Monitoring of Maryland's All-Payer Model

Biannual Report

Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605

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Executive Summary

Introduction

Effective January 1, 2014, the State of Maryland and the Centers for Medicare & Medicaid Services (CMS) entered into an agreement to modernize Maryland's unique all-payer rate-setting system for hospital services. This initiative replaced Maryland's 36-year-old Medicare waiver and allows Maryland to adopt new, innovative policies aimed at reducing per capita hospital expenditures and improving patient health outcomes. This biannual report, prepared in accordance with Maryland law, contains a summary of implementation, monitoring, and other activities during the time period from January 1, 2014 through December 31, 2018.[1] The purpose of this report is to inform the Maryland General Assembly on the status of the Maryland All-Payer Model, which concluded December 31, 2018, and initial activities under the Total Cost of Care (TCOC) Model which began January 1, 2019.

Highlights

The following bullets highlight the progress that the Maryland Health Services Cost Review Commission (HSCRC or Commission) made in the nine reporting areas required by law. They also highlight information related to the progression of the new Total Cost of Care Model.[2]

- **Total Hospital Per Capita Cost Growth** – CMS required Maryland to limit the average annual growth in all-payer hospital per capita revenue for Maryland residents to 3.58 percent. To date, Maryland has met this target, with a growth rate of 1.47 percent between calendar years (CYs) 2013 and 2014, 2.31 percent between CYs 2014 and 2015, 0.80[3] percent between CYs 2015 and 2016, 3.54[4] percent between CY 2016 and CY 2017, and 1.50 percent between CY 2017 and CY 2018. Since the beginning of the Model, the average annual growth rate is 2.03 percent, well below the 3.58 percent target.
- **Aggregate Medicare Savings** – The Maryland All-Payer Model Agreement required the State to achieve an aggregate hospital savings in Medicare spending equal to or greater than $330 million over the five years of the agreement. Savings are calculated by comparing the rate of increase in Medicare hospital payments per Maryland beneficiary with the national rate of increase in payments per beneficiary. CMS completes this calculation and provides an aggregate monthly report to the HSCRC. Maryland realized $120 million in savings in CY 2014, $155 million in CY 2015, $311 million[5] in CY 2016, $330 million in CY 2017, and $506 million in CY 2018. The cumulative hospital savings throughout the five years of the All-Payer Model amounts to $1.4 billion.
- **Shifting from a Per-Case Rate System to a Global Budget** – CMS required Maryland to shift at least 80 percent of hospital revenue to global or population-based budgets. Maryland exceeded this target and has shifted 98 percent of regulated hospital revenues

[1] Health-General Article §19-207(b)(9) Maryland Annotated Code.
[2] *Id.*
[3] The all-payer per capita growth rate reflects an adjustment to revenues to account for Maryland hospitals undercharging their global budgets from July to December 2016
[4] *Id.*
[5] The statewide savings noted here reflect an adjustment to account for undercharging that occurred in Maryland hospitals from July to December 2016. This adjustment reduces the amount of statewide savings otherwise shown in CY 2016. CY 2016 hospital savings without the undercharge adjustment is $336 million.

to global budget structures. The two percent of revenue not included in GBR accounts for drug costs which are funded based on volume.[6]

- **Reducing the Readmission Rate among Medicare Beneficiaries** – Readmission rates continued to steadily decline over the course of the All-Payer Model. With most recent twelve months' data through December 2018, the Maryland Medicare FFS Readmission Rate is 0.05 percentage points *lower than* the National Medicare FFS Readmission Rate (Maryland: 15.40 percent; Nation: 15.45 percent). The All-Payer Model agreement 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. Maryland is working to maintain this improvement, as well as additional improvement over the nation.
- **Reducing Hospital-Acquired Conditions (HACs)** – CMS required Maryland to reduce the cumulative rate of HACs by 30 percent by the end of CY 2018. HSCRC measures HACs using a list of Potentially Preventable Complications (PPCs).[7] Through December 2018, the State of Maryland has achieved a 51.50 percent reduction in all-payer, case-mix adjusted PPC rates. The reduction in the case-mix adjusted complication rate for Medicare FFS was 53.03 percent. Staff continue to incentivize reductions in HACs through the quality incentive program.
- **Monitoring Total Cost of Care (TCOC)** – Under the All-Payer Model agreement, 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. From CY 2014 to CY 2018, Maryland's TCOC growth met the requirements of the All-Payer Model.
- **Workgroup Activities** – The HSCRC continues to broadly engage with stakeholders in guiding policy and methodology development through various Workgroup meetings throughout CY 2018. Stakeholders representing consumers, businesses, payers, providers, physicians, nurses, and other health care professionals and experts have participated in these Workgroups. All Workgroup meetings are conducted in public sessions and comments from the public are solicited at each meeting.
- **Actions to Promote Alternative Methods of Rate Determination and Payment** – The All-Payer Model agreement allows Maryland to develop alternative methods of rate determination. The HSCRC developed the Global Budget Revenue (GBR) reimbursement model and has moved 98 percent of acute hospital revenue under global budgets as of CY 2016. The 2 percent of non-GBR revenue accounts for drug costs which are funded based on volume.[8]
- **Reports to CMS** – To date, the HSCRC has met all of CMS's reporting requirements.
- **Total Cost of Care Model Progression** – On July 9, 2018, Governor Hogan, alongside CMS and other State leaders, signed the Maryland Total Cost of Care Contract. The new Model aims to move beyond hospitals and to coordinate care for patients across both hospital and non-hospital settings, improve health outcomes, and contain the growth of

[6] Previous versions of this report have indicated that 100 percent of hospital revenue had moved under global budget arrangements as of 2017. The HSCRC has updated this number across all years of the Model to account for drug costs which are funded based on volume.

[7] 3M Health Information Systems developed the PPC measures. The PPC software relies on "present on admission" indicators from administrative data to calculate the actual versus expected number of complications for each hospital.

[8] Previous versions of this report have indicated that 100 percent of hospital revenue had moved under global budget arrangements as of 2017. The HSCRC has updated this number across all years of the Model to account for drug costs which are funded based on volume.

costs. The TCOC Model began on January 1, 2019 and the Commission has focused on implementation activities in the initial months of the Model.

- **Reporting Adverse Consequences** – Under the All-Payer Model contract, CMMI monitors the total cost of care in Maryland to ensure that reductions in hospital utilization does not result in unreasonable increases in total cost of care, which includes costs associated with all other health care providers. The All-Payer Model contract provides that in any one calendar year, Medicare total cost of care growth in Maryland may not grow more than 1 percent above Medicare total cost of care growth nationally. Additionally, in any two consecutive years, Maryland's Medicare total cost of care may not exceed the nation. The HSCRC monitored this measure closely in 2018 to ensure that the two consecutive year requirement was not breached, as Maryland total cost of care was 0.76 percent above the nation in CY 2017. Through the end of 2018, Maryland total cost of care is 1.30 percent below the nation for CY 2018.

Introduction

Effective January 1, 2014, the State of Maryland and the Centers for Medicare & Medicaid Services (CMS) entered into an initiative to modernize Maryland's unique all-payer rate-setting system for hospital services. This initiative replaced Maryland's 36-year-old Medicare waiver and allows Maryland to adopt innovative policies aimed at reducing per capita hospital expenditures and improving patient health outcomes. The All-Payer Model successfully reduced costs and improved the quality of care for patients and helped lay the foundation for the new TCOC Model, which began January 1, 2019. The Center for Medicare and Medicaid Innovation (CMMI) oversees the Model under the authority of CMS. The State, in close partnership with providers, payers, and consumers, have achieved significant progress in this modernization effort.

