maryland
health services
cost review commission

Performance Measurement Workgroup

July 8, 2026

HSCRC Quality Team

Meeting Agenda

- AHEAD Updates:
  - Transition Timeline & Questions
  - Alignment Status & PMWG Fall Priorities
  - AHEAD specific adjustments
- Clinical Adverse Events Measure Update
- RY2029 Readmission Reduction Incentive Program--Measure Discussion
- Inpatient Length of Stay Monitoring Update

Workgroup Learning Agreements

- **Be Present** – Make a conscious effort to know who is in the room, become an active listener. Refrain from multitasking and checking emails during meetings.
- **Call Each Other In As We Call Each Other Out** – When challenging ideas or perspectives give feedback respectfully. When being challenged - listen, acknowledge the issue, and respond respectfully.
- **Recognize the Difference of Intent vs Impact** – Be accountable for our words and actions.
- **Create Space for Multiple Truths** – Seek understanding of differences in opinion and respect diverse perspectives.
- **Notice Power Dynamics** – Be aware of how you may unconsciously be using your power and privilege.
- **Center Learning and Growth** – At times, the work will be uncomfortable and challenging. Mistakes and misunderstanding will occur as we work towards a common solution. We are here to learn and grow from each other both individually and collectively.

REMINDER: These workgroup meetings are recorded.

AHEAD Transition

AHEAD Updates and HGB Transition Timelines

- Maryland entered the AHEAD Model in 2026.
- CMS will set **Medicare FFS global budgets** starting in 2028.
  - Performance Year 1 (2026) and PY2 (2027) will be a transition period where the State will continue to set all-payer Hospital Global Budgets.
  - In order to smooth the transition, the State will be able to re-direct a portion of the total Medicare global budget amount between PY3 (2028) and PY5 (2030).
- The State will continue to set **non-Medicare FFS global budgets** with quality adjustments.

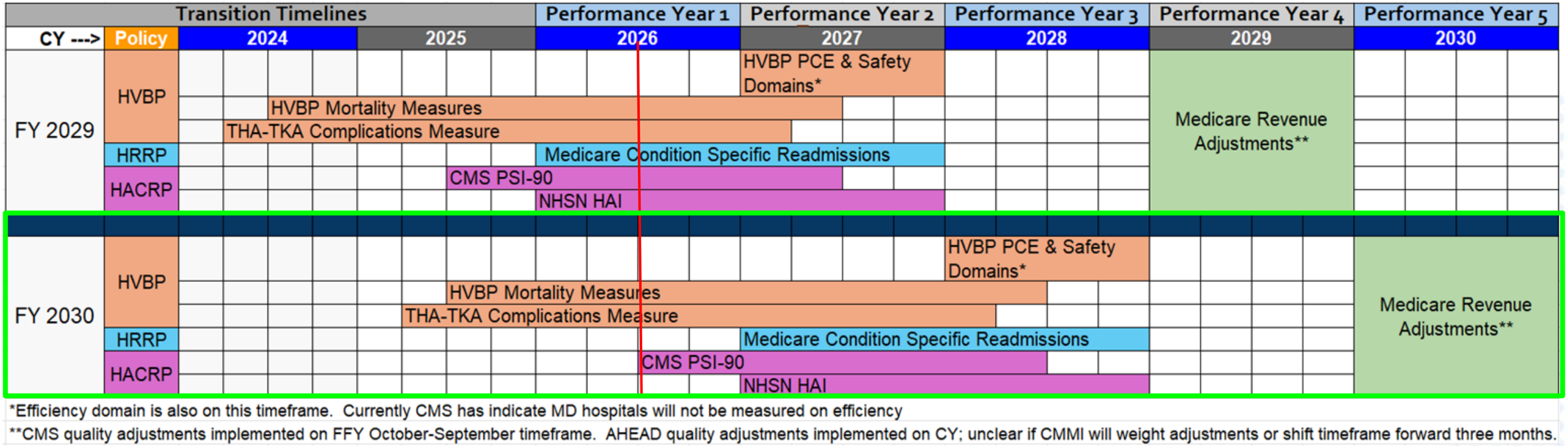
AHEAD Quality Transition

Staff received input from seven hospitals/hospital systems and MHA on timeline for transition and based on input will move forward with FY2030 transition, with continued discussion on alignment of FY2029 policies with CMS.

Option 1: Early transition (FY2029, PY4)	**Option 2: Later transition (FY2030, PY5)**
Johns Hopkins Health System (4 hospitals) Meritus Health Center UPMC Western Maryland Maryland Hospital Association	Lifebridge Health (3 hospitals) Adventist Health (3 hospitals) University of Maryland Health System (9 hospitals + UMROI) Luminus Health (2 hospitals)

CMMI has confirmed that they are comfortable with the FY2030 transition.

CMS & HSCRC Policy Timelines



*Efficiency domain is also on this timeframe. Currently CMS has indicate MD hospitals will not be measured on efficiency

**CMS quality adjustments implemented on FFY October-September timeframe. AHEAD quality adjustments implemented on CY; unclear if CMMI will weight adjustments or shift timeframe forward three months.

