742,614	+$57,578,980	+$71,562,237
Impact on Inpatient Utilization	-0.67%	-1.17%	-2.88%

[14] The results in Table 3 differ slightly from the prior reports (including "Evaluation of the Maryland Primary Care Program: Joint Chairmen's report", Health Services Cost Review Commission, 2021). The prior reports estimated small savings for calendar year 2020, while this report shows a cost in 2020. These differences are due to changes in the comparison group. The comparison group changes as new practices join MDPCP; additionally, the HSCRC made changes to the attribution algorithm and the risk adjustment algorithm.

MDPCP Racial and Ethnic Diversity

This section includes an analysis of the racial diversity of patients in MDPCP, an overview of the different components of MDPCP related to health equity, and an outline of existing data on the race and ethnicity of MDPCP providers.

Racial and Ethnic Diversity of MDPCP Beneficiaries

The HSCRC analyzed the racial diversity of Medicare beneficiaries attributed to MDPCP. The table below shows the demographics of the MDPCP Medicare-beneficiary population compared with the demographics of the statewide Medicare-beneficiary population. As shown below, MDPCP is slightly less racially diverse than the overall Medicare population.

Table 4: Demographics of the MDPCP Medicare Population Compared to the Statewide Medicare Beneficiary Population, Dec 2021

	MDPCP		Statewide	
Asian	7,822	2.1%	21,792	2.9%
Black	78,635	21.1%	176,307	23.4%
Hispanic	3,974	1.1%	10,078	1.3%
White	266,636	71.4%	508,962	67.5%
Other	5,602	1.5%	13,581	1.8%
Unknown	10,458	2.8%	23,389	3.1%
Total	**373,489**	**100%**	**754,475**	**100%**

MDPCP participation is voluntary for practices. The voluntary nature of this Program can impact the racial diversity of patients.[15] Patients are attributed to participating practices by CMMI using an algorithm. MDPCP

[15] Safety net providers have been underrepresented in CMMI delivery system reform models, which impacts the diversity of patients participating in the programs. “A safety net healthcare organization is one that provides a significant level of care to low-income, uninsured, and vulnerable populations and has a legal mandate to serve patients regardless of their ability to pay.”. J. Mac McCullough, PhD, MPH, Natasha Coult, MS, Michael Genau, MS, Ajay Raikhelkar, MS, Kailey Love, MBA, MS, William Riley, PhD, “Safety Net Representation in Federal Payment and Care Delivery Reform Initiatives”, The American Journal of Accountable Care, March 2019, Volume 7, Issue 1, available at https://www.ajmc.com/view/safety-net-representation-in-federal-payment-and-care-delivery-reform-initiatives. These challenges have meant that safety net providers are less likely to participate in these programs. A specific example is the Accountable Care Organization Model (ACO), a nationwide CMMI program which, similar to MDPCP, is voluntary for practices. “[S]everal descriptive, cross-sectional analyses suggest that disparities in geographic access may exist under Medicare ACOs, which are less likely to form in higher-poverty areas with more racial minorities and poorly educated individuals, as compared with more affluent areas with fewer of these individuals.” Joshua M. Liao,Amol S. Navathe, and Rachel M. Werner, “The Impact of Medicare's Alternative Payment Models on the Value of Care”, Annual Review of Public Health, Vol. 41:551-565, April 2020, https://doi.org/10.1146/annurev-publhealth-040119-094327. Thus, the disparity in patient populations in participating and non-participating practices in MDPCP is similar to that seen in other payment models

is actively engaged in efforts to improve minority representation in the Program. In 2021, CMMI allowed Federally Qualified Health Centers (FQHCs) to enroll in MDPCP for the first time. The PMO focused heavily on recruiting FQHCs. FQHCs serve underserved areas and populations and often have more racially diverse patient populations than do other MDPCP practices. Seven FQHC organizations representing 44 practice sites around the State joined the Program in 2021. In 2021, the seven FQHC organizations had a total of 11,620 beneficiaries attributed to MDPCP, of which 58.5% were dual Medicaid- and Medicare-eligible beneficiaries. Looking forward, MDPCP is focusing on recruiting additional FQHCs and practices in underserved areas for the 2023 program enrollment year.

In addition, Maryland Medicaid is working with CMMI to be recognized as an MDPCP-aligned payer, anticipated to start in 2023. Medicaid specifically serves low-income and disabled populations. Alignment of Medicaid and MDPCP will further access to advanced primary care for a more-diverse population of Marylanders.

MDPCP Health Equity Focus Areas

In addition to efforts to diversify the patient participation in MDPCP, the PMO provides technical assistance and data to MDPCP practices to improve care for underserved patients in the practices' current patient populations. This work aims to reduce disparities in access to care, quality of care, and clinical outcomes in MDPCP population by providing data to understand disparities and by supporting improvements in practice workflows that improve quality of care for under-resourced populations.

The HEART Payment (described on page 12) is a new payment for MDPCP practices that directs funding to practices caring for beneficiaries with high clinical and social risk. The HEART Payment, which began in 2022, directs funds towards the social needs of beneficiaries living in geographic areas with high scoring levels on the Area Deprivation Index (described on page 12) and high projected health care spending. This makes MDPCP the first CMMI model to direct funds to health providers based on social risk factors.

