



**599th Meeting of the Health Services Cost Review Commission  
October 12, 2022**

(The Commission will begin in public session at 11:30 am for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00pm)

**EXECUTIVE SESSION  
11:30 am**

1. Discussion on Planning for Model Progression – Authority General Provisions Article, §3-103 and §3-104
2. Update on Administration of Model - Authority General Provisions Article, §3-103 and §3-104
3. Update on Commission Response to COVID-19 Pandemic - Authority General Provisions Article, §3-103 and §3-104

**PUBLIC MEETING  
1:00 pm**

1. Review of Minutes from the Public and Closed Meetings on September 14, 2022
2. Docket Status – Cases Closed
3. Docket Status – Cases Open
  - 2604A - University of Maryland Medical Center
  - 2605A - University of Maryland Medical Center
  - 2606A - John Hopkins Health
  - 2607A - University of Maryland Medical Center
  - 2601N - Luminis Health Doctors Community Medical Center
4. Legal Update
5. Regional Partnership - 2021 Report
  - a. Staff Report
  - b. Baltimore Metropolitan Diabetes Regional Partnership Presentation
6. Draft RY 2025 Quality Based Reimbursement (QBR) Policy
7. Maryland CY 2022 Performance and Next Steps
  - a. Model Monitoring
  - b. Open Discussion
8. Policy Update and Discussion
  - a. RY 2023 Quality Revenue Adjustments Update
  - b. Maryland Progression Plan Development
9. Hearing and Meeting Schedule

## Cases Closed

The closed cases from last month are listed in the agenda

**IN RE: THE APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
UNIVERSITY OF MARYLAND  
MEDICAL CENTER  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2022  
\* FOLIO: 2394  
\* PROCEEDING: 2604A**

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**Staff Recommendation**

**October 12, 2022**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on August 30, 2022, requesting approval to continue its participation in a global rate arrangement with BlueCross and BlueShield Association Blue Distinction Centers for solid organ and blood and bone marrow transplant services for a period of one year beginning October 1, 2022.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

The Hospital will continue to submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

## **V. STAFF EVALUATION**

The staff found that the experience under this arrangement for the prior year has been unfavorable. According to the Hospital, the losses under this arrangement can be attributed to several extraordinary outlier cases. Staff believes that absent these cases that the Hospital can again achieve favorable experience under this arrangement.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for blood and bone marrow transplant services, for a one-year period commencing October 1, 2022. The Hospital will need to file a renewal application for review to be considered for continued participation.

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

**IN RE: THE APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
UNIVERSITY OF MARYLAND  
MEDICAL CENTER  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2022  
\* FOLIO: 2395  
\* PROCEEDING: 2605A**

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**Staff Recommendation**

**October 12, 2022**

## **I. INTRODUCTION**

University of Maryland Medical Center (the Hospital) filed an application with the HSCRC on August 30, 2022, for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The Hospital requests approval from the HSCRC to continue to participate in a global rate arrangement for heart, liver, kidney, lung, and pancreas transplants, SPK services, blood and bone marrow transplants and VAD services for a period of one year with Cigna Health Corporation beginning October 1, 2022.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

The Hospital will continue submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

## **V. STAFF EVALUATION**

The staff found that the Hospital's experience under this arrangement for the previous year was favorable. Staff believes that the Hospital can continue to achieve a favorable performance.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for heart, liver, kidney, lung, and pancreas transplants, SPK services, blood and bone marrow transplants and VAD services, for a one year period commencing October 1, 2022. The Hospital will need to file a renewal application to be considered for continued participation.

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



**IN RE: THE APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
JOHNS HOPKINS HEALTH  
SYSTEM  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2022  
\* FOLIO: 2416  
\* PROCEEDING: 2606A**

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**Staff Recommendation  
October 14, 2022**

## **I. INTRODUCTION**

Johns Hopkins Health System (the “System”) filed an application with the HSCRC on September 28, 2022, on behalf of its member Hospitals (the “Hospitals”) for a new alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC to participate in a global rate arrangement for Cardiovascular services, Bariatric Surgery, Orthopedic Services (shoulder, hip, knee, and spine), Gallbladder, Thyroid/Parathyroid, Oncology Diagnosis, and Prostate services with Employer Direct Healthcare. The System requests that the approval be for a period of one year beginning November 1, 2022.

## **II. OVERVIEW OF APPLICATION**

The contract will be held and administered by Johns Hopkins HealthCare, LLC (“JHHC”), which is a subsidiary of the System. JHHC will manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to regulated services associated with the contract.

## **III. FEE DEVELOPMENT**

The hospital portion of the updated global rates was developed by calculating mean historical charges for patients receiving similar joint replacement services at the Hospitals. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

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

## **V. STAFF EVALUATION**

Staff found that the experience under this arrangement for the last year has been favorable.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for Cardiovascular services, Bariatric Surgery, Orthopedic Services (shoulder, hip, knee, and spine), Gallbladder, Thyroid/Parathyroid, Oncology Diagnosis, and Prostate services with Employer Direct for a one-year period commencing November 1, 2022. The Hospitals will need to file a renewal application for review to be considered for continued participation. Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document would formalize the understanding between the Commission and the Hospitals and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
UNIVERSITY OF MARYLAND  
MEDICAL CENTER  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2022  
\* FOLIO: 2417  
\* PROCEEDING: 2607A**

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**Staff Recommendation**

**October 14, 2022**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“the Hospital”) filed a renewal application with the HSCRC on September 1, 2022, for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The Hospital requests approval from the HSCRC to continue to participate in a global rate arrangement for solid organ and blood and bone marrow transplant services with Humana for a period of one year beginning November 1, 2022.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

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

## **V. STAFF EVALUATION**

The staff reviewed the experience under this arrangement for the last year and found that it was favorable. The staff believes that the Hospitals can continue to achieve a favorable experience under this arrangement.

## **VI. STAFF RECOMMENDATION**

Staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for solid organ and blood and bone marrow transplant services for one year beginning November 1, 2022.

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

<b>IN RE: THE PARTIAL RATE</b>	*	<b>BEFORE THE HEALTH SERVICES</b>
<b>APPLICATION OF THE</b>	*	<b>COST REVIEW COMMISSION</b>
<b>LUMINIS HEALTH DOCTORS</b>	*	<b>DOCKET: 2022</b>
<b>COMMUNITY MEDICAL CENTER</b>	*	<b>FOLIO: 2411</b>
<b>LANHAM, MARYLAND</b>	*	<b>PROCEEDING: 2601N</b>

**Staff Recommendation**  
**October 12, 2022**

## **Introduction**

On July 18, 2022, Luminis Health Doctors Community Medical Center (“the Hospital”), submitted a partial-rate application to obtain a new Psychiatric Acute (PSY) rate. The Hospital has an approved Certificate of Need to establish a 16-bed inpatient adult psychiatric unit. They requested to establish a unit rate for PSY services effective November 1, 2022.

## **Staff Evaluation**

HSCRC policy is to set the rates for new services at the lower of the statewide median or at a rate based on the Hospital’s projections. The Hospital requested a PSY rate of \$1,612.80 per patient days, which represents the statewide median rate for PSY services.

<b><u>Service</u></b>	<b><u>Service Unit</u></b>	<b><u>Unit Rate</u></b>	<b><u>Projected Volumes</u></b>	<b><u>Approved Revenue</u></b>
Psychiatric Acute	Patient Days	\$1,612.80	1,688	\$2,722,406

## **Recommendation**

After reviewing the Hospital’s application, the staff recommends:

1. That the PSY rate of \$1,612.80 per patient days be approved effective November 1, 2022;
2. That the PSY rate center not be rate realigned until a full year of cost data has been reported to the Commission; and
3. That no change be made to the Hospital’s Global Budget Revenue for the PSY services.



## **Subtitle 37 HEALTH SERVICES COST REVIEW COMMISSION**

### **10.37.01 Uniform Accounting and Reporting System for Hospitals and Related Institutions**

Authority: Health-General Article, Sections §§19-207 and 19-215, Annotated Code of Maryland

#### **Notice of Proposed Action**

[20-168-P-I]

The Health Services Cost Review Commission proposes to amend Regulation .02 under **COMAR 10.37.01 Uniform Accounting and Reporting System for Hospitals and Related Institutions**. This action was considered and approved for promulgation by the Commission at an open meeting held on October 12, 2022, notice of which was given through the Commission's website.

If adopted, the proposed amendments will become effective on or about January 15, 2023.

#### **Statement of Purpose**

The purpose of this action is to update the Commission's manual entitled "Accounting and Budget manual for Fiscal and Operation Management (August 1987)," which has been incorporated by reference.

#### **Comparison to Federal Standards**

There is no corresponding federal standard to this proposed action.

#### **Estimate of Economic Impact**

The proposed action has no economic impact.

#### **Economic Impact on Small Businesses**

The proposed action has minimal or no economic impact on small businesses.

#### **Impact on Individuals with Disabilities**

The proposed action has no impact on individuals with disabilities.

#### **Opportunity for Public Comment**

Comments may be sent to William Hoff, Chief, Audit and Compliance, Health Services Cost Review Commission, 4160 Patterson Avenue, Baltimore, MD 21215, or call 410-764-3488, or email to [William.hoff@maryland.gov](mailto:William.hoff@maryland.gov), or fax to 410-358-6217. Comments will be accepted for thirty (30) days following the publication of this proposal. A public hearing has not been scheduled.

#### **Open Meeting**

It is anticipated that final action on the proposal will be considered by the Health Services Cost Review Commission during a public meeting to be held on December 14, 2022, at 1 p.m., at 4160 Patterson Avenue, Baltimore, MD 21215.

**.02 Accounting System; Hospitals.**

A. The Accounting System.

(1) (text unchanged)

(2) (text unchanged)

(a)—(x) (text unchanged)

(y) Supplement 25 (February 10, 2020); [and]

(z) Supplement 26 (January 14, 2021)[.];

**(aa) Supplement 27 (October 12, 2022).**

(3)—(5) (text unchanged)

B.—D. (text unchanged)

**ADAM KANE**

**Chair**

**Health Services Cost Review Commission**



maryland  
**health services**  
cost review commission

# Regional Partnership Catalyst Program

Calendar Year 2021 Activities - Final Report

October 2022

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## Introduction

The Health Services Cost Review Commission (HSCRC) created the Regional Partnership Catalyst Program (Catalyst Program) to advance the population health goals of the Total Cost of Care (TCOC) Model. The Catalyst Program funds hospital-led teams to advance two population health priority areas that are part of the Statewide Integrated Health Improvement Strategy (SIHIS): (1) diabetes prevention and management and (2) behavioral health crisis services. Teams include neighboring hospitals and community organizations such as local health departments (LHDs), local behavioral health authorities (LBHAs), non-profit and social service organizations, and provider groups to develop and implement interventions.

Goals of the Catalyst Program include:

- Partnerships and strategies resulting in long-term improvement in the population health metrics of the TCOC Model;
- Increased number of prevention and management services for persons at risk for or living with diabetes;
- Reduced use of hospital emergency departments (EDs) for behavioral health and improved approaches for managing acute behavioral health needs;
- Integration and coordination of physical and behavioral health services to improve quality of care; and
- Engagement and integration of community resources into the transforming healthcare system.

For the period January 2021 through December 2025, the HSCRC is issuing \$165.4 million in cumulative funding through nine awards to eight Regional Partnerships. The five-year cycle creates time to build partnerships and infrastructure prior to implementing interventions. This report summarizes activity for the first year of funding, Calendar Year (CY) 2021.

## Overview of the Regional Partnership Catalyst Program

The Catalyst Program builds on the HSCRC's Regional Partnership Transformation Grant Program, launched in 2015 to reduce potentially avoidable utilization and per capita costs and demonstrate a positive return on investment through Medicare savings. The Regional Partnership Transformation Grant Program funded fourteen hospital-led partnerships, involving 41 of Maryland's acute care hospitals. Interventions were diverse, spanning behavioral health integration, care transitions, home-based care, mobile health, and patient engagement/education strategies focused on high-need and high-risk Medicare patients.

Subsequent to the Regional Partnership Transformation Grant Program's expiration in June 2020, the HSCRC established the Catalyst Program to enable hospital-led partnerships to continue to build

infrastructure in support of the population health goals of the TCOC Model and SIHIS. The Catalyst Program made awards under two funding streams: (1) diabetes prevention and management and (2) behavioral health crisis services. The Catalyst Program is based on the HSCRC philosophy of fostering collaboration among hospitals and community partners while creating infrastructure to disseminate evidence-based interventions.

## **Diabetes Prevention and Management Programs**

Maryland needs significantly more diabetes prevention and management resources for the State's pre-diabetic population. The diabetes prevention and management funding stream supports Regional Partnerships implementing the Centers for Disease Prevention & Control (CDC) recommended Diabetes Prevention Program (DPP). DPP has shown long-term success in helping to prevent the onset of diabetes and promote weight-loss for those with pre-diabetes.

This funding stream also supports implementation of Diabetes Self-Management Training (DSMT) and Diabetes Self-Management Education and Support (DSMES). DSMT/ES provides lifestyle change help and diabetes management curriculum to Medicare beneficiaries to help better control their Type II diabetes. Regional Partnerships under the Catalyst Program must receive American Diabetes Association (ADA) or American Association of Diabetes Education (AADE) accreditation for their respective DSMT and DSMES programs.

Funding is available for wrap-around services to bolster the impact of DPP and DSMT/ES. For example, Medical Nutrition Therapy (MNT) could be provided as a wrap-around service. It is provided by registered dietitians as an intensive, focused, and comprehensive nutrition therapy service. MNT delivered concurrently with DSMT/ES has been shown to increase the ability of patients to manage their diabetes. Additional wraparound services to support patient success in DPP and DSMT/ES include healthy food access, exercise programs, and transportation services to in-person classes.

DPP and DSMT/ES offer Regional Partnerships a pathway to sustainability via Medicare, Medicaid and/or commercial payer reimbursement. However, Medicare billing requires suppliers to make substantial investments in certification, training, and administration. Catalyst Program funding helps build this infrastructure by supporting start-up costs, including recruitment, training, and certification.

## **Behavioral Health Crisis Programs**

The TCOC Model incentivizes reductions in unnecessary emergency department (ED) and hospital utilization. Across Maryland, hospitals cite opioid use disorder and inadequate access to acute mental

health as contributors to ED overcrowding. Maryland currently lacks sufficient infrastructure needed to divert behavioral health crisis needs from EDs and inpatient settings to more appropriate community-based care. Community-based organizations often do not receive reimbursement for crisis management services and struggle to provide the capacity needed in Maryland.

The behavioral health crisis services funding stream supports development and implementation of infrastructure and interventions consistent with the [“Crisis Now: Transforming Services is Within Our Reach”](#) action plan developed by the National Action Alliance for Suicide Prevention.<sup>1</sup> Regional Partnerships are implementing one or more of the following:

- **Air Traffic Control (ATC)<sup>2</sup> Capabilities with Crisis Line Expertise.** The ATC model is based on always knowing the location of an individual in crisis and verifying hand-offs to the next provider. The model creates a hub for deployment of mobile crisis services and access to other services such as crisis stabilization. The model’s essential components include qualified crisis call centers and 24/7 clinical coverage with a single point of contact for a defined region.
- **Community-Based Mobile Crisis Teams.** Mobile crisis services deploy real-time professional and peer intervention to the location of a person in crisis. It is intended to avoid unnecessary ED use and hospitalization.
- **Stabilization Centers.** Crisis stabilization services provide 24-hour observation and supervision at a sub-acute level to prevent or ameliorate behavioral health crises and/or address acute symptoms of mental illness. Settings are small and home-like relative to institutional care.

## Summary of Awards

The HSCRC awarded a cumulative \$165.4 million through nine awards to eight Regional Partnerships for the five-year period of January 2021 through December 2025. Six of the nine awards fall under the diabetes prevention and management funding stream. These six awards total \$86.3 million and involve 24 hospitals. They span Western, Central, and Southern Maryland as well as the Capital Region. Three of the nine awards fall under the behavioral health crisis services funding stream. These three awards total \$79.1 million and involve 24 hospitals. They span Central Maryland, portions of the Capital Region, and the Lower Eastern Shore. A summary of awards is shown in **Table 1**.

