



maryland
health services
cost review commission

Performance Measurement Work Group Meeting

November 15, 2023

HSCRC Quality Team

PMWG Members

Carrie	Adams	Meritus	Sharon	Neeley	Maryland Department of Health Medicaid
Ryan	Anderson	MedStar - MD Primary Care Program	Christine	Nguyen	Families USA
Kelly	Arthur	Qlarant QIO	Jonathan	Patrick	MedStar Health
Ed	Beranek	Johns Hopkins Health System	Elinor	Petrocelli	Mercy Medical Center
Barbara	Brocato	Barbara Marx Brocato & Associates	Mindy	Pierce	Primary Care Coalition of Montgomery County
Zahid	Butt	Medisolv Inc.	Farzaneh	Sabi	Kaiser Mid-Atlantic Permanente Medical Group
Tim	Chizmar	MIEMSS	Nitza	Santiago	Lifefridge Health
Linda	Costa	University of Maryland School of Nursing	Dale	Schumacher	MedChi, Maryland State Medical Society
Ted	Delbridge	MIEMSS	Jodi	Segal	Johns Hopkins University
Lori	Doyle	Community Behavioral Health Association of Maryland	Madeleine "Maddy"	Shea	Health Management Associates
Toby	Gordon	Johns Hopkins Carey Business School	Brian	Sims	Maryland Hospital Association
Theressa	Lee	Maryland Health Care Commission	Mike	Sokolow	University of Maryland Medical Systems
Angela	Maule	Garrett Regional Medical Center	Geetika "Geeta"	Sood	JHU SOM, Division of Infectious Diseases.
Patsy	Mcneil	Adventist Health	April	Taylor	Johns Hopkins Health System
Stephen	Michaels	MedStar Southern Maryland Hospital	Bruce	VanDerver	Maryland Physicians Care
Lily	Mitchell	CareFirst	Jamie	White	Frederick Health

Agenda

- RY 2026 QBR final recommendation
- RY 2024 QBR cutpoint
- RY 2025 PPC Concerns
- MHAC RY 2026 draft recommendation
 - PPC Trends
 - Bayesian Smoothing
 - Performance Standards and Scoring
- ED PAU
- IP Diabetes Screening final recommendation

RY 2026 Policy Decisions

1. Quality-Based Reimbursement (QBR) Program

- Add disparity in Medicare Timely Follow-Up
- Add ED wait time/Turnaround measure
- Transition from inpatient mortality to all-cause, all-payer 30-day mortality
- Evaluate revenue at-risk under program given addition of measures
- Addition of Sep 1 Measure to Safety domain
- HCAHPS improvement: Supplemental questions

2. Maryland Hospital Acquired Conditions (MHAC) Program

- Payment PPCs
- Bayesian Smoothing
- Calculation of performance standards
- Small hospital concerns
- Revenue at-risk

RY 2026 Policy Decisions, continued

3. Readmission Reduction Incentive Program (RRIP)

- Improvement target
- Attainment target
- Revisits/Observation
- Excess Days in Acute Care measure
- Within hospital disparities measure and incentive

4. Emergency Department/Multi-Visit Patient policy recommendation

- Finalize measure
- How to incorporate into existing or new PAU policy
- How to incorporate measure into existing methodologies (e.g., Marketshift)

5. Population Health: IP diabetes screening recommendation

- Discussion on options for payment policy
- Evaluate options for removing those already screened and opt outs from denominator

RY 2026 Quality Based Reimbursement Update

RY 2026 Draft Recommendations for QBR Program

1. Modify Domain Weighting as follows for determining hospitals' overall performance scores: Person and Community Engagement (PCE) - 60 percent (+10%), Safety (NHSN measures) - 25 percent (-10%), Clinical Care - 15 percent (no change).
 - a. Within the PCE domain:
 - i. Increase domain weight to 60 percent to accommodate new measures but do not increase the weight on HCAHPS top-box and consistency scores.
 - ii. Continue to include four linear HCAHPS measures **but reduce overall weight by half to accommodate new measures.**
 - iii. Continue to include Medicare and Medicaid Timely Follow-Up (TFU) rates and **add TFU Disparity Gap measure.**
 - iv. **Add an ED wait time measure.**
 - b. Within the Safety domain:
 - i. **Reduce overall domain weight from 35 to 25 percent to match CMS VBP program.**
 - c. Within the Clinical Care domain:
 - i. Continue to include the inpatient mortality measure in the program.
 - ii. **Add the all-payer, all-cause 30-Day Mortality measure.**
 - iii. **Split the weight on mortality between the two mortality measures.**

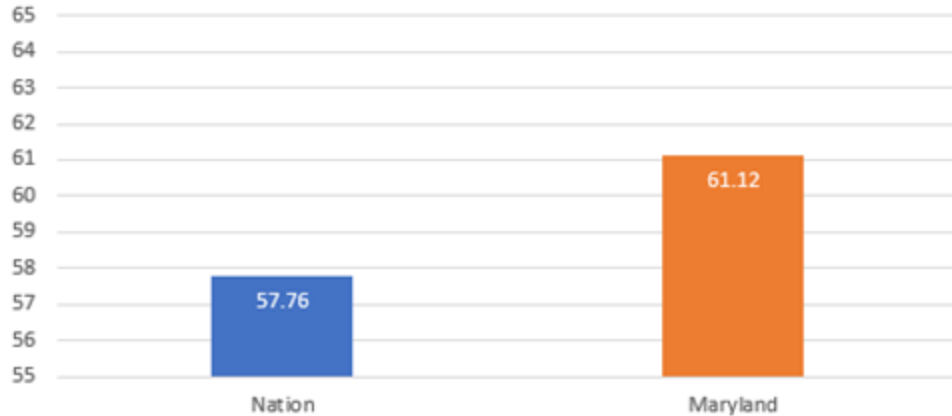
RY 2026 Draft Recommendations for QBR Program

2. Develop the following monitoring reports to track hospital performance:
 - a. Timely Follow-Up for Behavioral Health
 - b. Sepsis Dashboard: Sepsis mortality, Sep-1 measure—Early Management Bundle, Severe Sepsis/Septic Shock
3. Continue implementing the HCAHPS improvement framework with key stakeholders.
 - a. Explore statewide adoption of added question(s) to the survey linked to best practice with evidence that implementation improves HCAHPS scores.
 - b. Address emergency department length of stay/hospital throughput issues as strategy to improve HCAHPS
4. Continue collaboration with CRISP and other partners on infrastructure to collect hospital electronic clinical quality measures and core clinical data elements for hybrid measures;
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 cut point using more recent data to calculate national average score for RY25 and RY26
 - b. **Based on more analyses on the impact of pre-COVID performance standards on national hospital performance, adjust the RY24 QBR cut point to be [to be determined in final policy, see discussion under revenue adjustment section]**

New Measure Discussion

Sep-1 Sepsis and Septic Shock Bundle, Maryland Performs Better

Sep-1 Average Performance, October 2021- September 2022



Maryland Hospital Change from CY19 to 10/21-9/22

- 4 hospitals improved >50%
- 6 hospitals improved 20%-50%
- 15 hospitals improved 1%-20%
- 10 hospitals declined 1%-20%
- 6 hospitals declined 20%-50%

- CMS adding to FY 2026 VBP; 2018 public reporting on Care Compare

Prior PMWG discussion—

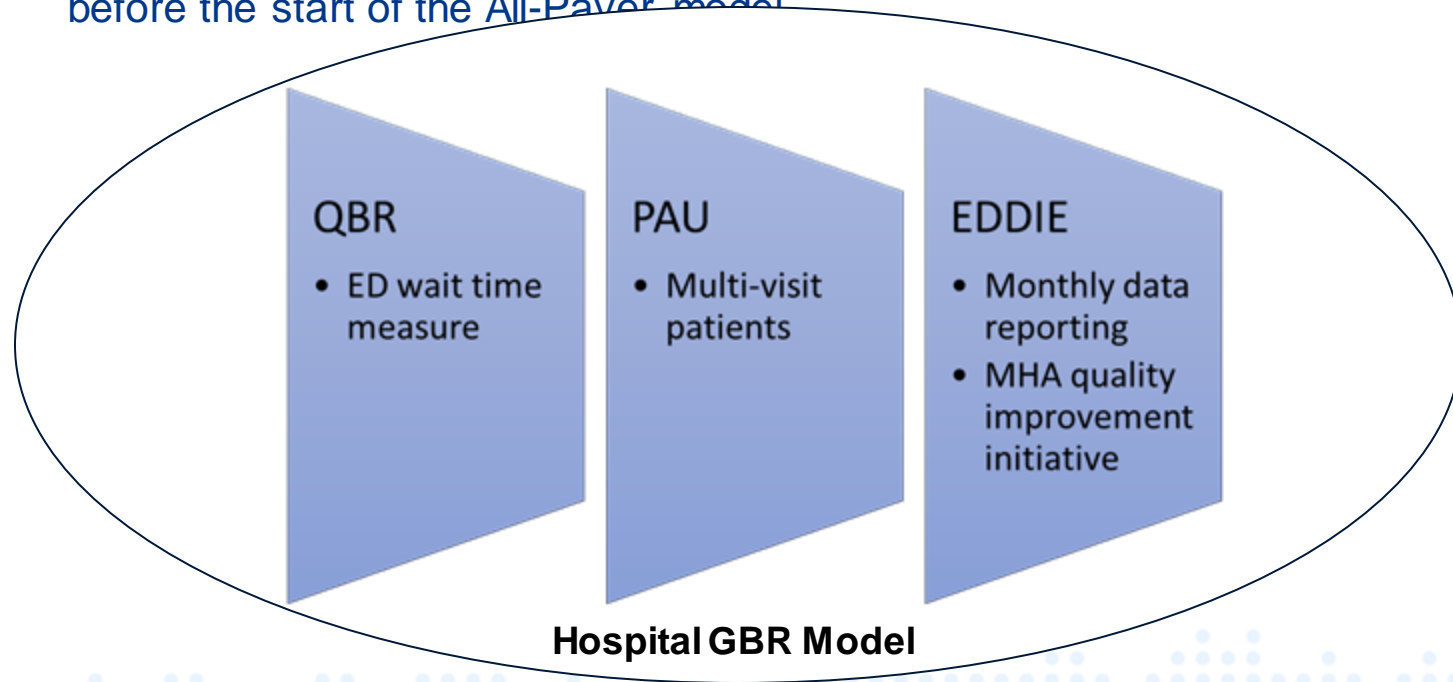
- Measure too broad; sepsis definition needs updates
- Maryland inpatient all-condition mortality measure includes sepsis
- QBR includes postop. sepsis as part of PSI 90 in Safety domain; Sepsis PPC

Commission discussion—

- Commissioners Elliot and Joshi expressed support for Sep-1 measure because of its proven effect on reducing sepsis
- Commissioner Johnson expressed support for holding hospitals for outcomes over process measures

HSCRC Policies and Initiatives to Address ED Length of Stay*

- ED length of stay in Maryland has been consistently higher than the nation since before the start of the All-Payer model



*In addition to HSCRC policies and initiatives, other activities like legislative task force are underway. **HSCRC will present on this in December PMWG**

Measure Options

ED Measures	Pros	Cons
OP-18: Arrival to Discharge	<ul style="list-style-type: none"> 80 percent of ED visits Validated CMS measure Available on Care Compare National data available for benchmarking 	<ul style="list-style-type: none"> Data is delayed (9 months) Concern on not focusing on IP throughput issues as directly
ED 2: eCQM Version (MD only)	<ul style="list-style-type: none"> Validated CMS measure (historically) State has infrastructure to collect CY22 and CY23 historical data available for measuring improvement 	<ul style="list-style-type: none"> Requires special assistance from CMS to maintain and from EHR vendors to implement Exclusion of patients with >1 hr observation Concerns on lack of order to admit for some patients admitted May not be available for CY 2024
EDDIE ED1-like: Arrival to IP Admission	<ul style="list-style-type: none"> Full time from arrival to IP admission Timely monthly reporting Focus on IP All ED admissions (not sampled) 	<ul style="list-style-type: none"> Similar measure to CMS but unaudited data Concerns over observation cases being treated the same across hospitals or being excluded Only about 20 percent of patients are admitted
EDDIE OP 18-like: Arrival to Discharge	<ul style="list-style-type: none"> Timely monthly reporting All ED admissions (not sampled) 80 percent of ED visits 	<ul style="list-style-type: none"> Similar measure to CMS but unaudited data Concerns over observation cases being treated the same across hospitals or being excluded Concern on not focusing on IP throughput issues as directly
EDDIE: EMS Turnaround Time	<ul style="list-style-type: none"> Easy measure to collect Improvement will benefit patient, hospital, and EMS 	<ul style="list-style-type: none"> Concern on data collection consistency Only addresses length of stay for those arriving by ambulance

ED Length of Stay Measure Options

Option 1: Delay implementation of an ED length of stay measure for admitted patients for one year so that staff can finalize measure development and selection.