Current date

Questions on Implementation of CMS programs

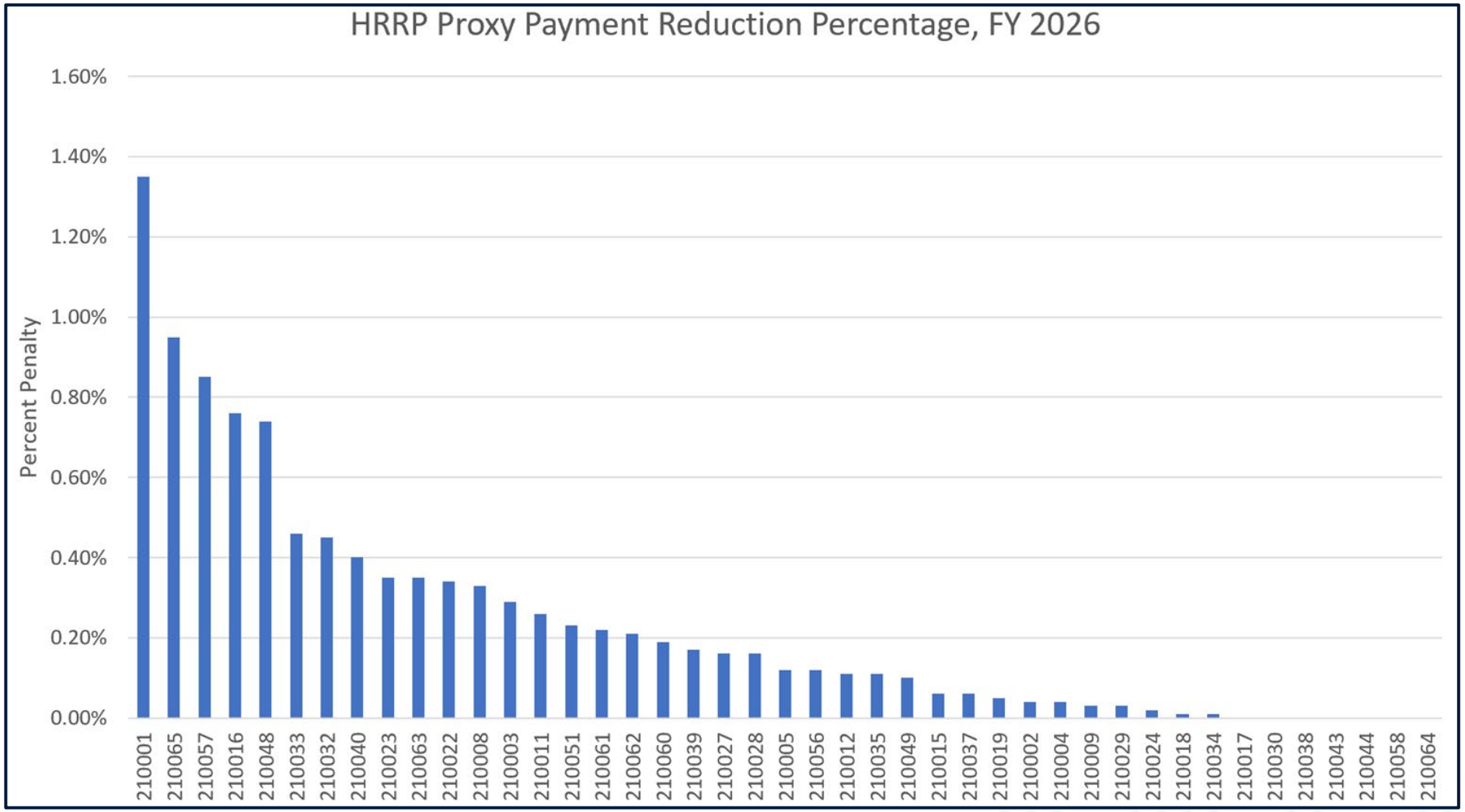
Staff believes the later start date is also prudent given CMS needs time to prepare for transition.

- Staff met with CMMI in June to discuss transition details. Questions included:
  - Timeline for implementing federal FY updates for AHEAD states (i.e., average two years, 3 month shift)--*CMMI has stated they are willing to to use CY as basis for quality adjustments*

		CY2029				CY2030				CY2031				CY2031			
CMS timeline	FY2029					FY2030				FY2031				FY2031			
Option 1: Shifting						FY2030 Quality Program Implementation				FY2031				FY2031			
Option 2a: Averaging starting Yr1						FY2029*	FY2030										
Option 2a: Averaging starting Yr2						FY2030 Quality Program Implementation				FY2030**	FY2031						
Option 3: Mid-rate update						FY2030				FY2031^							
Concerns																	
*Uses FY29 which was earlier timeperiod than hospitals prepared																	
**uses FY30 for 5 quarters																	
^concerned about timing for getting FY31 results from CCSQ to implement																	

  - Process for handling Extraordinary Circumstances Exceptions (ECE) requests for Maryland hospitals
  - Addition of MD hospitals to Inpatient Quality Reporting (IQR) and Outpatient Quality Reporting (OQR) data validation and tracking of Annual Payment Update regarding participation
  - Confirmation of continued exclusion of MD hospitals in HVBP efficiency domain and process for inclusion of MD hospitals in national relative ranking
  - Availability of FY 2027 quality program results

FY2026 by Hospital HRRP Results



Minimum Payment Reduction	0%
Maximum Payment Reduction	1.35%
Average Payment Reduction*	0.28% *of those with a reduction
% of Hospitals Penalized	84%

FY2026/RY2026 Totals Revenue across programs

FY26 Programs	Statewide Net Total	%	Penalties	%	Rewards	%
QBR	$ (20,502,273)	-0.16%	$ (34,934,359)	-0.28%	$ 14,432,086	0.11%
VBP	$ 51,181,610	0.41%	$ (17,406,631)	-0.14%	$ 68,588,240	0.54%
RRIP	$ (27,056,623)	-0.21%	$ (44,486,730)	-0.35%	$ 17,430,107	0.14%
HRRP	$ (24,916,918)	-0.20%	$ (24,916,918)	-0.20%	$ -	-
MHAC	$ 38,738,778	0.31%	$ (8,105,750)	-0.06%	$ 46,844,528	0.37%
HACRP	$ (63,515,381)	-0.50%	$ (63,515,381)	-0.50%	$ -	-
HSCRC Programs	$ (8,820,118)	-0.07%	$ (87,526,839)	-0.69%	$ 78,706,721	0.62%
National Programs	$ (37,250,689)	-0.29%	$ (105,838,929)	-0.84%	$ 68,588,240	0.54%

The estimated dollar amount revenue adjustments are calculated using all-payer inpatient revenue.

Policy Timelines

Staff aims to align State quality programs with CMS quality programs where feasible, while maintaining all-payer focus and the flexibility to address state priorities and AHEAD goals

RY 2029 Quality Policies										
	September	October	November	December	January	February	March	April	May	June
QBR		Draft		Final						
MHAC			Draft		Final					
RRIP				Draft		Final				
PAU*									Draft	Final
ED Best Practices			Draft		Final					

*PAU is include in update factor; PMWG will need to discuss future PAU adjustment

Fall PMWG Decision Points--Measures

Additional alignment of QBR with HVBP

- Staff will continue to recommend inclusion of ED LOS and Medicaid timely follow-up. Recommend exploring use of ECAT or ECAT-like measure for future years.
- While staff remain concerned about inclusion of Sepsis Bundle and THA-TKA complications, staff will continue to recommend inclusion for purposes of alignment.
- Efficiency domain? In RY2028 IP LOS policy, staff discussed potential inclusion of measure in QBR. Would need to reconsider revenue at-risk and domain weighting.
- Mortality? Maintain IP and 30-day mortality? Recommend developing hybrid, all-payer 30 day mortality measure for future years and following development and CMS use of Adult Community Onset of Sepsis; consider monitoring 30-day sepsis mortality (community onset and hospital acquired) using DX codes.