State and Federal Status Reporting Requirements for Maryland's All-Payer Model

State Reporting Requirements for Maryland's All-Payer Model

This report contains a summary of implementation, monitoring, and other activities to inform the Maryland General Assembly on the status of the Maryland All-Payer Model. This Maryland All-Payer Model Biannual Report, prepared in accordance with Maryland law, discusses the State's progress during the period from January 1, 2014, through December 30, 2018, based on the most recent available information.[9] The HSCRC updates the report every six months. Table 1 provides an overview of the reporting that is required by law under the Maryland All-Payer Model.[10]

Table 1. State Biannual Reporting of Maryland's All-Payer Model

Section	Achievement Requirement	Accomplishments	Ongoing Activities
I.1	Limit the annual growth in all-payer hospital per capita revenue for	Per capita revenue for Maryland residents grew 1.47% between CYs 2013-2014; 2.31% between CYs	• Ongoing monthly measurement • Continued favorable performance under the Total Cost of Care model is expected as global budgets result in

9 Health-General Article §19-207(b)(9) Maryland Annotated Code.
10 Id.

Section	Achievement Requirement	Accomplishments	Ongoing Activities
	Maryland residents to 3.58%	2014-2015; and 0.80% between CYs 2015-2016, 3.54% between CYs 2016-2017, and 1.50% between CYs 2017-2018.	predictable statewide revenue performance
I.2	Achieve aggregate hospital savings in Medicare spending equal to or greater than $330 million over 5 years	$120 million in Performance Year (PY) 1 (CY 2014), $155 million in PY 2 (CY 2015), $311 million in PY 3 (CY 2016), $330 million in PY 4 (CY 2017, and $506 million in PY 5 (CY 2018), bringing the cumulative savings to $1.4 billion.	• HSCRC is working with an analytics contractor to examine and replicate CMS calculations of Medicare savings and per beneficiary growth rates during the TCOC model.
I.3	Shift at least 80% of hospital revenue to a population-based payment structure (such as global budgets)	98% of hospital revenue shifted to global budgets.[11]	• All hospitals are engaged in global budgets under Global Budget Revenue (GBR) agreements • HSCRC continues to refine global budget methodology
I.4	Reduce the hospital readmission rate for Medicare FFS beneficiaries to be below the national rate over the 5-year period of the agreement	At the beginning of the model, Maryland's readmission rate was 1.22 percent higher than the nation. Maryland has narrowed its gap from the nation each year of the model and now has a readmission rate that is 0.05 percentage points **below** the national readmission rate.	• HSCRC is monitoring progress within Maryland across all-payers using data it collects from hospitals and is working to maintain improvements and remain below the national Medicare readmission rate. • HSCRC maintains an aggressive improvement target for hospitals under the Readmission Reduction Incentive Program (RRIP), while recognizing the high performing hospitals may have less opportunity to improve.
I.5	Cumulative reduction in hospital acquired conditions (HACs) by 30% over 5 years	Compounded with previous reductions in complications since CY 2013, the State of Maryland has achieved a 51.50 percent reduction in all-payer, case-mix adjusted PPC rates by the end of 2018.	• HSCRC will continue to incentivize PPC reductions through the Maryland Hospital Acquired Conditions (MHAC) program in the Total Cost of Care Model.
I.6	Monitor Total Cost of Care (TCOC) for Medicare and maintain growth within guardrails	Maryland TCOC growth met the requirements of the All-Payer Model for all five years.	• HSCRC is continuing to closely monitor TCOC growth trends for hospital and total cost of care to ensure that the two consecutive year requirement is not breached.
II	Workgroup Activities	The Performance Measurement Workgroup reviewed the annual quality policies that were approved by the Commission in Spring 2018. The Payment Models Workgroup reviewed the annual update factor that was approved by the Commission in June 2018. A	• Active workgroups continue to meet on a regular basis • Staff have convened new subgroups to discuss quality policies, rate setting methodologies, and care transformation initiatives.

[11] Previous versions of this report have indicated that 100 percent of hospital revenue had moved under global budget arrangements as of 2017. The HSCRC has updated this number across all years of the Model to account for drug costs which are funded based on volume.

Section	Achievement Requirement	Accomplishments	Ongoing Activities
		Care Transformation Steering Committee was convened in November 2018.	
III	New alternative methods of rate determination	98% of hospital revenue is now under global budget arrangements.[12]	• Global budget agreements are published on the HSCRC website • Staff continues to refine rate setting methodologies.
IV	Ongoing reporting to CMS of relevant policy development and implementation	The HSCRC provided CMS with the Annual Monitoring Report as required in the All-Payer Model contract, as well as quarterly progress reports.	• HSCRC continues to provide reports to CMS on an ongoing basis.
V.	Progress of Total Cost of Care (TCOC) Model	The State signed the TCOC Model Contract with CMS on July 9, 2018.	• HSCRC continues to work on implementation activities for the January 1, 2019 Model start date.

Federal Reporting Requirements for Maryland's All-Payer Model

Maryland's All-Payer Model agreement with CMS established a number of requirements that the State must fulfill. CMS must evaluate and provide an annual report on Maryland's calendar year performance. The HSCRC submitted a final transition report on the All-Payer Model to CMS in May 2019. In addition to the annual report, the HSCRC provides ongoing reporting to CMS on relevant policy and implementation developments. If Maryland failed to meet selected requirements, CMS would provide notification, and Maryland would have the opportunity to provide information and a corrective action plan, if warranted. CMS did not provide any failure notifications to Maryland during the course of the All-Payer Model.

Section I – Requirements under the All-Payer Model

Total Hospital Per Capita Cost Growth

The Maryland All-Payer Model agreement requires the State to limit the average annual growth in all-payer hospital per capita revenue for Maryland residents to the average growth in per capita gross state product (GSP) for the period 2002 through 2012, a 3.58 percent growth rate. Per capita revenue for Maryland residents increased by 1.47 percent between CYs 2013 and 2014 and by 2.31 percent between CYs 2014 and 2015. Per capita revenue growth grew 0.80[13] percent between CYs 2015 and 2016. The all-payer hospital per capita growth rate in CY 2017 was slightly higher than previous years at 3.54[14] percent. The CY 2018 per capita revenue for Maryland residents grew 1.50 percent, continuing the favorable performance. At the end of 2018, the average annual growth rate was 2.03 percent, well below the 3.58 percent target required under the All-Payer Model. The favorable performance is a result of global budgets with strong incentives to reduce avoidable utilization (discussed at length in Section III) creating predictable statewide revenue performance that allowed the HSCRC to actively manage compliance with the 3.58 percent growth target.

[12] *Id.*
[13] The all-payer per capita growth rate reflects an adjustment to revenues to account for Maryland hospitals undercharging their global budgets from July to December 2016.
[14] *Id.*

In addition to the all-payer hospital per capita growth, the HSCRC tracked Medicare FFS per capita cost trends from its own Maryland data. Based on these data, the Medicare FFS per capita revenue declined by 1.12 percent between CYs 2013 and 2014, and grew by 1.14 percent in CY 2015. In CY 2016, the Medicare FFS per capita revenue declined by 0.97[15] percent over the same time period in CY 2015, and Medicare FFS per capita grew by 2.23[16] percent between CY 2016 and CY 2017. CY 2018 had favorable results with a 1.63 percent decline over CY 2017.

Aggregate Medicare Savings

The Maryland All-Payer Model Agreement requires the State to achieve an aggregate hospital savings in Medicare spending equal to or greater than $330 million over the five years of the agreement. Savings are calculated by comparing the rate of increase in Medicare hospital payments per Maryland beneficiary with the national rate of increase in payments per beneficiary. Currently, CMS completes this calculation and provides an aggregate monthly report to the HSCRC. Maryland realized $120 million in savings in CY 2014, $155 million in CY 2015, $311 million[17] in CY 2016, $330 million in CY 2017, and $506 million in CY 2018. The cumulative hospital savings throughout the five years of the All-Payer Model amounts to $1.4 billion.

Shifting from a Per-Case Rate System to Global Budgets

As of CY 2016, 98 percent of Maryland regulated hospital revenues are contained within global budget structures. The remaining two percent of non-GBR revenue accounts for drug costs which are funded based on volume.[18] This exceeds the Maryland All-Payer Model agreement requirement of shifting at least 80 percent of hospital revenue to global or population based budgets. All regulated Maryland hospitals now operate under Global Budget Revenue (GBR) agreements. Global budget agreements are available on the Global Budgets webpage of the HSCRC website.