The PMO has also stood up a robust platform with data on equity to help practices better understand disparities in access to care, quality of care, outcomes, and costs within their patient populations. CRISP, the State-designated Health Information Exchange, provides MDPCP practices, CTOs, and State agencies with a reporting services suite that includes the "Health Equity by Demographics" report. This report allows practices to view trends in utilization and cost outcomes, stratified by various demographic factors. This report allows practices to understand where disparities exist for their patient populations in order to design interventions to reduce these disparities.

The MDPCP CRISP Reporting Services suite also includes a number of social risk indicator variables (including the Area Deprivation Index and the COVID Vulnerability Index) that stratify beneficiaries by social

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focused on physician practices. The voluntary nature of MDPCP is a result of CMMI policies, not State-level implementation of the program.

risk. Practices can take these indicators into account to provide the most appropriate care to patients. Finally, in 2022, the PMO began a new partnership with CRISP and a vendor to create a platform to help practices understand disparities in clinical quality outcomes. This platform stratifies clinical quality measure data (such as measures of diabetes control and hypertension control) by key socio-demographic factors. All of these data resources provide MDPCP practices with an understanding of disparities in utilization, cost, clinical quality outcomes, and access to care for their patient populations. This understanding enables practices to design targeted interventions to reduce disparities and improve patient care in their populations.

The PMO recognizes the outsize role social determinants of health play in health outcomes. The PMO's training and technical assistance for MDPCP practices emphasize the importance of screening patients for social needs and referring patients to appropriate community-based organizations. Screening beneficiaries for social needs is a requirement for Track 2 practices. In 2022, the PMO is engaging a contractor to help practices adopt workflows based on best practices for social-needs screenings and referrals. The PMO has also engaged with Maryland 211 to improve their online resource directory of community-based organizations for referral.

Disparities in Primary Care Access

MDPCP practices are required to expand access to primary care services and to improve continuity of care for MDPCP beneficiaries. Expansion of access enables MDPCP practices to reach patients in a manner that is more timely, convenient, and appropriate for the specific patient. Expanding access is particularly important for beneficiaries that have difficulty accessing transportation to an office visit, cannot take time off work for an appointment, live in rural areas with longer travel times, or face other challenges to accessing care.

MDPCP practices provide expanded access through a variety of channels, including:

- availability of same or next-day appointments for patients in need;
- office-visit availability on the weekend, evening or early morning;
- telephone advice on clinical issues outside of regular office hours;
- secure/encrypted email or patient portal to provide advice on clinical issues;
- availability of video-based telehealth visits; and
- 24/7 access to a member of the care team who has real-time access to the practice's Electronic Health Records system.

To advance to Track 2 of MDPCP, practices must have enabled video-based telehealth visits and provide at least one alternative approach to accessing care. As of Q3 of CY 2021, MDPCP practices have expanded access to primary care through each of the channels listed above at the rates listed in Table 5.

Table 5: Percentage of MDPCP practices providing various methods of expanded access to primary care services, Q3 2021

Method for Expanding Primary Care Access	% of MDPCP Practices Providing this Method for Beneficiaries Sometimes, Often, or Always
Availability of same or next-day appointments for patients in need	100%
Office visit availability on the weekend, evening, or early morning	76.8%
Telephone advice on clinical issues outside of regular office hours	99.2%
Secure/encrypted email or patient portal to provide advice on clinical issues	97.0%
Availability of video-based telehealth visits	98.2%
24/7 access to a member of the care team who has real-time access to the practice's Electronic Health Records system	95.3%

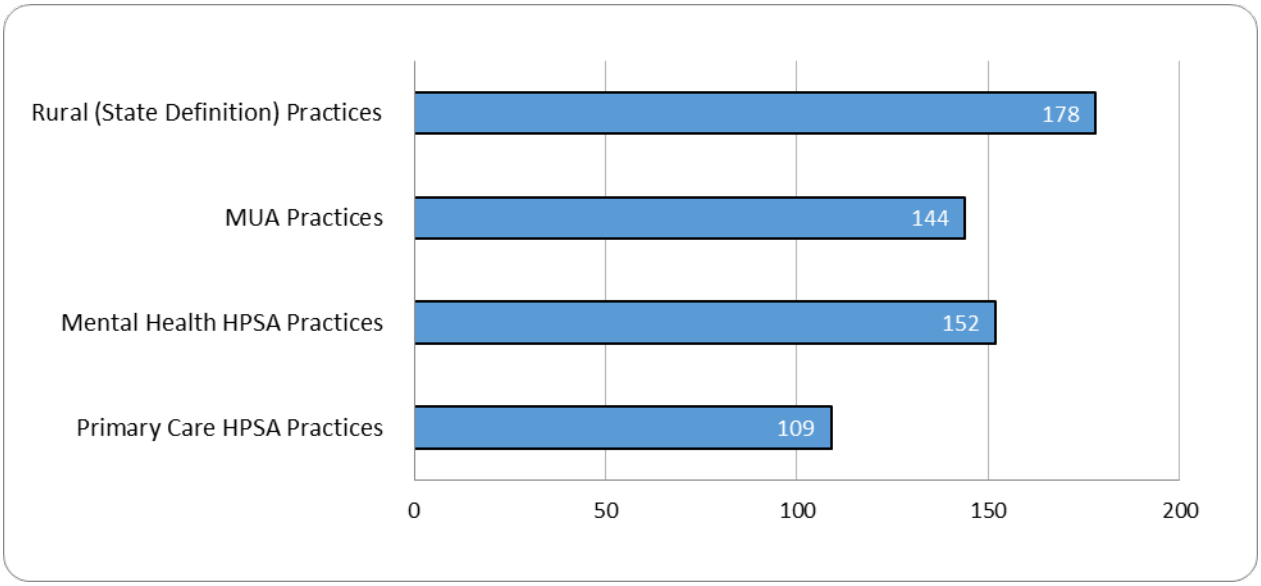
Figure 1 below shows the number of MDPCP practices that serve underserved areas in the State. The federal Health Resources and Services Administration (HRSA) designates different types of geographic areas that do not have sufficient access to health care services. These designations include the following:

1. **Health Professional Shortage Areas (HPSAs)**: The HPSA designation indicates that an area does not have enough providers to meet the health needs of its population. HRSA designates HPSAs for both primary care and mental health care.
2. **Medically Underserved Areas (MUAs):** HRSA designation of geographic locales with a shortage of primary care health services.

MDPCP practices in HPSAs provide crucial access to care in those communities. As of 2021, 109 MDPCP practices were located in primary care HPSAs and 152 were located in mental health HPSAs. Given that MDPCP requires integration of behavioral health care into primary care, these practices can help fill the gap in mental health care in these communities. In 2021, 144 MDPCP practices were located in MUAs.

Maryland recognizes 18 counties as rural. In 2021, 178 MDPCP practices were located in rural counties.

Figure 1. Count of 2021 MDPCP Practices by Underserved Category



Racial and Ethnic Diversity of Primary Care Providers in MDPCP

In response to the 2021 MDPCP JCR, MDPCP started collecting data on the racial and ethnic diversity of participating providers. Reporting this data is optional for practices and therefore may not be fully representative of all MDPCP providers. 183 practices of 508 MDPCP practices (36%) opted to report some or all of the data requested. The data reported represents about a third of health care providers in MDPCP.

A breakdown of MDPCP providers by race and ethnicity for Q1 2022, for practices that reported this information, is shown in Table 6 and Table 7. Because some of the reporting practices did not submit complete data, the totals in each table are different. Data on overall provider diversity in Maryland is not available for comparison.[16] Additional efforts needed to collect provider race and ethnicity data may be best addressed through licensing under the Board of Physicians.

Overall, MDPCP participation as a share of eligible practices in Maryland is robust. The PMO estimates that approximately 2/3 of eligible primary care practices are participating as of 2021. The number of practices is expected to increase in 2023 with more practices having applied for participation. Undoubtedly, diversity among physicians is both a Maryland and national issue. While MDPCP seeks to enroll all eligible primary care practices in the MDPCP, program minimum thresholds for number of Medicare FFS beneficiaries in the practice and advanced practice capabilities may limit participation by certain practices including those led by minority providers. In addition, minority providers are often working in smaller practices made up of 1 or 2 providers, which may have higher barriers to entry including the cost of infrastructure to meet minimum program capabilities like a 2015 certified electronic health record. Based on recruiting efforts and conversations with program providers, some providers remain skeptical of the value-based design of the program including capitated payments and financial risk.

Additional outreach efforts for MDPCP are underway for the 2023 program year. The PMO has conducted several outreach webinars for practices and FQHCs to join the Program. Initial data on applications suggest

[16] §1-226, Health Occupations, Maryland Code requires all health occupation boards to include an option for applicants to provide race and ethnicity information on application forms. Submission of this data is voluntary and may not result in data that is representative of all licensed providers. This law went into effect in 2021. It will take a number of years for this data set to grow to a size that is reasonable for use for this sort of analysis.

that several more FQHCs are seeking to join the Program in 2023. In addition, the PMO has reached out to minority-provider leaders in the Program to discuss strategies for recruiting non-participating providers from racially and ethnically-diverse backgrounds.

Table 6: MDPCP Providers by Ethnicity, Q1 2022

Provider Breakdown by Ethnicity (183 Reporting Practices)		
Hispanic or Latino	24	3.46%
Not Hispanic of Latino	669	96.54%
Total	***693***	***100%***

Table 7: MDPCP Provider Breakdown by Race Q1 2022

Provider Breakdown by Race (183 Reporting Practices)		
American Indian or Alaska Native	6	0.83%
Asian	147	20.25%
Black or African American	107	14.74%
Native Hawaiian or Other Pacific Islander	1	0.14%
White	422	58.13%
Other	43	5.92%
Total	***726***	***100.00%***

Outcome-Based Credits

Under the Total Cost of Care Model agreement, CMMI provides Maryland with financial incentives for improvements in population health areas identified for outcome-based credits. Outcome-based credits (OBCs) allow the State to identify specific diseases or health risk factors for focused intervention. In other words, OBCs are an opportunity for the State to receive financial credit, applied to the calculation of total cost of care savings under the model, for interventions on population health that positively impact health outcomes.