Option 2: Approve inclusion of an existing ED measure for CY 2024. The options for existing measures would be OP-18 from Care Compare, which measures length of stay for non-admitted patients, or the EMS turnaround time measure.

Option 3: Approve inclusion of ED-1 like measure in RY 2026 QBR program, which will be finalized during CY 2024 and will not require additional Commission approval.

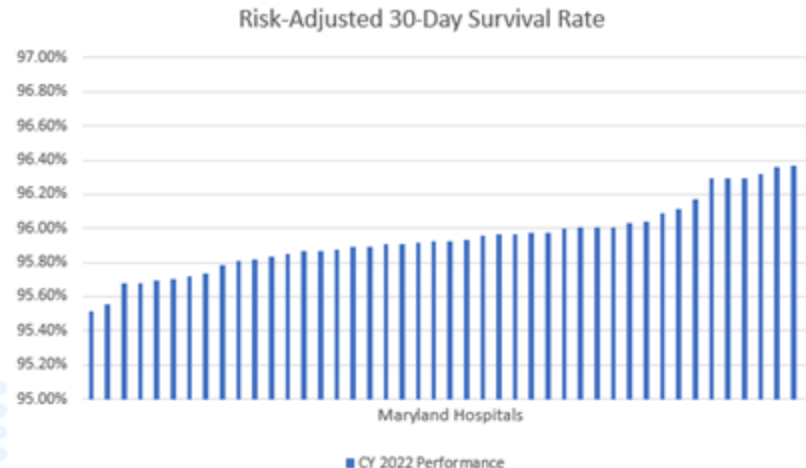
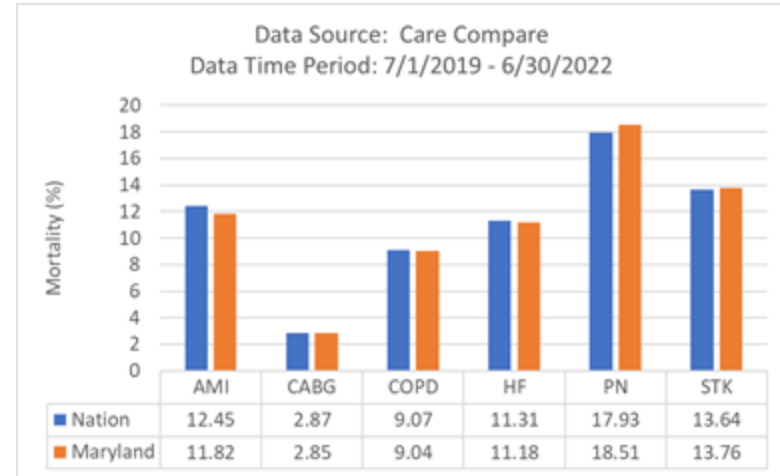
**Staff
Recommendation**

Commissioner Discussion

- ED LOS is a significant issue in Maryland; are we doing enough to address the issue
 - Providing enough or appropriate incentive(s)
 - Diagnosing/addressing root causes
 - Should we add OP 18-like measure (Commissioner Joshi)

Transition from IP to 30-Day Mortality

- CMS VBP program assesses 30-day condition specific mortality; Maryland performs similar to the nation
- CMS has also developed a hybrid all-cause 30-day mortality measure
- HSCRC worked with Mathematica to adapt CMS measures and develop an all-payer, all-cause 30-day mortality measure
- Appendix slides show measure exclusions (e.g., hospice patients, transfers, non-MD residents) and calculation steps



Key Components of TFU Disparity Gap Methodology

- Medicare only (in future years staff plan to add Medicaid)
- Measure patient-level social exposures
 - Patient Adversity Index (PAI) = race, Medicaid coverage, ADI
- Estimate association between social exposures and likelihood of TFU at hospital level for baseline (2018)
- Estimate the association for each performance year
- Difference between performance year and baseline is disparity gap improvement
- No risk adjustment because TFU is a process measure

**Methodology
Modeled after
Readmission
Disparity Gap**

Summary of New Measures

Measure	RY26 Staff Recommendation
Sepsis Bundle	Do not include for RY26. Continue to incentivize high quality sepsis care using mortality, PSI, PPCs in MHAC. Develop Sepsis Dashboard for ongoing monitoring.
Timely FU Disparity Gap	Include for RY26.
ED Length of Stay	See staff options for commissioner consideration.
30-day, all-payer, all-cause Mortality	Phase into QBR program by splitting mortality weight between inpatient and 30-day for RY26.

QBR Revenue-at-Risk Discussion

Commission Discussion

- Various Commissioners shared staff's concern that the number of measures in the QBR program risks saliency/effectiveness
- At the same time, Commissioners have expressed support for new measures
 - ED Wait Times (Commissioner Johnson)
 - Sep-1 (Commissioners Elliot, Joshi)
 - Timely Follow-Up Disparity Metric (Commissioner Joshi)
- Staff agrees that these new measures (and existing measures, e.g., HCAHPS) are important to ensuring high quality outcomes in the TCOC Model
- Therefore, staff will continue to support its proposal to improve saliency by
 - Reducing the Safety Domain to 25% of QBR
 - Reducing the pilot measure of HCAHPS Linear to 5% of QBR
 - Adding ED Wait Times and Timely Follow Up with re-assigned weights
 - Splitting weight between IP Mortality and 30 Day Mortality and
 - Maintaining all other weights at prior levels
- More substantive changes to weighting among all programs should be assessed next year

RY2026 Proposed Domain and Measure Weighting

RY2026 Proposed Weighting (2% total at-risk)	QBR Program Weight	IP Revenue at Risk (%)	Revenue at Risk (\$) for Hospital w/\$250m IP Revenue	Total Revenue at Risk (%) for Hospital w/\$400m Total Revenue
PCE Domain	60%	1.20%	\$3,000,000	0.7500%
HCAHPS TopBox (8)	25.00%	0.50%	\$1,250,000	0.3125%
HCAHPS Consistency	10.00%	0.20%	\$500,000	0.1250%
HCAHPS Linear (4)	5.00%	0.10%	\$250,000	0.0625%
ED Wait Times 1h/2h	10.00%	0.20%	\$500,000	0.1250%
TFU Medicare	3.33%	0.07%	\$166,667	0.0417%
TFU Medicare Disparity Gap	3.33%	0.07%	\$166,667	0.0417%
TFU Medicaid	3.33%	0.07%	\$166,667	0.0417%
Clinical Care Domain	15%	0.30%	\$750,000	0.19%
IP Mortality	5.000%	0.10%	\$250,000	0.06250%
30-Day Mortality	5.000%	0.10%	\$250,000	0.06250%
IHAVIKA	5.000%	0.10%	\$250,000	0.06250%
Safety Domain	25%	0.50%	\$1,250,000	0.3125%
CAUTI	4.17%	0.08%	\$208,333	0.0521%
C. Diff	4.17%	0.08%	\$208,333	0.0521%
SSI (2)	4.17%	0.08%	\$208,333	0.0521%
CLABSI	4.17%	0.08%	\$208,333	0.0521%
MRSA	4.17%	0.08%	\$208,333	0.0521%
PSI 90 (10)	4.17%	0.08%	\$208,333	0.0521%

Lowers Weight

Lower Weight to match CMS VBP

Maintains same potential \$ on HCAHPS top box and consistency

Adds ED LOS and TFU Disparity w/ reassigned Safety Domain and linear measure weight

Splits Weight

Questions?

- Are there any additional data elements staff should explore for the final recommendation on weighting?
- Are there any other ideas on how to better improve saliency?
- If a hospital improves in the Timely Follow Up Disparity Metric but performance worsens overall for Timely Follow Up, how should the remaining weight be apportioned to other measures?
 - Staff recommendation: Increase the weight on the Medicare and Medicaid Timely Follow Up measures by 3.33% (1.67% for each measure)
 - Other options:
 - Proportional to remaining domain weights (e.g., clinical care would get 15% of the 3.33% TFU Disparity weight)
 - Other measures of importance this year (e.g. ED LOS) would increase by 3.33%
- Any significant concerns with staff's proposal?

RY 2024 QBR Cut Point

RY 2024 QBR Cutpoint Discussion

- Background:
 - Current cut point is 41%, based on average national scores from FFY16-FFY21 using QBR weighting
 - Using RY24 data and transforming national scores to QBR weighting, the national average is ~23% (likely understated - see next slide)
- To account for degradation in National and State performance, Staff proposes to lower cut point to 32% for Commissioner consideration
 - Not yet discussed with Commissioners

QBR Cut Point Calculation (Proposed Method)

RY24 QBR Cut Point Analysis	National Average						RY24	Average
	FFY16	FFY17	FFY18	FFY19	FFY20	FFY21		
Old Method: Reweight VBP	43%	40%	42%	41%	42%	39%		41%
Old Method % Change		-7%	5%	-2%	2%	-7%		
						FFY21	RY24	
New Method: by Measure						35%	23%	
New Method % Change							-34%	
	FFY16	FFY17	FFY18	FFY19	FFY20	FFY21	RY24: FY21 X (1+New Method % Change)	Average
Old Method with Imputed Value based on New Method	43%	40%	42%	41%	42%	39%	26%	39%
						39%	26%	32%

- Staff used a different method to calculate RY24 scores due to data unavailability
 - Data is not available because CMS has yet to release VBP domain scores for CY2022 performance
- Tested new method on previous FFY to ensure similar results
 - While values did not entirely reconcile, new method does allow for assessment of year over year performance degradation
- Performed imputation to standardize national average across different calculation methods
- To account for the recent degradation in national performance/COVID impacts, staff is proposing to only average FFY21 and RY24