RRIP

- As will be discussed today, staff recommend adopting an RRIP measure that includes elements of the NCQA PCR and CMS HWR measure deemed necessary to meet statewide PHAP goal and important for alignment.
- Determine improvement and/or attainment goals for readmissions.

MHAC

- Finalize list of measures that meet criteria outlined by CAEM and pick measures for RY2029; propose additional measures for monitoring or future consideration (i.e., incubator measures).
- Determine scaling approach and revenue at-risk for complications program.

Maryland Hospital Quality Incentives under AHEAD

Medicare Fee-for-Service

CMS Quality Programs

- **Hospital Value Based Purchasing (HVBP)**
- **Hospital Acquired Conditions Reduction**
- **Hospital Readmission Reduction**

AHEAD Specific Incentives

- **Effectiveness Adjustment:** Revenue linked to unplanned readmissions, ED visits, and avoidable admissions
- **Community Improvement Bonus:** Focus on hospital-wide readmissions and avoidable admissions

Other Payers

Medicaid, Commercial, & Medicare Advantage

HSCRC Quality Programs

- **Quality Based Reimbursement**
- **Maryland Hospital Acquired Conditions Program**
- **Readmission Reduction Incentive Program**

Focus of today's discussion; info based on HSCRC understanding of the methodology from CMMI written documentation, office hour materials, and conversations.

Effectiveness Adjustment (EA) Measure

EA measures revenue associated with PAU defined as an inpatient hospitalization or outpatient encounter that satisfies numerator criteria for each of the following 3 measures:

1. Unplanned Readmissions (using the planned readmission algorithm from the CMS' Hospital-Wide All-Cause Unplanned Readmission (HWR) measure)
2. Avoidable Admissions (calculated by the AHRQ PQI-90 indicator)
3. Emergency Department Utilization (using the NCQA Emergency Department Utilization (EDU) measure definition)

$$\textbf{Overall Hospital PAU Percent} = \frac{PAU\ Payments}{Total\ Inpatient\ and\ Outpatient\ Revenue}$$

$$\textbf{Adjusted Hospital PAU Percent} = \frac{Overall\ Hospital\ PAU\ Percent}{Hospital\ Social\ Risk\ Score}$$

The PAU percent is divided by the social risk score

Hospitals are then relatively ranked by the adjusted PAU percent across the state to get the EA Percentile for each hospital.

Effectiveness Adjustment -- Revenue Adjustments

Current methodology splits hospitals into 4 buckets.

- <20%: No EA Adjustment
- 20% to 49%: Start at -0.25% in PY2 and scale to -1.00% by PY7
- 50% to 79%: Start at -0.38% in PY2 and scale to -1.52% by PY7
- 80% to 100%: Start at -0.50% in PY2 and scale to -2.00% by PY7

HSCRC believes that EA revenue adjustments will start for MD hospitals in CY2029 (PY4 for MD-not PY2) and be based on CY2027 (PY2) performance.

While CMMI has agreed with this timeline, HSCRC is still awaiting confirmation in writing.

In the first year, the maximum penalty will be -0.50 percent and that will increase annually.

Effectiveness Adjustment (EA) Concerns

HSCRC raised concerns on the following items related to the EA:

- Large percentile buckets: Based on this feedback, CMMI has proposed to assess more granular percentile ranges
- No national comparison such that even if all MD hospitals were performing better than nation, 80% would get reduction in revenue
- Lack of risk-adjustment of measures: CMMI has proposed to use actual scores that incorporate risk adjustment, normalize by z-scores, and use this distribution for percentiles.
- For PQIs, concerns have been raised on attribution and that the risk-adjusted PQI measure is an area level indicator that is population based and does not take into account service mix.
- For readmissions, if revenue is used, HSCRC has asked for clarification of what revenue will be used if the readmit hospital is different than the index hospital (i.e., if rates are higher or lower at receiving hospital than index then it could benefit or hurt index hospital).
- For ED visits, HSCRC has raised concerns about flagging all ED visits that meet the NCQA ED utilization measure without risk adjustment as avoidable. Also NCQA measure removes patients with frequent ED visits (i.e., multi-visit patients) where hospitals may have greatest opportunity to intervene.

AHEAD Adjustment Next Steps

- HSCRC can provide overview of Community Improvement Bonus at future meeting based on our understanding of the adjustment.
- HSCRC requests hospitals to submit feedback to CMMI (see below) on AHEAD adjustments and the proposed modifications, even if HSCRC has raised same or similar concerns.

For questions or feedback, send inquiries to the Model Helpdesk: AHEAD@cms.hhs.gov

Clinical Adverse Event Measures Subgroup Update

CAEM Goals

1. Recommend ***complications (MHAC), safety (QBR), and mortality (QBR)*** measures for:
    a. RY2029 (CY2027) Maryland Hospital Acquired Conditions program and Quality-Based Reimbursement, and
    b. Incubator that can be considered in future years, including:
        i. Measures that are not yet ready for payment that are either under consideration by CMS or measures that are important for MD under an all-payer quality program such as maternal health measures.
2. Recommend criteria for measure selection that can be used in future years and any payment considerations for PMWG
    a. For example: Maintain rewards in RY2029 if program includes measures beyond CMS portfolio.

Sources for Candidate Complication, Safety, and Mortality Measures

- Maryland Hospital Acquired Conditions Measures (MHAC) Measures
- CMS Hospital Acquired Complications Reduction Program Measures
- Complications/Mortality Measures Under Maryland Quality Based Reimbursement
- Complications/Mortality Measures Under CMS Hospital Value Based Purchasing
- CMS Inpatient Quality Reporting measures
- CMS Measures Under Consideration list for 2025
- CMS Electronic Clinical Quality Measures (eCQMs)

Complications Recap

RY2028 MHAC

- Subset of PPCs in composite, weighted at 5/6th of score
- All-Payer AHRQ PSI, weighted 1/6th of score
- State performance standards, 2% scaled rewards and penalties

FY2028 HACRP

- NHSN Healthcare Associated Infections, weighted 5/6th of score
- Medicare AHRQ PSI, weighted 1/6th
- National performance standards, 1% penalty for worst quartile

CAEM Measure-Related Discussion to Date

Continue PPCs?

- Discussed concern on proprietary costs and lack of alignment with CMS. Today we will discuss overlap with PSI and populations excluded if PPCs discontinued.

Add NHSN measures?

- CAEM discussed concerns about these surveillance measures and duplication in multiple programs. Other concerns include small cell sizes and lack statistical differences over time and between hospitals.