OBCs are not the only element of the Total Cost of Care Model focused on population health. For example, the Statewide Integrated Health Improvement Strategy (SIHIS) provides a statewide plan for improving population health. The OBCs are separate from SIHIS, although there is significant synergy between the two programs. The efforts made under SIHIS to improve statewide population health should help the State earn OBCs.

The TCOC Model agreement requires the State to develop at least three outcome credits, including identifying health conditions, selecting measures and targets related to those conditions, and developing a methodology for determining savings based on statewide performance on those measures.[17] The State has

[17] TCOC Model Agreement. Available at: https://hscrc.maryland.gov/Documents/Modernization/TCOC-State-Agreement-CMMI-FINAL-Signed-07092018.pdf

selected Type 2 diabetes, opioid use, and hypertension as the conditions subject to OBCs.[18] This section describes the process used to select these conditions and the development of the measures and savings methodologies. The methodologies for the three credit areas are similar in that the amount of credit awarded is calculated by measuring the number of cases averted and multiplying that number by the estimated cost per case.

This section also describes the implementation status of each credit. The only OBC that was in place in 2021 was for diabetes. The State earned a $5 million credit for performance on the diabetes OBC in 2020, which was applied to the 2021 TCOC savings calculation.

Selection of Conditions for Outcome-Based Credits.

The HSCRC developed a framework to select health conditions for inclusion in the outcome-based credit program with the goal of maximizing public health and financial impact. The framework requires evaluation of possible health conditions across the following four domains:

1. **Disease Burden –** HSCRC staff sought to select conditions with significant morbidity and mortality rates in the population.
2. **Preventability** – HSCRC also sought to select conditions that can be influenced by public health interventions, as compared to conditions that are not responsive to interventions.
3. **Cost** – HSCRC sought to identify conditions with high cost per case. High cost per case, combined with high burden of the condition in the population, increases the likelihood that financial incentives will motivate change in the health care system.
4. **Equity** – Equity is an important priority for the Model. In addition, the State wished to avoid building an incentive structure that would entrench or potentially exacerbate existing inequities in population health.

Using publicly-available data, the State evaluated a wide range of chronic diseases and risk factors across the four domains of the framework. In conjunction with discussions with stakeholders, HSCRC used this framework to select Type 2 diabetes, opioid use, and hypertension as the outcome-based credit focus areas.

[18] The population health measures used for outcome-based credits are different from the measures under the Statewide Integrated Health Improvement Strategy (SIHIS). SIHIS has three population health focus areas: type 2 diabetes prevention and management, opioid overdose prevention, and maternal and child health (i.e., maternal morbidity and childhood asthma ED visits). The outcome-based credit program also has measures related to type 2 diabetes and opioid use. Furthermore, hypertension is a common comorbidity with type 2 diabetes and both conditions can be improved by interventions related to obesity.

Diabetes Outcome-Based Credit

Maryland started applying the diabetes OBC in the 2021 global budget based on 2020 diabetes outcomes. To implement this credit HSCRC developed, and CMMI approved, a performance methodology and a cost methodology. These methodologies and the results are described below.

Performance Methodology

The purpose of the performance methodology is to determine the effect of the TCOC Model on diabetes incidence in Maryland. Accomplishing this requires comparing Maryland's performance to that of a relevant control group. The State identified the Behavioral Risk Factor Surveillance System (BRFSS) as the only available source of data on diabetes incidence that provided regular annual updates for a national, all-payer population. BRFSS is a nationally-representative health survey administered by state health departments in conjunction with the Centers for Disease Control and Prevention (CDC).

The State identified a control group using the weighted average of performance from other states whose pre-TCOC diabetes incidence closely resembles Maryland's, using a process designed to provide the closest possible match between Maryland and the control group in the pre-intervention years (before the start of the TCOC model in 2019).[19] The control group for the diabetes OBC is largely made up of eastern states with similar economic profiles to Maryland. These states are either Maryland's neighbors or resemble Maryland in their socioeconomic characteristics.

Table 8: Synthetic Control Composition

State	Weight (%)
DE	37.9
MA	30.3
DC	24
CT	6.8
VA	0.4
NH	0.1

After selection of the control group, the methodology uses a difference-in-difference analysis to compare the change in Maryland's diabetes incidence rate to the change in the control group's diabetes incidence rate for the same time frame.

[19] More specifically, the State used synthetic control matching to identify the control group. This creates a single control unit that reflects the weighted average of other states whose pre-TCOC diabetes incidence closely resembles Maryland's. The weights are implemented to provide the closest possible match between Maryland and the control group in the pre-intervention years.

Cost Methodology

HSCRC worked with a contractor to develop a methodology that estimates the cost per case of diabetes.[20] Using this methodology, the State estimated that each averted diabetes case in the Medicare population would save Medicare $14,512 over five years.[21] The cost estimate per averted case represents an aggregate estimate of: a) savings realized during the year in which a Maryland resident may have otherwise been diagnosed with diabetes absent the TCOC Model, and b) savings accrued in the following four years, when the resident may be diagnosed with diabetes but can be treated at a lower cost because they have had the disease for less time.