QBR Cut Point Comparison

RY24 QBR Cut Point Comparison			
Comparison	Current Cut Point	Proposed Cut Point	Pre-COVID Cut Point
	<u>41%</u>	<u>32%</u>	<u>RY21, 41%</u>
# of hospitals penalized	40	34	29
# of hospitals rewarded	1	7	13
% revenue penalties	\$ (97,990,365.00)	\$ (67,548,058.00)	\$ (52,193,879.00)
% revenue rewards	\$ 91,892.00	\$ 3,676,109.00	\$ 2,733,702.00
\$ revenue penalties	-0.87%	-0.60%	-0.52%
\$ revenue rewards	0.0008%	0.0327%	0.03%
Net Adjustments	\$ (97,898,473.00)	\$ (63,871,949.00)	\$ (49,460,177.00)

- May need to also propose/refine RY25 cutpoint
- Final policy for RY 2026 will include modeling of proposed QBR changes.
 - Given increase in number of non-National measures, need to think about best ways to estimate National scores (i.e., add in Maryland average or median score for national hospitals)

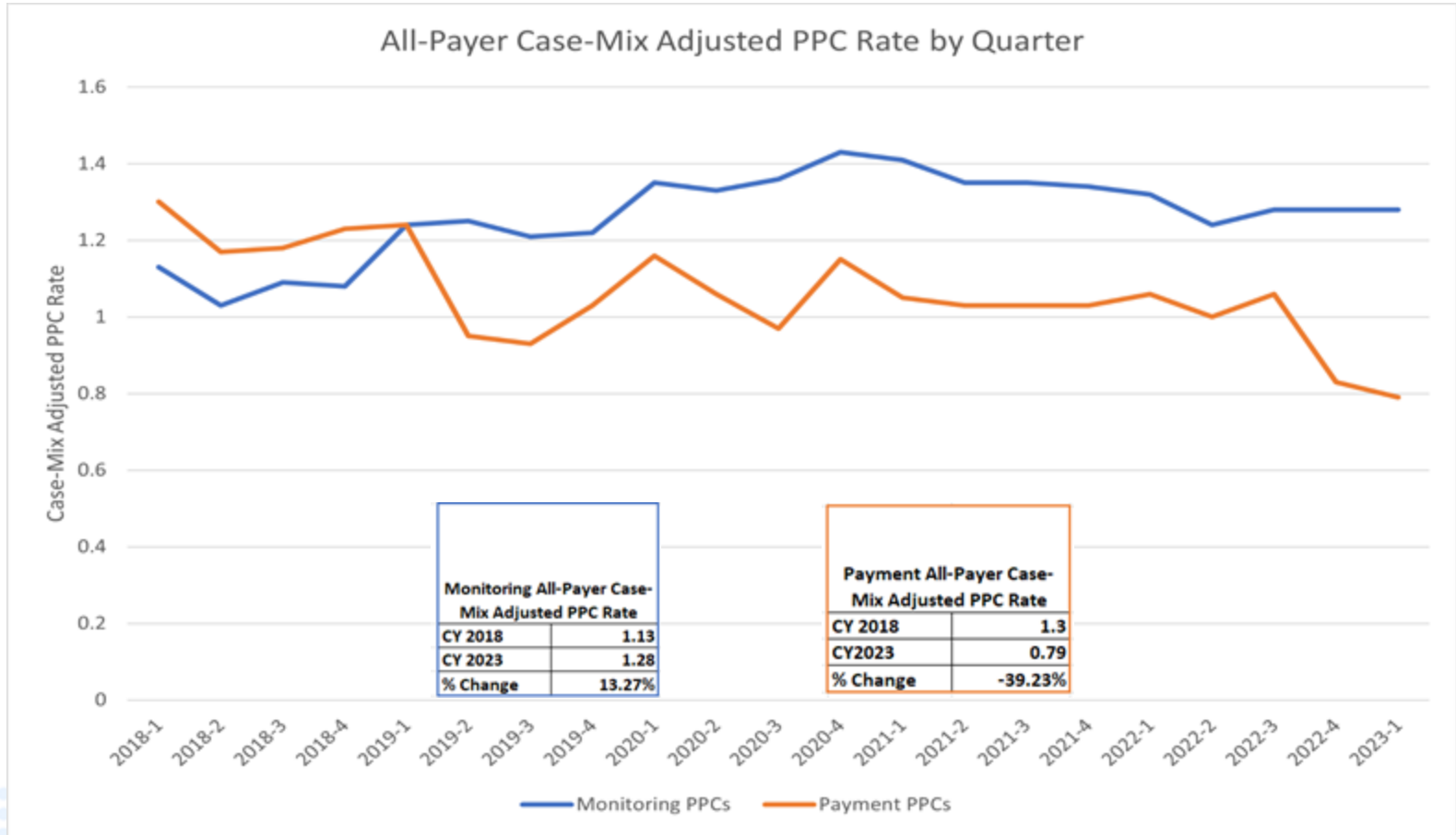
Maryland Hospital Acquired Conditions

Clinical Updates to Payment PPCs*

- **PPC 42: Accidental Puncture or Laceration-**
 - Dural tears- for Grouper v41, 3M will remove diagnosis G9612 Meningeal adhesions (cerebral) (spinal)
 - Adhesions- 3M investigating clinical concerns and will address in v42; HSCRC requested additional feedback on how to address with codes
- **PPC 07- Pulmonary Embolism- Add codes below to DVT exclusion list in v41**
 - I82461 Acute embolism and thrombosis of right calf muscular vein
 - I82462 Acute embolism and thrombosis of left calf muscular vein
 - I82463 Acute embolism and thrombosis of calf muscular vein, bilateral
 - I82469 Acute embolism and thrombosis of unspecified calf muscular vein
 - I82561 Chronic embolism and thrombosis of right calf muscular vein
 - I82562 Chronic embolism and thrombosis of left calf muscular vein
 - I82563 Chronic embolism and thrombosis of calf muscular vein, bilateral
 - I82569 Chronic embolism and thrombosis of unspecified calf muscular vein

*For complete details, refer to the document: “3M™ Potentially Preventable Complications Classification System, Summary of Changes, Version 41.0, October 2023”, found in the 3M Knowledge Base on the 3M HIS website.

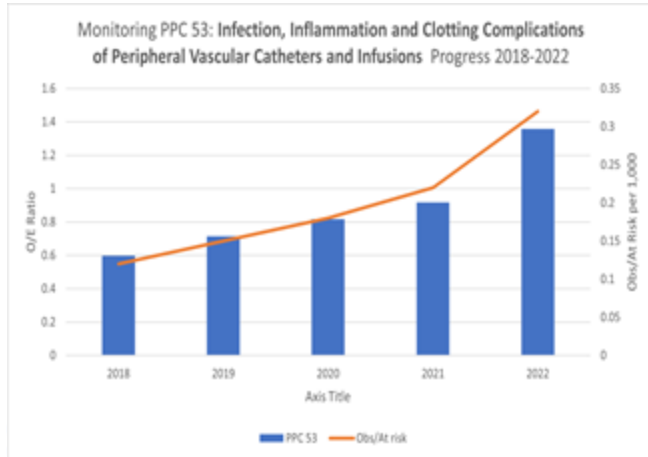
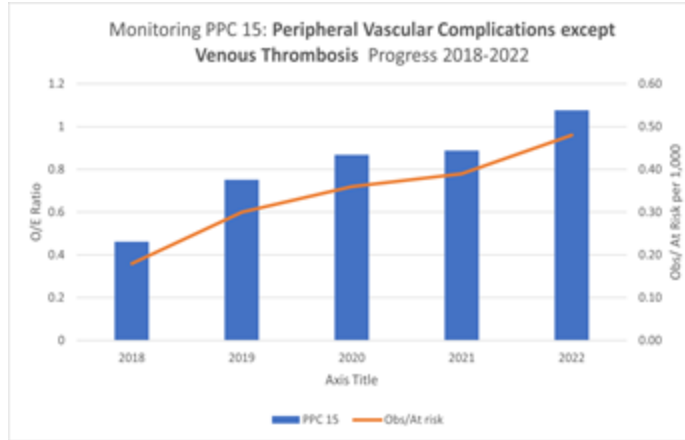
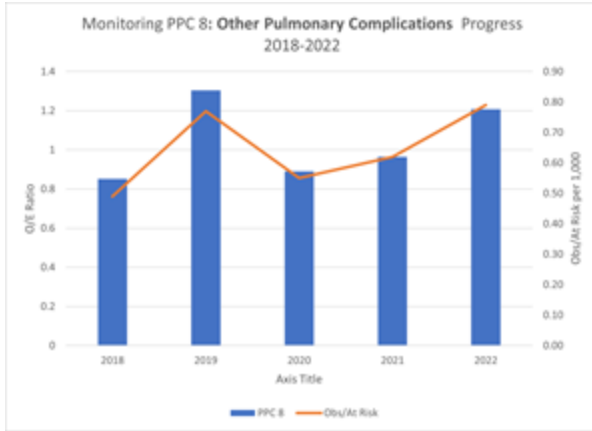
PPC Performance, CY2023 YTD through March



PPC Report Analysis

- Utilized the O/E ratio and Obs/At Risk to understand the progress of the ppc's and determine if any needed to be moved into the opposite program.
- There were concerns with a few monitoring PPC's due to their increase in O/E ratio over time; however, the PPCs with increases had clinical validity concerns raised during MHAC redesign.
 - PPC 8: Other Pulmonary Complications
 - PPC 15: Peripheral Vascular Complications except Venous Thrombosis
 - PPC 53: Infection, Inflammation and Clotting Complication of Peripheral Vascular and Infusions
- **Based on the findings, overall HSCRC will not be moving any monitoring PPC's into the payment program for RY 2026.** We will continue to monitor the MHAC summary report for findings in the future.

PPC Trends Over Time



Observed Counts CY 2022:

- PPC 8: 154
- PPC 15: 140
- PPC 53: 91

Performance Standards by Calculation Method

Base CY21 and CY22		Current Method		Potential Method	
		P90	P10	Avg P80	Avg P20
PPC Number	PPC Description	Threshold	Benchmark	Threshold	Benchmark
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1.4652	0.4577	1.8063	0.3641
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1.8435	0.2207	1.7991	0.2203
7	Pulmonary Embolism	1.7835	0.3125	1.6457	0.2709
9	Shock	2.0077	0.3751	1.9209	0.345
16	Venous Thrombosis	1.5923	0.0964	1.7412	0.131
28	In-Hospital Trauma and Fractures	1.828	0.1732	2.1401	0.2135
35	Septicemia & Severe Infections	1.547	0.464	1.8284	0.4323
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	1.9892	0.3349	1.9412	0.3196
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc	2.1739	0	2.0487	0.045
42	Accidental Puncture/Laceration During Invasive Procedure	1.4578	0.2903	1.4101	0.2817
47	Encephalopathy	1.8575	0.2666	1.9884	0.2432
49	Iatrogenic Pneumothrax	1.8755	0.3216	2.0387	0.263
60	Major Puerperal Infection and Other Major Obstetric Complications	1.8307	0	1.7426	0.1491
61	Other Complications of Obstetrical Surgical & Perineal Wounds	2.1728	0	2.0577	0.1402
67	Combined Pneumonia (PPC 5 and 6)	1.4636	0.2822	1.5771	0.2608