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<sup>1</sup> National Action Alliance for Suicide Prevention: Crisis Services Task Force. (2016). Crisis now: Transforming services is within our reach. Washington, DC: Education Development Center, Inc. Available at: <https://theactionalliance.org/sites/default/files/crisisnow.pdf>

<sup>2</sup> Also referred to as “Care Traffic Control” by Regional Partnerships implementing this element of the Crisis Now Model.

Table 1. Summary of Regional Partnership Catalyst Program Awards, CY 2021 – CY 2025

	Regional Partnership	Counties/ Region	Award	Participating Hospitals
Diabetes Prevention and Management	<b>Baltimore Metropolitan Diabetes Regional Partnership</b>	<ul style="list-style-type: none"> <li>Baltimore City</li> </ul>	\$43,299,986	<ul style="list-style-type: none"> <li>JH Bayview Medical Center</li> <li>Howard County General Hospital</li> <li>Johns Hopkins Hospital</li> <li>Suburban Hospital</li> <li>UMMC</li> <li>UMMS Midtown</li> </ul>
	<b>Western Regional Partnership</b>	<ul style="list-style-type: none"> <li>Allegany</li> <li>Frederick</li> <li>Washington</li> </ul>	\$15,717,413	<ul style="list-style-type: none"> <li>Frederick Health</li> <li>Meritus Medical Center</li> <li>UPMC Western Maryland</li> </ul>
	<b>Nexus Montgomery</b>	<ul style="list-style-type: none"> <li>Montgomery</li> </ul>	\$11,876,430	<ul style="list-style-type: none"> <li>Holy Cross Germantown</li> <li>Holy Cross Hospital</li> <li>Shady Grove Medical Center</li> <li>White Oak Medical Center</li> </ul>
	<b>Totally Linking Care (TLC)</b>	<ul style="list-style-type: none"> <li>Charles</li> <li>Prince George's</li> <li>St. Mary's</li> </ul>	\$7,379,620	<ul style="list-style-type: none"> <li>Adventist -Fort Washington Medical Center</li> <li>Luminis Doctors Community Hospital</li> <li>MedStar St. Mary's</li> <li>MedStar Southern Maryland</li> <li>UM Capital Region Health</li> <li>UM Laurel Regional Medical Center</li> </ul>
	<b>Saint Agnes and Lifebridge</b>	<ul style="list-style-type: none"> <li>Baltimore City</li> <li>Baltimore County</li> </ul>	\$5,962,333	<ul style="list-style-type: none"> <li>Ascension St. Agnes</li> <li>Sinai Hospital</li> <li>Grace Medical Center</li> </ul>
	<b>Full Circle Wellness</b>	<ul style="list-style-type: none"> <li>Charles</li> </ul>	\$2,214,862	<ul style="list-style-type: none"> <li>UM Charles Regional Medical Center</li> </ul>
Behavioral Health Crisis Services	<b>Greater Baltimore Region Integrated Crisis System (GBRICS)</b>	<ul style="list-style-type: none"> <li>Baltimore City</li> <li>Baltimore County</li> <li>Carroll</li> <li>Howard</li> </ul>	\$44,862,000	<ul style="list-style-type: none"> <li>Bayview Medical Center</li> <li>Carroll Hospital</li> <li>Grace Medical Center</li> <li>Greater Baltimore Medical Center</li> <li>Howard County General</li> <li>Johns Hopkins Hospital</li> <li>Ascension St. Agnes</li> <li>Sinai</li> <li>MedStar Franklin Square</li> <li>MedStar Good Samaritan</li> <li>MedStar Harbor</li> <li>MedStar Union Memorial</li> <li>Mercy</li> <li>Northwest</li> <li>University Maryland Medical Center</li> <li>UM Midtown</li> <li>UM St. Joseph Medical Center</li> </ul>



	<b>Totally Linking Care (TLC)</b>	<ul style="list-style-type: none"> <li>• Prince George's</li> </ul>	\$22,889,722	<ul style="list-style-type: none"> <li>• Adventist Fort Washington Medical Center</li> <li>• MedStar Southern Maryland</li> <li>• UM Laurel Medical Center</li> <li>• UM Capital Region Health</li> </ul>
	<b>Tri-County Behavioral Health Engagement (TRIBE)</b>	<ul style="list-style-type: none"> <li>• Lower Eastern Shore</li> </ul>	\$11,316,332	<ul style="list-style-type: none"> <li>• Atlantic General Hospital</li> <li>• TidalHealth - Peninsula Regional Medical Center</li> </ul>
<b>Total Awards</b>			<b>\$165,428,698</b>	

An overview of Catalyst Program activities by Regional Partnership is shown below in **Table 2**. The table is inclusive of current and planned activities through the duration of the program. The diabetes prevention and management activities emphasize community partnership building and infrastructure expansion to expand DPP and DSMT/ES services, as well as wrap-around services to support engagement. The behavioral health crisis activities focus on increasing immediate access to behavioral health care through implementing elements of the CrisisNow Model.

*Table 2. Overview of Catalyst Program Activities by Regional Partnership*

Regional Partnership		Catalyst Program Activities
<b>Diabetes Prevention and Management</b>	<b>Baltimore Metropolitan Diabetes Regional Partnership</b>	<ul style="list-style-type: none"> <li>• Establish centralized management services for DPP and DSMT/ES</li> <li>• Build partnerships with community stakeholders including faith-based organizations, senior citizen centers, and community engagement centers</li> <li>• Expand DSMT/ES sites beyond hospital outpatient clinics</li> <li>• Integrate social needs wrap-around services, including food security and transportation.</li> <li>• Build technology infrastructure for information transfer throughout the State</li> </ul>
	<b>Western Regional Partnership</b>	<ul style="list-style-type: none"> <li>• Increase DPP certified leaders, participant recruitment and retention, and classes</li> <li>• Rapidly expand virtual, in-person, and hybrid DSMT/ES capabilities</li> <li>• Implement and expand evidence-based nutrition and physical activity programs into current patient practice and coordinate external partners</li> <li>• Integrate mental health screenings into patient intake</li> <li>• Partner with community-based organizations and deploy community health workers for social needs screening and resource navigation</li> </ul>
	<b>Nexus Montgomery</b>	<ul style="list-style-type: none"> <li>• Improve the supply of DPP and DSMT/ES providers and programs by increasing capacity support and process improvement</li> <li>• Increase the demand for DPP and DSMT/ES programs through public outreach campaigns to raise program awareness</li> <li>• Ensure diabetes outcomes through referral and case management</li> </ul>

	<b>Totally Linking Care</b>	<ul style="list-style-type: none"> <li>Expand the number of DPPs and DSMT/ES operating in the target region</li> <li>Expand outreach, screening, and referrals to DPPs and DSMT/ES</li> <li>Expand wrap-around services to support DPP and DSMT/ES engagement, retention, and completion</li> <li>Establish training and technical assistance for healthcare and social service providers to support DPP and DSMT/ES programs</li> </ul>
	<b>Saint Agnes and Lifebridge</b>	<ul style="list-style-type: none"> <li>Expand evidence-based diabetes education and DPP by recruiting, training, and supporting twelve Certified DPP LifeStyle coaches within the community</li> <li>Improve access to healthy food for individuals with prediabetes/diabetes by expanding virtual supermarket access to food insecure patients</li> </ul>
	<b>Full Circle Wellness</b>	<ul style="list-style-type: none"> <li>Expand DSMT/ES services by hiring a full-time RN CDCES and a full-time dietician</li> <li>Offer wrap-around services including MNT, home visits, telehealth, pulmonary exercise, transportation, patient support groups, and medication delivery</li> <li>Utilize community health workers, lifestyle coaches, nurse navigators, and pharmacist technicians to provide social support for patients, increasing participation and engagement</li> </ul>
<b>Behavioral Health Crisis Services</b>	<b>Greater Baltimore Region Integrated Crisis System</b>	<ul style="list-style-type: none"> <li>Establish a regional Care Traffic Control system by implementing a single hotline for substance use and mental health crisis calls</li> <li>Expand mobile crisis teams to divert patients from the ED who do not require a high-level intervention</li> <li>Expand access to immediate-need behavioral health services by piloting the Same Day Access program</li> </ul>
	<b>Totally Linking Care</b>	<ul style="list-style-type: none"> <li>Enhance Prince George's County Response System via technology</li> <li>Expand mobile crisis teams throughout Prince George's County</li> <li>Establish a crisis receiving facility to accept individuals in crisis 24/7/365 on a walk-in self-referred basis</li> </ul>
	<b>Tri-County Behavioral Health Engagement (TRIBE)</b>	<ul style="list-style-type: none"> <li>Increase behavioral health crisis care for individuals by establishing a regional behavioral healthcare urgent care center</li> <li>Centralize and regionalize two mobile crisis programs with the behavioral healthcare urgent care center</li> </ul>

## Year One Diabetes Prevention and Management Activities

The HSCRC recognizes CY 2021 as an initial period of planning, relationship building, and infrastructure development for the five-year program cycle. Regional Partnerships started at different points: some already operated DPPs, some established new collaborations with existing DPPs, and others began creating entirely new DPPs. Achievements for CY 2021 include the creation of 32 new DPP cohorts supported by the Catalyst Program as well as expansion of DSMT/ES programs. All six Regional Partnerships met the two diabetes CY 2021 scale targets. For diabetes prevention, this was having at least

one preliminary, pending, or full CDC-recognized program in its service area with qualification in a payment program. For diabetes management this was ADA DSMT accreditation or AADE DSMES accreditation.

## DPP Infrastructure Development

Regional Partnerships undertook DPP infrastructure development and capacity building activities in CY 2021. Those in the early stages of DPP development conducted research and analysis to identify and target community needs and available capacity. Inputs to these analyses included prevalence of diabetes, obesity, poverty, and other demographic factors overlaid with existing community referral points and resources. Stakeholder interviews also provided information on needs and barriers.

Other Regional Partnerships formed governance and executive operating structures, and conducted staff recruitment, hiring, and onboarding. This included hiring of administrative staff such as program coordinators as well as DPP coaches. Training and support for personnel was another major set of activities in CY 2021. Regional Partnerships provided direct support for diabetes educators through the launch of learning collaboratives and symposiums. One Regional Partnerships offered stipends to DPP educators for new programs and for those serving uninsured patients. Educational forums and training in motivational interviewing were also held to onboard new community health workers.

During CY 2021 Regional Partnerships planned and implemented outreach to clinical providers to generate referral workflows. Outreach took the form of mail, email, in-person presentations, and the development of continuing medical education (CME) modules on DPP eligibility and referral processes. Regional Partnerships developed public media campaign strategies and materials—this was completed internally in some cases, and with procurement of an external vendor in others. Formalization of collaborative relationships was another key activity in CY 2021, discussed below in Community Partner Engagement.

Health Information Technology (HIT) was another key element of infrastructure development. Efforts included electronic health record (EHR) reporting enhancements and data management, engagement with CRISP around the referral module development, and work to map social risk screening workflows into CRISP eReferrals in CY 2022.

Two Regional Partnerships reported activities to launch wrap-around services supportive of DPP. One Regional Partnership is working with five food partners to provide medically tailored meals and produce. In this model, all enrolled participants are assessed for food access programs. Another Regional Partnership added transportation services, medication delivery, and other services to support DPP. Social determinant of health (SDOH) support is provided by community health workers, nurse navigators, and others.

While one Regional Partnership relocated to a larger, more central space to increase DPP capacity, other Regional Partnerships pivoted to provide virtual and asynchronous options amidst COVID-19, in addition to continue offering in-person resources.

## **DPP Referral Strategies and Enrollment**

The Regional Partnerships have a broad reach of engagement with community-based organizations, faith-based organizations, and clinical providers. During CY 2021, Regional Partnerships developed infrastructure and processes for receiving and managing referrals from community partners, Medicaid MCOs, clinical providers, and directly from patients' self-referral.

Regional Partnerships reported on their efforts to automate identification of patients for DPP within their EHRs. This included mining EHR data to retroactively identify patients for referral, creating eligibility flags, and creating enrollment registries for patients with diabetes and prediabetes. For example, EHR tools included automated after-visit summaries with referrals to DPP, patient messages, DPP intake and patient document flowsheets, and new outreach reports capturing referral navigation work.

Technical work also focused on establishing clinical workflows and interface screens to track DPP referrals with the CRISP web-based provider referral and registration process. All of these new tools required the Regional Partnerships to deliver education and training to providers and staff. Notification of referrals were provided back to community health workers and diabetes educators.

Regional Partnerships worked to establish their essential roles in centralized DPP referral management and follow-up. Some Regional Partnerships provided this internally, while at least one other selected and onboarded an external referral management partner to track direct referrals as well as those received via CRISP.

Some Regional Partnerships had already-operational DPPs at the start of the funding cycle, while others were building completely new DPPs. Enrollment during the first year reflects this variation in the maturity of programs. Several of the Regional Partnerships launched multiple DPP cohorts in CY 2021, ranging from seven to twelve. Others were still focused on planning and infrastructure development during this first year and did not enroll participants.

## DSMT/ES Infrastructure Development

As was the case for DPP, Regional Partnerships embarked on DSMT/ES capacity building activities in CY 2021. Most Regional Partnerships were already providing DSMT/ES services in CY 2021 in group cohorts and individual sessions, including virtually and telephonically. Thus, CY 2021 efforts focused on expansion to enable patients to receive education earlier in their diagnoses. Activities included:

- Providing technical assistance and one-on-one support to revive a dormant DSMT/ES program at one hospital;
- Fostering new partnerships with already-accredited DSMT/ES providers, and facilitating virtual and hybrid telehealth options;
- Hiring of staff, including a number of certified diabetes care and education specialists (CDCES) and a dietician as well as administrative coordinators and support staff;
- Relocating DSMT/ES to a larger physical space to accommodate a greater number of patients; and
- Planning activities also focused on expanding to sites within local communities.

Direct support was provided to diabetes education providers delivering DSMT/ES, for example with training and participation via learning collaboratives, support for DSMES accreditation, and provision of start-up stipends to help cover the costs of new programs.

Regional Partnerships conducted research and analysis to identify community needs based on the prevalence of diabetes, obesity, poverty, and other demographic variables. This information along with hospital diabetes-related ED and inpatient claims was integrated with existing community referral points and resources to understand community need and how to align providers and services. Another Regional Partnership procured expertise of a consultant to analyze potential DSMT/ES model options for ambulatory practice.

HIT was another key element of DSMT/ES infrastructure development. Like DPP, efforts included EHR reporting enhancements and data management, new EHR tools for referrals, and provider training on EHR enhancements and referral processes.

## DSMT/ES Referral Strategies and Initiation

Regional Partnerships reported on the challenge of obtaining a consistent volume of provider referrals to DSMT/ES. During CY 2021, Regional Partnerships conducted outreach with clinical providers to build on the formal referral avenues already in place with partner hospitals. To engage and educate providers, one Regional Partnership developed CME course credits on diabetes education with information on DSMT/ES. A variety of other community outreach initiatives targeted patients as well as the community at large to

promote diabetes education. Regional Partnerships worked to align their outreach campaigns with local county-led diabetes programs.

As was the case for DPP, the Regional Partnerships play essential roles in centralized DSMT/ES referral management and follow-up. This required technical work during CY 2021, for example setting up referral pathways through EHRs.

Regional Partnerships also reported on a number of innovations as part of DSMT/ES service expansion in the first year of the funding cycle. One Regional Partnership is embedding CDCES educators within primary care settings to fill a traditional gap in services. Another Regional Partnership established MNT as a new outpatient service at the end of CY 2021; all patients completing DSMT/ES are referred to MNT. Other Regional Partnerships continued working on integration of wrap-around services and supports for patients. As described above, most of the Regional Partnerships already provided DSMT/ES at the start of the program.

## **Diabetes Billing and Sustainability**

The ability to bill Medicare and Medicaid for reimbursement of DPP creates a pathway to sustainability for Regional Partnerships. HSCRC has required that all Regional Partnerships DPP billing be fully established by January 2023. The rates of billing in CY 2021 reflect the different starting points for DPP across the Regional Partnerships. Four of the Regional Partnerships reported that a cumulative total of six DPP provider partners billed for Medicare and/or Medicaid during the year, with continued work to refine existing billing processes. Regional Partnerships must also bill for DSMT/ES in CY 2023 as well.