Identify Incubator Measures for future rate years to justify program rewards

- CAEM has discussed inclusion criteria for measure and developed matrix for input from CAEM members and stakeholders.
- Discussed specific areas/populations for non-Medicare HGBs as we discuss areas included with PPCs that are not as represented in the Medicare measures.

Safety Recap

FY2028 HVBP

- Sep 1 bundle process measure
- CDC NHSN HAI CLABSI, CAUTI, C Diff, MRSA and SSI (colon and hysterectomy)
- National performance standards, 2% rewards or penalties, not revenue neutral, Safety domain weighted 31%

FY2028 HVBP

- Sep 1 bundle process measure
- CDC NHSN HAI CLABSI, CAUTI, C Diff, MRSA and SSI (colon and hysterectomy)
- National performance standards, 2% rewards or penalties, revenue neutral, Safety domain weighted 25%

CAEM Measure-Related Discussion to Date

Continue Sep 1 bundle and CDC NHSN HAI measures in QBR

- Discussed concerns about Sep 1 measure being one size fits all in QBR RY 2028 policy but CMS alignment was deemed important for the policy
- Discussed concerns related to low numbers and reliability of NHSN measures

Identify Incubator measures for adoption and use when fully developed

- CAEM discussed Hospital Onset Bacteremia HOB measure and potential for statewide enrollment with CDC when the feasable
- Discussed options for adopting measures for Non-Medicare hospital GBRs

Mortality Measures Recap

RY2028 Maryland QBR

- Clinical Outcomes Domain
- All-Payer, all-condition, all-cause mortality measures, inpatient and 30-day
- Total hip/knee arthroplasty complications
- State performance standards, 2% scaled rewards and penalties, domain weighted at 31%

FY2028 HVBP

- Clinical Outcomes Domain
- All-cause 30-day condition specific mortality for AMI, CABG, COPD, CHF and Pneumonia.
- Total hip/knee arthroplasty complications
- National performance standards, 2% scaled rewards, revenue neutral with domain weighted at 25%

CAEM Measure-Related Discussion to Date

Align with CMS exactly on mortality measures

- Discussed consensus to not adopt condition specific in QBR
- Current options is to retain all payer 30-day and inpatient mortality measures
- Today we will discuss the capture of sepsis in our current mortality measures and implications

Maintain alignment with CMS with use of THK complications measure

- Discussed concerns related to majority of procedures having moved to out-patient
- Today we will discuss whether to recommend retaining this measure after RY 2028

Identify Incubator measures for future adoption

- CAEM has discussed Adult Community Onset Sepsis 30-day mortality measure and HWM hybrid measure
- Discussed 0ptions for timing of measure adoption for Non-Medicare hospital GBRs

PPC PSI-Overlap Analysis Recap from CAEM

PPCs and PSIs Have Differences in Numerators and Denominators

- There is significant variability in the Numerator and Denominator populations and for each “overlapping” set of PSI/PPC combinations
- Some of this variability is attributable to known differences in populations and specification logic.
  - For example, both PSI 13 and PPC 38 measure Sepsis rates, however, PSI 13 is limited to postoperative Sepsis while PPC 38 covers all inpatient Sepsis cases.
  - Other differences include Age and Major Diagnostic Category (MDC) variables.
  - Data suggest the measure specifications are not sufficiently aligned for PSIs and PPCs to be considered comparable across most of the “overlapping” measure sets
    - Measures within each measure set should be compared to their own historical performance rates in order to understand trends.
    - This has implications if the PSIs were to replace PPCs
  - While PPCs are more comprehensive in some of their constructs, they lack national comparative performance data and benchmarks.
- Staff believes that inclusion of both PPCs and PSIs provides for comprehensive measurement of complications acquired in the hospital while making progress toward aligning with the HACRP program.

PSI-PPC Numerator and Denominator Overlap

Highlight Indicates Payment PPC Example

Measures Compared	Measure Inclusion	Numerator Cases		Denominator Cases	
		Frequency	Percent	Frequency	Percent
PSI 03: Pressure Ulcer PPC 31: Pressure Ulcers	PSI and PPC	305	42.10%	307,871	56.60%
	PSI Only	85	11.70%	221,786	40.80%
	PPC Only	334	46.10%	14,388	2.60%
PSI 06: Iatrogenic Pneumothorax Rate PPC 49: Iatrogenic Pneumothorax	PSI and PPC	52	26.90%	574,470	66.10%
	PSI Only	44	22.80%	123,661	14.20%
	PPC Only	97	50.30%	171,304	19.70%
PSI 08: In Hospital Fall with Hip Fracture Rate PPC 28: In-Hospital Trauma and Fractures	~~PSI and PPC~~	~~135~~	~~57.00%~~	~~727,412~~	~~81.90%~~
	PSI Only	4	1.70%	113	0.00%
	PPC Only	98	41.40%	160,956	18.10%
PSI 09: Perioperative Hemorrhage or Hematoma Rate PPC 41: Peri-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Procedure	PSI and PPC	45	16.50%	97,744	46.10%
	PSI Only	182	66.90%	24,721	11.70%
	PPC Only	45	16.50%	89,447	42.20%

PSI-PPC Numerator and Denominator Overlap

Highlight Indicates Payment PPC

Measures Compared	Measure Inclusion	Numerator Cases		Denominator Cases	
		Frequency	Percent	Frequency	Percent
PSI 11: Postoperative Respiratory Failure Rate	PSI and PPC	23	2.20%	52,099	10.00%
PPC 03: Acute Pulmonary Edema and	PSI Only	392	37.20%	13,759	2.60%
Respiratory Failure without Ventilation	PPC Only	639	60.60%	454,842	87.40%
PSI 11: Postoperative Respiratory Failure Rate	PSI and PPC	59	10.20%	55,750	10.70%
PPC 04: Acute Pulmonary Edema and	PSI Only	356	61.40%	10,108	1.90%
Respiratory Failure with Ventilation	PPC Only	165	28.40%	454,682	87.30%
PSI 12: Perioperative Pulmonary Embolism or	PSI and PPC	144	21.20%	118,992	17.10%
Deep Vein Thrombosis Rate	PSI Only	405	59.60%	40,983	5.90%
PPC 07: Pulmonary Embolism	PPC Only	130	19.10%	536,775	77.00%
PSI 12: Perioperative Pulmonary Embolism or	PSI and PPC	48	8.10%	73,951	15.70%
Deep Vein Thrombosis Rate	PSI Only	501	84.50%	86,024	18.20%
PPC 16: Venous Thrombosis	PPC Only	44	7.40%	312,272	66.10%