The HSCRC continues to work with stakeholder workgroups to refine the GBR methodology and develop a number of policies discussed in Section III.

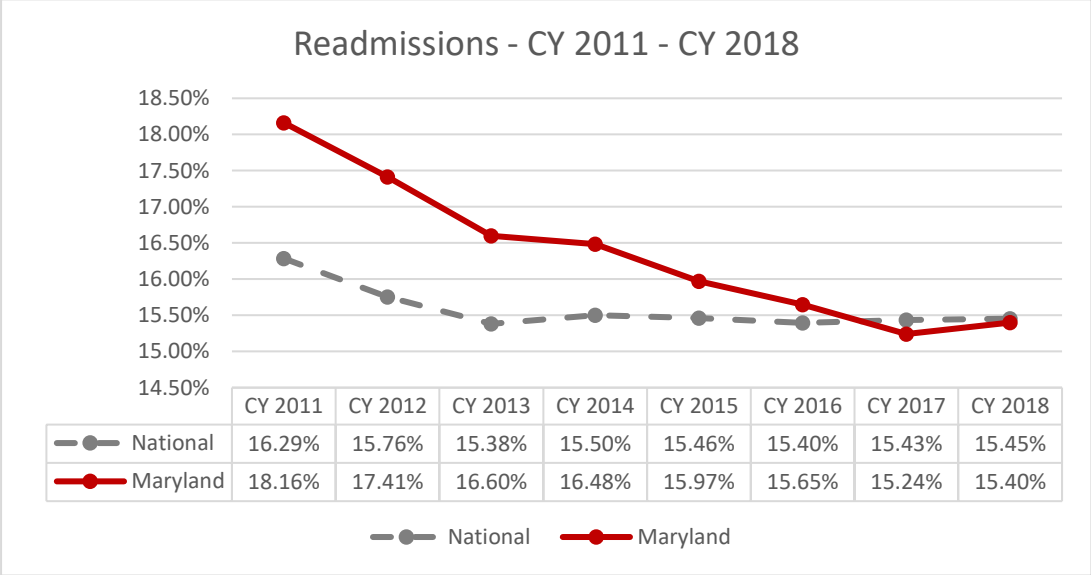
Reducing the Hospital Readmission Rate among Medicare Beneficiaries

Reducing hospital inpatient readmission rates has been an objective of the HSCRC policies since 2011. At the beginning of the All-Payer Model, the Maryland readmission rate was 1.22 percentage points higher than the nation (Maryland: 16.60 percent; Nation: 15.38 percent). Readmission rates have continued to steadily decline over the course of the All-Payer Model, and, with most recent twelve months' data through December 2018, the Maryland Medicare FFS Readmission Rate is 0.05 percentage points lower than the National Medicare FFS Readmission Rate (Maryland: 15.40 percent; Nation: 15.45 percent). The All-Payer Model agreement required Maryland's hospital readmission rate

[15] The Medicare FFS per capita growth rate reflects an adjustment to revenues to account for Maryland hospitals undercharging their global budgets from July to December 2016.
[16] *Id.*
[17] The statewide savings noted here reflect an adjustment to account for undercharging that occurred in Maryland hospitals from July to December 2016. This adjustment reduces the amount of statewide savings otherwise shown in CY 2016. CY 2016 hospital savings without the undercharge adjustment is $336 million.
[18] Previous versions of this report have indicated that 100 percent of hospital revenue had moved under global budget arrangements as of 2017. The HSCRC has updated this number across all years of the Model to account for drug costs which are funded based on volume.

for Medicare FFS beneficiaries to be at or below the national readmission rate by the end of 2018, which Maryland successfully achieved. In 2019, Maryland is working to maintain this improvement, and to match or exceed any additional improvement that the nation experiences to maintain this achievement. The All-Payer Model requirement uses national Medicare data, which is summarized in Figure 1.

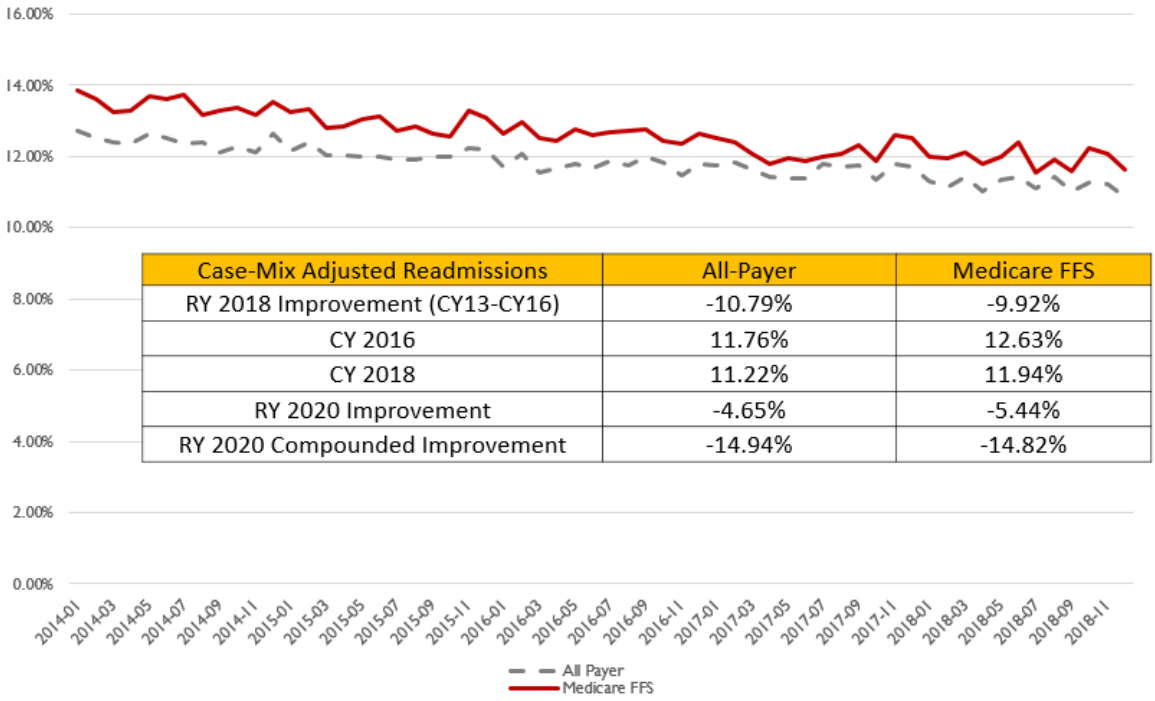
Figure 1. Medicare Readmissions - Rolling 12 Months Trend, Data through December 2018



	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
National	16.29%	15.76%	15.38%	15.50%	15.46%	15.40%	15.43%	15.45%
Maryland	18.16%	17.41%	16.60%	16.48%	15.97%	15.65%	15.24%	15.40%

Additionally, HSCRC's hospital data show that the monthly case-mix adjusted readmission rate through CY 2018 is substantially improved when compared to CY 2013 (Figure 2). This analysis includes all Maryland inpatient stays, including Medicare FFS. Based on these HSCRC data, the all-payer, case-mix adjusted readmission rate in CY 2018 was 11.22 percent, compared to 11.74 percent in CY 2016, a 4.22 percent reduction. Compounded with previous reductions in readmissions since CY 2013, the state of Maryland has achieved a 14.94 percent reduction in the all-payer, case-mix adjusted readmission rates. The corresponding compounded readmission reduction for Medicare FFS beneficiaries was slightly lower at 14.82 percent. This reduction is significant given difficulty and time involved in reducing readmissions, as it requires sustained effort, investment, and coordination across providers.