Additional Regional Partnerships made progress during the year to prepare for DPP billing in CY 2022. For example, an additional DPP provider submitted its application to Medicare. At the state level, Regional Partnerships worked with Maryland Medicaid officials to set up billing processes as well as coordinate billing processes with Maryland Medicaid MCOs. Regional Partnerships worked to ready their internal billing teams. They evaluated payment model sustainability for different clinical practice settings. Several described their efforts to support additional DPPs with credentialing for Medicare and Medicaid reimbursement. Regional Partnerships also worked to extend the reach of Medicare and Medicaid revenue streams by becoming umbrella billing entities for community partners.

In addition to pursuing Medicare and Medicaid reimbursement to support sustainability, Regional Partnerships reported additional sources of revenue. Some of the DPP cohorts operating in CY 2021 were

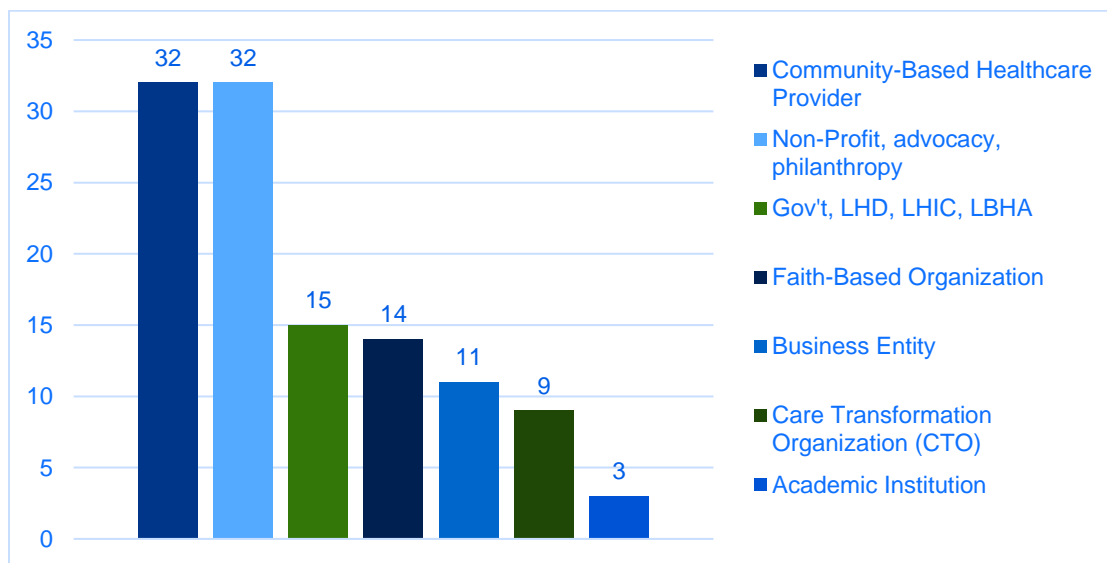
supported by funds outside of the Catalyst Program. Regional Partnerships reported private payer reimbursement and some modest amounts of non-Catalyst Program funding.

## Diabetes Community Partner Engagement

The development of partnerships for long-term improvements in population health, and engagement and integration of community resources in the healthcare system are core goals of the Catalyst Program. Community partner engagement was one of the main activities undertaken in CY 2021. For both DPP and DSMT/ES, Regional Partnerships met with partners individually and held summits to understand needs—such as Spanish-language DPP and DSMT/ES services—and collect information on baseline participation. These interactions were also opportunities to learn about prior successes and challenges, and brainstorm implementation strategies for the future. During CY 2021 Regional Partnerships formalized their relationships with partners, for example through the development of MOUs and collaborative agreements as they identified community hosts for DPP and associated activities. For DSMT/ES, Regional Partnerships worked with community partners on strategies to access populations not otherwise reached through existing marketing efforts.

Figure 1 shows the breadth of Regional Partnerships' community partners for diabetes prevention and management. There are a total of 116 community partner organizations across the six Regional Partnerships. The two most common types of organizations are community-based healthcare providers and non-profit advocacy or philanthropy organizations.

Figure 1. Diabetes Program Community Partners



Regional Partnerships provide different types of support to community partners, including direct financial support, in-kind support, and resource sharing. In CY 2021, the diabetes Regional Partnerships provided approximately \$580,000 in direct financial support to community partners, and \$246,000 in in-kind support. Some Regional Partnerships provided additional in-kind support without tracking its monetary value, so it is not reflected in the \$246,000. One also reported providing resource sharing to community partners in CY 2021.

## **Year One Behavioral Health Crisis Services Activities**

During CY 2021, the three Regional Partnerships under the behavioral health crisis services funding stream focused on infrastructure planning and development as well as relationship building. All Regional Partnerships met the three behavioral health scale targets, which included having: (1) five-year development and business plans for crisis services, (2) MOUs with community partners, member hospitals, and local emergency services, and/or (3) crisis protocols for services indicated in the application/award letter. CY 2021 produced the following major achievements: a CTC software vendor was procured, mobile crisis team providers began responding to calls, and groundwork was laid to open crisis centers in the first half of CY 2022.

### **Overarching Behavioral Health Crisis Services Infrastructure Development**

The three Regional Partnerships undertook a number of activities as part of infrastructure planning and development during CY 2021. This included establishing formal structures for governance, accountability, meeting cadence, and sub-groups that included representation of a wide array of stakeholders. Regional Partnerships built administrative capacity to manage day-to-day project implementation and finances. Efforts included recruiting and hiring new staff and bringing on external expertise via competitive procurements. Significant time was devoted to the development and execution of competitive procurement processes.

Regional Partnerships worked with consultants to conduct needs assessments through market research, interviews with providers and other stakeholders, and tours of existing facilities. This provided an understand of gaps between the current state of services and best practices, and barriers to implementation. Information gathered informed the identification of workflows and standard protocols to support patients.



## Care Traffic Control (CTC) Activities and Progress

The Catalyst Program is funding two Regional Partnerships to develop CTC capabilities as a hub for deployment of mobile and other crisis services. The model includes open access clinical care. CY 2021 coincided with ongoing planning for the national launch of the 988 Crisis and Suicide Lifeline. Consequently, Regional Partnership decisions regarding implementation of CTC were dependent on progress of the national 988 system.

With guidance from the Maryland Department of Health (MDH) and collaboration between the two Regional Partnerships, the same vendor—Behavioral Health Link—was procured by both Regional Partnerships in CY 2021. The vendor provides software in support of the comprehensive call center as well deployment and coordination of crisis services in real time.

One Regional Partnership reported that the launch of the open access pilot was delayed due to the complexity of determining call center software, and the need to gather extensive feedback from partners to draft the open access pilot RFP.

## Mobile Crisis Team Activities and Progress

Two Regional Partnerships are engaged in developing mobile crisis teams. A major focus of CY 2021 was development of mobile crisis team standards in collaboration with stakeholders. Standards were incorporated into the process to procure and expand service providers for CY 2022. Mobile crisis team service launch coincides with CTC call center launch.

One Regional Partnership awarded contracts to mobile crisis team service providers. After extensive training, the providers began responding to community calls in the last quarter of CY 2021. The other Regional Partnership worked on its procurement in the last quarter of CY 2021. Challenges to implementation included the need to align the mobile crisis team scope with community needs, hiring delays, and the length of time needed for the procurement process.

## Crisis Center Activities and Progress

Two Regional Partnerships reported on activities to develop crisis centers in CY 2021. One Regional Partnership is developing two crisis stabilization center sites: a primary site which opened in May 2022 and a secondary site which opened in January 2022. Both sites are across from EDs to facilitate alternative access to emergency care. During CY 2021 progress was made on centralizing existing crisis response services and the following activities:

- Building infrastructure;
- Renovating buildings, including instituting safety and risk assessment recommendations;
- Recruiting, hiring, and training staff, including a full-time on-site psychiatrist at the primary center and additional general and pediatric tele-psychiatry providers;
- Developing policies and procedures;
- Securing necessary IT and medical equipment; and
- Creating and deploying a marketing strategy and community outreach campaign.

The other Regional Partnership contracted a national leader in crisis services and reported on efforts to secure an appropriate facility and address regulatory and reimbursement requirements for commercial payers and Medicaid. The Regional Partnership awarded a separate contract for the provision of wrap-around services to reduce behavioral health readmissions.

## **Behavioral Health Sustainability**

The three Regional Partnerships were in the early stages of achieving sustainability in CY 2021. Efforts during the year included engaging in statewide and national convenings to increase knowledge of best practices, collaborating with community partners and local and State government to identify standards, and advocating for policy reforms needed to support local development of the crisis care continuum and sustain behavioral health crisis services.

Regional Partnerships coordinated with the broad-based effort to establish a statewide mechanism to fund 988 in Maryland. The “Fund Maryland 988 Campaign” brings together more than 50 partner organizations to establish a Maryland 988 Trust Fund with an initial \$10 million investment to support crisis call centers across the state. The campaign advocated for legislation during the 2022 General Assembly session. The campaign website [www.fundmd988.org](http://www.fundmd988.org) is a source for information sharing and partner mobilization.

In addition, Regional Partnerships worked with the (MDH) Behavioral Health Administration (BHA) to identify potential funding sources through grants and Maryland Medicaid reimbursement to enhance Catalyst Program funds. Insurance reimbursement requirements for Medicaid, such as billing codes, are also applicable to the work Regional Partnerships did to explore commercial insurance reimbursement. Regional Partnerships reported on the need to amend the Maryland Medicaid program to cover mobile crisis services and receiving centers. Regional Partnerships reported involvement with BHA’s stakeholder engagement activities related to the drafting of regulations. Additionally, Regional Partnerships reported on the need to develop commercial payer reimbursement for mobile crisis services and crisis stabilization centers. Efforts included working with stakeholders and the State legislature to explore requiring all insurers

to cover crisis services. Since the submission of the annual reports, Medicaid received a planning grant to develop a state plan amendment (SPA) to provide qualifying community-based mobile crisis intervention services and will reimburse for mobile crisis care. In addition, Medicaid will reimburse stabilization services at crisis stabilization centers, a critical component of the crisis care continuum and a significant milestone in sustainably funding behavioral healthcare in Maryland.

Other State-level needs identified by Regional Partnerships include addressing the social stigma surrounding crisis services and identifying locations for centers. There is also a need to address behavioral health workforce shortages within the industry.

Regional Partnerships also undertook activities directly tied to sustainability. For example, one Regional Partnership reported on creation of a dashboard to monitor results from crisis center sites. In another instance, the introduction of wrap-around services was found to reduce hospital readmissions of program participants by 55 percent.

## Behavioral Health Community Partner Engagement

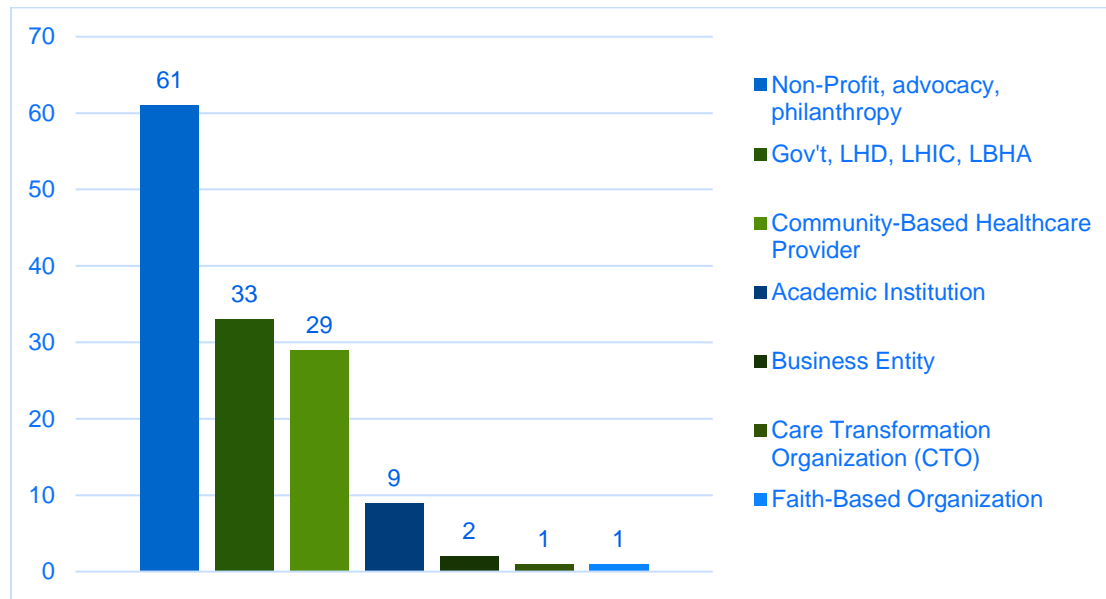
The Regional Partnerships devoted significant effort to solidifying strong working relationships with community partners. Regional Partnerships described these relationships as vital to their planning and operationalization activities. New governance structures include community partners and other stakeholders at their foundation to ensure a diversity of voices and perspectives.

Regional Partnerships involved local government entities to ensure Catalyst Program efforts complemented existing initiatives to develop behavioral health crisis service infrastructure. Key public entities included local government, public safety agencies, and LBHAs. Consultant deliverables funded by the Catalyst Program were shared widely to support coordination. Regional Partnerships also collaborated among one another, for example coordinating receiving center plans.

Regional Partnerships invested in market research to determine how best to communicate the value of behavioral health crisis services to the general public, promoting awareness and access.

**Figure 2** below shows the breadth of community partners in behavioral health crisis services Regional Partnerships. There were 136 community partners. The most prevalent category was non-profit, advocacy, or philanthropy organizations. Local public entities comprised 33 community partners, followed by 29 community-based healthcare providers.

Figure 2. Behavioral Health Community Partners



Regional Partnerships provide different types of support to community partners, including direct financial support, in-kind support, and resource sharing. In CY 2021, the behavioral health Regional Partnerships provided approximately \$830,000 in direct financial support to community partners. The Regional Partnerships provided additional in-kind support without tracking its monetary value. One Regional Partnership reported providing additional resource sharing to community partners in CY 2021.

## Catalyst Program Budget and Expenditures Summary

Regional Partnership expenditures for CY 2021 are shown in **Table 3**. Total expenditures across all Regional Partnerships were approximately \$9.3 million. The largest category was workforce, with approximately \$5.6 million in expenditures. Approximately \$2.1 million was spent on other implementation activities, operations, and indirect costs; approximately \$990,000 was spent on IT/technology, and approximately \$590,000 was spent on wrap-around services.