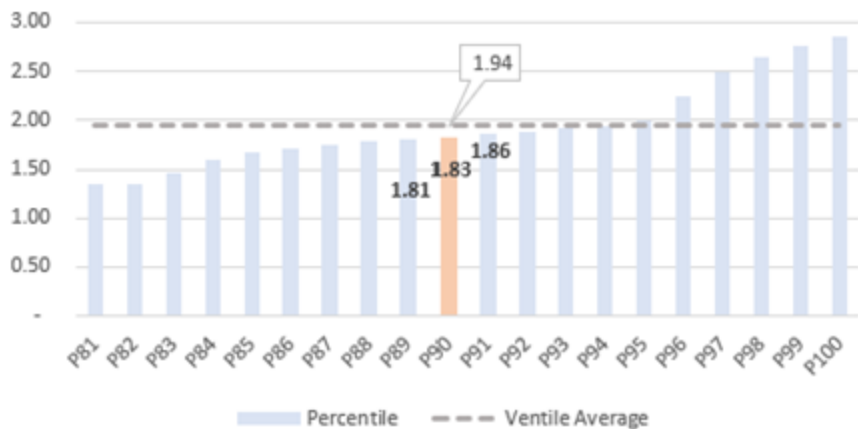
PPC Variation in Performance

- To understand if there's a need to move to an average approach, staff wanted to understand the variation amongst the best and worst performers
 - Large variation would warrant moving to an average approach

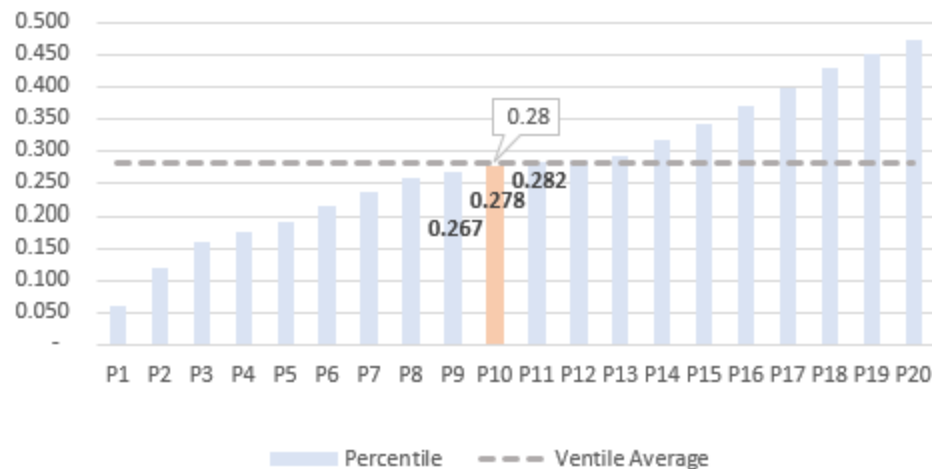


Note: Staff calculations vary from SAS calculations due to differences between SAS and Excel

PPC 47 Threshold Distribution



PPC 47 Benchmark Distribution



RY 2026 ED PAU Recommendation

Background

- Commissioners asked staff to develop a policy incentivizing reduction in avoidable ED visits
- Avoidable ED utilization is a significant component of challenges with ED LOS and EMS service availability in Maryland
- Staff convened a work group in CY22 to evaluate policy options
- Stakeholders suggested development of policy focused on multi-visit patients

Rationale for Focusing on MVPs

- Easier to intervene on patients with pre-existing relationship with a hospital
- Addresses low-acuity visits, those preventable with better primary care, and behavioral visits
- Several studies have focused on programs that reduce ED utilization by intervening on frequent visitors
- MedStar is currently conducting significant work in this area
- Interventions include case management, improving primary care access, behavioral care access

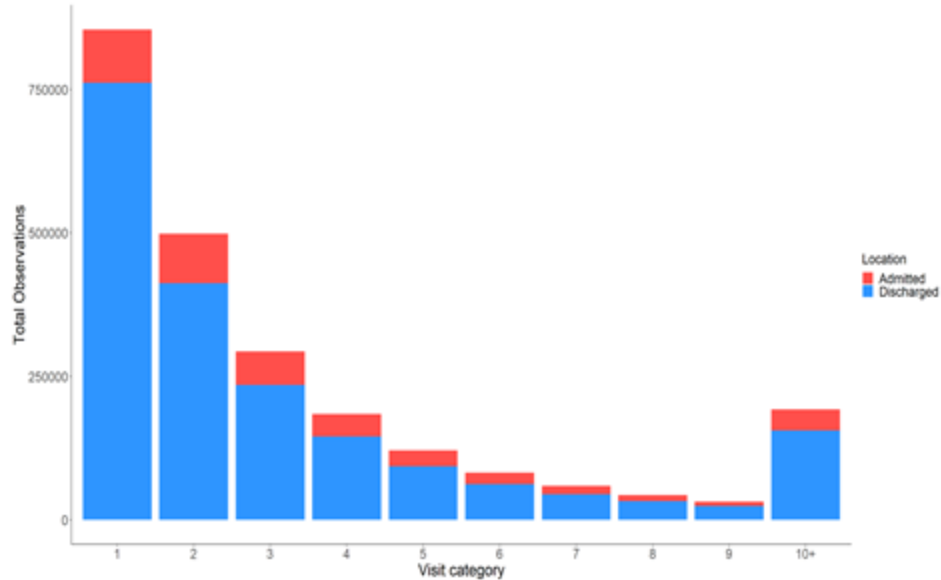
- Althaus et al. 2010. Effectiveness of interventions targeting frequent users of emergency departments: A systematic review. *Annals of Emergency Medicine*. Vol 58. pg 41-52
- Tsai et al. 2018. Reducing high-users visits to the emergency department by a primary care intervention for the uninsured: A retrospective study. *Inquiry*. Vol 55.
- Soril et al. 2015. Reducing frequent visits to the emergency department: A systematic review of interventions. *PLoS One*. 10(4)

Assessing opportunity related to MVPs

Staff sought to understand volume and cost related to MVPs, as well as overlap with PAU, payer and demographic patterns, and variability across hospitals

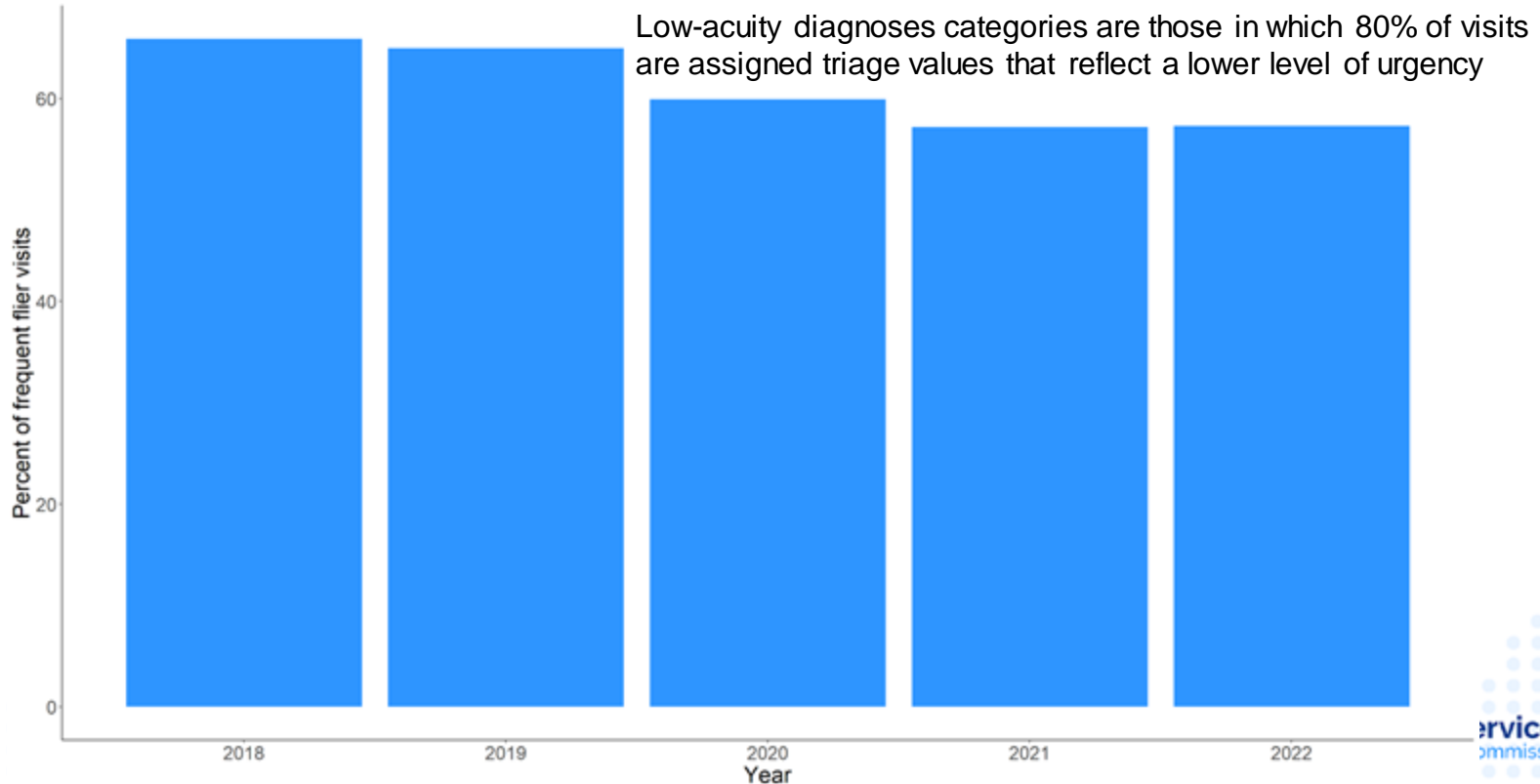
- Analyzed OP/IP across several years to understand MVP patterns.
- Results are based primarily on CY 2019 OP casemix data. This year was chosen because COVID could skew the 20/21 data.
- We categorized individuals with 4+ visits in a year as an MVP