Figure 2. Case-Mix Adjusted Readmissions in Maryland, CY 2013 - CY 2018



Case-Mix Adjusted Readmissions	All-Payer	Medicare FFS
RY 2018 Improvement (CY13-CY16)	-10.79%	-9.92%
CY 2016	11.76%	12.63%
CY 2018	11.22%	11.94%
RY 2020 Improvement	-4.65%	-5.44%
RY 2020 Compounded Improvement	-14.94%	-14.82%

In the RY 2020 and 2021 policies, hospitals continue to be measured based on improvement and attainment. To help readmission reduction efforts, the HSCRC continues to improve its readmission reporting capability by leveraging resources available in the state Health Information Exchange and providing timely, monthly, and patient-specific data to hospitals. During CY 2019, the State is working with hospital quality experts and other measurement subject-matter experts to update the readmission policy and monitor for unintended consequences, as the State works to sustain the improvement hospitals achieved during the All-Payer Model through the Total Cost of Care Model.

Cumulative Reduction in Hospital Acquired Conditions

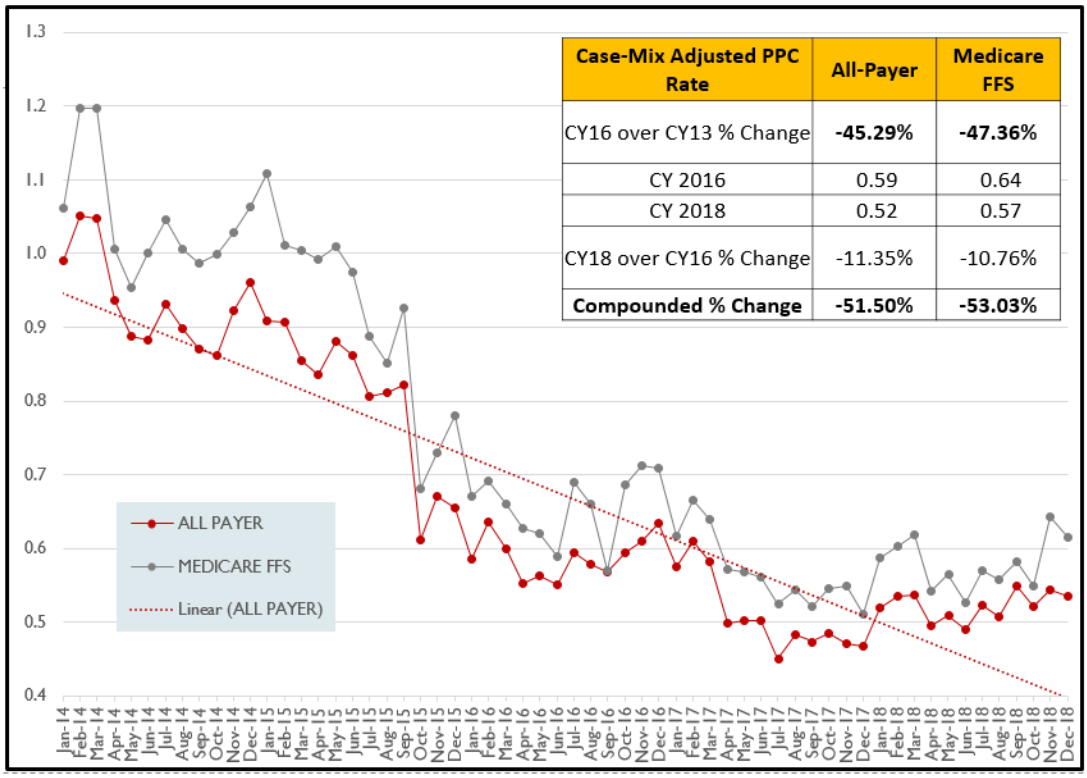
Maryland hospitals were required to achieve a 30 percent cumulative reduction in Hospital Acquired Conditions (HACs) by 2018 to comply with the Maryland All-Payer Model agreement. Maryland measures HACs using a list of potentially preventable complications (PPCs). PPCs are defined as post-admission harmful 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 treatment rather than from a natural progression of underlying disease.

The HSCRC approved major revisions to the Maryland Hospital Acquired Conditions (MHAC) program in April 2014 in order to support the goal of reducing PPCs. The MHAC program calculates hospital rewards and penalties for case-mix adjusted rates of PPCs. Specifically, these calculations use observed-to-expected ratios as the basis of the measurement for all PPCs, converts the individual PPC performance into a standardized score, and then uses a preset scale to determine penalties and rewards.

Figure 3 shows the all-payer and Medicare FFS case-mix-adjusted PPC rates by month and year. In CY 2018, the all-payer case-mix adjusted PPC rate was 0.52 per 1,000, compared with 0.59 per 1,000 during CY 2016, which is an 11.35 percent reduction. Compounded with previous reductions in complications since CY 2013, the state of Maryland has achieved a 51.50 percent reduction in all-payer, case-mix adjusted PPC rates. The reduction in the case-mix adjusted complication rate for Medicare FFS was slightly higher at 53.03 percent.

While this reduction in the case-mix adjusted complication rate exceeds the All-Payer Model target of 30 percent by 2018, the HSCRC continues to incentivize hospitals to further reduce hospital-acquired infections and complications. In CY 2019, the HSCRC migrated to a pay-for-performance program that only rewards hospitals for achieving low PPC rates, removing the credit for improving PPC rates over time.

Figure 3. Case-Mix Adjusted PPC Rates in Maryland, CY 2014 – CY 2018



Case-Mix Adjusted PPC Rate	All-Payer	Medicare FFS
CY16 over CY13 % Change	**-45.29%**	**-47.36%**
CY 2016	0.59	0.64
CY 2018	0.52	0.57
CY18 over CY16 % Change	-11.35%	-10.76%
Compounded % Change	**-51.50%**	**-53.03%**

Note: Line graph based on v32 prior to October 2015; and v35 October 2015 to December 2018; all data are final, but are subject to validation.

Medicare Savings and Total Cost of Care Performance

Under the All-Payer Model agreement, 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 the first year of the Model, non-hospital costs were contained, and Medicare saved money on both hospital and non-hospital costs.
- In the second year of the Model, Maryland Medicare hospital cost growth remained stable, but non-hospital costs increased and even offset some of the hospital savings achieved in the first year. Maryland exceeded the national

Medicare total cost of care growth rate in CY 2015 by approximately 0.33 percent.

- In the third year of the Model, hospital cost growth rate was favorable compared to the nation, but non-hospital growth continued to be higher than the nation. Even so, Medicare total cost of care growth in Maryland was lower than the nation by 0.73 percentage points in CY 2016.
- In the fourth year of the Model, hospital cost growth rate continued to be favorable compared to the nation, and non-hospital growth continued to be a concern. Medicare total cost of care growth in Maryland was above than the nation by 0.75 percentage points in CY 2017.
- In the fifth year of the Model, hospital cost growth rate continued to be favorable compared to the nation. While Maryland non-hospital growth was marginally higher than the national growth rate, national trends in non-hospital utilization increased significantly. As a result, Maryland's total cost of care growth was 1.30 percentage points below the nation through December 2018.

The following figures represent actual growth trends over the five years of the All-Payer Model. The trend measures growth for the current calendar year month versus the prior calendar year month.