Table 3. Regional Partnership CY 2021 Expenditures

	Regional Partnership	Expenditures by Category	Total Expenditures
Diabetes Prevention and Management	Baltimore Metropolitan Diabetes Regional Partnership	<ul style="list-style-type: none"> <li>Workforce expenditures: <b>\$1,807,453</b></li> <li>IT services: <b>\$36,920</b></li> <li>Other implementation activities, operations, and indirect costs: <b>\$221,226</b></li> </ul>	<b>\$2,065,599</b>
	Western Regional Partnership	<ul style="list-style-type: none"> <li>Workforce expenditures: <b>\$1,449,103</b></li> <li>IT services: <b>\$15,223</b></li> <li>Wrap-around services: <b>\$81,755</b></li> <li>Other indirect costs: <b>\$183,209</b></li> </ul>	<b>\$1,729,290</b>
	Nexus Montgomery	<ul style="list-style-type: none"> <li>Workforce expenditures: <b>\$680,699</b></li> </ul>	<b>\$942,942</b>

		<ul style="list-style-type: none"> <li>• Wrap-around services: <b>\$60,434</b></li> <li>• Other implementation activities and indirect costs: <b>\$201,809</b></li> </ul>	
	<b>Totally Linking Care</b>	<ul style="list-style-type: none"> <li>• Workforce expenditures: <b>\$122,313</b></li> <li>• IT services: <b>\$62,804</b></li> <li>• Wrap-around services: <b>\$102,519</b></li> <li>• Other implementation activities and indirect costs: <b>\$292,889</b></li> </ul>	<b>\$580,525</b>
	<b>Saint Agnes and Lifebridge</b>	<ul style="list-style-type: none"> <li>• Workforce expenditures: <b>\$399,283</b></li> <li>• Wrap-around services: <b>\$117,459</b></li> <li>• Other implementation activities: <b>\$3,379</b></li> </ul>	<b>\$520,121</b>
	<b>Full Circle Wellness</b>	<ul style="list-style-type: none"> <li>• Workforce expenditures: <b>\$217,584</b></li> <li>• IT services: <b>\$6,257</b></li> <li>• Wrap-around services: <b>\$1,658</b></li> <li>• Other implementation activities and indirect costs: <b>\$28,554</b></li> </ul>	<b>\$254,053</b>
<b>Behavioral Health Crisis Services</b>	<b>Greater Baltimore Region Integrated Crisis System</b>	<ul style="list-style-type: none"> <li>• IT services: <b>\$326,000</b></li> <li>• Other indirect costs: <b>\$484,880</b></li> </ul>	<b>\$810,880</b>
	<b>Total Linking Care</b>	<ul style="list-style-type: none"> <li>• Workforce expenditures: <b>\$224,957</b></li> <li>• Wrap-around services: <b>\$229,080</b></li> <li>• Other implementation activities and indirect costs: <b>\$494,195</b></li> </ul>	<b>\$948,232</b>
	<b>Tri-County Behavioral Health Engagement (TRIBE)</b>	<ul style="list-style-type: none"> <li>• Workforce expenditures: <b>\$725,154</b></li> <li>• IT services: <b>\$543,603</b></li> <li>• Other implementation activities and indirect costs: <b>\$209,398</b></li> </ul>	<b>\$1,478,155</b>
<b>Total Expenditures</b>			<b>\$9,329,797</b>

HSCRC staff is in the midst of conducting financial audits of all Regional Partnership spending to verify expenditures. As with all other special funding programs, any unspent funds are removed from hospital rates. Due to the impact of COVID-19 on the first year of the program, HSCRC staff allowed Regional Partnerships to request a one-time rollover of CY 2021 funding that was unspent due to the impact of COVID-19. Regional Partnerships were required to provide a fixed dollar amount and justification for their request. HSCRC staff reviewed written requests and approved the rollover of \$11.2 million of the \$23 million awarded in CY 2021. This was a one-time exception due to challenges posed by the pandemic and HSCRC staff does not intend to allow funding to roll over in future years of the program.

## Catalyst Program Health Equity Efforts

Both the diabetes and behavioral health Regional Partnerships had multi-pronged approaches to addressing health equity. They intentionally kept health equity at the forefront of activities. For example, the governance committee of one Regional Partnership adopted the theme of advancing equity through policy and systems change as the foundation of its guiding principles.

Regional Partnerships conducted analyses to identify the specific areas and communities experiencing health disparities. This involved working with community partners to understand the root causes of disparities. Regional Partnerships prioritized historically excluded and marginalized communities for outreach and inclusion in the stakeholder engagement process. Regional Partnerships also designed their tracking systems to stratify populations by a variety of parameters. This will enable them to understand how services are reaching different populations.

Screening for social determinants of health (SDOH) was an element described by most of the Regional Partnerships. They are assessing for a variety of SDOH and connecting clients to available resources. In some cases, one Regional Partnership directs certain patients to care coordination teams to address SDOH in lieu of directly referring to DPP or DSMT/ES. This approach acknowledges that DPP or DSMT/ES may not necessarily be a successful intervention for a patient if other underlying issues impacting their health remain unaddressed.

Health equity considerations were also woven into practices around staffing and procurement. Staffing strategies included hiring more community health workers (CHWs) reflective of communities served, pursuing grant funding to hire behavioral health peer support specialists, and developing diverse mobile crisis leadership and service providers with respect to gender, race, ethnicity, and sexual orientation. Staff training included topics such as motivational interviewing, cultural humility, and anti-racism. Regional Partnerships also described their efforts to promote diversity through procurement, for example prioritizing organizations with strong connections to their local communities and reflective of the culture, language, and demographics of the area they serve. Selecting locally-owned minority businesses was another strategy reported.

Other health equity efforts addressed different modes of service delivery. For example, DPP classes were designed to be held virtually to remove transportation barriers and were offered both day and evening to increase accessibility to different populations. Regional Partnerships promoted wholistic well-being. Examples include a mobile integrated health visitation program and delivery of behavioral crisis center services through a behavioral health visit within the primary care office.

Regional Partnerships also highlighted the needs of different populations. Three of the diabetes Regional Partnerships addressed plans to provide cohorts in Spanish. In addition, Diabetes 101 was offered by a Regional Partnership as a free community workshop targeting the un- and underinsured. For behavioral health, Regional Partnerships raised the need to target the LGBTQIA population, Deaf and Hard of Hearing communities, and to address racial biases inherent in the criminal justice system.

## Impact of COVID-19 on Regional Partnerships

The COVID-19 pandemic created a range of challenges for Regional Partnerships in CY 2021. A primary challenge was the redeployment among local community partners and clinical staff to pandemic-related needs. This delayed implementation, for example pushing back the timing for training healthcare providers on diabetes referral systems. Regional Partnerships also reported difficulty hiring due to pandemic-related workforce shortages, affecting clinical and wrap-around services.

Regional Partnerships responded to COVID-19 by pivoting to virtual formats—for example for community engagement and diabetes programs. However, some diabetes patients lacked technology or were less engaged in virtual formats. Because diabetes patients had fewer visits to primary care during the pandemic, Regional Partnerships reported poorer diabetes management and lower rates of referrals to DPP and DSMT/ES. Some active participants dropped out of diabetes prevention and management programs because of disruptions in their lives stemming from COVID-19.

Regional Partnerships reported a number of pandemic-related delays, including to CTC software set-up and to community marketing campaigns as public health messaging prioritized vaccination efforts. Supply chain delays were also an issue.

Given the impact of COVID-19 on implementation, Regional Partnerships underspent Catalyst Program funds. As discussed in the expenditures section of this report, HSCRC staff allowed Regional Partnerships to request a one-time rollover of CY 2021 funding that was unspent due to the impact of COVID-19. HSCRC staff reviewed written requests and approved the rollover of \$11.2 million of the \$23 million awarded in CY 2021.

## Conclusion

During CY 2021 the eight Regional Partnerships made significant progress in infrastructure development and began to expand service delivery for diabetes prevention and management, as well as behavioral health crisis services. Regional Partnerships recognized the complexity of standing up new programs across a large set of partners and different healthcare delivery systems. They also recognized importance of conducting meaningful, multi-stakeholder engagement to achieve sustainable change. Regional Partnerships also worked in earnest to respond to the challenges of the pandemic which impacted implementation activities and program resources. Looking ahead, Regional Partnerships will continue to scale their DPP enrollment efforts and provision of DSMT services, through strategies such as promoting provider awareness and building relationships with payers. Regional Partnerships receiving behavioral health funding will continue to execute on their implementation plans, build additional community

partnerships, and scale up services implemented in 2022. HSCRC will continue to monitor to Regional Partnership performance through written reporting, regular meetings with individual Regional Partnerships on implementation progress, and data monitoring through CRISP.





maryland  
**health services**  
cost review commission

# Draft Quality-Based Reimbursement Program for Rate Year 2025

October 12, 2022

This document contains the staff draft recommendations for updating the Quality-Based Reimbursement Program for RY 2025. Comments on this draft are due by COB October 19, 2022 and may be submitted to [HSCRC.quality@maryland.gov](mailto:HSCRC.quality@maryland.gov).

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## LIST OF ABBREVIATIONS

CDC	Centers for Disease Control & Prevention
CAUTI	Catheter-associated urinary tract infection
CDIFF	Clostridium Difficile Infection
CLABSI	Central Line-Associated Bloodstream Infection
CMS	Centers for Medicare & Medicaid Services
DRG	Diagnosis-Related Group
ED	Emergency Department
FFY	Federal Fiscal Year
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HSCRC	Health Services Cost Review Commission
MRSA	Methicillin-Resistant Staphylococcus Aureus
NHSN	National Health Safety Network
PQI	Prevention Quality Indicators
QBR	Quality-Based Reimbursement
RY	Maryland HSCRC Rate Year (Coincides with State Fiscal Year (SFY) July-Jun; signifies the timeframe in which the rewards and/or penalties would be assessed)
SIR	Standardized Infection Ratio
SSI	Surgical Site Infection
TFU	Timely Follow Up after Acute Exacerbation of a Chronic Condition
THA/TKA	Total Hip and Knee Arthroplasty Risk Standardized Complication Rate
VBP	Value-Based Purchasing

## POLICY OVERVIEW

Policy Objective	Policy Solution	Effect on Hospitals	Effect on Payers/ Consumers	Effect on Health Equity
The quality programs operated by the Health Services Cost Review Commission, including the Quality-Based Reimbursement (QBR) program, are intended to ensure that any incentives to constrain hospital expenditures under the Total Cost of Care Model do not result in declining quality of care. Thus, HSCRC's quality programs reward quality improvements and achievements that reinforce the incentives of the Total Cost of Care Model, while guarding against unintended consequences and penalizing poor performance.	The QBR program is one of several pay-for-performance quality initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value within a global budget framework.	The QBR policy currently holds 2 percent of hospital inpatient revenue at-risk for Person and Community Engagement, Safety, and Clinical Care outcomes.	This policy ensures that the quality of care provided to consumers is reflected in the rate structure of a hospital's overall global budget. The HSCRC quality programs are all-payer in nature and so improve quality for all patients that receive care at the hospital.	Quality programs that reward hospitals for the better of attainment or improvement (QBR and RRIP) better allow the policies to target improvements in hospitals that serve a high proportion of under-resourced patients. The Health Equity Workgroup (HEW) analyzed the Medicare Timely Follow-Up measure and found disparities by race, dual-status, and Area Deprivation. Over the coming year, HSCRC staff will explore methods to assess disparities in Timely Follow-Up across social factors and develop hospital incentives for reducing these disparities, similar to the approved readmission disparity gap improvement policy.

## RECOMMENDATIONS

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

Draft Recommendations for RY 2025 QBR Program:

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

RY 2025:

- a. 30-day all-payer, all-cause mortality (claims based)
  - b. Timely Follow-Up for Behavioral Health
  - c. Disparity gaps for Timely Follow-Up
3. Implement the HCAHPS improvement framework with key stakeholders.
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements; For CY 2023 require submission of:
  - a. ED-2 eCQM for monitoring; consider for re-adoption after RY 2025 (in CY 2024)
  - b. Safe Opioid Use eCQM for monitoring
  - c. Four additional eCQM measures aligned with the SIHIS goals and hospital improvement priorities
  - d. Clinical data elements for 30-day mortality and readmission hybrid measures beginning July 2023
5. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent), and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.
  - a. Retrospectively evaluate 41 percent cutpoint using more recent data to calculate national average score

## INTRODUCTION

Maryland hospitals have been funded under a population-based revenue system with a fixed annual revenue cap under the All-Payer Model agreement with the Centers for Medicare & Medicaid Services (CMS) beginning in 2014, and continuing under the current Total Cost of Care (TCOC) Model agreement, which took effect in 2019. Under the global budget system, hospitals are incentivized to shift services to the most appropriate care setting and simultaneously have revenue at risk in Maryland's unique, all-payer, pay-for-performance quality programs; this allows hospitals to keep any savings they earn via better patient experiences, reduced hospital-acquired infections, or other improvements in care. Maryland systematically revises its quality and value-based payment programs to better achieve the state's overarching goals: more efficient, higher quality care, and improved population health. The revisions include annual updates to each program policy, which must be approved by the Health Services Cost Review Commission (HSCRC), and have also included more recent large-scale overhauls of the Maryland Hospital Acquired Condition Program and Readmissions Reduction Incentive Program to better align program policies with the expanded and evolving goals of the TCOC Model agreement.

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

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

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

Domain/ Measure	RY 2025	Future program years
<b>Person and Community Engagement domain</b>		
<b>HCAHPS</b>	<ul style="list-style-type: none"> <li>• Monitor HCAHPS linear and overall scores after allocating 10% of points for the linear scores to the Person and Community Engagement (PCE) domain</li> <li>• Use HCAHPS patient level data from the Maryland Health Care Commission (MHCC) for additional analytics, including on disparities, and hospital improvement</li> <li>• Work with stakeholders to facilitate more sharing of best practices</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to use HCAHPS patient-level data from the MHCC for additional analytics, including on disparities, and hospital improvement.</li> <li>• Continue working with stakeholders to facilitate more sharing of best practices</li> </ul>
<b>Emergency department (ED) wait times</b>	<ul style="list-style-type: none"> <li>• Conduct more research and analyses, such as an analysis of ED median times during the COVID-19 pandemic if the data are publicly released by CMS</li> <li>• Use infrastructure for electronic clinical quality measures (eCQMs) to enable the collection of data for an ED wait time measure; begin collection in CY 2022</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to collect the ED wait time measure eCQMs; consider adopting the ED measure in the QBR Program in future years</li> <li>• Determine components to allow inclusion of measure in program (such as performance standards)</li> </ul>
<b>Follow-up measure</b>	<ul style="list-style-type: none"> <li>• Identify strategies for all hospitals in Maryland to achieve the SIHIS goal for Timely Follow-up</li> <li>• Develop monitoring reports for behavioral health for the Timely Follow-Up measures</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the results in the monitoring reports for the Medicaid and behavioral health follow-up measures; consider adding a measure that includes Medicaid and/or behavioral health to the QBR Program in RY 2025</li> </ul>
<b>Safety domain</b>		
<b>CDC National Health Safety Network</b>	<ul style="list-style-type: none"> <li>• In light of the work group's findings that demonstrate that Maryland is on par with national performance, maintain alignment with the national VBP Program; focus on improvement on current measures.</li> <li>• Analyze impact of COVID on MD vs national trends</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to analyze Maryland trends compared to national performance.</li> <li>• Explore working with CDC to add more innovative and less burdensome “digital” measures.</li> </ul>

Domain/ Measure	RY 2025	Future program years
<b>Clinical Care domain</b>		
<b>30-day mortality</b>	<ul style="list-style-type: none"> <li>Review additional analyses related to 30-day measure</li> <li>Continue to develop the 30-day measure for monitoring in RY 2025</li> </ul>	<ul style="list-style-type: none"> <li>Continue to evaluate 30-day measure</li> <li>Consider developing a hybrid measure using eCQM infrastructure</li> <li>Consider adoption for RY 2026</li> </ul>
<b>Total hip arthroplasty/total knee arthroplasty</b>	<ul style="list-style-type: none"> <li>Consider expansion of the current inpatient total hip arthroplasty/total knee arthroplasty measure to all-payers and to outpatient cases.</li> </ul>	<ul style="list-style-type: none"> <li>When eCQM infrastructure is developed, explore adaptation of provider measures to assess all-payer inpatient and outpatient complications</li> <li>Explore opportunities for Patient Reported Outcome Measures (PROMs)</li> </ul>

## Implications of COVID-19

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

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

## BACKGROUND

### Overview of the QBR Program

The QBR Program, implemented in 2010, includes potential scaled penalties or rewards of up to 2 percent of inpatient revenue. The program assesses hospital performance against national standards for its Person and Community Engagement and Safety domains. For the Clinical Care domain, the program uses Maryland-specific standards for the inpatient mortality measure and national standards for the Medicare only measure of total hip arthroplasty/total knee arthroplasty (THA/TKA) complications. Figure 2 compares RY 2024 QBR measures and domain weights to those used in the VBP Program.



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

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

With the selected measures from above, the QBR Program assesses hospital performance based on the national threshold (50th percentile) and benchmark (mean of the top decile) values for all measures, except the HSCRC calculated in-hospital mortality rate and Medicare Timely Follow-Up (which uses state data to calculate performance standards). Each measure is assigned a score of zero to ten points, then the points are summed and divided by the total number of available points, and weighted by the domain weight. Thus, a total score of 0 percent means that performance on all measures is below the national threshold and has not improved, whereas a total score of 100 percent means performance on all measures is at or better than the mean of the top decile (about the 95th percentile). This scoring method is the same as that used for the national VBP Program. But unlike the VBP Program, which ranks all hospitals relative to one another and assesses rewards and penalties to hospitals in a revenue neutral manner retrospectively based on the distribution of final scores, the QBR Program uses a preset scale to determine each hospital’s revenue adjustment. This gives Maryland hospitals predictability and an incentive to work together to achieve high quality of care, instead of competing with one another for better rank.