Change in Diabetes Incidence

Based on the regression analysis, the 2020 diabetes incidence rate in Maryland improved to a greater extent than in the control group. Maryland experienced a reduction of -3.62 cases per 10,000 residents while the control group had a change of -2.26 cases per 10,000. Thus, Maryland averted 1.36 cases of diabetes per 10,000 residents.

Multiplying the prevented case rate (1.36 per 10,000 residents) by the number of adults ages 45+ in Maryland (2,576,359) provides the total number of diabetes cases prevented: 350. This value is then multiplied by the cost-per-case estimate of $14,512, resulting in a cost savings of $5,084,785 for Maryland in 2020.

Table 9: Credit Calculations

Cases prevented per 10,000	1.36
MD pop. Over 45 years	2,576,359
Cases prevented (MD pop * 1.36/10,000	350
Credit per case	$14,512
2020 diabetes credit*	$5,084,785
*Total credit amount affected by rounding in cases prevented	

[20] This analysis employed multiple years of Medicare fee-for-service claims data, along with a regression model that adjusted for potential confounding factors, to estimate incremental healthcare expenditures for Maryland residents with incident diabetes, as compared to those without.

[21] The $14,512 figure is derived from combining estimates for averting a case of Type 2 diabetes for one year with the benefit of savings due to delayed disease progression in following years. These estimates use 2019 as a base year.

The overall reduction in diabetes incidence suggests the Total Cost of Care model had a positive impact on diabetes burden in Maryland. Maryland used this calculation to apply for a credit of $5,084,785 on Maryland's 2021 TCOC savings.

Opioids

The State is working with contractors to develop the performance and cost methodologies for the opioid OBC. The State elected to measure performance using the rate of opioid prescriptions that do not meet CDC guidelines.[22] Off-guidelines prescription volume is associated with Opioid Use Disorder (OUD) incidence, OUD-related overdose, and overdose mortality. The performance methodology uses a longitudinal commercial data source on opioid pharmacy claims to estimate rates of off-guidelines prescribing and to estimate OUD prevalence from those rates.

The cost estimate was derived by comparing Medicare expenditures for Maryland residents with a diagnosis of OUD, as compared to expenditures for those with no OUD diagnosis. HSCRC plans to submit the opioid credit methodology to CMMI for approval in 2023. If the methodology is approved in the same year, a credit application could be submitted in 2023 based on 2022 performance.

Hypertension

The State identified hypertension as the third OBC focus area in late 2021 and has hired contractors to develop the performance and cost methodologies. HSCRC staff are working with the contractors to finalize these methodologies for submission to CMMI for approval in 2023. HSCRC expects that this OBC will first be applied to 2022 data, which will be submitted to CMMI, if a credit is earned, in 2023.

Population Health and MDPCP

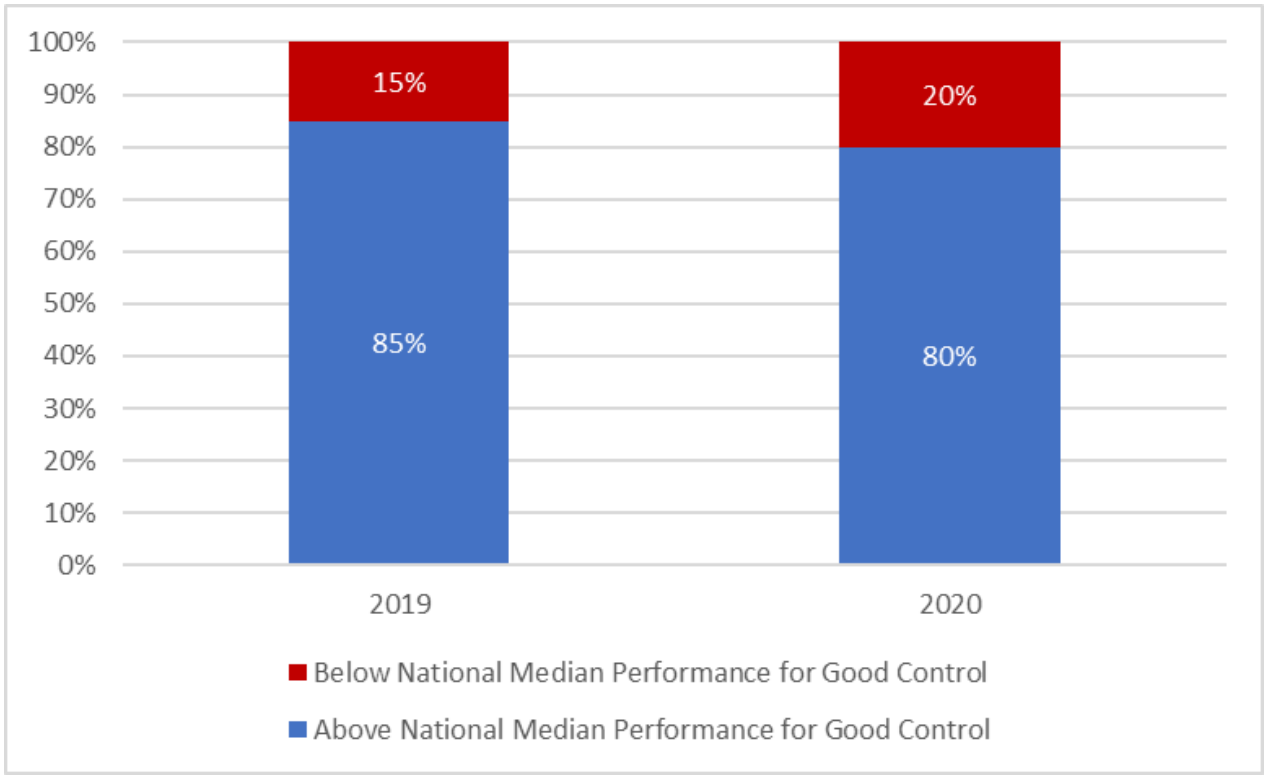
MDPCP supports the State's population health goals, as articulated both through SIHIS and the OBCs, through its diabetes-, opioid-, and hypertension-related initiatives. On diabetes, all MDPCP practices tracked electronic clinical quality measures (eCQM) related to Body Mass Index (BMI) screening and follow-up plan (CMS69) and diabetes control (CMS122) in 2021. These measures will also be included in MDPCP's new Track 3, which begins in Performance Year 2023. Figure 2 below shows 2019-2020 diabetes control rates for all patients in MDPCP practices compared to the national median of reporting providers.[23] Practices are focused on managing patient weight and providing patients with support to reduce the risk of developing diabetes through strategies such as referrals to Diabetes Prevention Programs (DPP).[24] Many MDPCP practices have partnered with hospitals that are funded through HSCRC's Regional Partnership