MVPs accounted for 30% of all ED visits in 2019

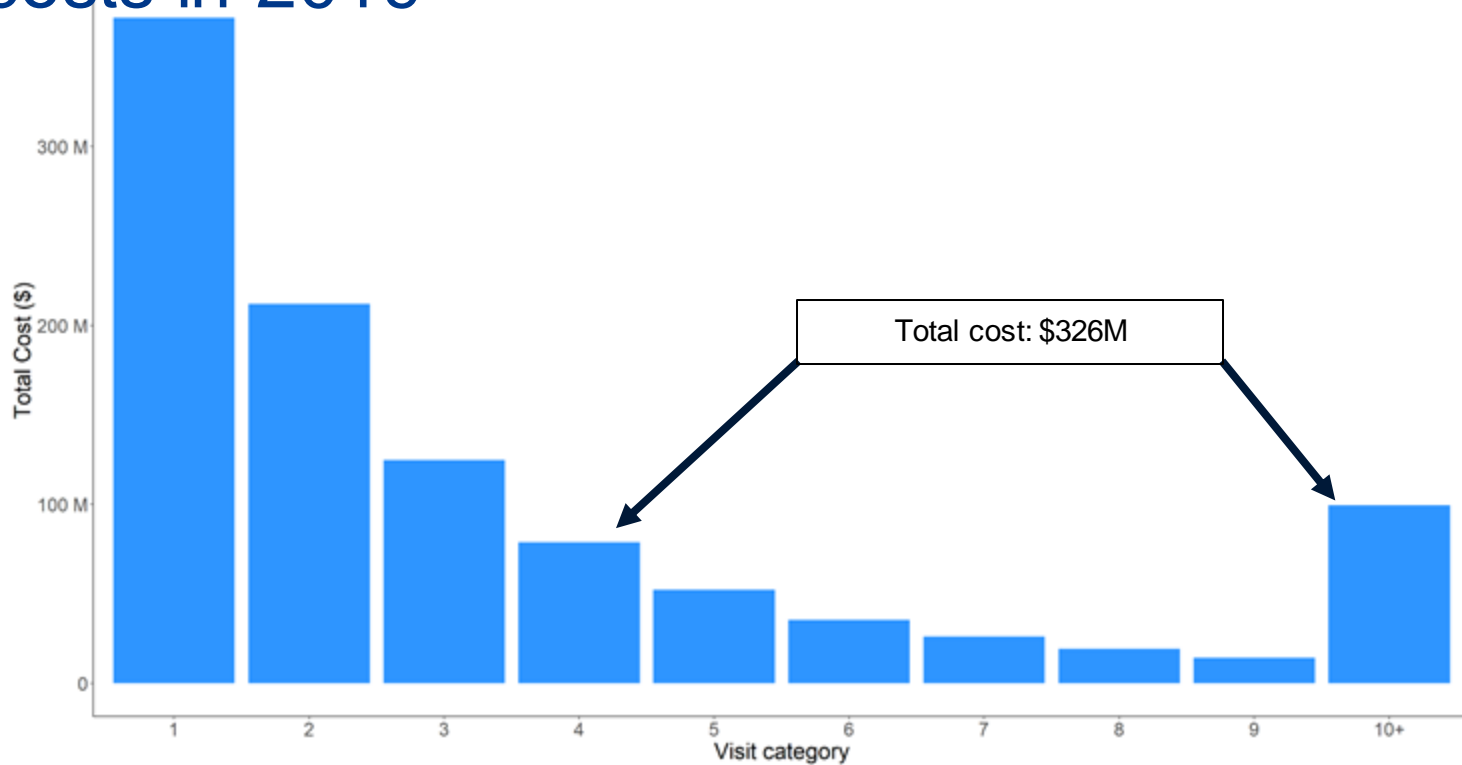


- Bulk of MVP visits are discharged from ED
- Indicates lower-acuity problems are common in MVP population
- Limited overlap with PAU

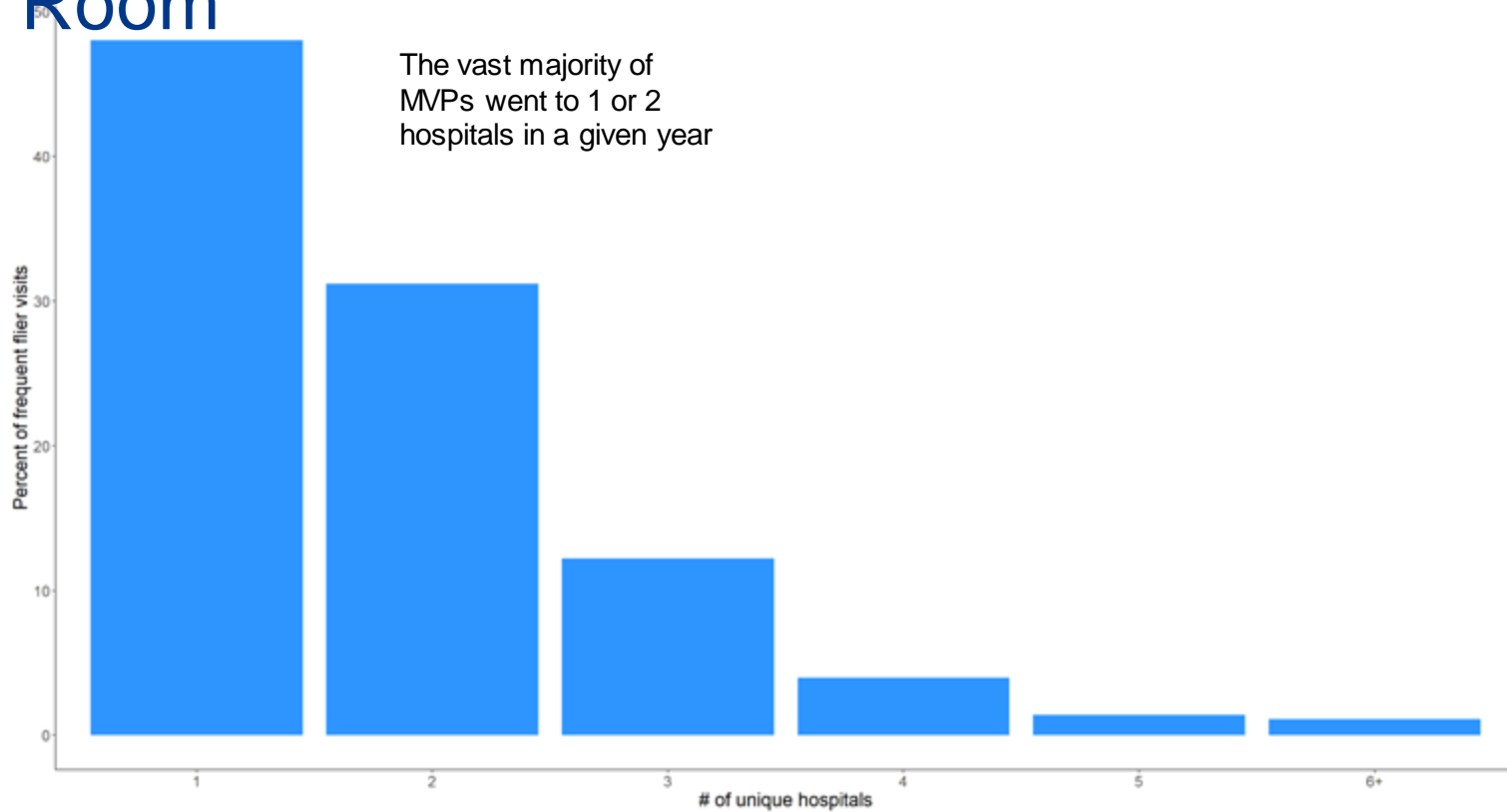
Of outpatient visits by MVPs, 62% are for low-acuity principal diagnoses



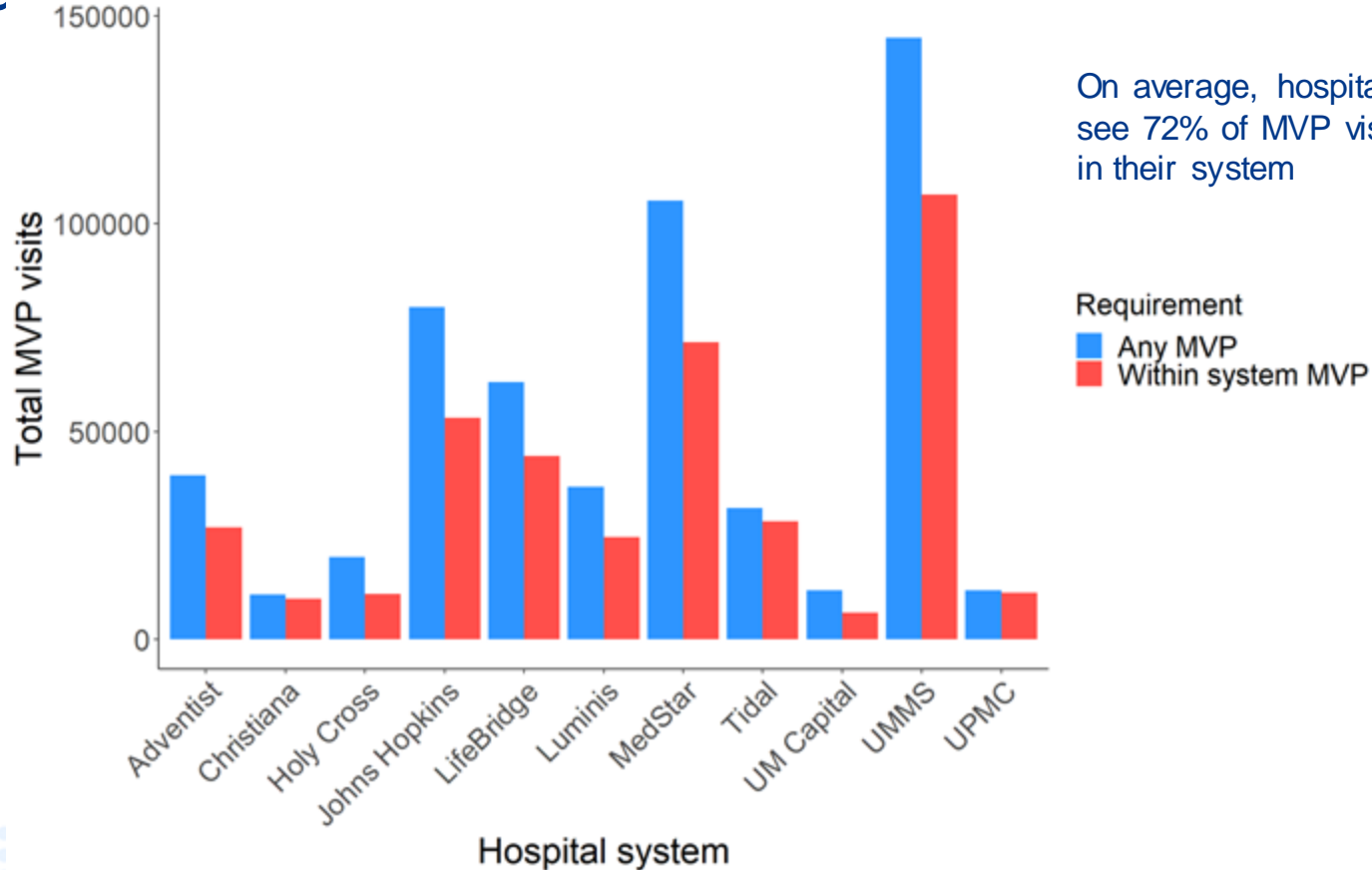
MVPs accounted for 32% of discharged ED costs in 2019