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

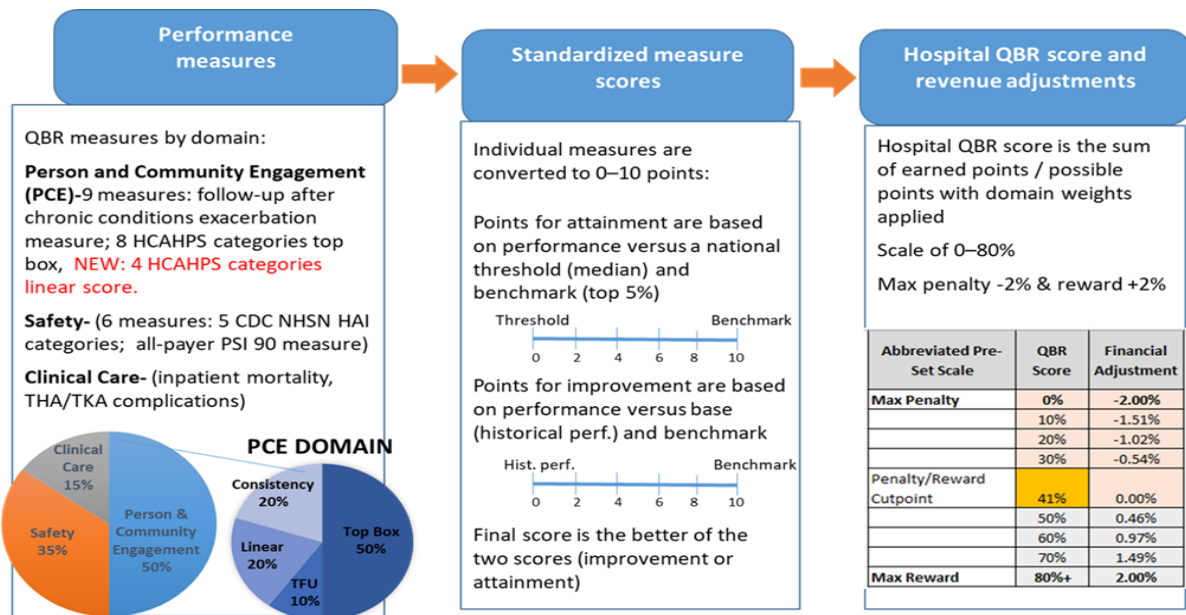
scores for federal fiscal years 2016–2021, which indicated the average national score using Maryland domain weights (without the Efficiency domain) was around 41 percent (ranging from 38.5 to 42.7).

As a recap, the method for calculating hospital QBR scores and associated inpatient revenue adjustments has remained essentially unchanged since RY 2019. It involves:

1. Assessing performance on each measure in the domain
2. Standardizing measure scores relative to performance standards
3. Calculating the total points a hospital earned divided by the total possible points for each domain
4. Finalizing the total hospital QBR score (0 to 100 percent) by weighting the domains, based on the overall percentage or importance the HSCRC placed on each domain
5. Converting the total hospital QBR scores into revenue adjustments using the preset scale (range of 0 to 80 percent)

This method is shown in Figure 3.

**Figure 3. RY 2024 QBR Policy Methodology Overview**



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

## ASSESSMENT

The purpose of this section is to present an assessment, using the most current data available, of Maryland’s performance on measures used in the QBR program, compared to the nation when national data is available. In addition, staff has proposed a preliminary revenue adjustment scale and a method

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

## Person and Community Engagement Domain

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

## Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

The HCAHPS survey is a standardized, publicly reported survey that measures patient's perceptions of their hospital experience. In keeping with the national VBP Program, the QBR Program scores hospitals on either improvement or attainment, whichever is highest, across the following HCAHPS domains: (1) communication with nurses, (2) communication with doctors, (3) responsiveness of hospital staff, (4) communication about medicine, (5) hospital cleanliness and quietness, (6) discharge information, (7) a composite care transition measure, and (8) overall hospital rating. The QBR Program also scores hospitals separately on consistency<sup>1</sup>; a range of 0-21 consistency points are awarded by comparing a hospital's HCAHPS survey lowest performing measure rates during the performance period to all hospitals' HCAHPS survey measure rates from a baseline period.

The VBP and QBR program have historically measured HCAHPS based on the top-box score (e.g., the percent of respondents who indicate they strongly agree). As part of the RY 2024 QBR Redesign, the state decided to also score hospitals on the HCAHPS linear scores, which are the average response across all response categories. Specifically, HCAHPS linear scores were added as 20% of the PCE domain (i.e., 10 percent of overall QBR score) for the following domains: the nurse communication, doctor communication, responsiveness of staff and care transition. The addition of the linear measures is designed to further incent focus on HCAHPS by providing credit for improvements along the continuum and not just improvements in top box scores. Also by focusing on just 4 of the 8 measures, staff believes additional emphasis will be put on these important measures that have been shown to be correlated with other patient safety outcomes. The HSCRC staff recommends including the linear measures for RY 2025; however, staff will assess if adding the linear measures helps improve top-box scores over the

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

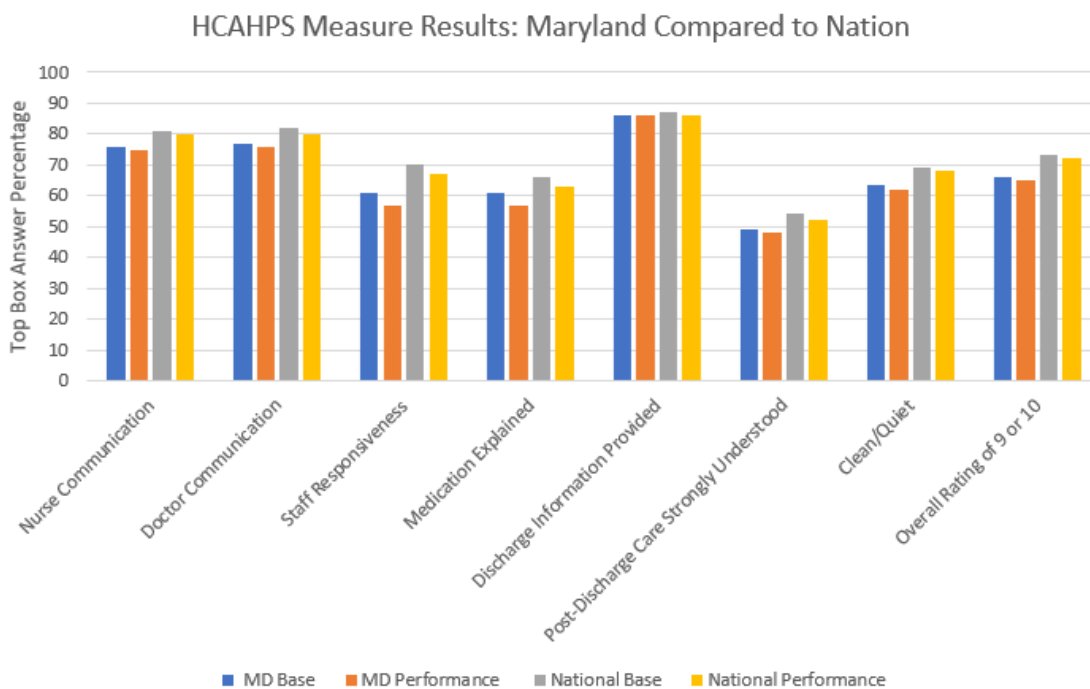
coming 2-3 years. If top box scores do not improve, the staff will recommend removing the linear measures in future rate years.

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

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

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

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



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

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

## Maryland HCAHPS Improvement Framework

### Background

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

"CMS encourages the State to prioritize strategies to investigate the root cause of poor HCAHPS performance, create a formalized platform for hospitals to share HCAHPS best practices, and invest in infrastructure to capture patient-level-data; CMS believes that these strategies have the greatest potential to maximize sustained performance improvement in HCAHPS, long-term. CMS suggests the State consider implementing a State-wide HCAHPS performance improvement initiative that leverages input from providers, industry experts, and other stakeholders to develop future improvement goals. CMS is looking for the State to further develop these strategies and commit to creating a framework for setting HCAHPS performance improvement goals for future performance years. CMS expects the FFY 2023 CMS Quality Program Waiver request to include a framework development timeline and proposal outlining the State's approach for developing HCAHPS performance improvement goals. This proposal and timeline will be heavily considered in evaluating the State's CMS Quality Program Waiver request for FFY 2023. "

### Historic Efforts to Improve HCAHPS

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

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

### **Past Learning Collaboratives and Programs**

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

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

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

### **Administrative Leadership Accountability:**

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

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

### **Data Analysis and Data Sharing:**

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

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

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

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

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

### **Organizational Factors**

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

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

7. staff capacity building,
8. accountability and incentives and
9. a culture strongly supportive of change and learning.<sup>2</sup>

*Patient-Physician Communication*

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

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

Demonstrating Courtesy and Respect	Best Practices for Improving Listening	Best Practices for Explaining
<ul style="list-style-type: none"> <li>● Knock before entering a patient's room.</li> <li>● Greet the patient by name.</li> <li>● Introduce yourself and your role. Review the chart prior to entering the room.</li> <li>● Treat every concern brought up as important and explain why you prioritize certain concerns over others in the hospital.</li> <li>● Ask the patient for permission to conduct a physical examination.</li> <li>● At the end of an encounter, ask for questions in an open-ended fashion</li> <li>● End the hospital stay on a positive note.</li> </ul>	<ul style="list-style-type: none"> <li>● Avoid interrupting the patient.</li> <li>● Take notes so they know you take their concerns seriously</li> <li>● Summarize key points of a discussion.</li> <li>● Pay attention to nonverbal cues, and acknowledge emotions</li> <li>● Sit at the bedside.</li> <li>● Use social touch to convey empathy.</li> <li>● Be comfortable with silence: allow 5 seconds to re-sum conversation when there is a pause.</li> <li>● Watch your body language; don't appear hurried, bored or fidgety; don't cross your arms.</li> </ul>	<ul style="list-style-type: none"> <li>● Avoid medical jargon</li> <li>● Explain physical examination findings as you are conducting the examination.</li> <li>● Use the teach-back method to ensure understanding; utilize open-ended questions.</li> <li>● Explain procedures/testing before they are ordered/performed.</li> <li>● Write out important information, if needed (use white-boards in rooms).</li> <li>● Give patients a way to contact you with any questions after the hospital stay.</li> </ul>

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

<sup>3</sup> Dutta, Suparna, and Syeda Uzma Abbas. "HCAHPS And The Metrics Of Patient Experience: A Guide For Hospitals And Hospitalists." *Hospital Medicine Practice*, vol. 3, no. 6, June 2015. Available at [http://medicine.med.miami.edu/documents/Patient\\_Satisfaction\\_6-15.pdf](http://medicine.med.miami.edu/documents/Patient_Satisfaction_6-15.pdf).



## *Discharge Planning/Care Transition*

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

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

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

### **Next Steps**

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

- [What Do Our Patients Want From Us Now?](#)
- [BIRTH Equity: Breaking Inequality Reimagining Transformative Healthcare](#)

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

## **Emergency Department Wait Time Measure**

Long ED wait times are an enduring issue in Maryland, which has had longer wait times than the national average pre-dating the start of global budgets in 2014. Concerns about unfavorable ED throughput data have been shared by many Maryland stakeholders, including the HSCRC, the Maryland Health Care Commission, payers, consumers, emergency room physicians, the Maryland Institute of Emergency

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

Medical Services Systems, and the Maryland General Assembly.<sup>5</sup> Under alternative payment models, such as hospital global budgets or other hospital capitated models, there may be an incentive to reduce staffing that leads to ED throughput issues. Measuring ED wait times is one way to monitor for unintended consequences of the Model on hospital throughput. In general, ED staff supported including the inpatient wait time measures to address the issue of ED boarding and hospital throughput.

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

### *Collection of ED Wait Time Data*

Currently staff is collaborating with CRISP and its contractor, Medisolv, to collect electronic clinical quality measures (eCQMs), including the ED-2 eCQM, and clinical core data elements for hybrid measures since CMS is signaling this direction for quality measurement. Half of hospitals began submitting the measure using CY 2021 data, and all hospitals have been required to submit the measure for all four quarters in

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

CY 2022. Please see more information regarding Maryland's hospital eCQM Infrastructure in the section below. The eCQM ED-2 measure has several advantages:

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

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

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

### Timely Follow-Up After Discharge

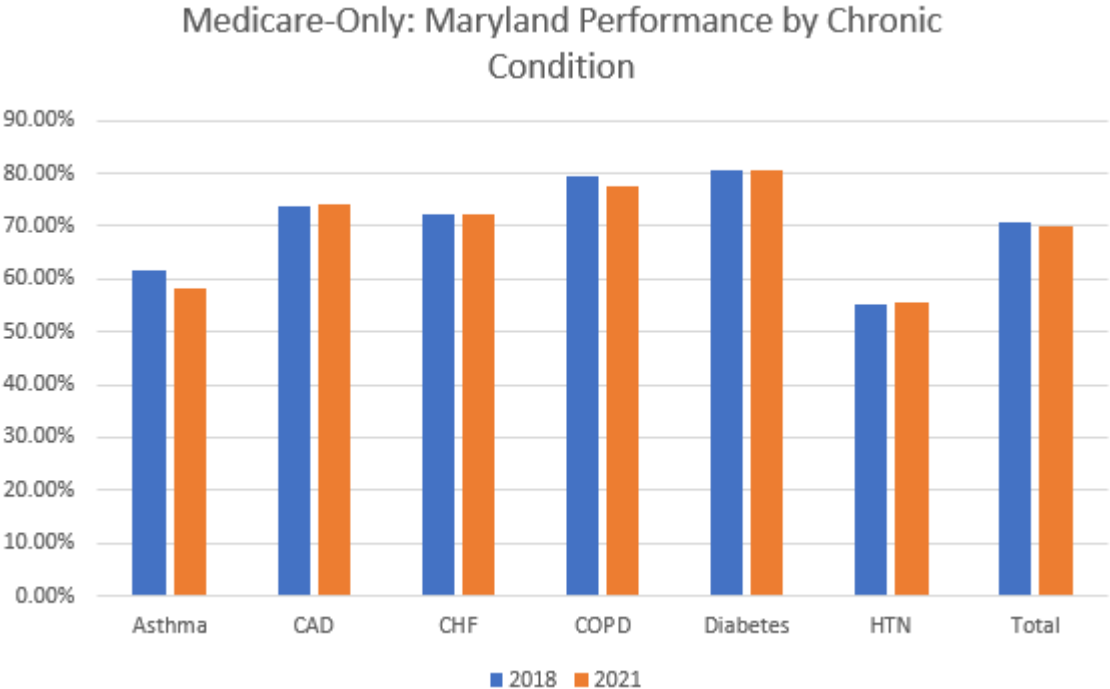
On March 17, 2021, CMS approved Maryland's proposed SIHIS, which included a National Quality Forum-endorsed health plan measure of timely follow-up (TFU) after an acute exacerbation of a chronic condition in the Care Transition domain. The SIHIS goal is to achieve a 75 percent TFU rate for Medicare FFS beneficiaries across the six specified conditions and respective time frames. To hold hospitals accountable for meeting this goal, the HSCRC introduced this measure for Medicare beneficiaries into the RY 2023 QBR Program within the Person and Community Engagement domain and recommend continuing it in the RY 2025 QBR program weighted at 10 percent of the PCE domain (20 percent of the overall QBR score).