[22] HSCRC initially sought to use the incidence of opioid use disorder as the performance measure for this OBC, but a robust national dataset containing annual incidence of OUD was not available.
[23] Due to national issues with the measure specifications, CMS suppressed the BMI measure for performance year 2021, resulting in no scoring on this measure in this year.
[24] These referrals occur electronically through CRISP, the State-Designated Health Information Exchange.

Catalyst Program.[25] The purpose of the Diabetes Regional Partnerships is to increase referrals and enrollment in DPPs and diabetes-management programs. Additionally, the PMO has been working closely with CareFirst to plan a coordinated strategy to address diabetes in practices participating in both MDPCP and the CareFirst PCMH programs.

Moreover, the PMO has established partnerships with entities across the State that are working to address weight and to implement lifestyle change programs. The PMO actively reached out to community-based organizations with the capability and capacity to accept additional referrals from MDPCP practices and established a pilot referral process via CRISP. The PMO organized meetings to introduce these partners to MDPCP practices in their service regions. These partners include Giant Food nutrition, MAC Living Well Center of Excellence, Bethesda Newtrition and Wellness Services, and Meals on Wheels of Central Maryland. The PMO also works collaboratively with the PreventionLink program in Southern Maryland, the Maryland Department of Aging and its Area Agencies on Aging, and the MDH Center for Chronic Disease Prevention and Control to develop education and best practices communications for participating practices.

Figure 2: Percent of MDPCP Practices above the National Median Performance Score in Controlling Diabetes



[25] Through the Regional Partnership Catalyst program, HSCRC expects to provide $86.3 million dollars to hospitals over five years (starting in 2021) to increase use of DPP and diabetes management programs. This funding was awarded to hospitals in six regions in the State who must work with community partners, including local health departments, non-profits, local businesses, faith-based organizations, community healthcare providers, academic institutions, and others.

MDPCP also supports the State's efforts to address substance use in the community, with a focus on opioids. One of the core features of the advanced primary care model within MDPCP is integration of behavioral health services within the primary care setting to proactively respond to patients' behavioral health needs. As of Q3 2021, 100% of MDPCP practices reported implementing a strategy to integrate behavioral health into their practice workflows. To address substance use disorder and opioids in the community, the evidence-based approach of Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an approved approach to integrating behavioral health in MDPCP.

Since 2021, the PMO, in partnership with the Behavioral Health Administration (BHA), has established a three-fold strategy to use SBIRT to drive reductions in OUD. The following elements are components of this strategy:

- **SBIRT implementation in Hot Spot OUD areas:** The PMO prioritizes the implementation of SBIRT in Opioid Use Disorder Hot Spots including: Anne Arundel, Baltimore, Montgomery, Prince George's, Washington and Harford counties, and in Baltimore City. The State is focused on increasing the number of practices using SBIRT statewide but focuses particularly on recruiting practices to use this strategy in these Hot Spots. Concentration of practices in Hot Spot counties is included in Figure 5 below.
- **Practice improvement:** The PMO, through a contractor, actively reviews data reported by MDPCP practices to ensure the practices are meeting performance targets related to the use of SBIRT. Practices that have implemented SBIRT are provided with a report on the assessment of their data and actions that the practice could take to improve their use of SBIRT. As of March 2022, over 80 practices are currently working with the contractor to review SBIRT-related data, assess their current workflows, and identify the action steps to improve the use of SBIRT within the practice.
- **SBIRT data in CRISP:** As of May 2022, 222 practices uploaded SBIRT data into a CRISP tool built to capture each practice's progress. The PMO is working with additional practices to increase the number of practices reporting SBIRT data through CRISP. Since SBIRT reporting is voluntary, practices' support of this work has been critical. Accordingly, the PMO does not anticipate all practices that have implemented SBIRT will report in a given month.