Over 45% of MVPs went to the same Emergency Room



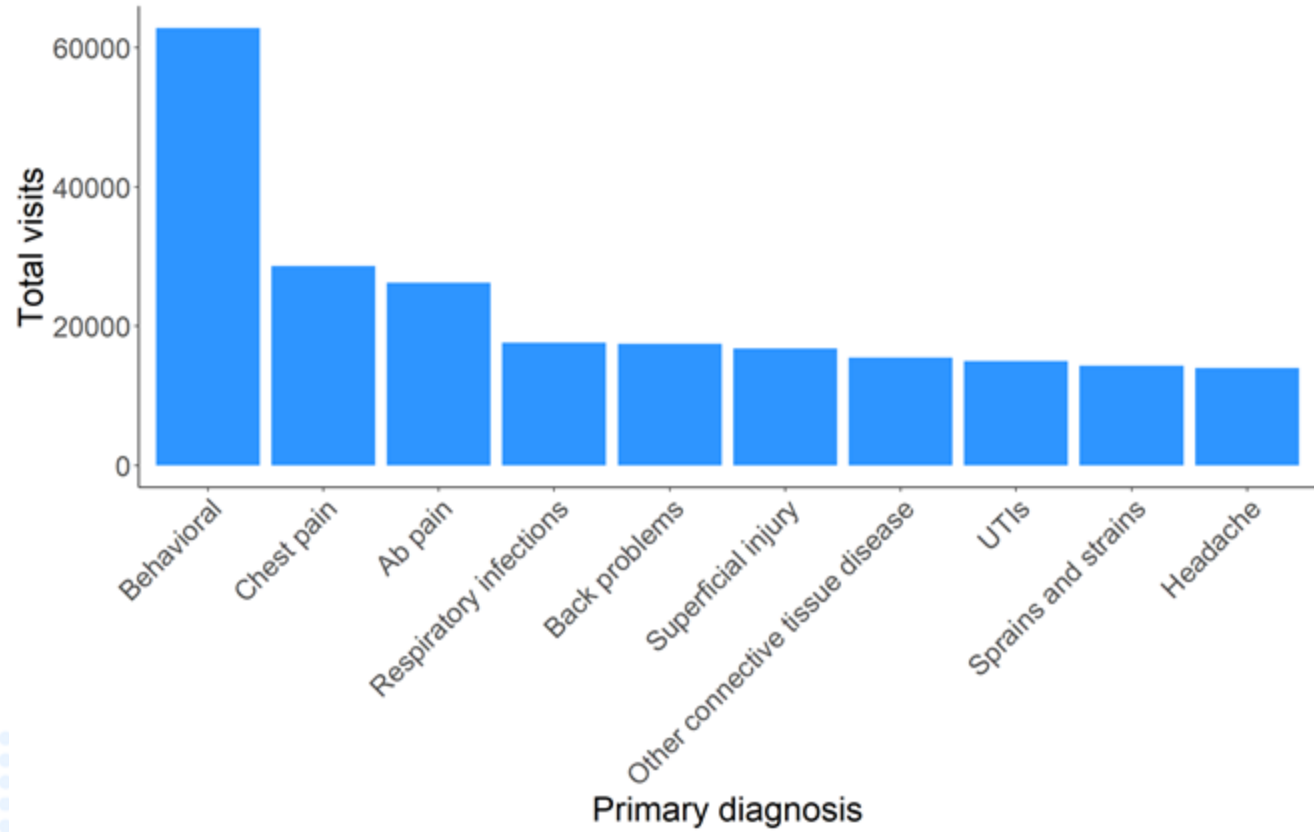
Total MVP visits by system and non-system requirements



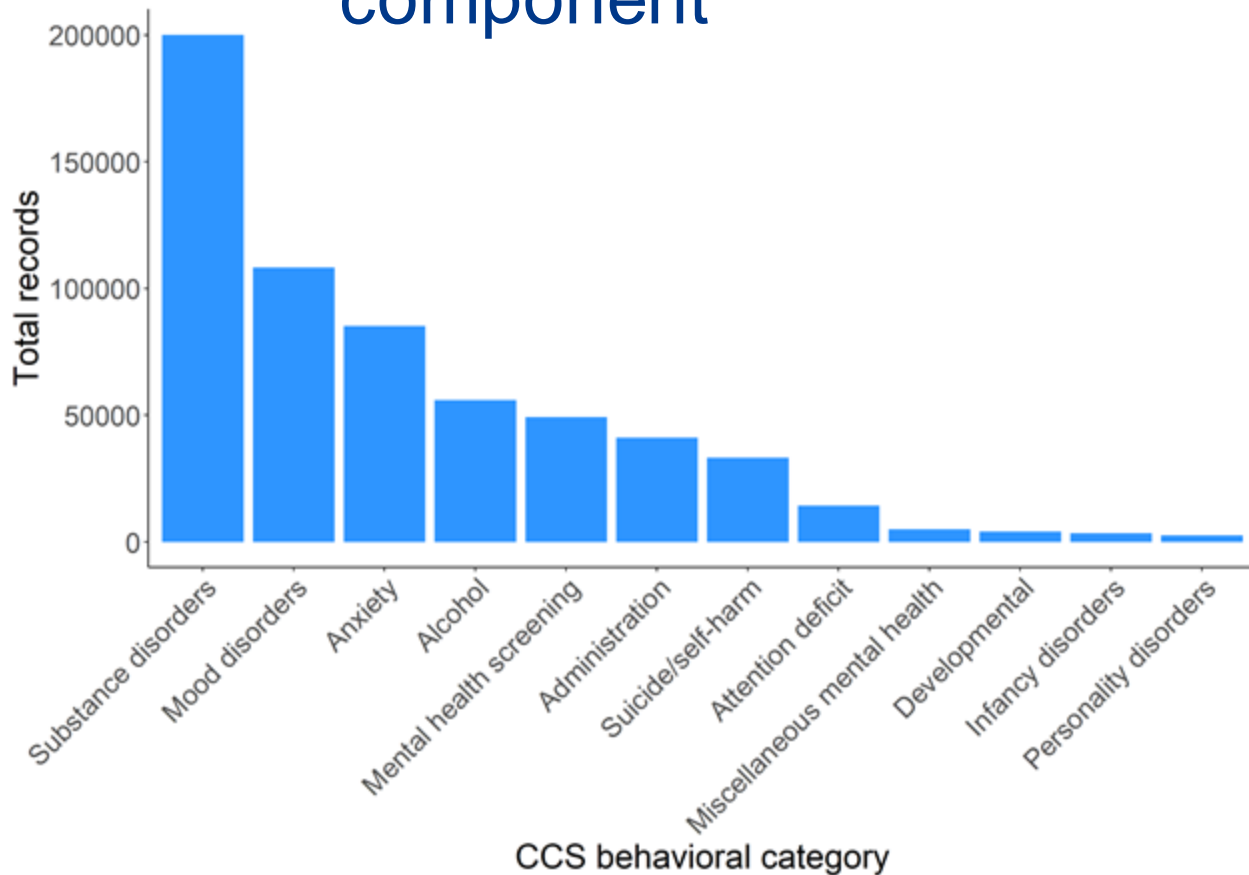
Characteristics of MVP Visits in 2019

- 40% are covered by Medicaid
- 37% involve patients in the top quartile of Area Deprivation Index
- 41% involve Black patients
- 1% involve homeless patients
- 38% (of admitted visits) are also flagged as PQI's

MVP Visits by primary diagnosis for ED all sources in 2019



Most MVP visits have a behavioral health component

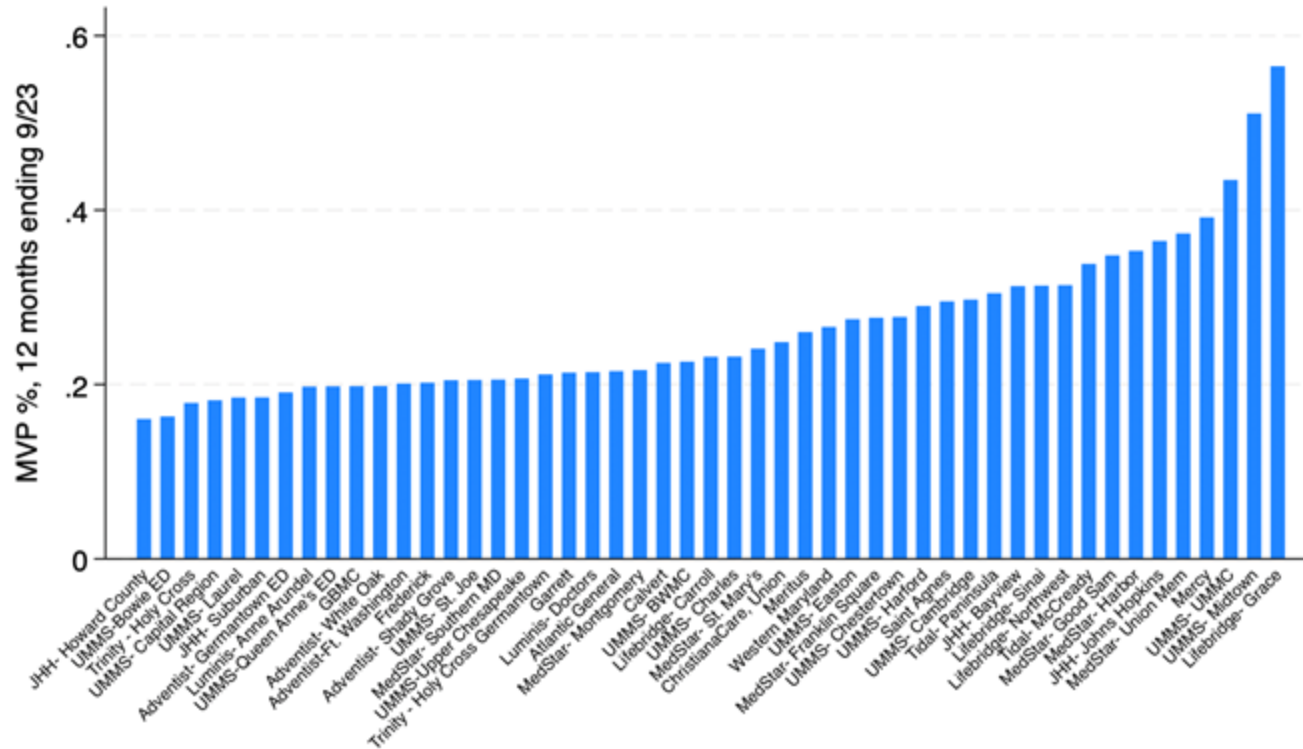


	Non MVP	MVP
% with at least one behavioral diagnosis	29	67

Proposed Measure Definition

- Numerator: # of **ED VISITS** at a given hospital by patients who have ≥ 4 visits at any hospital in calendar year
- Denominator: # of ED visits at a given hospital
- Strengths
 - Responsive to reductions in visit count for heaviest users as well as movement of patients from MVP to non-MVP status
 - Encourages hospitals to work together to reduce utilization
- Limitations
 - Hospitals may have to use CRISP data to understand who is in numerator if visits occur at other hospitals
 - Changes in ED utilization, e.g., increases in ED volume due to waning telemedicine use, may distort evaluation of ED MVP rate

MVP Reporting for CY23



Draft Recommendation for RY26 Policy

- Staff sought to make MVP policy proportionate to other quality programs
- \$1.2B PAU revenue associated with readmissions in RY24
 - 2% IP revenue at risk
 - Equates to approximately 1% of total revenue
- \$342M in ED revenue associated with MVPs
 - This would suggest ~0.5% revenue at risk is appropriate
- Half a percent is consistent with another newly introduced quality program (RRIP disparity), and also with the revenue assigned some subcomponents of QBR
- Staff is recommending the program be reward only and improvement only for CY24
 - Expectation is that MVP may transition to reward and penalty in CY25 absent substantial improvement

Draft Recommendation: Scaling

- Establish the threshold for performance reward at 5% improvement prevalence, and the benchmark at 30%. Reward hospitals for reduction in % of MVP visits as follows:
 - CY24 reduction of 5-20%: 0.125% of inpatient revenue
 - CY24 reduction of 20-30%: 0.25% of inpatient revenue
- Develop methodology to monitor for unintended consequences related to MVP reduction
- Monitor for health equity as well

Integrating MVP into Related Payment Policies

- Marketshift
 - Traditional PAU measures (Readmissions, PQI's) are purposefully excluded from the Marketshift methodology
 - Exclusion ensures that incentives do not work at odds with one another:
 - Reduction in PAU is rewarded by allowing hospitals to retain more revenue through the GBR
 - Reduction in PAU is rewarded by reducing the extent of the PAU Shared Savings cut
 - If PAU was not carved out of marketshift, hospitals would potentially get funding shifted to another hospital when PAU is reduced and increased elsewhere
 - To ensure that ED PAU does not have disincentive to overall intent of the program, staff recommend similarly carving out of the marketshift methodology ED services flagged as MVP visits.
- Efficiency
 - Various efficiency policies are scaled based off of a hospital's performance in PAU
 - Integrated Efficiency policy builds additional cases into the cost per case assessment if PAU has been reduced over time
 - Capital Financing policy provides enhancements to hospitals that have low levels of PAU and thus limited opportunity to recapitalize by reducing avoidable utilization
 - Staff will further explore how to incorporate ED PAU into efficiency policies in subsequent workgroups