Figure 4. Total Cost of Care per Capita, CY 2014-CY 2018

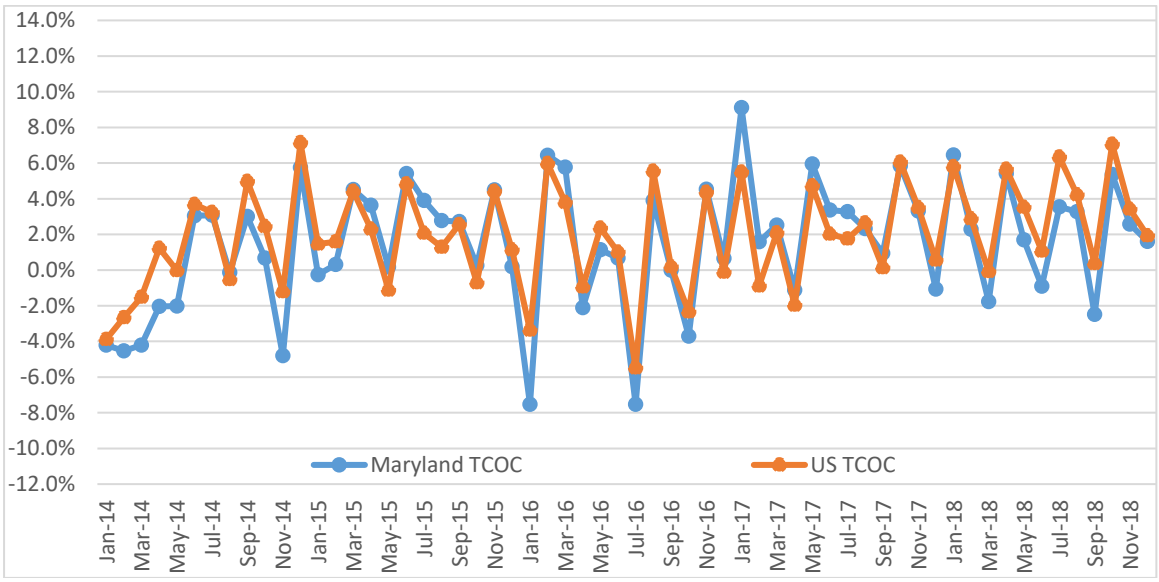


Figure 5. Medicare Hospital Spending per Capita, CY 2014- CY 2018

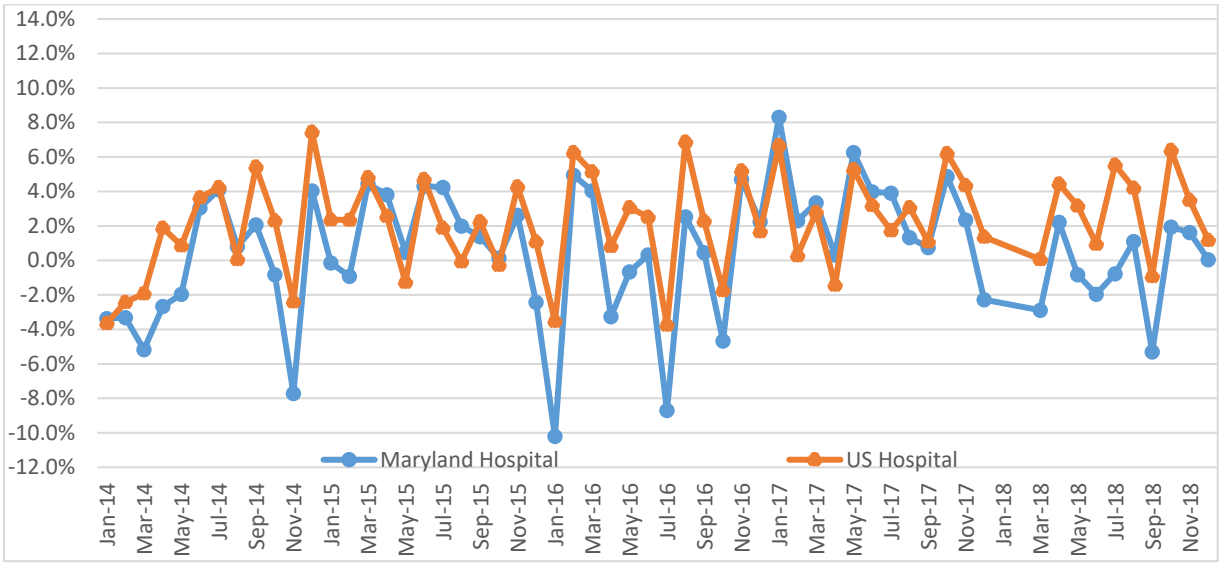
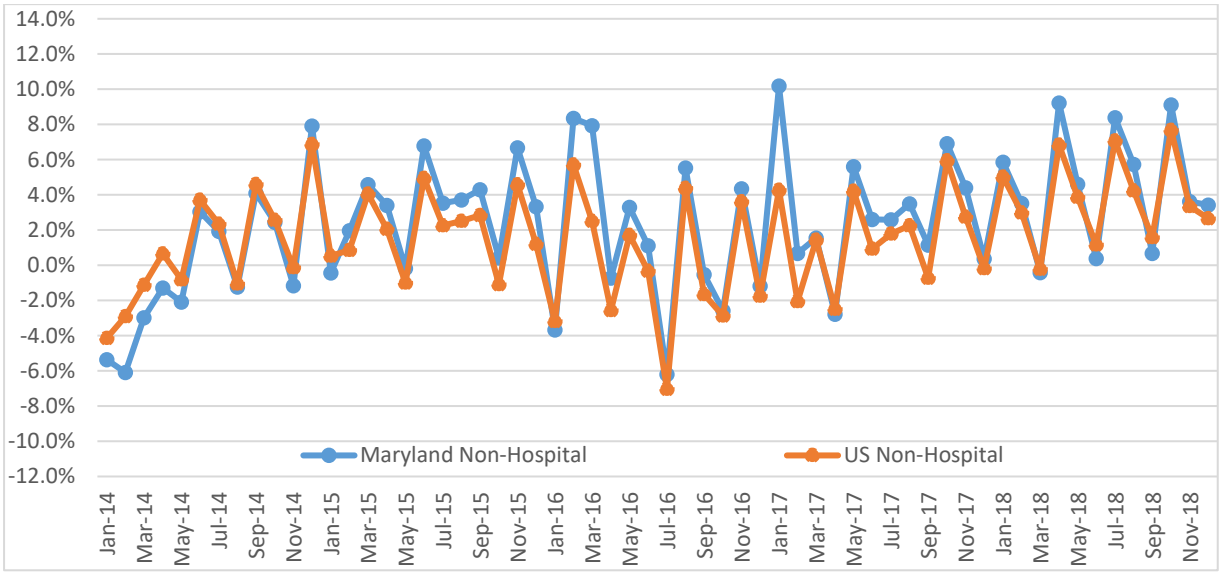


Figure 6. Medicare Non-Hospital Spending per Capita, CY 2014-CY 2018



Staff is continuing to monitor growth trends for hospital and total cost of care as we continue under the Total Cost of Care Model.