PSI-PPC Numerator and Denominator Overlap

Highlight Indicates Payment PPC

Measures Compared	Measure Inclusion	Numerator Cases		Denominator Cases	
		Frequency	Percent	Frequency	Percent
PSI 13: Postoperative Sepsis Rate PPC 35: Septicemia & Severe Infections	PSI and PPC	47	6.80%	16,421	5.60%
	PSI Only	221	32.10%	48,771	16.70%
	PPC Only	420	61.00%	226,453	77.60%
PSI 14: Postoperative Wound Dehiscence Rate PPC 37: Post-Procedural Infection and Deep Wound Disruption without Procedure	PSI and PPC	12	3.00%	24,354	16.40%
	PSI Only	71	17.70%	18,155	12.20%
	PPC Only	319	79.40%	105,763	71.30%
PSI 14: Postoperative Wound Dehiscence Rate PPC 38: Post-Procedural Infection and Deep Wound Disruption with Procedure	PSI and PPC	18	9.10%	24,562	16.60%
	PSI Only	65	33.00%	17,947	12.10%
	PPC Only	114	57.90%	105,849	71.30%
PSI 15: Unrecognized Abdominopelvic Accidental Puncture or Laceration Rate PPC 42: Accidental Puncture/Laceration During Invasive Procedure	PSI and PPC	109	61.90%	131,525	14.40%
	PSI Only	21	11.90%	1,331	0.10%
	PPC Only	46	26.10%	782,256	85.50%

Service Line Analysis of PPC Cases Not Overlapping with "Paired" PSI

PPC	Paired PSI	PSI Filter Applied	CASE_TYPE	Analysis Population Cases	Obstetric N	Obstetric %	Surgical N	Surgical %	Medical N	Medical %
PPC35-Sepsis	PSI13	Y	DENOMINATOR	226453	12836	5.67%	15113	6.67%	148811	65.71%
PPC35	PSI13	Y	NUMERATOR	420	11	2.62%	76	18.10%	272	64.76%
PPC37-Postop infec w/o proc	PSI14	Y	DENOMINATOR	105763	26825	25.36%	25572	24.18%	43582	41.21%
PPC37	PSI14	Y	NUMERATOR	319	0	0.00%	174	54.55%	104	32.60%
PPC41-Peri op Hem w/ control procedure	PSI09	Y	DENOMINATOR	89447	43578	48.72%	13667	15.28%	26320	29.43%
PPC41	PSI09	Y	NUMERATOR	45	3	6.67%	20	44.44%	17	37.78%
PPC42- Acc punc and lac	PSI15	Y	DENOMINATOR	782256	123212	15.75%	51048	6.53%	482910	61.73%
PPC42	PSI15	Y	NUMERATOR	46	3	6.52%	22	47.83%	11	23.91%
PPC47-Encephalopathy	UNMAPPED	N	DENOMINATOR	430050	120207	27.95%	56428	13.12%	192249	44.70%
PPC47	UNMAPPED	N	NUMERATOR	187	1	0.53%	46	24.60%	128	68.45%
PPC49- Iatro pneumothorax	PSI06	Y	DENOMINATOR	171304	122436	71.47%	2236	1.31%	21793	12.72%
PPC49	PSI06	Y	NUMERATOR	97	0	0.00%	8	8.25%	83	85.57%

Service Line Analysis of PPC Cases Not Overlapping with "Paired" PSI

PPC	Paired PSI	PSI Filter Applied	CASE_TYPE	Analysis Population Cases	Obstetric N	Obstetric %	Surgical N	Surgical %	Medical N	Medical %
PPC3-Resp Failure, no vent	PSI11	Y	DENOMINATOR	454842	120714	26.54%	21571	4.74%	244251	53.70%
PPC3	PSI11	Y	NUMERATOR	639	25	3.91%	152	23.79%	422	66.04%
PPC4-Resp failure, vent	PSI11	Y	DENOMINATOR	454682	120707	26.55%	23372	5.14%	242627	53.36%
PPC4	PSI11	Y	NUMERATOR	165	1	0.61%	43	26.06%	110	66.67%
PPC7-- Pulm embolism	PSI12	Y	DENOMINATOR	536775	119033	22.18%	10988	2.05%	337675	62.91%
PPC7	PSI12	Y	NUMERATOR	130	5	3.85%	19	14.62%	82	63.08%
PPC9-Shock	PSI13	Y	DENOMINATOR	568178	121439	21.37%	26657	4.69%	342214	60.23%
PPC9	PSI13	Y	NUMERATOR	699	7	1.00%	218	31.19%	386	55.22%
PPC16-VTE	PSI12	Y	DENOMINATOR	312272	34472	11.04%	6849	2.19%	214632	68.73%
PPC16	PSI12	Y	NUMERATOR	44	0	0.00%	1	2.27%	35	79.55%
PPC28-In hop trauma, fx	PSI08	Y	DENOMINATOR	160956	121509	75.49%	5596	3.48%	25758	16.00%
PPC28	PSI08	Y	NUMERATOR	98	2	2.04%	17	17.35%	61	62.24%

CMS Framework: Measure Selection Criteria (whether a measure should be included for a specific program)

- Supports CMS/national health priorities: outcome, patient-reported, digital measures, and access for all.
- Meets program goals and statutory requirements.
- Addresses important conditions/topics with performance gaps and strong scientific evidence to drive desired outcomes/affordability.
- Requires written consent for proprietary algorithms.
- Promotes alignment across CMS and HHS programs/settings.
- Identifies improvement opportunities (e.g., not topped out).
- Avoids unintended consequences (e.g., overuse, inappropriate care, limited access).
- Does not duplicate existing measures.
- If an eCQM, must have a CMS ID (in MADiE) and be expressed using HQMF, QDM, and CQL.

Measure Evaluation and Selection Criteria Discussed

- Data Analysis/Statistics
  - High rates: PPC Rate per 1,000 generally 0.5 or above
  - High Volume: PPC Volume of observed events 100
  - or above (over 2 yrs)
  - **Significant variation across hospitals**
  - At least half of the hospitals are eligible for the PPC
- Additional Considerations
  - **Clinical significance**
  - **Supports coding practice improvements**
  - **Opportunity for improvement/actionability**
  - **Measure overlaps, e.g., PPC-PSI**
  - **All-payer**
- New Proposed Criteria
  - **National CMS alignment; consider CMS and MUC measures***
  - **Addresses state priorities for quality and pop health improvement**
  - **Cost of Proprietary systems***
  - **Adequate risk adjustment***
  - **Digitally specified***

Questions/Comments:

Considering measures on the MUC list leverages the PRMR review process.

The PPC Composite Methodology used since RY 2027 mitigates the previous rate and volume concerns.