RY26 Inpatient Diabetes Screening Recommendation

Introduction

- CMMI required staff to develop one or more measures to enhance hospital accountability for population health progress
- During a series of subgroup meetings in CY22, staff proposed assessing population diabetes screening and/or DPP participation
- MHA and others had concerns regarding attribution
- Staff and some workgroup participants developed an approach to incentivizing diabetes screening for ED patients
- JHHS/MedStar/UMMS recommended focusing measure on inpatients due to concerns about ED throughput, followup
- HSCRC implemented IP monitoring program beginning in April 2023
- Staff will put forward a potential payment policy in December

Background

- More than 8 million people in the United States were estimated to have undiagnosed Type 2 diabetes in 2019
 - 23% of U.S. adults living with diabetes
 - 3.4% of all adults in the United States
 - Prevalence of undiagnosed diabetes for those with IP stay in previous year is 10% higher than in non-IP population
- Late diagnosis of diabetes results in 2x higher mortality
- Program modelled on successful development of opportunistic HIV screening policies
 - Running since 1980s
 - Based on CDC recommendation to screen inpatients in areas with elevated HIV seroprevalence

Why Maryland Needs an Inpatient Diabetes Policy

- American Diabetes Association (ADA) guidelines call for testing inpatients with a prior diagnosis of diabetes if they have not been tested in the prior three months
- MD hospitals fail to test more than half of eligible Medicare inpatients
 - Staff suspects test rate is even lower in younger patients
 - There is a significant quality gap in inpatient diabetes testing
- ADA guidelines specify screening for those >34 and no prior diagnosis every three years
- Only half of Americans are screened in accordance with this guideline
- Using the hospital inpatient stay as an opportunity to close the screening gap could significantly reduce prevalence of undiagnosed diabetes (more on this later)

IP Screening Has Strong Track Record

Mass General: ~700 inpatients with no prior T2DM were screened. 18% had probable diabetes.

“Screening with HbA1c levels at the time of admission to an acute care hospital may represent an opportunity to identify a high-risk group of patients with unrecognized diabetes and, if coupled with effective follow-up, to promote prevention of subsequent diabetes-related complications.”

Wexler, Deborah J., et al. "Prevalence of elevated hemoglobin A1c among patients admitted to the hospital without a diagnosis of diabetes." *The Journal of Clinical Endocrinology & Metabolism* 93.11 (2008): 4238-4244.

IP Screening Has Strong Track Record

Jacobi Medical Center (public hospital, Bronx, NY):
screened ~1,000 inpatients with no prior T2DM diagnosis.
24% had $A1c \geq 6.5$.

“Our study supports the hypothesis that HbA1c testing on the in-patient service of a public hospital in a high-risk community can help to identify patients at risk for diabetes”

Mazurek, Jeremy A., et al. "Prevalence of hemoglobin A1c greater than 6.5% and 7.0% among hospitalized patients without known diagnosis of diabetes at an urban inner city hospital." *The Journal of Clinical Endocrinology & Metabolism* 95.3 (2010): 1344-1348.

IP Screening Has Strong Track Record

Tertiary care hospital in Ottawa screened ~500 patients admitted for heart treatment or joint replacement. 10% of those with no history of diabetes had dysglycemia.

“Undiagnosed [dysglycemia] in hospitalized patients has been well documented in the literature as a common inpatient problem that is associated with poor inpatient outcomes. [Screening] affords the possibility of early diagnosis of [dysglycemia] and application of risk-reduction strategies in previously unscreened high-risk individuals.”

Malcolm, Janine C., et al. "Implementation of a screening program to detect previously undiagnosed dysglycemia in hospitalized patients." *Canadian journal of diabetes* 38.2 (2014): 79-84.

IP Screening Has Strong Track Record

Tertiary care hospital in Melbourne, Australia screened 5,082 adults ≥ 54 , identified 5% with undiagnosed diabetes.⁴

“Routine inpatient HbA1c testing to measure glycaemic status utilises a currently missed opportunity to identify patients with newly diagnosed diabetes and poor glycemic control. We demonstrate a feasible method of conducting such an initiative, utilising electronic health infrastructure to identify patients at greatest risk for prioritisation for review.”

HSCRC Screening Policy Supported by ADA



“This policy is important because making the diagnosis earlier is critical for early treatment, preventing prediabetes from progressing to a diabetes diagnosis, reducing associated damaging and sometimes fatal conditions, and lowering the cost of care and undue burden diabetes places on those affected and their families.”

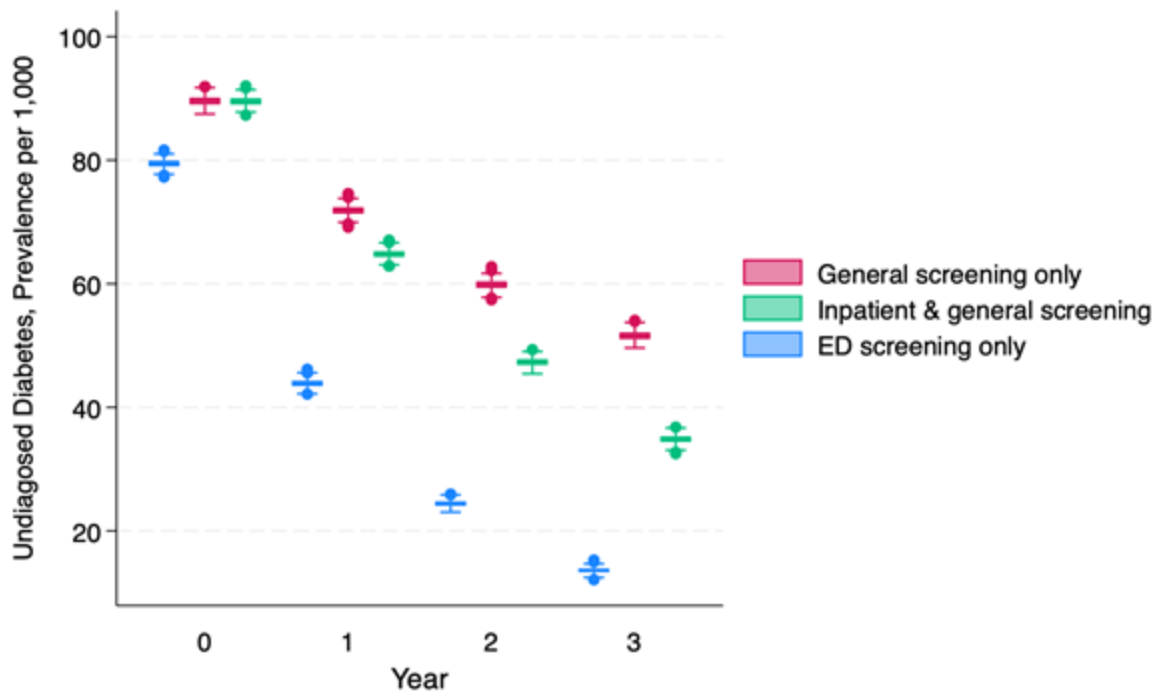
“We support the Commission’s efforts to increase access to diabetes screening in concordance with ADA screening guidelines, and are confident this policy will result in reduced prevalence of undiagnosed diabetes.”

Measuring Potential Impact in Maryland

- Staff developed a simulation model that included the entire population of a representative hospital service area in Maryland.
- The model accounted for the probability of residents visiting the hospital, the chance that they would meet diabetes screening criteria, and the chance that they would have undiagnosed diabetes.
 - Data derived from CDC National Health And Nutrition Examination Survey
- Compared changes over three years in the prevalence of undiagnosed diabetes under three screening approaches:
 - Current situation (outpatient screening in general population)
 - Inpatient screening
 - ED screening

Policy Could Significantly Reduce Undiagnosed Diabetes

A statewide inpatient screening policy would yield a reduction in prevalence of undiagnosed diabetes of **32.5%** over three years



Inpatient Screening is Efficacious

Test efficacy can be measured by calculating the number of subjects screened to yield one positive test result

Number needed to test for:

- Opportunistic HIV screening: **670**
- Mammography in women over 50: **540**
- Pap smear :**1,100**

Estimated number needed to test to identify one person with undiagnosed diabetes: **8.96**.

Number needed to test to identify one patient requiring intervention (undiagnosed/uncontrolled diabetes, prediabetes): **3.19**

Results of Monitoring Program

- Beginning in April 2023, staff received access to hospital lab feed data from CRISP
- Beginning in July 2023, staff began providing hospital-level data on A1c screening prevalence through the CRISP portal
- For the 12 months ending Aug. 31, screening prevalence ranged from 5% to 35% across Maryland hospitals
- Data quality checks demonstrated no issues with lab feeds
- Stakeholders reported no concerns to HSCRC regarding data quality or usability of CRISP reporting

Draft Measure Specification

- **Denominator:** Inpatient claims with a discharge date in the performance period
 - Exclusions: <35 years old, died in hospital, transferred, AMA, tested < 3 months ago (diabetics) / 3 years ago (others)
- **Numerator:** Claims in the denominator with an A1c lab result in the CRISP hospital lab feed
 - Lab service data occurs on or after admit date and on or prior to discharge date
 - Lab and IP data matched on CRISP EID, hospital ID

Data Challenges Around Patient Eligibility

- Hospitals currently do not have a way to convey whether a patient was ineligible for screening due to a recent test
- Staff expects to begin requiring hospitals to submit this information via casemix in the near future
- Prior to that point, staff will provide interim performance reporting as follows:
 - Using existing all-setting claims data (APCD or Medicare), calculate proportion of patients in screening population that were ineligible because of recent test
 - Multiply that proportion by the hospital denominator to derive an adjusted denominator. Calculate performance by dividing the numerator by the adjusted denominator

Potential Draft Recommendation for RY26 Policy

- Establish the threshold for performance reward at 40% screening prevalence, and the benchmark at 70%. Reward hospitals for screening prevalence as follows:
 - CY24 screening rate of 40-55%: 0.1% of inpatient revenue
 - CY24 screening rate of 56-70%: 0.2% of inpatient revenue
 - Payment based on cost estimates for test/counseling
- Develop reporting on follow up for those testing positive
- Ensure the screening program does not further existing disparities in diabetes detection and treatment
 - Monitor screening prevalence by race, payer, gender, Area Deprivation Index, and age group
- Ensure screening is efficacious
 - Monitor number needed to test

Next Steps

- Final recommendations for RY 2026 QBR will be presented at December Commission meeting
- RY 2026 MHAC draft recommendations will be presented at December Commission Meeting
- December and January PMWG will focus on RY 2026 RRIP
- Diabetes screening and Multi-Visit ED policy will be presented at December Commission Meeting

Next Meeting: Wednesday, December 20, 2023



APPENDIX

QBR Background

- Inpatient ED wait times (ED1b and ED2b) were added to QBR program in RY 2020 (CY 2018 performance)
 - Improvement only
 - Benchmark was national median by ED volume category
 - Included in Person and Community Engagement domain as two measures
 - Protection for hospitals that did worse on QBR despite earning 1 improvement point for ED length of stay (i.e., if hospitals QBR score was lower despite 1 improvement point, the higher score without ED measures was used)
 - In RY2020, 53% of hospital measures got worse, 2% remained the same, and 45% got better
 - In RY2021, 62% of hospitals measures got worse, 4% remained the same, and 33% got better
- Starting in CY 2022, Maryland hospitals were required to submit the electronic clinical quality measure for ED2
 - CMS then discontinued the ED2 eCQM starting in CY 2024, however HSCRC staff are in discussions with CMS about maintenance of this measure.