The measure assesses the percentage of ED visits, observation stays, and inpatient admissions for one of six conditions in which a follow-up was received within the time frame recommended by clinical practice:

- Hypertension (follow-up within seven days)
- Asthma (follow-up within 14 days)
- Heart failure (follow-up within 14 days)
- Coronary artery disease (follow-up within 14 days)
- Chronic obstructive pulmonary disease (follow-up within 30 days)
- Diabetes (follow-up within 30 days)

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

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



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

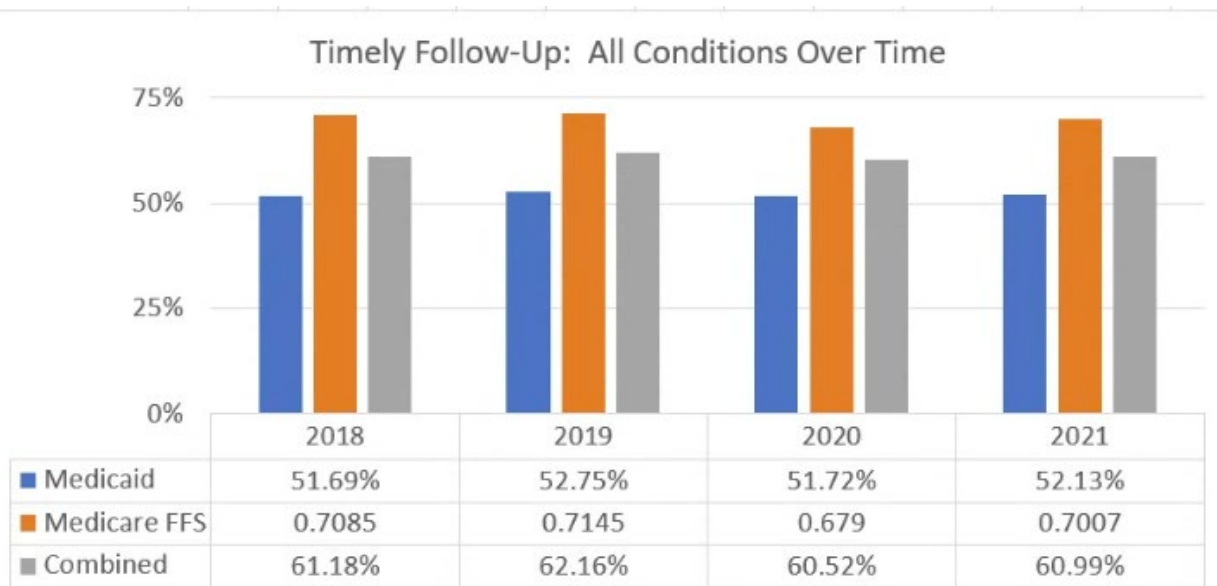
Figure 8 shows the annual performance on the total TFU measure for Maryland and the Nation (national data is based on the Chronic Condition Warehouse 5 percent sample). Overall there was a drop in TFU for both the State and the nation during the COVID-19 PHE. Based on the data from CY 2021, the state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

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

	CY2018	CY2019	CY2020	CY2021
<b>Maryland</b>	70.85%	71.45%	67.90%	70.07%
<b>US</b>	66.82%	69.00%	64.75%	67.68%

As part of the SIHIS proposal, it was noted that staff would explore expanding the timely follow-up rates for chronic conditions to other payers and adding follow-up after a hospitalization for behavioral health. In Calendar Year 2022, staff worked with CRISP and Maryland Medicaid to provide hospitals monthly Medicaid Timely Follow-Up reports on the CRS portal. Figure 9 shows the TFU rate for both Medicare FFS and Medicaid individually and combined. Currently staff is vetting with the PMWG how to incorporate Medicaid in the payment program. Issues to discuss include the concerns of the SIHIS goal being missed for Medicare FFS, the significant differences between Medicare and Medicaid rates that make it less suitable as a combined measure, and the weight that would be put on a Medicaid measure (i.e., how would the current 5 percent of the PCE domain be split and is that weight significant enough of an incentive). The HSCRC staff will further review these issues with PMWG in October and request that comment letters provide feedback on how to incorporate Medicaid. Based on this discussion the staff will provide a final recommendation for consideration in November.

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



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

### *Health Equity Workgroup Findings*

In the Summer of CY 2022, staff convened a Health Equity Workgroup which stratified Maryland’s quality measures by social demographic factors to glean disparities. For the QBR program, staff stratified the Timely Follow-Up measure by race, dual-eligibility status, and Area Deprivation Index (ADI). Results of this stratification analysis are below in Figures 10, 11, and 12, but overall the analysis found disparities on all three factors. For example, Figure 10 indicates that Blacks have a 58 percent higher odds of not receiving follow-up compared to Whites. Similar trends were seen where duals and those with higher area deprivation had a higher odds of not receiving follow-up. Given that the state did not meet the 2021 Year 3 Milestone Target and the overwhelming evidence of disparities in this measure, HSCRC staff will develop hospital incentives for reducing these disparities, similar to the approved readmission disparity gap improvement policy, over the next year. The methodology will address how to measure disparities in the three exposure factors above using a composite exposure variable that is not associated with the outcome. This differs from the current readmission methodology and will require time to develop the measure before reports can be provided to hospitals. However, this is a priority of the staff and will hopefully aid the state in achieving the final SIHIS goal of a 75 percent (or 0.5% better than the nation) timely follow-up rate in CY 2026.

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

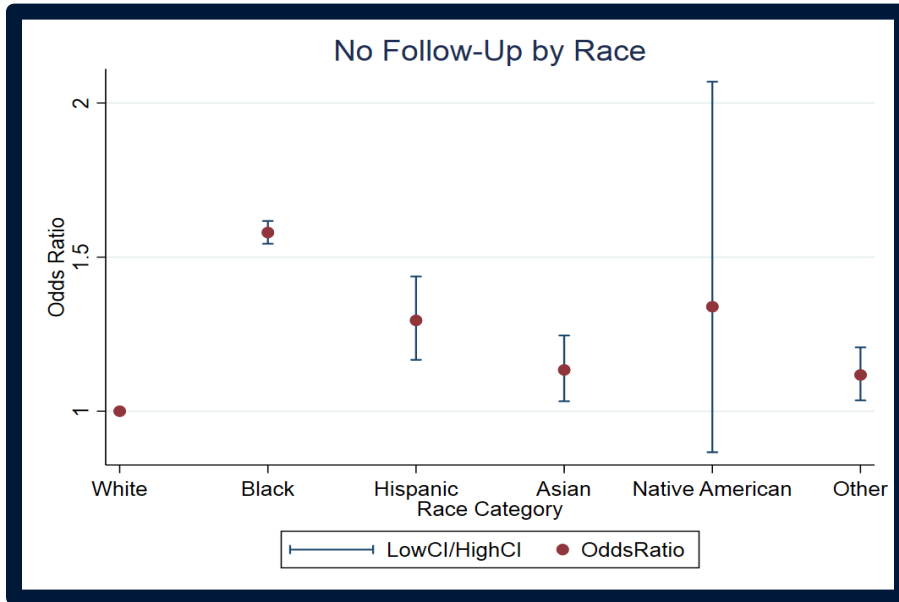


Figure 11. Odds Ratio of No Follow-Up by ADI Decile

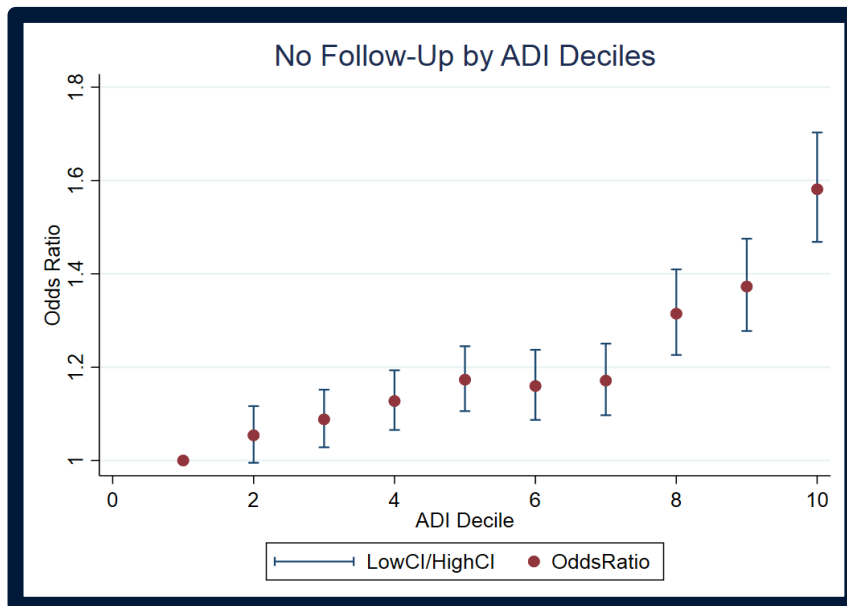
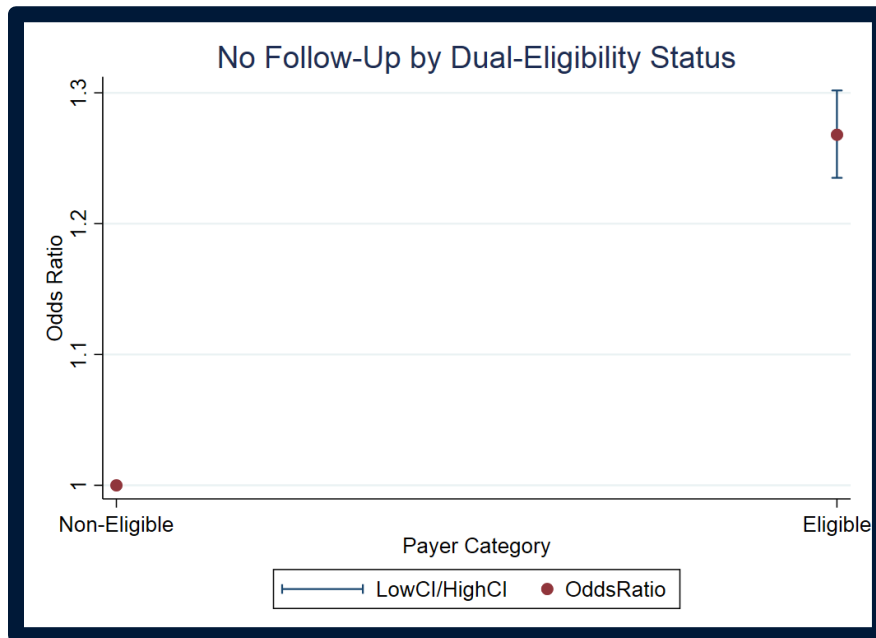


Figure 12. Odds Ratio of No Follow-Up by Dual-Eligibility Status



## Safety Domain

The QBR Safety domain contains five measures from six CDC NHSN HAI categories and the AHRQ Patient Safety Index Composite (PSI-90).<sup>6</sup> It is weighted at 35 percent of the QBR score.

### CDC NHSN HAI measures

The CDC's National Healthcare Safety Network (NHSN) tracks healthcare-associated infections such as central-line associated bloodstream infections and catheter-associated urinary tract infections. Both Maryland and the nation have seen increases in HAIs during CY 2020 and CY 2021. Specifically, CDC has reported that there were significant increases in the national SIRs for CLABSI, CAUTI, VAE, and MRSA bacteremia in 2020 compared to 2019, but that the increases varied by quarter and State. In Maryland, there were statistically significant increases in CLABSI in 2020, while all other NHSN measures for Maryland did not show a statistically significant change despite increases. Furthermore a recent study has shown that the increase in HAI SIRs continued into CY 2021.<sup>7</sup> For example, nationally CLABSI increased by 45 percent from Q1 2019 to Q1 2021. Based on these trends, the FY 2023 CMS final rule suppressed the NHSN HAI measures in the national VBP program based on the significant changes in the national results during COVID, as well as significant shortages in health personnel that would impact

<sup>6</sup> For use in the QBR Program, as well as the VBP program, the SSI Hysterectomy and SSI Colon measures are combined.

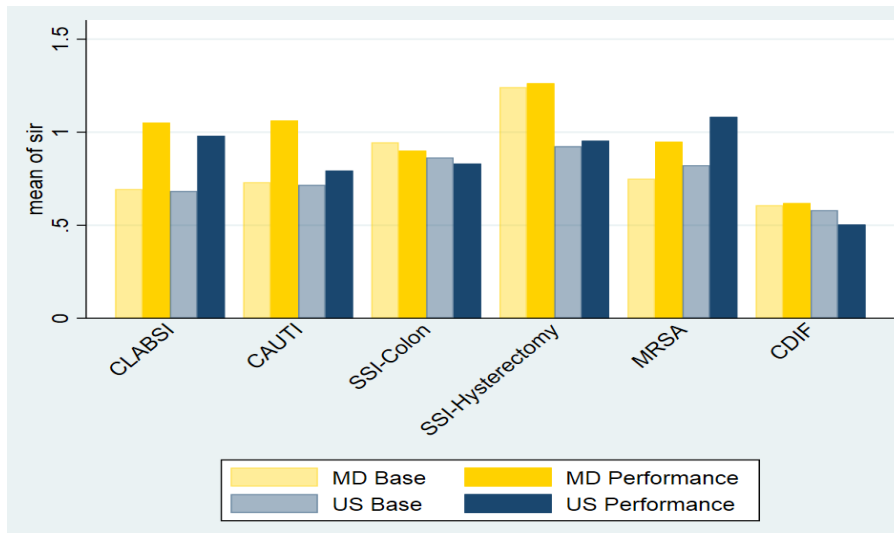
<sup>7</sup> Lastinger, L., Alvarez, C., Kofman, A., Konnor, R., Kuhar, D., Nkwata, A., . . . Dudeck, M. (2022). Continued increases in the incidence of healthcare-associated infection (HAI) during the second year of the coronavirus disease 2019 (COVID-19) pandemic. *Infection Control & Hospital Epidemiology*, 1-5. doi:10.1017/ice.2022.116



care delivery. Thus, the Maryland and national results below should be interpreted cautiously and the HSCRC staff will need to monitor whether CMS makes any additional recommendations for suppressing measures during the RY 2025 performance period.

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

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



### Patient Safety Index (PSI-90)

To align with the VBP program and expand the QBR program’s measurement of preventable complications that cause patient harm and increase the cost of hospital care, the Commission approved the adoption of the all-payer version of the PSI-90 measure in the RY 2023 QBR program at the recommendation of staff and PMWG stakeholders. The Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators were developed<sup>8</sup> and released in 2003 to help assess the quality and safety of care for adults in the hospital. PSI-90 focuses on a subset of ten AHRQ-specified PSIs of in-hospital complications and adverse events following surgeries, procedures, and childbirth. The PMWG noted that CMS removed the PSI-90 measure from the VBP program in FY 2024, but retained the measure in the Hospital Acquired Conditions Reduction Program. Since Maryland does not have PSI-90 in the MHAC program, staff is recommending to retain it in the RY 2025 QBR program.

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

- The state has **improved** with lower rates in 2021 on PSIs 09 Perioperative Hemorrhage or Hematoma Rate and 14 Postoperative Wound Dehiscence Rate.
- The state has **neither improved or declined** on PSIs 03 Pressure Ulcer Rate, 08 In-Hospital Fall With Hip Fracture Rate, and 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate.

<sup>8</sup> AHRQ contracted with the University of California, San Francisco, Stanford University Evidence-based Practice Center, and the University of California Davis for development. For additional information: [https://www.qualityindicators.ahrq.gov/Modules/psi\\_resources.aspx](https://www.qualityindicators.ahrq.gov/Modules/psi_resources.aspx)

- The state has **worsened** with higher rates in 2021 on PSIs 06 Iatrogenic Pneumothorax Rate, 11 Postoperative Respiratory Failure Rate, 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate, 13 Postoperative Sepsis Rate, and 15 Abdominopelvic Accidental Puncture or Laceration Rate.
- On the overall PSI 90 composite measure, the state has worsened slightly.