Are there additional criteria that should be considered?

NOTE: Bolded above indicates updated proposed criteria.
***Emphasized by subgroup**

CAEM Next Steps for June Subgroup Meeting

- The updated final slide deck and Excel workbook used for 6/24 CAEM meeting posted to the HSCRC website
- Excel has worksheet that contains “Measures of Interest Matrix" with a narrowed list of measures and Subgroup measure selection criteria
  - HSCRC staff completed and included our ratings of the measures using the criteria.
  - Subgroup members asked to provide feedback to HSCRC staff by 7/13/26 on Measure Matrix tab and criteria by adding notes in the far right column or completing matrix themselves
- Maryland 30-day mortality measures case capture of sepsis/sepsis with organ dysfunction on the CRISP dashboard not discussed with CAEM; will include this discussion in the 8/19/26 PMWG meeting; will share paper describing methods used to identify sepsis mortality cases in the Sepsis Dashboard on CRISP
- Staff will also provide in the August PMWG meeting a summary of the CAEM member inputs/feedback on the prospective measures and evaluation criteria.
- We look forward to the combined CAEM and PMWG member participation in the August PMWG meeting.

RRIP RY2029 and beyond

1. Review last meeting's discussion questions and feedback
2. Hospital Wide Readmissions (HWR) Update
3. NCQA Plan All-Cause Readmission (NCQA PCR) Update
4. Analysis of Measure Differences

Review last meeting's discussion questions and feedback

Discussion Questions

1. Should future RRIP assess all-payer or non-Medicare data for adjustments to non-Medicare global budgets?

   Staff's recommendation from the May meeting discussion is to assess all-payer performance

2. Should RRIP use By Payer claims for program?

   Staff's recommendation from the May meeting discussion is to use case-mix data for RRIP measure

3. Should HSCRC staff also explore development of all-payer condition specific HRRP measures? Staff supports all-condition measure for comprehensiveness.

   Staff's recommendation from the May meeting discussion is to focus on all-conditions

4. Staff working to adapt the following measures to HSCRC case-mix data

   See upcoming slides

5. Should staff prioritize correlating Medicare results statewide and by hospital, and over time for each measure?

   See upcoming slide

Correlation of Medicare FFS Readmission Rates

- The hybrid HWR measure has the highest correlation with RRIP at 0.48 but may be related to time period and not measure differences (see table)
- For July 2021-June 2022 the correlation of RRIP and claims-based HWR was 0.41 (not shown)
- For July 2022-June 2023 the correlation of RRIP and claims-based HWR was 0.37 (see table)
- Given HWR includes in and out of state readmissions, staff tested removing hospitals with Out of State Utilization of > 1.18 in CY25 (removes Garrett, Ft. Washington, Medstar S. MD, Union, Chestertown, Atlantic General)
  - The correlations increased from 0.48 to 0.62 (hybrid 23-24), 0.41 to 0.48 (claims-based 21-22) and 0.37 to 0.58 (claims-based 22-23)

	RRIP	AMI	CABG	COPD	HF	THA/TKA	PN	HWR	hHWR
RRIP	1								
AMI	0.28	1							
CABG	0.08	0.44	1						
COPD	0.29	0.04	0.05	1					
HF	0.17	0.02	0.07	0.15	1				
THA/TKA	0.13	-0.04	0.70	0.19	0.04	1			
PN	0.24	0.21	0.39	0.16	0.34	0.28	1		
HWR	0.37	-0.07	0.71	0.28	0.41	-0.06	0.31	1	
hHWR	0.48	0.33	0.43	0.39	0.43	0.06	0.65	0.58	1

Table time periods for CMS measures: Condition specific 7/21-6/24; Hybrid 7/23-6/24; HWR 7/22-6/23; RRIP was run for Medicare FFS only for corresponding CMS time periods.

Inclusion and Exclusion Measure Differences

Staff are exploring impact of differences between current RRIP, HWR, and NCQA PHAP measure.

- **Goals:** Support hospitals with alignment of measures, ensure State has mechanism to incentivize hospitals to achieve PHAP statewide goal, and address areas of particular concern to CMMI or Maryland.

Measures	Exclusion Criteria				
	Primary Psych	Observation Stays	Hospice	Oncology	<18 years of age
NCQA Plan All Cause Readmissions			x	x	x
Hybrid HWR	x	x		x	x
CMS HWR	x	x		x	x
MD HWR (TCOC)	x	x		x	x
RRIP		x			

Hospital Wide Readmission Measure Update

Hospital Wide Readmission Measure

- Staff recommends to focus efforts, at this time, on claim-based HWR rather than Hybrid HWR
  1. delay with receiving Core Clinical Data Elements (CCDE)
  2. the time and level of effort it will take to create a risk adjustment using all-payer CCDE
  3. results from Yale New Haven Services Corporation, Center for Outcomes Research and Evaluation (CORE)
- In the future, staff may decide to revisit the Hybrid measure

Claims-Based HWR vs Hybrid HWR Performance Results

- The standardized risk ratios and risk standardized readmission rates overall and by service line were highly correlated between the claims-based (original) and hybrid models *(Table 3.10)*.
- Ranking for most hospitals used for development were unchanged (11 of 21), and shifted up or down by at most two positions on the list *(Table 3.11)*.

Table 3.10: Correlation of Original HWR and Hybrid eHWR RSRRs (Development Sample)

Value	Surgery/ Gynecology	Cardio-respiratory	Cardiovascular	Neurology	Medicine	Overall
Correlation of RSRRS	0.9888	0.9829	0.9818	0.9707	0.9953	0.9902

Table 3.11: Hospital Rankings by Risk Model Approach (Development Sample)

Hospital ID	Original HWR		Hybrid eHWR	
-	Rank	RSRR	Rank	RSRR
A	1	13.26	1	13.15
B	2	13.91	2	13.99
C	3	13.98	3	14.06
D	4	14.10	4	14.14
E	5	14.29	5	14.33
F	6	14.46	6	14.52
G	7	14.60	9	14.64
H	8	14.62	7	14.56
I	9	14.74	8	14.59
J	10	14.83	11	15.04
K	11	14.89	10	14.86
L	12	15.04	14	15.12
M	13	15.05	13	15.12
N	14	15.14	12	15.10
O	15	15.16	16	15.16
P	16	15.19	17	15.19
Q	17	15.22	15	15.14
R	18	15.23	18	15.28
S	19	15.43	19	15.52
T	20	15.73	20	15.56
U	21	16.31	21	16.16

Given the high correlation and very similar results between models, staff recommend to test and include an all-payer hybrid measure at a later time

Source: https://www.cms.gov/files/document/hybrid-hospital-wide-readmission-methodology-report-03202023.pdf

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Plan All-Cause Readmission Update

5/19/2026

Plan All-Cause Readmission (PCR)

- **Maryland submitted PCR measure targets using claims data for the AHEAD Population Health Accountability Plan (PHAP).**
  - PCR was a required utilization measure in the Statewide Quality measure set.
  - Targets were approved by the Data Advisory Committee last year prior to submission to CMMI.
  - CMMI recently sent approval for the PHAP Readmission goal.