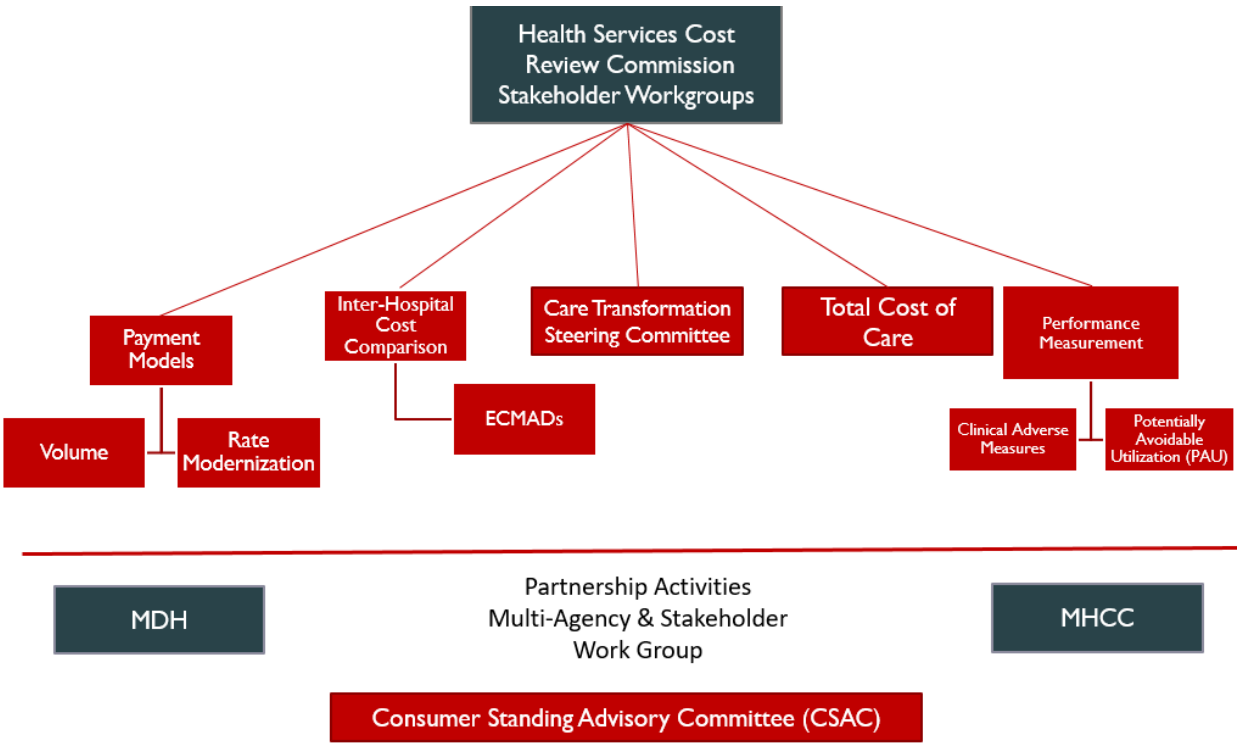
Section II – Workgroup Activities

The HSCRC continued to engage broadly with stakeholders in guiding policy and methodology development through various workgroup meetings throughout CY 2018. The Performance Measurement and Total Cost of Care Workgroups met monthly and the Payment Models Workgroup re-convened for monthly meetings in September 2018. Various subgroups were convened to help further refine new policies and methodologies impacting hospitals.

Figure 7 depicts the structure of the stakeholder engagement workgroups in 2018. All workgroup meetings are conducted in public sessions, and comments are solicited from the public at each meeting. There are also a number of 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 the Workgroup activities may be found on the Workgroups page on the HSCRC website.

Figure 7. Stakeholder Engagement Structure



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. The Workgroup met monthly from February to May 2018 to review the FY 2019 Annual Update Factor and other payment policies. In September, the group reconvened to vet new payment-related policies such as adjusting the public-payer differential, drug cost policies, and hospital rate modernization. New subgroups of Payment Models convened in Fall 2018, focusing on rate modernization and volume measurements.

Volume Adjustment Subgroup

The Volume Adjustment Workgroup was convened in November 2018 to review the various methodologies that affect hospitals' global revenue caps and potentially revise or replace them. The subgroup reviewed various components of core and supplemental

volume based methodologies, including Market Shift, Demographic Adjustment, and Drug Volume Funding, in order to evaluate potential modifications and restructuring to align with new TCOC Model goals. As a result of this workgroup, the Commission voted to reduce the number of service lines and geographies evaluated in the Market Shift methodology, thereby improving the statistical stability of the methodology. Staff was also directed to use the analyses outlined in the workgroup to improve the distribution of the Demographic Adjustment.

Inter-hospital Cost Comparison Workgroup

The Inter-hospital Cost Comparison (ICC) Subgroup convened in December 2017 and was tasked with reviewing and vetting modifications to the ICC methodology. Taking into account factors such as regional location, hospital size and case mix, the ICC allows HSCRC staff to evaluate and compare within a peer group, and the cost efficiency of a hospitals. The ICC is an important component in hospital full rate reviews, discussed in Section III of this report.

Equivalent Casemix Adjusted Discharges (ECMAD) Subgroup

The Commission convened an ECMAD subgroup in March 2018 which was tasked with reviewing and vetting the ECMAD methodology. The ECMAD methodology accounts for the different array of services hospitals provide and allows staff to assess hospital volume with a singular statistic. The HSCRC recently developed a new algorithm to calculate ECMADs with the goal of addressing concerns about cycle billing and weight suppression among various Enhanced Ambulatory Patient Groupings (EAPGs) that are utilized in multiple clinical settings such as the emergency department and clinic settings. ECMADs form the basis of most commission methodologies such as those used to calculate hospital efficiency, market shift, demographic adjustment, and total cost of care performance.

Performance Measurement Workgroup

The Performance Measurement Workgroup develops recommendations for HSCRC consideration on measures that are reliable, informative, and practical for assessing a number of important quality and efficiency issues. In the spring of 2018, the Workgroup considered the Readmission Reduction Incentive Program (RRIP) for RY 2020 and the Potentially Avoidable Utilization Savings Policy for RY 2019. In Fall 2018, the Workgroup reviewed RY 2021 policies, including the Maryland Hospital Acquired Conditions (MHAC) Program, the Quality-Based Reimbursement (QBR) Program, and the Readmissions Reduction Incentive Program (RRIP).

Clinical Adverse Event Measures Subgroup

The Clinical Adverse Event Measures Subgroup, a subgroup of the Performance Measurement Workgroup, convened in 2018 to assist in the refinement of Maryland's performance-based payment programs. Maryland operates a complications program that aims to reduce Maryland hospital acquired conditions (MHACs) and adverse events in hospitals. The workgroup developed a revised list of clinical adverse events for use in Maryland's hospital pay-for-performance programs. This work will help define the framework for measuring and reporting these events for use in payment programs under the new Total Cost of Care Model.

Potentially Avoidable Utilization (PAU) Subgroup

The PAU Subgroup convened in August 2018 to consider the modernization and expansion of potentially avoidable utilization in order to improve the PAU measure for RY 2021 and future years. The group was primarily focused on incorporating low value care measures, refining the application of existing measures of prevention quality indicators (PQIs) and readmissions, and adding additional measures of avoidable utilization to the PAU policy. The group met throughout Fall 2018 to help refine PAU methodologies under the TCOC Model. The main accomplishment of the group was to determine a methodology to assess hospitals on their per capita rates of avoidable admissions, which is important under the TCOC model.

Total Cost of Care Workgroup

The Total Cost of Care (TCOC) Workgroup is charged with providing feedback to the HSCRC on the development of specific methodologies and calculations for TCOC. The TCOC workgroup met monthly in 2018 to further refine methodologies related to the CY 2019 Medicare Performance Adjustment policy which impacts RY 2021 rates. Commissioners approved the Year 2 MPA Policy in November 2018.

Consumer Standing Advisory Committee

The Consumer Standing Advisory Committee (CSAC) builds on existing consumer engagement and involvement across various HSCRC and MDH Workgroups in an effort to bring together a diverse cross-section of consumers, consumer advocates, relevant subject matter experts, and other stakeholders. Workgroup goals include: ensuring that the consumer perspective is reflected in and remains central to the TCOC Model and ongoing modernization efforts; promoting understanding of the TCOC Model and its impact on improving healthcare for patients; and gathering input from consumers to ensure those perspectives are used to inform the policymaking process. In 2018, the committee received updates on hospitals transformation efforts, care redesign, and discussed consumer messaging and education strategies.

Section III – Alternative Methods of Rate Determination

The Maryland All-Payer Model agreement affords the State the ability to innovate by developing alternative methods of rate determination. During the first six months of the Maryland All-Payer Model, the HSCRC developed the global budget revenue (GBR) reimbursement model and engaged all hospitals not already under a total patient revenue (TPR) agreement in GBR. As of CY 2016, 98 percent of Maryland regulated hospital revenues are contained within GBR agreements. The two percent of non-GBR revenue accounts for drug costs which are funded based on volume.[19] In addition to regulated acute hospital revenue under global budgets, the HSCRC sets the rates of non-governmental payers and purchasers for psychiatric hospitals and Mount Washington Pediatric Hospital.

[19] Previous versions of this report have indicated that 100 percent of hospital revenue had moved under global budget arrangements as of 2017. The HSCRC has updated this number across all years of the Model to account for drug costs which are funded based on volume.

The GBR methodology was central to the success of the Maryland All-Payer Model and continues to be an essential part of the new Total Cost of Care Model. In contrast to the previous Medicare waiver that focused on controlling increases in Medicare inpatient payments per case, the Maryland All-Payer Model focused on controlling increases in total hospital revenue per capita. GBR agreements prospectively establish a fixed annual revenue cap for each hospital to encourage hospitals to focus on care improvement and population-based health management.