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

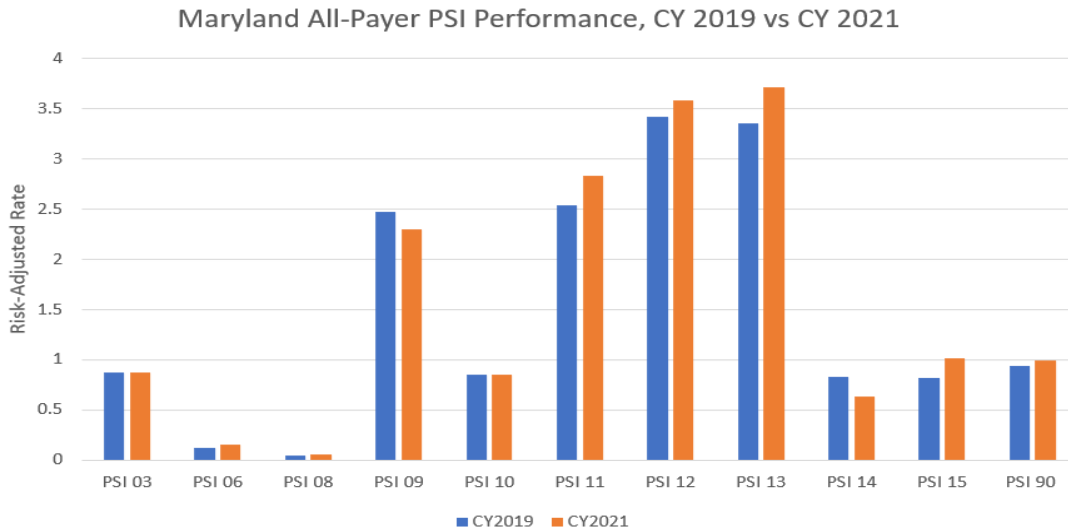
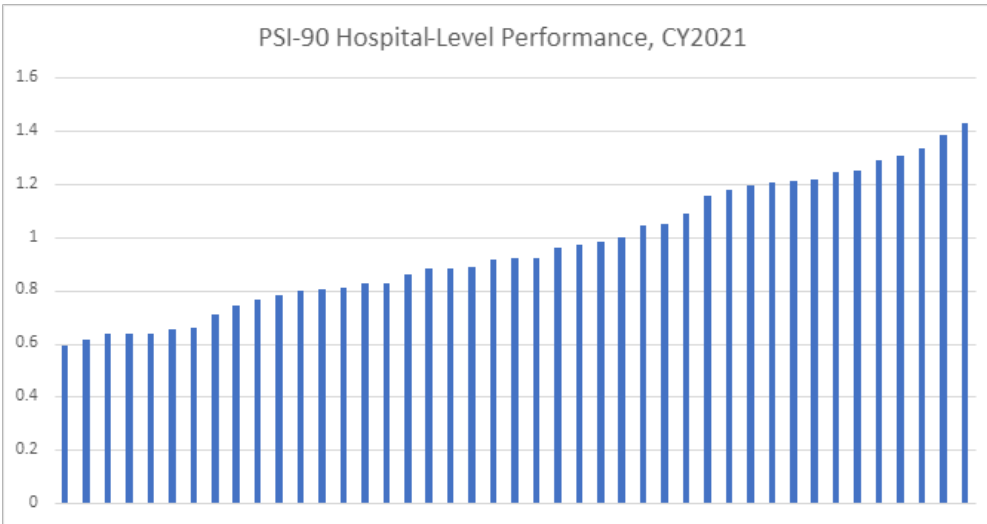


Figure 15 below illustrates the hospital-level performance on the all-payer PSI-90 composite measure for CY 2021; the variation in performance by hospital suggests there may be opportunity for improvement on this measure. However, it should be noted that this data may be impacted by the COVID PHE even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

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



## Clinical Care Domain

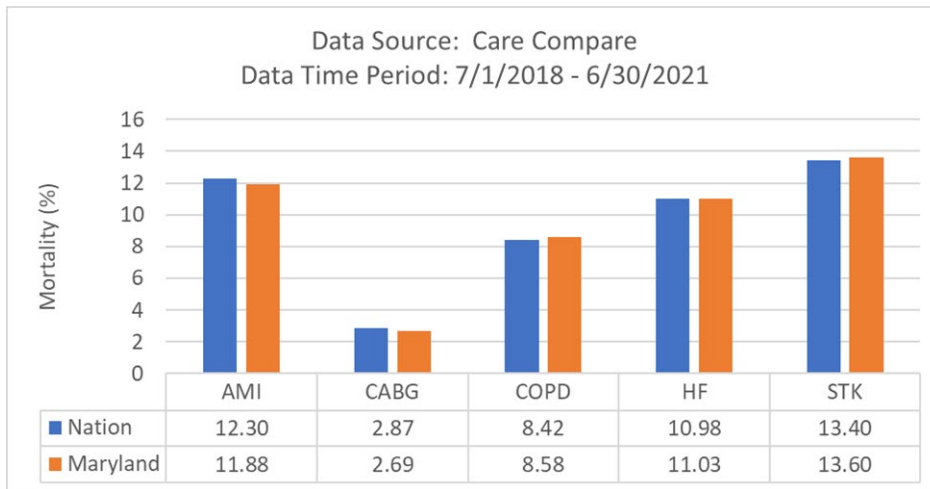
This domain, weighted at 15 percent of the QBR score, currently includes:

- A broader inpatient, all-payer, all-condition mortality measure that is weighted at 10 percent. This differs from the CMS VBP Program that uses four condition-specific, 30-day mortality measures for Medicare beneficiaries. Medicare also monitors two additional 30-day mortality measures for Coronary Artery Bypass Graft (CABG) and Stroke (STK). The HSCRC is in the process of developing an all-payer, all-cause 30 day mortality measure and recommends developing monitoring reports for RY 2025.
- The inpatient Medicare Total Hip Arthroplasty-Total Knee Arthroplasty (THA/TKA) Complications measure is weighted at 5 percent. This is also used by the CMS VBP program.

## Mortality

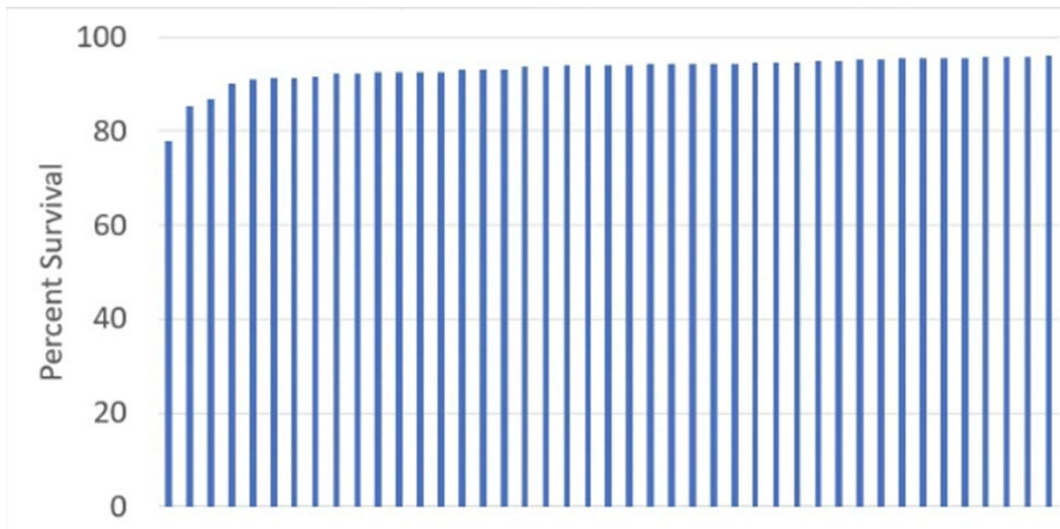
Based on the most recently available data through June of 2021, Maryland performs on par with the nation on all five of the condition specific mortality measures (data on pneumonia was removed in the latest Care Compare release due to COVID). Specifically Maryland performs slightly better than the nation on AMI and CABG, and slightly worse on COPD, HF, and STK (Figure 16). It should be noted that this data was impacted by the COVID PHE and that the first 6 months of CY 2020 was excluded from the three year measure (i.e., the measurement period was shorter than normal).

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



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

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

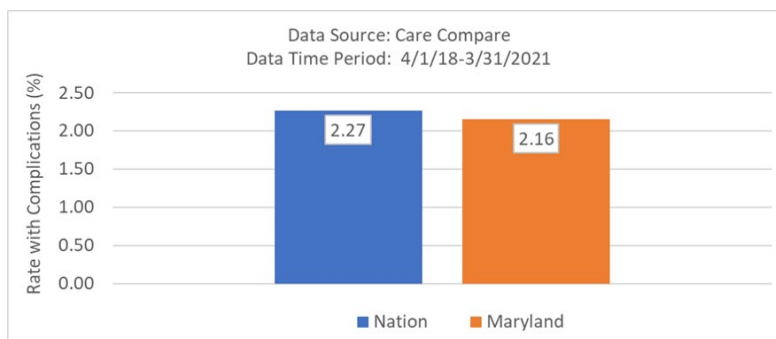


For RY 2024, staff is not proposing any significant methodology changes to the inpatient mortality measure. However, staff continue to assess impacts of COVID on the mortality measure. Furthermore, work continues to develop a 30-day, all-payer, all-cause mortality measure that can be monitored during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

**Hip and Knee Arthroplasty Complications**

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

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



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

Going forward, Commission staff will work with the PMWG and other stakeholders to continue building a multiyear, multipronged, broad strategy for inclusion of outpatient measures in the HSCRC’s quality programs. Specifically, for a THA/TKA measure, staff and stakeholders should explore approaches to adapting CMS’s current claims-based inpatient THA/TKA measure to the all-payer population, and the feasibility, validity and reliability of specifying the eCQM version of the measure at the hospital level. Further in the future, staff and stakeholders should explore the feasibility of developing an infrastructure to collect and use a hospital-level PRO-PM for elective primary THA/TKA procedures. For additional specific details on the options for THA/TKA outpatient and all-payer measure adaptation or adoption, please see the Quality Based Reimbursement RY 2024 Policy.

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

### CMS Digital Quality Measures Roadmap

Like the national programs, the quality programs in Maryland provide incentives for and/or penalties for performance on quality measures, contribute to improvements in health care, enhance patient outcomes, inform consumer choice, and promote transformation to a digital health ecosystem. Over the past decade, CMS has led efforts to advance the use of data from electronic health records (EHRs) to enhance and expand quality measurement. However, accessing clinical patient data from EHRs for the purpose of quality reporting remains relatively burdensome. Additionally, CMS’s current approach to quality

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

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

measurement does not easily incorporate emerging digital data sources such as patient-reported outcomes (PROs) and patient-generated health data (PGHD). There is a need to streamline the approach to data standardization, collection, exchange, calculation, and reporting to fully leverage clinical and patient-centered information for measurement, quality improvement, and learning.

Advancements in the interoperability of healthcare data from EHRs create an opportunity to dramatically improve quality measurement systems and realize creation of a learning health system. In 2020, the Department of Health and Human Services (HHS) finalized interoperability requirements in CMS's Interoperability and Patient Access final rule and in the Office of the National Coordinator for Health Information and Technology's (ONC's) 21st Century Cures Act final rule. Driven by the Cures Act's goal of "complete access, exchange, and use of all electronically accessible health information," these changes will greatly expand the availability of standardized, readily accessible data for measurement. Most important, CMS's and ONC's interoperability rules and policies require specified healthcare providers and health plans to make a defined set of patient information available to authorized users (patients, other providers, other plans) with no special effort using Fast Healthcare Interoperability Resources (FHIR®) application programming interfaces (APIs). The scope of required patient data and standards that support them will evolve over time, starting with data specified in the United States Core Data for Interoperability (USCDI) Version 1, structured according to the Health Level Seven International (HL7®) FHIR US Core Implementation Guide (US Core IG).

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



Maryland, like CMS, believes that In the future, interoperability of EHR and other digital health data can fuel a revolution in healthcare delivery and advance MCTs to leverage data beyond just EHRs and across settings and providers. A learning health system powered by advanced analytics applied to all digital health data can optimize patient safety, outcomes, and experience.<sup>10</sup>

## Near-Term Reporting Requirements

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

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

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

<sup>10</sup> Please see CMS Digital Quality Measurement Strategic Roadmap: [https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap\\_032822.pdf](https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf), last accessed 8/9/2022.

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

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

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

## Revenue Adjustment Methodology

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

to approximate QBR scores for all hospitals nationally and set the cutpoint at the average national score over the last several years. However, staff have not repeated this analysis on more recent data due to concerns about its validity and reliability, as well as some data being wholly suppressed due to the COVID PHE. Thus staff proposes to maintain the current scale, but determine if the cutpoint needs to be amended once we have more recent complete data. If staff determine the cutpoint needs to be amended, we will report this to the Commission.

## DRAFT RECOMMENDATIONS FOR RY 2025 QBR PROGRAM

1. Continue Domain Weighting as follows for determining hospitals' overall performance scores:  
Person and Community Engagement (PCE) - 50 percent, Safety (NHSN measures) - 35 percent, Clinical Care - 15 percent.
  - a. Within the PCE domain, continue to include four linear HCAHPS measures weighted at 10% of QBR score; remove associated revenue at risk from top box.
  - b. Within the PCE domain, add the Timely Follow-Up measure for Medicaid.
2. Develop the following monitoring reports for measures that will be considered for adoption after RY 2025:
  - a. 30-day all-payer, all-cause mortality (claims based)
  - b. Timely Follow-Up for Behavioral Health
  - c. Disparity gaps for Timely Follow-Up
3. Implement the HCAHPS improvement framework with key stakeholders.
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements; For CY 2023 require submission of:
  - a. ED-2 eCQM for monitoring; consider for re-adoption after RY 2025 (in CY 2024)
  - b. Safe Opioid Use eCQM for monitoring
  - c. Four additional eCQM measures aligned with the SIHIS goals and hospital improvement priorities
  - d. Clinical data elements for 30-day mortality and readmission hybrid measures beginning July 2023
5. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent), and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.
  - a. Retrospectively evaluate 41 percent cutpoint using more recent data to calculate national average score

## APPENDIX A

### QBR PROGRAM BACKGROUND

#### Detailed Overview of HSCRC QBR Program

Maryland's QBR Program, in place since July 2009, uses measures that are similar to those in the federal Medicare VBP Program, under which all other states have operated since October 2012. Similar to the VBP Program, the QBR Program currently measures performance in Clinical Care, Safety, and Person and Community Engagement domains, which comprise 15 percent, 35 percent, and 50 percent of a hospital's total QBR score, respectively. For the Safety and Person and Community Engagement domains, which constitute the largest share of a hospital's overall QBR score (85 percent), performance standards are the same as those established in the national VBP Program. The Clinical Care Domain, in contrast, uses a Maryland-specific mortality measure and benchmarks. In effect, Maryland's QBR Program, despite not having a prescribed national goal, reflects Maryland's rankings relative to the nation by using national VBP benchmarks for the majority of the overall QBR score.

In addition to structuring two of the three domains of the QBR Program to correspond to the federal VBP Program, the HSCRC has increasingly emphasized performance relative to the nation through benchmarking, domain weighting, and scaling decisions. For example, beginning in RY 2015, the QBR Program began using national benchmarks to assess performance for the Person and Community Engagement and Safety domains. Subsequently, the RY 2017 QBR policy increased the weighting of the Person and Community Engagement domain, which was measured by the national HCAHPS survey instrument to 50 percent. The weighting was increased to raise incentives for HCAHPS improvement, as Maryland has consistently lagged behind the nation on these measures. In RY 2020, ED-1b and ED-2b wait time measures for admitted patients were added to this domain, with the domain weight remaining at 50 percent. In RY 2021, the domain weight remained constant, but the ED-1b measure was removed from the program. For RY 2022, ED-2b was removed from QBR because CMS no longer required submission of the measure for the Inpatient Quality Reporting Program.

Although the QBR Program has many similarities to the federal Medicare VBP Program, it does differ because Maryland's unique model agreements and autonomous position allow the state to be innovative and progressive. Figure A.1 compares the RY 2023 and 2024 QBR measures and domain weights to those used in the CMS VBP Program.

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

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

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

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

### **1. Domain weights and revenue at risk**

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

The HSCRC sets aside a percentage of hospital inpatient revenue to be held “at risk” based on each hospital’s QBR Program performance. Hospital performance scores are translated into rewards and penalties in a process called scaling.<sup>11</sup> Rewards (positive scaled amounts) or penalties (negative scaled amounts) are then applied to each hospital’s update factor for the rate year. The rewards or penalties are

<sup>11</sup> Scaling refers to the differential allocation of a predetermined portion of base-regulated hospital inpatient revenue based on an assessment of hospital performance.

applied on a one-time basis and are not considered permanent revenue. The HSCRC previously approved scaling a maximum reward of 2 percent and a penalty of 2 percent of the total approved base revenue for inpatients across all hospitals.