As of May 2022, 343 MDPCP practice sites (including 7 FQHC sites) have implemented SBIRT to identify and appropriately refer patients with substance use disorders to services and treatment. This update of SBIRT far exceeds the 2021 SIHIS goal of implementing SBIRT in 200 MDPCP practices. Practices have been voluntarily reporting data related to SBIRT to MDH since August 2021. The key statistics for Maryland patients are outlined in Figure 3 below.

Figure 3: Number of SBIRT Screenings, Positive Screens, and Brief Interventions for MDPCP Practices, August 2021 - May2022

SBIRT Screenings	Positive Screens	Brief Interventions
347,052	23,882	6,800

Lastly, MDPCP is also focused on hypertension. Practices are incentivized to address high blood pressure through an eCQM for Controlling High Blood Pressure, which measures the percentage of patients with blood pressure below the value of 140/90 mmHG. MDPCP has offered a variety of educational and training opportunities for MDPCP practices, including annual training for providers and staff on controlling diabetes and hypertension. MDPCP practices are controlling blood pressure better than the Nation when compared to practices reporting to CMS under the Merit Based Incentive Program. As noted in Figure 4 below, 67% of practices exceeded the national benchmark in 2019 and 63% of practices exceeded the national benchmark in 2020. Data for 2021 will be available later in 2022.

Figure 4: Percent of MDPCP Practices above the National Median in Managing Hypertension, 2019-2020