Measure Availability

	2012	2013	2014- 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Frequency	Source
ED Wait Time Measures														
ED 1: Arrival to IP Admission													Quarterly, rolling 12 months	CMS Care Compare
ED 2: Decision to admit until Admission													Quarterly, rolling 12 months	CMS Care Compare
OP 18 a,b,c: Arrival to Discharge													Quarterly, rolling 12 months	CMS Care Compare
ED 2: eCQM Version (MD only)											?	?	6 months/Quarterly	CRISP-Medisolv
EDDIE ED1-like: Arrival to IP Admission										June		?	Monthly	Hospital send to HSCRC
EDDIE OP 18-like: Arrival to Discharge										June		?	Monthly	Hospital send to HSCRC
EDDIE: EMS Turnaround Time										June		?	Monthly	MIEMSS
Available														
Available for RY2026 QBR														

Maryland All-Payer 30-day All Cause All Payer Mortality Measure

- Used CMS 30-Day Hospital-Wide Mortality Measure as a guide to develop
- Uses Maryland Vital Statistics death data merged with inpatient records

Step 1.

Cases Excluded from Sample	
Transferred in from another acute care facility	Inconsistent vital status
Enrolled in hospice 12M before, during index admission, 30-days after (Medicare/Medicaid)	Left against medical advice
Metastatic cancer	Crush, spinal, brain, or burn injury
Limited ability for survival (uses ICD-10 codes)	Non-Maryland resident

Step 2 Assign to Service Line:

MATERNITY	NON-SURGICAL	Neurology	SURGICAL	
	Cancer	Orthopedic	Cancer	
	Cardiac	Pulmonary	Cardiothoracic surgery	
	Gastrointestinal	Renal	Neurosurgery	
	Infectious Disease	Other Conditions	Orthopedic surgery	Other

Maryland All-Payer 30-day All Cause All Payer Mortality Measure

Step 3. Estimate risk-adjusted regression models:

- **Adjust for age, APR-DRG category and Risk of Mortality (ROM)**
 - Outcome: 0/1 indicator for whether patient died within 30-days of index admission date
 - Use APR-DRG categories and ROM values present on index stay
 - Adjust for age and quadratic of age
- **Estimate models within each service line**
 - Allows for association between risk adjustment variables and outcome to vary by type of case
- **All models estimated using logistic regression**

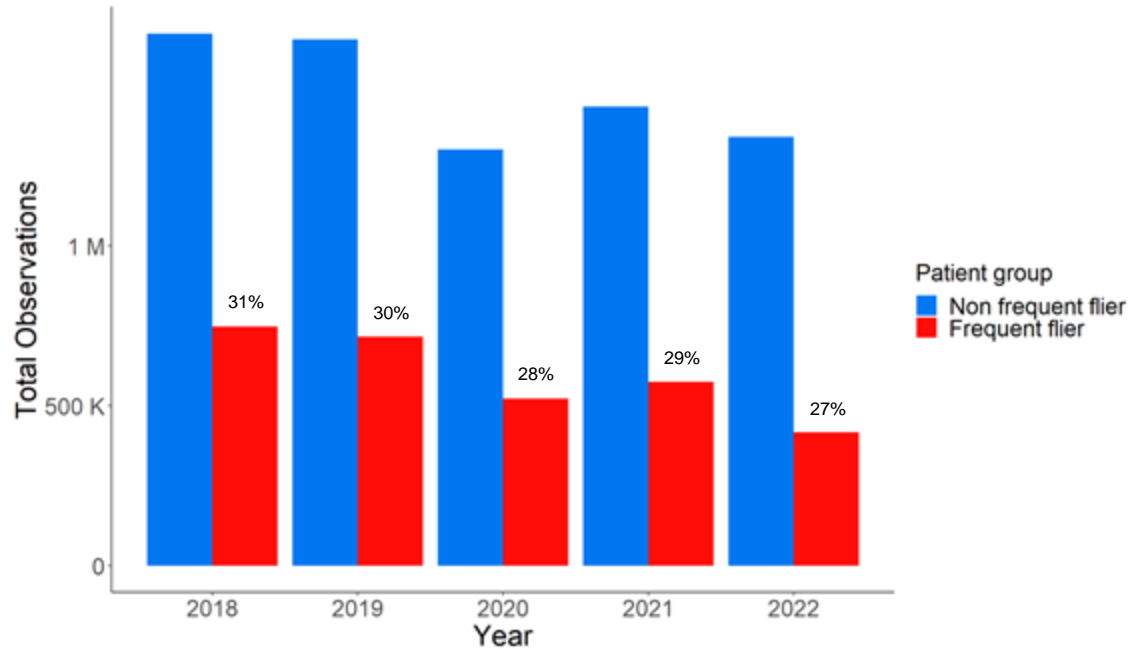
Step 4: Produce hospital-level rates:

- **For each hospital, calculate the expected number of 30-day deaths**
 - Within each service-line, calculate sum of predicted (expected) 30-day deaths for the hospital
 - These are the number of 30-days that are expected for that service line, given the hospital's mix of patients
- **Calculate service line-specific observed to expected (O/E) ratios**
 - By hospital, calculate ratio of observed number of 30-day deaths to expected number of 30-day deaths for each service line
- **Create aggregate O/E ratios for each hospital**
 - Calculate weighted average of O/E ratios across service lines
 - Hospital-specific weights = proportion of overall case volume represented by a service line
- **Multiply hospital's aggregate O/E ratio by state average 30-day mortality rate**
 - Risk-standardized mortality rate (RSMR)

Mortality Updates: Hospice

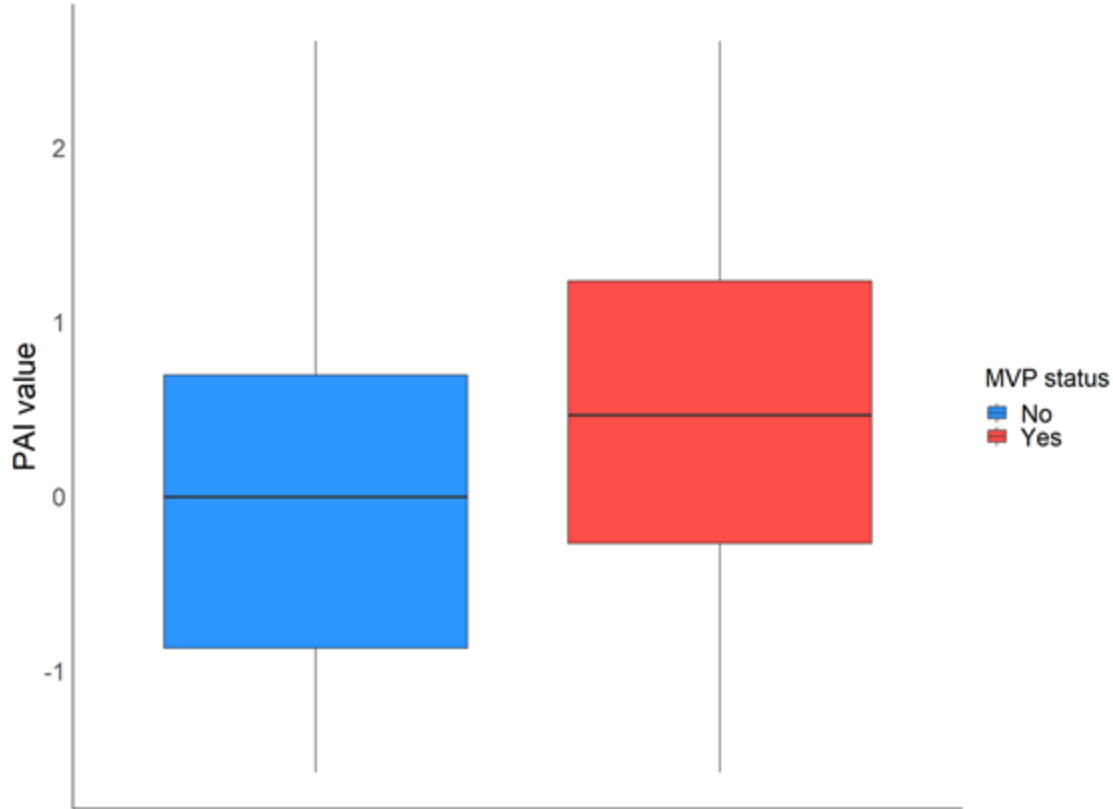
- In HSCRC measure, confirmed hospice is identified by:
 - Type of daily service = hospice
 - Discharge disposition = home hospice or hospice
 - Claims data for any hospice claim within 30 days (*currently Medicare only but plan to extend to Medicaid*)
- Medicare condition-specific claims based 30-day mortality measures exclude hospice differently than hybrid Hospital Wide Mortality measure. Hybrid is all-cause so more analogous to our all-payer, all-cause measure. Hybrid measure excludes:
 - Those enrolled in hospice at time of, or 12 months prior to index admission, or enrolled within 2 days of admission, or with principle dx of cancer and enrolled in hospice at anytime during admit

MVP volume fell during the pandemic



- We believe volume is high enough to create incentives around MVP volume

MVPs by PAI



MVPs have a higher PAI value by 0.5

MVP Visits by Day of Week and EMS status

	Non MVPs	MVP
Weekday %	73	74
Weekend %	27	26
Arrival by EMS %	24	29
Arrival from nursing home %	2	3

Examples of Opposing Positions on the Adoption of SEP-1

- *There have been ongoing concerns that SEP-1 mandates an inflexible “one size fits all” therapeutic approach for sepsis that lacks high or even moderate level evidence demonstrating its benefit and defining its risks in the highly diverse group of patients it is directed at. While the source of the low compliance reported so far with SEP-1 can be from many etiologies, it may very well reflect these concerns and clinicians’ need to individualize care in patterns not consistent with the measure. Without high quality evidence based on reproducible RCT, the true benefits and risks associated with SEP-1 are unknown.¹*
- *Because of this emphasis on timing, **SEP-1 is lifesaving**, and Sepsis Alliance has long supported its continued use in hospitals. ...The VBP incentivizes hospitals to give patients higher quality care according to their performance on certain processes, such as SEP-1. According to **CMS**, the program is designed to make the quality of care better for hospital patients, and to make hospital stays a better experience for patients. ...Much work still needs to be done. Sepsis Alliance will continue to educate about SEP-1’s importance and work to ensure its continued use in hospitals.²*

¹Wang J, Strich JR, Applefeld WN, Sun J, Cui X, Natanson C, Eichacker PQ. Driving blind: instituting SEP-1 without high quality outcomes data. J Thorac Dis. 2020 Feb;12(Suppl 1):S22-S36. doi: 10.21037/jtd.2019.12.100. Erratum in: J Thorac Dis. 2021 Jun;13(6):3932-3933. PMID: 32148923; PMCID: PMC7024755.

²Sepsis Alliance: Found at: <https://www.sepsis.org/news/sep-1-update-inclusion-in-hospital-value-based-purchasing-program-is-a-victory-for-patients/>; last accessed, 10/10/2023.