HSCRC staff has worked with stakeholders over the last several years to align the QBR measures, thresholds, benchmark values, time lag periods, and amount of revenue at risk with those used by the CMS VBP Program, where feasible,<sup>12</sup> enabling the HSCRC to use data submitted directly to CMS. Maryland implemented an efficiency measure outside of the QBR Program, based on potentially avoidable utilization (PAU). The PAU savings adjustment to hospital rates is based on the costs of potentially avoidable admissions, as measured by the Agency for Healthcare Research and Quality's Prevention Quality Indicators and avoidable readmissions. HSCRC staff will continue to work with key stakeholders to finish developing an efficiency measure that incorporates population-based cost outcomes.

## 2. QBR score calculation

QBR scores are evaluated by comparing a hospital's performance rate to its base period rate, as well as to the threshold (which is the median, or 50<sup>th</sup> percentile, of all hospitals' performance during the baseline period) and the benchmark (which is the mean of the top decile, or roughly the 95<sup>th</sup> percentile, during the baseline period).

**Attainment points:** During the performance period, attainment points are awarded by comparing a hospital's rates with the threshold and the benchmark. With the exception of the Maryland mortality measure and ED wait time measures, the benchmarks and thresholds are the same as those used by CMS for the VBP Program measures.<sup>13</sup> For each measure, a hospital that has a rate at or above the benchmark receives 10 attainment points. A hospital that has a rate below the attainment threshold receives 0 attainment points. A hospital that has a rate at or above the attainment threshold and below the benchmark receives 1–9 attainment points.

**Improvement points:** Improvement points are awarded by comparing a hospital's rates during the performance period to the hospital's rates from the baseline period. A hospital that has a rate at or above the attainment benchmark receives 9 improvement points. A hospital that has a rate at or below the baseline period rate receives 0 improvement points. A hospital that has a rate between the baseline period rate and the attainment benchmark receives 0–9 improvement points.

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<sup>12</sup> VBP measure specifications can be found at [www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html](http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html).

<sup>13</sup> One exception is the ED wait time measures. For these measures, attainment points are not calculated; instead, the full 10 points are awarded to hospitals at or below (more efficient) than the national medians for their respective volume categories in the performance period.

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

**Domain denominator adjustments:** In certain instances, QBR measures will be excluded from the QBR Program for individual hospitals. Hospitals are exempt from measurement for any of the NHSN Safety measures for which there is less than one predicted case in the performance period. If a hospital is exempt from an NHSN measure, its Safety domain score denominator is reduced from 50 to 40 possible points. If it is exempt from two measures, the Safety domain score denominator would be 30 possible points. Hospitals must have at least two of five Safety measures to be included in the Safety domain.

**Domain scores:** The better of the attainment score and improvement score for each measure is used to determine the measure points for each measure. The measure points are then summed and divided by the total possible points in each domain and multiplied by 100.

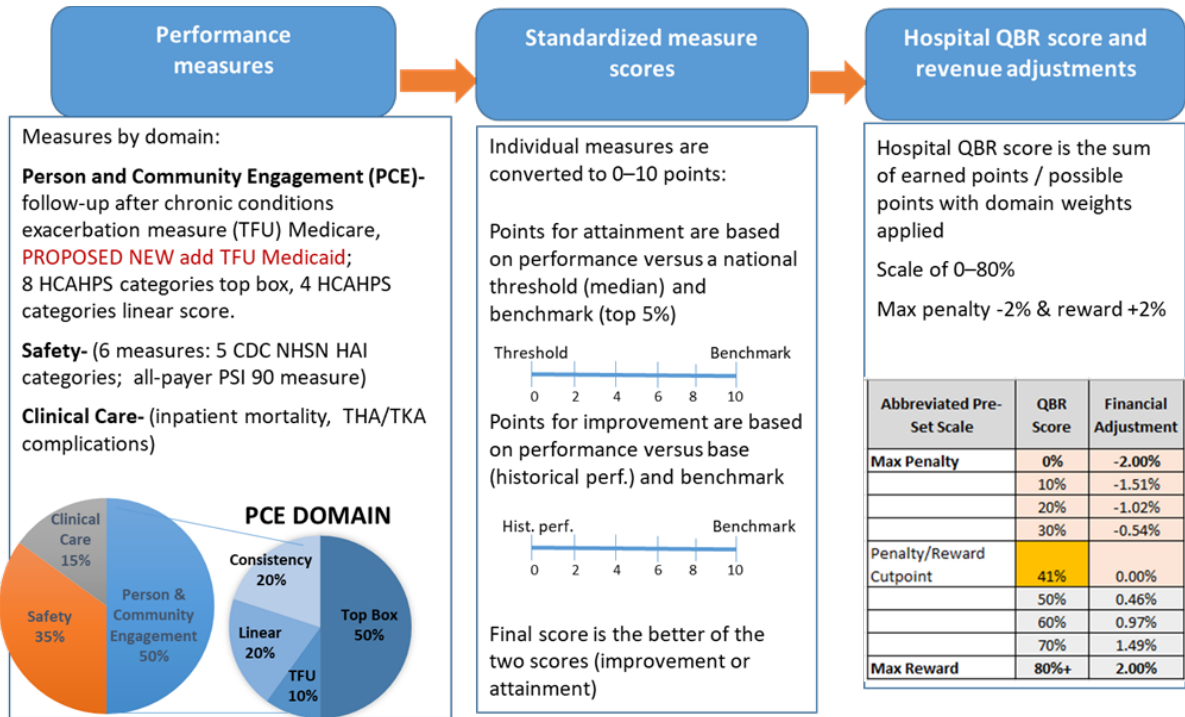
**Total performance score:** The total performance score is computed by multiplying the domain scores by their specified weights and then adding those totals together. The total performance score is then translated into a reward or penalty that is applied to hospital revenue.

### 3. RY 2023 and 2024 QBR Program

For RY 2023, the HSCRC did not make fundamental changes to the QBR Program's methodology but implemented the addition of the Follow-Up After Acute Exacerbation of Chronic Conditions measure and PSI-90 composite measures.

Figure A.2 shows the steps for converting measure scores to standardized scores for each measure, and then to rewards and penalties based on total scores earned, reflecting the updates for RY 2023 and proposed for RY 2024.

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



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

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

	Clinical Care	Person and Community Engagement	Safety
<b>QBR RY 24 Program</b>	15 percent 2 measures <ul style="list-style-type: none"> <li>Inpatient mortality (HSCRC case-mix data)</li> <li>THA TKA (CMS Hospital Compare, Medicare claims data)</li> </ul>	50 percent 9 measures <ul style="list-style-type: none"> <li>8 HCAHPS domains (CMS Hospital Compare patient survey)</li> <li>Follow-Up After Acute Exacerbation of Chronic Conditions (Medicare claims, <b>proposed add Medicaid for RY 2025</b>)</li> </ul>	35 percent 7 measures <ul style="list-style-type: none"> <li>6 CDC NHSN HAI measures (CMS Hospital Compare chart abstracted)</li> <li>PSI 90 all-payer (HSCRC case-mix data)</li> </ul>



**a. *PSI 90 measure (adopted beginning RY 2023)***

Newly adopted in RY 2023, the Patient Safety Indicator composite measure was developed by the Agency for Healthcare Research and Quality in 2003.<sup>14</sup> CMS first adopted the composite measure in the VBP program in FFY 2015 and removed the measure in FY 2019-FY 2022 due to operational constraints from the International Classification of Diseases, Tenth Revision (ICD-10) transition. The HSCRC had used the ICD-9 version of this measure in the QBR program but applied it to Maryland's all-payer population. CMS adopted the updated NQF endorsed ICD-10 version of the measure (Medicare only) that is used beginning with the FY 2023 Hospital VBP program<sup>15</sup>, and also adopted by the QBR program (all-payer version) in RY 2023.

AHRQ's specified PSI uses include:

- Assess, monitor, track, and improve the safety of inpatient care
- Comparative public reporting, trending, and pay-for-performance initiatives
- Identify potentially avoidable complications that result from a patient's exposure to the health care system
- Detect potential safety problems that occur during a patient's hospital stay

The discharge weighted average of the observed-to-expected ratios for the following subset of AHRQ's PSIs comprise the PSI-90 composite measure:

- PSI 03 Pressure Ulcer Rate
- PSI 06 Iatrogenic Pneumothorax Rate
- PSI 08 In-Hospital Fall With Hip Fracture Rate
- PSII 09 Perioperative Hemorrhage or Hematoma Rate
- PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate
- PSI 11 Postoperative Respiratory Failure Rate
- PSI 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate
- PSI 13 Postoperative Sepsis Rate
- PSI 14 Postoperative Wound Dehiscence Rate
- PSI 15 Abdominopelvic Accidental Puncture or Laceration Rate

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

<sup>15</sup> For more information on the measure removal and adoption, reference the [FY 2018 IPPS/LTCH PPS final rule](#) (82 FR 38242-38244) and (82 FR 38251-38256).

PSI 90 combines the smoothed (empirical Bayes shrinkage) indirectly standardized morbidity ratios (observed/expected ratios) from selected Patient Safety Indicators. The weights of the individual component indicators are based on two concepts: the volume of the adverse event and the harm associated with the adverse event. The volume weights were calculated based on the number of safety-related events for the component indicators in the all-payer reference population. The harm weights were calculated by multiplying empirical estimates of the probability of excess harms associated with each patient safety event by the corresponding utility weights (1–disutility). Disutility is the measure of the severity of the adverse events associated with each harm (for example, the outcome severity or the least-preferred states from the patient perspective).

The PSI 90 measure scores are converted to program scores, as described in the QBR Score Calculation section of this appendix.

**b. *Follow-Up After Acute Exacerbation for Chronic Conditions (adopted for RY 2023)***

Newly proposed for RY 2023, this measure was developed by IMPAQ on behalf of CMS.<sup>16</sup> Technical details for calculating measure scores are provided below.

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

**Measure steward:** IMPAQ International

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

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

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

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

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<sup>16</sup> Source: <https://impagint.com/measure-information-timely-follow-after-acute-exacerbations-chronic-conditions>

3. HF: Within 14 days of the date of discharge
4. Coronary artery disease: Within 14 days of the date of discharge
5. Chronic obstructive pulmonary disease: Within 30 days of the date of discharge
6. Diabetes: Within 30 days of the date of discharge

**Numerator details:** This measure is defined at the issuer-by-product level, meaning that results are aggregated for each qualified insurance issuer and for each product. A product is defined as a discrete package of health insurance coverage benefits that issuers offer in the context of a particular network type, such as health maintenance organization, preferred provider organization, exclusive provider organization, point of service, or indemnity. Issuers are broadly defined as health insurance providers who participate in the Federally Facilitated Marketplaces and health insurance contracts offered in the Medicare Advantage market.

Timely follow-up is defined as a claim for the same patient after the discharge date for the acute event that (1) is a non-emergency outpatient visit and (2) has a Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding System (HCPCS) code indicating a visit that constitutes appropriate follow-up, as defined by clinical guidelines and clinical coding experts. The follow-up visit may be an office or telehealth visit and takes place in certain chronic care or transitional care management settings. The visit must occur within the condition-specific time frame to be considered timely and for the conditions specified in the numerator. For a list of individual codes, please see the data dictionary.<sup>17</sup>

The time frames for a follow-up visit for each of the six chronic conditions are based on evidence-based clinical practice guidelines, as laid out in the evidence form.

**Denominator statement:** The denominator is the sum of the acute events—that is, the issuer-product-level acute exacerbations that require an ED visit, observation stay, or inpatient stay—for any of the six conditions listed above (hypertension, asthma, heart failure, coronary artery disease, chronic obstructive pulmonary disease, or diabetes).

**Denominator details:** Acute events are defined as either an ED visit, observation stay, or inpatient stay. If a patient is discharged and another claim begins for the same condition on the same day or the following day, the claims are considered to be part of one continuous acute event. In this case, the discharge date of the last claim is the beginning of the follow-up interval. The final claim of the acute event must be a discharge to community.

An acute event is assigned to [condition] if:

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<sup>17</sup> Please see <https://impagint.com/measure-information-timely-follow-after-acute-exacerbations-chronic-conditions>.

1. The primary diagnosis is a sufficient code for [condition].

OR

2. The primary diagnosis is a related code for [condition] AND at least one additional diagnosis is a sufficient code for [condition].
  - If the event has two or more conditions with a related code as the primary diagnosis and a sufficient code in additional diagnosis positions, **assign the event to the condition with a sufficient code appearing in the “highest” (closest to the primary) diagnosis position.**

If the visits that make up an acute event are assigned different conditions, the event is assigned the condition that occurs last in the sequence. Following this methodology, only one condition is recorded in the denominator per acute event.

**Denominator exclusions:** The measure excludes events with:

1. Subsequent acute events that occur two days after the prior discharge but still during the follow-up interval of the prior event for the same reason; to prevent double-counting, the denominator will include only the first acute event
2. Acute events after which the patient does not have continuous enrollment for 30 days in the same product
3. Acute events in which the discharge status of the last claim is not “to community” (“left against medical advice” is not a discharge to community)
4. Acute events for which the calendar year ends before the follow-up window ends (for example, acute asthma events ending less than 14 days before December 31)
5. Acute events in which the patient enters a skilled nursing facility, non-acute care, or hospice care during the follow-up interval

**Measure scoring:**

1. Denominator events are identified by hospitalization, observation, and ED events with appropriate codes (that is, codes identifying an acute exacerbation of one of the six included chronic conditions).
2. Exclusions are applied to the population from Step 1 to produce the eligible patient population (that is, the count of all qualifying events) for the measure.
3. For each qualifying event, the claims are examined to determine whether they include a subsequent code that satisfies the follow-up requirement for that event (for example, whether a diabetes event received follow-up within the appropriate time frame for diabetes, from an

appropriate provider). Each event for which the follow-up requirement was satisfied is counted as one in the numerator. Each event for which the follow-up requirement was not satisfied is counted as zero in the numerator.

4. The percentage score is calculated as the numerator divided by the denominator.

**Measure-scoring logic:** Following the National Quality Forum's guideline, we use **opportunity-based weighting** to calculate the follow-up measure. This means each condition is weighted by the sum of acute exacerbations that require either an ED visit or an observation or inpatient stay for all of the six conditions that occur, as reflected in the logic below.

$$[\text{NUM}(\text{ASM}) + \text{NUM}(\text{CAD}) + \text{NUM}(\text{HF}) + \text{NUM}(\text{COPD}) + \text{NUM}(\text{DIAB}) + \text{NUM}(\text{HTN})] / [\text{DENOM}(\text{ASM}) + \text{DENOM}(\text{CAD}) + \text{DENOM}(\text{HF}) + \text{DENOM}(\text{COPD}) + \text{DENOM}(\text{DIAB}) + \text{DENOM}(\text{HTN})]$$

Although the development team designed the measure to aggregate each condition score in the manner described above into a single overall score, programs may choose to also calculate individual scores for each chronic condition when implementing the measure. Individual measure scores would be calculated by dividing the condition-specific numerator by the condition-specific denominator, as in the example for heart failure:  $\text{NUM}(\text{HF}) / \text{DENOM}(\text{HF})$ .

The follow-up measure scores are converted to QBR scores, as described in the QBR Score Calculation section above.

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

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

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

Rate year (Maryland fiscal year)	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23	Q1-24	Q2-24	Q3-24	Q4-24	
Calendar year	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23	Q1-24	Q2-24	
QBR base and performance periods	<b>BASE- CMS Hospital Compare base period (HCAHPS measures, all CDC NHSN measures)*</b>																						

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

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

## **Maryland CY 2022 Performance and Next Steps**

Staff will present materials and accept testimony at the Commission Meeting.

## **Policy Update Report and Discussion**

Staff will present materials at the Commission Meeting.





**TO:** HSCRC Commissioners  
**FROM:** HSCRC Staff  
**DATE:** October 12, 2022  
**RE:** Hearing and Meeting Schedule

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**Adam Kane, Esq**  
Chairman

**Joseph Antos, PhD**  
Vice-Chairman

**Victoria W. Bayless**

**Stacia Cohen, RN, MBA**

**James N. Elliott, MD**

**Maulik Joshi, DrPH**

**Sam Malhotra**

November 9, 2022 To be determined – In-person/Hybrid or GoTo Webinar

December 14, 2022 To be determined – In-person/Hybrid or GoTo Webinar

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

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

**Katie Wunderlich**  
Executive Director

**William Henderson**  
Director  
Medical Economics & Data Analytics

**Allan Pack**  
Director  
Population-Based Methodologies

**Gerard J. Schmith**  
Director  
Revenue & Regulation Compliance