Under GBR contracts, each hospital's total annual revenue is known at the beginning of each fiscal year. Annual revenue is determined from a historical base period that is adjusted to account for inflation updates, demographic driven volume increases, performance on quality-based or efficiency-based programs, changes in payer mix, and changes in the levels of approved uncompensated care. Annual revenue may also be modified for changes in service levels, market shifts, or shifts of services to unregulated settings.

Refining Global Budget Methodologies

While the majority of Maryland hospitals transitioned to global budgets during the first six months of the Maryland All-Payer Model, a number of essential policies were not yet finalized to address issues such as adjusting global budgets for market shifts or changes to inter-hospital transfer rates, establishing rates for new hospitals, and providing hospitals flexibility to achieve annual GBR revenue while reducing PAU. As shown in this report, HSCRC staff worked closely with the Payment Models Workgroup, as well as a number of technical sub-workgroups to develop policies to address these issues. Additionally, HSCRC staff and Workgroup members emphasized that these policies will continually progress as underlying data resources improve and the State continues under the Total Cost of Care Model.

Global Budget Charge Corridors

A unique feature of global budgets that was refined is the capacity of a GBR hospital to increase or decrease its approved unit rates to achieve its overall approved global revenue. This mechanism allows a hospital the flexibility to compensate for fluctuations in service volume over the course of the year and still reach its annual revenue target. The hospital must vary these unit rates in unison and within a defined charge corridor or be subject to penalties. If a hospital is experiencing significant volume declines as a result of reduced utilization, it may submit a request to expand this corridor so that it can achieve the approved global revenue necessary for financial stability and population health investment. HSCRC staff review these charge corridor requests to determine the cause of hospital volume changes and the impact of the charge corridor expansion on the patient population, surrounding hospitals, and other factors related to the goals and requirements of the All-Payer Model.

Transfer Case Payment Adjustment Implementation

An early concern with the expansion of global budgets was the possibility that transfer rates to academic medical centers (AMCs) would increase, and high cost care would leave community hospitals with the associated revenue for cases that had been transferred. Global budget hospitals are encouraged to reduce potentially avoidable utilization (PAU) and promote care management and quality improvement. This could result in hospitals transferring a greater number of complex cases to AMCs in order to

both provide patients with the advanced care they need, as well as to reduce the high costs associated with such cases that the initial hospital would incur. The Transfer Case Adjustment addresses these concerns by ensuring that "receiving" hospitals have the capacity to take on a possible influx of complex cases without facing financial penalties under a global budget. The HSCRC established a process to monitor and adjust for changes in transfer rates to AMCs and from sending hospitals on a quarterly basis. The Transfer Case Adjustment Policy began in RY 2016.

Market Shift Adjustment (MSA) Development

In CY 2016, the HSCRC worked extensively with stakeholders to understand and adequately account for shifts in market volume, which were reflected in rate orders as of RY 2017. Staff believes it is important to move money when patients shift from one institution to another, thereby maintaining a competitive market place where the institution that acquires increased market share from another hospital receives a marginal cost adjustment of 50 percent to care for the larger share of patients. Given the dynamic healthcare market in Maryland, the HSCRC makes market shift adjustments on a semi-annual basis. The volume workgroup began to review this policy in 2018 to make formal updates in 2019 that include reducing the number of service lines and geographies evaluated in the MSA methodology, thereby improving the statistical stability of the policy.

HSCRC staff continue to track emergency department volumes and alert trends, whereby patients may be diverted from one hospital's emergency department to another. Based on its findings, staff may incorporate these data into market shift adjustments. Additionally, staff continues to monitor any services shifting to unregulated sites, which is not represented by the current hospital market shift calculations. As always, the HSCRC will continue to make market shift adjustments when significant events occur (e.g., movement of a service, closure of a service, or other very large shifts).

Full Rate Reviews

A moratorium was issued on full rate reviews in November 2015 and expired on October 31, 2017. In anticipation of that date, the Commission voted in September 2017 to approve an amended process for full rate reviews. Full rate reviews allow staff to initiate or hospitals to apply for a full review of rates across all hospital rate centers. Staff may then adjust rates as appropriate based on review findings. Due to the unique nature of global budgets, former processes and methodologies under the previous rate setting system no longer provided adequate analysis for review. The amended process allows for a more accurate comparison of hospitals under the new global budget system. Specifically, staff now utilize total cost of care growth calculations as well as a more refined version of the historical cost per case analysis. Staff continue to refine tools, such as the ICC mentioned in Section II, to assist in full rate reviews and in the future may bring in additional efficiency tools, such as total cost of care national benchmark analyses.

GBR Infrastructure and Community Benefit Reporting

In FYs 2014 through 2016, the Commission included over $200 million in rates to support hospitals in developing services and mechanisms to improve care delivery, population health, and care management. Hospitals submitted reports on these investments with program descriptions, expenditures, and results. Key areas of

investment over this time period included disease management, post-discharge and transitional care, community care coordination, case management, and consumer education and engagement. Reporting for GBR Infrastructure spending was suspended for FY 2017 to encourage hospitals to focus on developing care redesign initiatives and to avoid diverting staff attention from those efforts.

Currently, staff are exploring ways to combine community benefits reporting with GBR infrastructure reporting, as many of the investments may overlap and have similar goals to improve community and population health. Staff is still in nascent planning stages and anticipates this to be a long-term project that may be utilized in future hospital efficiency methodologies.

Transformation Implementation Awards

As part of its update factor process for FY 2017, the Commission authorized up to 0.25 percent of hospital rates to be used for intensive community-based care coordination activities for chronically ill patients. In FY 2017, the Commission awarded $36.5 million to fourteen hospital partnerships to work with community partners to reduce PAU. Awardees submitted an annual report in September 2018. Ongoing reporting will be required of all awardees, and the Commission maintains the authority to curtail funding if it is not used in accordance with the proposals as approved by the Commission. HSCRC staff is considering updates to the program in 2019 to increase alignment with the goals of the TCOC Model and State population health improvement goals.

Section IV – Reports Submitted to CMS

The All-Payer Model agreement required the HSCRC to report to CMS on relevant policy and implementation developments. To date, the HSCRC has met all of the reporting requirements outlined in the All-Payer Model agreement by submitting the following information to CMS:

- Maryland All-Payer Model Annual Monitoring Report: This annual report was submitted to CMS in August 2018. It contains data for performance years 2014, 2015, 2016, and 2017, as well as 2013 baseline measures. A final report on select measures as agreed to by CMS was submitted May 2019.

Please find the most recent annual report submitted to CMS attached to this biannual report.

Section V - Implementation of the Total Cost of Care Model

On July 9, 2018, Governor Hogan, alongside CMS and other State leaders, signed the Maryland Total Cost of Care (TCOC) Contract, authorizing the January 1, 2019 start of the TCOC Model. Under the new TCOC Model, Maryland is expected to progressively transform care delivery across the health care system with the objective of improving health and quality of care. At the same time, State growth in Medicare spending must be maintained lower than the national growth rate. The new TCOC Model gives the State flexibility to tailor initiatives to the Maryland healthcare context, and encourage providers to drive health care innovation. The TCOC Model encourages continued Care Redesign and initiated the Maryland Primary Care Program (MDPCP) to provide new tools and resources for primary care providers to better meet the needs of patients with

complex and chronic conditions and help Marylanders achieve better health status overall.

Total Cost of Care Model Builds on Existing Momentum

The new Total Cost of Care Model leverages the foundation already developed by Maryland for hospitals and builds on the investments that hospitals have made since 2014. Maryland will continue to encourage provider- and payer-led development of care redesign programs to support innovation. Maryland is also continuing efforts to implement the MDPCP, which is voluntary to all qualifying Maryland primary care providers and provides funding and support for the delivery of advanced primary care throughout the State. 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. Finally, the State will commit its public health resources to support population health improvements that are aligned with Model goals and Marylanders' needs.