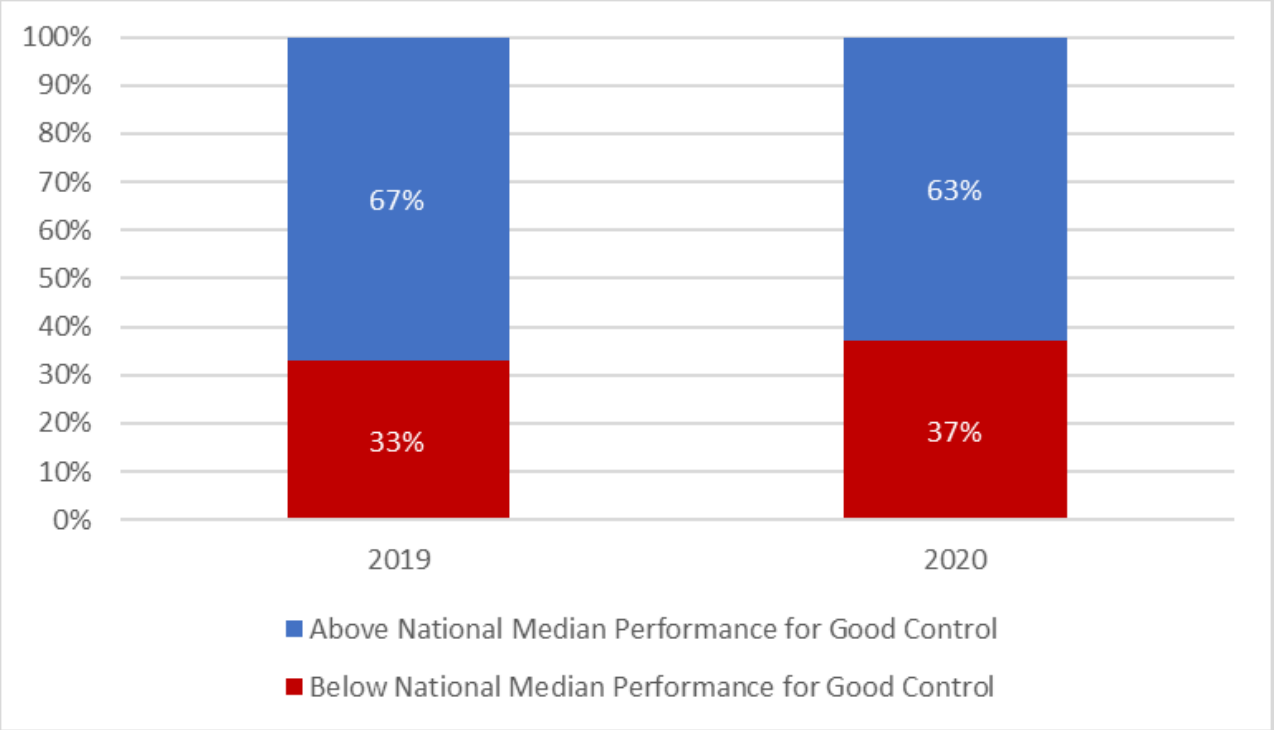
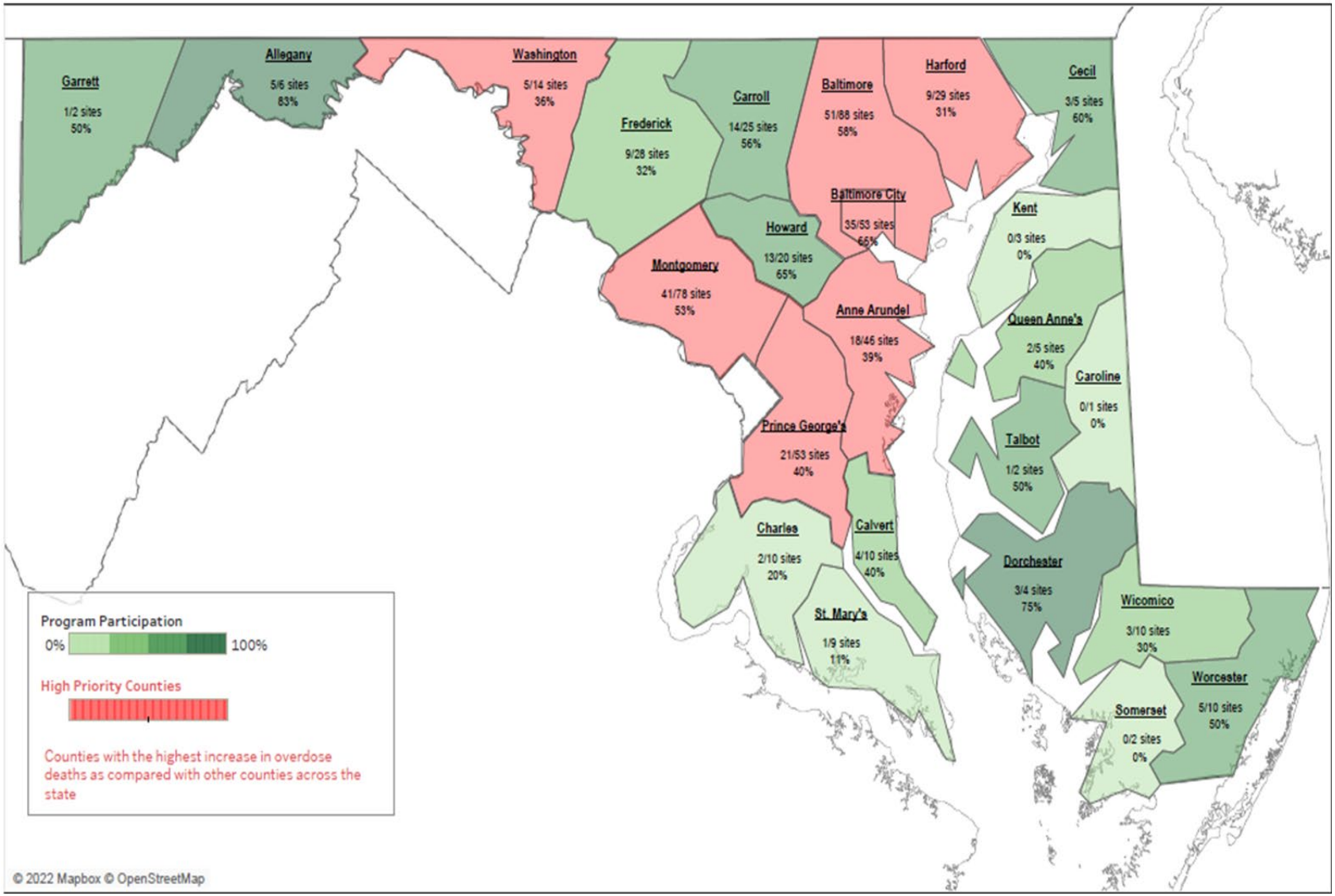


Figure 5: MDPCP Practices that use SBIRT compared to total MDPCP Practices by County



Conclusion

The State of Maryland, under the Total Cost of Care Model, is making bold steps to control the cost of healthcare, increase healthcare quality, and improve population health. MDPCP is an important component of the Total Cost of Care Model and is a key tool for accomplishing these goals.

When comparing the cost of MDPCP practices with non-MDPCP practices in Maryland, MDPCP had a small amount of additional cost ($72 million) over the first three years of program operation. The program has reduced hospital utilization. The additional costs of the payments made to participating practices and CTOs has outweighed the cost savings associated with the utilization reductions. More time will be needed to assess whether these results are due to statistical variation or a meaningful program impact.

The MDPCP beneficiary population remains slightly less diverse than the statewide population. However, MDPCP has numerous initiatives in place to increase diversity of the patient population through inclusion of FQHCs and to address disparities within the MDPCP patient population. MDPCP has begun collecting data on diversity in the MDPCP provider population. Comparative data to evaluate the diversity of the provider population is limited.

Outcome-based credits provide the State with an opportunity to receive financial credit from CMMI under the Total Cost of Care Model for performance on population health measures related to diabetes, opioids, and hypertension. The OBCs are largely aligned with the population health goals identified in the SIHIS agreement with CMMI. MDPCP practices support SIHIS and OBCs through their work to refer patients to diabetes prevention programs, the use of SBIRT to identify and intervene with patients at risk for substance use disorder, and efforts to control high blood pressure.