Data source	All-Payer 2023 Baseline	All-Payer 2027 Target
Claims	O/E= 1.01	O/E= 1.00

- **We are exploring the use of case mix to calculate PCR to use in RRIP and as a secondary measure to support tracking of the PHAP measure.**
- **Calculating PCR with case mix offers many advantages: (1) More timely availability, (2) More complete capture of hospital-based utilization across payers, and (3) Reduced reliance on multiple claims sources.**

Plan All-Cause Readmission (PCR) Case Mix Investigation

- **To support developing the PCR measure with case mix, we conducted a data matching exercise. We matched case mix records to claims records to determine the following:**

1. Are we determining index hospitals stays (acute inpatient or observation stays) correctly in case mix data?
2. Do index hospital stays match across data sets? Are there any stays that need to be filtered out?
3. Does the index hospital stay have an observed readmission across data sets?
4. Does the expected readmission risk associated with the index hospital stay match across data sets?

Plan All-Cause Readmission (PCR) Case Mix Data Match

There was a high match rate between the case mix data and Medicare and Medicaid claims data. Level 1 matches were based on exact agreement on admission date, discharge date, and hospital ID. Level 2 matches allowed for differences in admission or discharge dates of 1–5 days.

				Type of Match	
Payer	Total Records	Match Rate	Unmatched Rate	Level 1 Match	Level 2 Match
Medicare	1,145,809	88%	12%	847,931 (74%)	164,683 (14%)
Medicaid	579,947	89%	11%	346,995 (60%)	169,654 (29%)
Commercial & Medicare Advantage	834,784	48%	52%	316,319 (38%)	79,561 (10%)

Plan All-Cause Readmission (PCR) Case Mix Initial Investigation Findings

- **Claims and case mix can yield different results because they have different populations in their denominator. Different denominators result in different O/E results.**
- **Key denominator differences stem from underlying data set variations including:**
  - Admissions present in one data set but not the other
    - Cases flagged as outliers in one data set but not the other due to missing admissions
    - Expect differences in commercial and Medicare Advantage but also see differences in Medicare and Medicaid
  - Differences in classification (e.g., observation stay vs. non-acute inpatient admission)
  - Differences in procedures and diagnoses associated with the admission
  - Inability to assess continuous enrollment using case mix data
- **In a sample of admissions excluded from claims but included in case mix data, 71% were excluded due to continuous enrollment requirements.**
- **We validated the observed readmission logic by comparing admissions flagged as index stays in both datasets. Approximately 97% had a consistent observed readmission indicator across the two datasets.**

Plan All-Cause Readmission (PCR) Case Mix Investigation Next Steps

- **Incorporate psychiatric data into the case mix data set**
  - This will allow for more apples-to-apples comparison. Claims outputs includes psychiatric hospitals.
  - We expect this revision to increase the observed rate and improve alignment.
- **Identify the key sources of denominator variation and quantify their impact**
  - Continuous enrollment
  - Outliers
  - Differences in categorization of stays
  - Other exclusions

Discussion questions

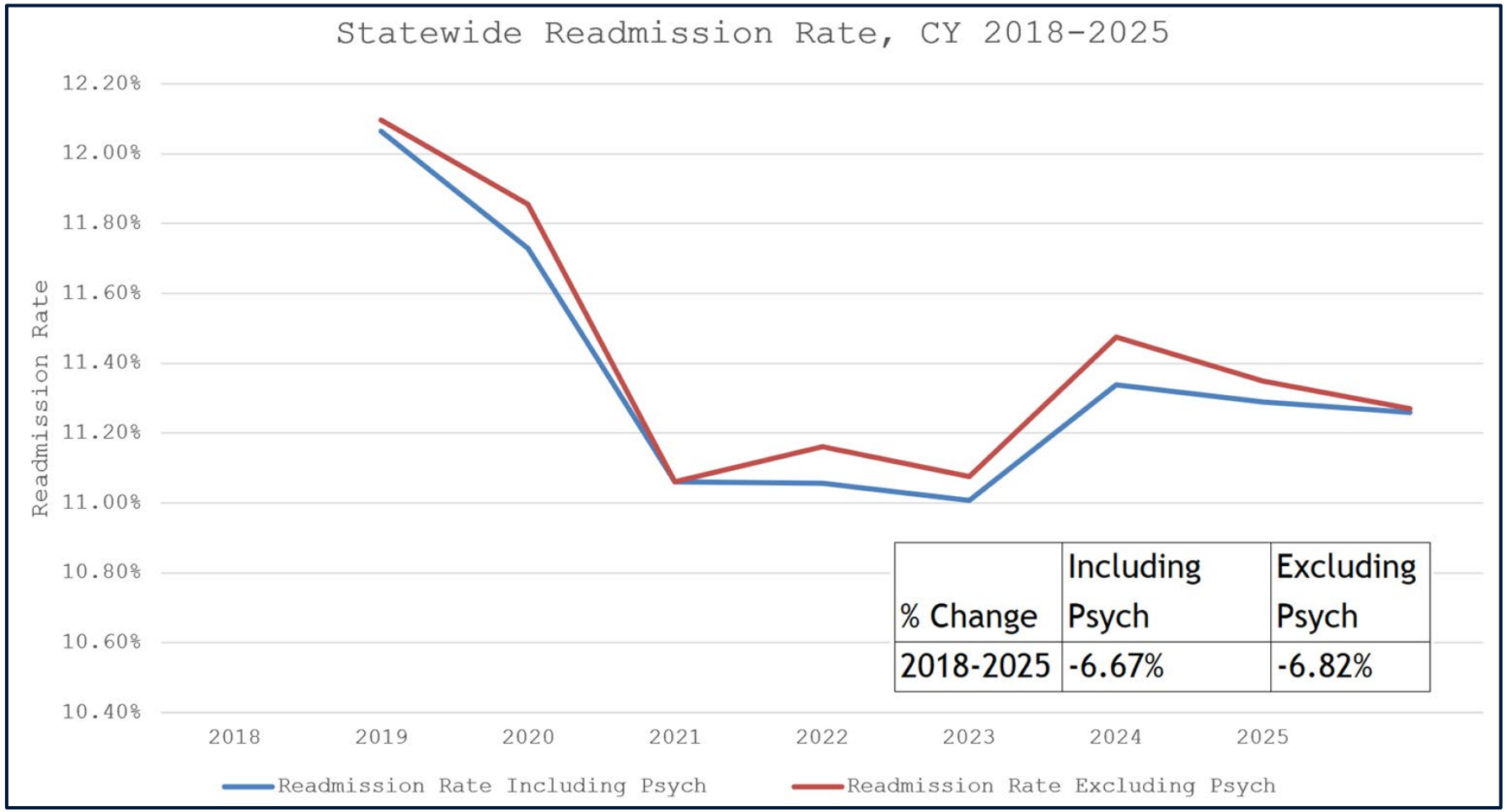
- **Should replication using HSCRC case-mix be "exact" or be focused on alignment of elements?**
- **What elements of the NCQA PCR measure should be prioritized?**
  - Inclusion of observation stays
  - Risk-adjustment by payer
  - Removal of outliers
  - Inclusion of psychiatric admissions
  - Continuous enrollment criteria
  - Exclusion of hospice
- **What is the acceptable threshold for differences in the case mix and claims results?**
- **What additional validation should we consider as we finalize this analysis?**