Medicare Performance Adjustment

The HSCRC implemented the Medicare Performance Adjustment (MPA) to assist the State in the transition to the Total Cost of Care Model, which focuses on controlling TCOC. The MPA adjusts hospital Medicare payments based on Medicare TCOC performance. Commissioners voted on the initial policy in November 2017 to allow for a January 2018 implementation date, with payment adjustments beginning in July 2019 (RY 2020). Based on hospital performance in CY 2018, these adjustments are net positive payments to hospitals given favorable TCOC performance across the State. The TCOC Workgroup, describe in Section II of this report, worked throughout 2018 to refine the methodology of the MPA to guide implementation in CY 2019 and future years. Commissioners approved the CY 2019 policy in November 2018, which will impact Medicare payment adjustments for RY 2021.

Care Redesign Program

In April 2017, the State received approval from CMS for an amendment to the existing All-Payer Model contract to implement specific care redesign strategies and to provide hospitals and providers with the tools and flexibility necessary to achieve the goals of the All-Payer Model and transition to the Total Cost of Care Model. The Chesapeake Regional Information System for our Patients (CRISP) serves as the administrator of the program.

Two care redesign tracks were designed at the beginning of the program to encourage hospital and physician alignment: the Hospital Care Improvement Program (HCIP) and the Complex and Chronic Care Improvement Program (CCIP). HCIP aims to facilitate care improvement and efficiency within hospitals, while CCIP focuses on improving care for high-risk and rising needs patients through increased care coordination among hospitals and community physicians.

The Episode Care Improvement Program (ECIP) was developed in 2018 and allows hospitals to link payments to providers across certain clinical episodes of care. This is modeled off of CMS' Bundled Payments for Care Improvement Advanced (BPCI-Advanced) program. This episode payment approach aligns incentives across hospitals, physicians, and post-acute care facilities to generate savings and improve quality through

better care management during episodes, eliminating unnecessary care, and reducing post-discharge emergency department visits and hospital readmissions. CMS approved this track in June 2018 and sixteen hospitals are currently participating.

As of July 2019, there is a total of 42 unique participants across all tracks, with 40 hospitals participating in HCIP, sixteen hospitals participating in ECIP, and two hospitals participating in CCIP. Participation in CCIP declined significantly in 2019 as hospitals opted to participate in the Maryland Primary Care Program (MDPCP) instead. In February 2019, HSCRC notified CMMI of the intent to end CCIP at the end of 2019.

Additional information on care redesign can be found at https://hscrc.maryland.gov/Pages/CareRedesign.aspx.

Stakeholder Innovation Group

Maryland's Secretary of Health directed Maryland stakeholders to convene an advisory group to discuss ongoing health care delivery and payment innovations that may be leveraged or scaled, as well as to identify and develop any additional tools or programs needed to realize the goals of the TCOC Model. The group, known as the Stakeholder Innovation Group (SIG), is a broad group of health care industry representatives including hospitals, physicians, skilled nursing and long term care facilities, and payers. The group is staffed by the Maryland Hospital Association and attended by several State agencies including the HSCRC, Maryland Health Care Commission, and Maryland Department of Health. The group met throughout 2018 and early 2019 to collaborate on the development of new tools and make recommendations to the MDH that may be incorporated into the implementation strategy of the TCOC Model.

Key Elements of the New Model

Core requirements and expectations of the new model, which began January 1, 2019, include the following:

- The new Total Cost of Care Model will run for a 10-year term, so long as Maryland meets the model performance requirements.
- Average annual hospital cost growth per capita for all payers must not exceed 3.58 percent per year. The State has the opportunity to adjust this growth limit based on economic conditions, subject to federal review and approval.
- Maryland commits to saving $300 million in annual total Medicare spending for Medicare Part A and Part B by the end of 2023. The Medicare savings required in the TCOC Model will build on the ongoing work of Maryland stakeholders, which began in 2014. Maryland reached $273 million in annual TCOC savings in CY 2018, achieving $869 million cumulative TCOC savings over the course of the All-Payer Model.
- Resources will be invested in primary care and delivery system innovations, consistent with national and State goals to improve chronic care and population health.
- The Model will help physicians and other providers leverage voluntary initiatives and federal programs to align participation in efforts focused on improving care and care coordination, and participation in incentive programs that reward those results. These programs will be voluntary, and the State will not undertake in setting Medicare and private fee schedules for physicians and clinicians.
- Maryland will set aggressive quality of care goals.

- Maryland will set a range of population health goals.

Additional information about the new Total Cost of Care Model can be found at https://hscrc.maryland.gov/Pages/tcocmodel.aspx.

Section VI – Reporting Adverse Consequences

At this time, the HSCRC has not observed any adverse consequences on patients or the public generally as a result of the implementation of the Maryland All-Payer Model.

A number of policies developed in the past four years of implementation guard against potential adverse consequences that HSCRC staff and stakeholder workgroups identified as possible unintended outcomes of implementation. The GBR agreements initiated by the HSCRC for implementation of the global budgets contain consumer protection clauses. The HSCRC, in conjunction with the Payment Models Workgroup, developed the Transfer Adjustment Policy and a Market Shift 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 (AMCs).

Additionally, the HSCRC is continuing to refine tools to monitor changes in patterns of service, particularly shifts in utilization and expenditures across all healthcare providers. One area that has been under considerable scrutiny is the potential diversion of patients from one Emergency Department to other surrounding hospitals' Emergency Departments. In CY 2017, the HSCRC began to study the utilization of Emergency Department services, diversions from one hospital to another, and the efficiency of moving patients through the Emergency Department at a particular hospital. Although wait times and efficiency measures for Maryland Emergency Departments has been historically worse relative to the nation, the HSCRC has devoted time and resources to identify potential causes of Emergency Department delays or diversions and to appropriately address them. Additionally, in the RY 2020 Quality Based Reimbursement policy, the Commission voted to hold hospitals financially at risk for excessive emergency room wait times that show no sign of improvement.

Other tools to measure market shifts potentially associated with the All-Payer Model include a Total Cost of Care Reporting Template, which was developed with the aim of compiling public and private payer hospital and non-hospital claims in order to assess the growth and shifts that occur within the regulated and unregulated hospital markets, as well as those changes that occur among non-hospital healthcare providers. Claims data is compiled from the All Payer Claims Data operated by MHCC and from data submitted to the HSCRC by public payers. The HSCRC continues to improve its processes with MHCC and payers to obtain the needed data in the most efficient and timely manner possible to appropriately monitor changes in utilization and expenditures.

During CY 2016 through CY 2018, the HSCRC also continued its work to engage consumers through a Consumer Standing Advisory Committee (CSAC), which builds on the foundation laid by the Consumer Engagement and Outreach Workgroup in 2015.

The HSCRC workgroup process is considered a model for stakeholder engagement in major policy endeavors. Stakeholder engagement is key to the implementation and success of the TCOC Model. The HSCRC has made significant efforts to be as transparent as possible in its initiatives and policy developments by making these workgroup meetings open to the public and by posting the meeting materials and recordings on the HSCRC's website. More information can also be found in Section II of this report.

As mentioned earlier in the report, one area of caution for our current contract is the fluctuation in trends of the total cost of care. In the All-Payer Model 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, which includes cost related to all health care providers, not just hospitals. The All-Payer Model contract provides that in any one calendar year, Medicare total cost of care growth in Maryland may not grow more than 1 percent above Medicare total cost of care growth nationally. Further, the growth in Maryland may not exceed the national average in two consecutive years. The HSCRC monitored this measure closely in 2018 to ensure that the two consecutive year requirement was not breached, as Maryland total cost of care was 0.76 percent above the nation in CY 2017. Through the end of 2018, Maryland total cost of care is 1.30 percent below the nation for CY 2018. More detailed information on Maryland's TCOC Performance can be found in Section I of this report.

Contact and More Information

For questions about this report or more information, please contact Tequila Terry, Deputy Director, at tequila.terry1@maryland.gov.

More information is available on HSCRC's website: http://www.hscrc.maryland.gov.

Appendix 1. Maryland All-Payer Model Monitoring Report to CMS