Impact of Measure Differences

RRIP Analyses

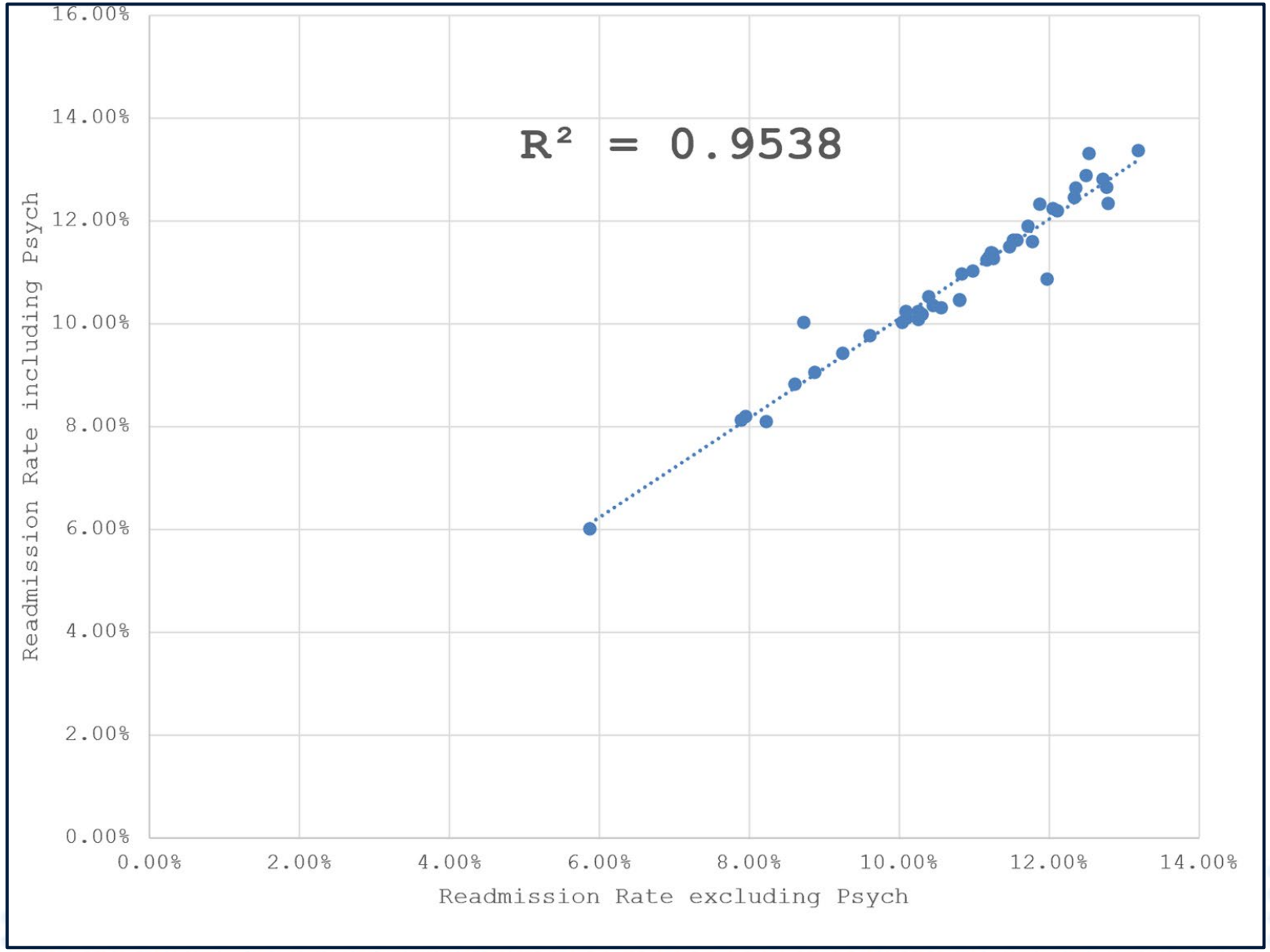
- There are differences between readmission measures and together we have to decide which elements will be included in the future RRIP measure
  - Psychiatric patients and psychiatric hospitals (defined by APR-DRGs and specialty hospitals)
  - Observation stays, all and >23 hrs (as index admissions and readmissions)
  - Hospice
  - Oncology
  - <18 years of age
- Staff will bring results to PMWG to discuss and decide which should be included/excluded in the future RRIP measure
- Discussions on target selection

Statewide Impact



% Change	Including Psych	Excluding Psych
2018-2025	-6.67%	-6.82%

Hospital Level Impact



Discussion

Should psychiatric patients be included or excluded from future RRIP measure?

- At this time, staff recommend including psychiatric in the future RRIP measure
  - Minimal improved performance when excluding psychiatric
  - Very high correlation in readmission rates including vs excluding psychiatric
  - Included in NCQA PCR measure/ PHAP goal performance
  - Important population for care coordination representing opportunity for improvement (also note the TFU after mental illness PHAP measure)
- Stakeholders have mentioned the exclusion of substance abuse cases specifically
  - Are there other considerations?

Next Steps

- Examine other elements for inclusion/exclusion
- Determine if changes are needed to risk-adjustment
- Determine attainment and/or improvement goal

Inpatient Length of Stay Policy

RY 2028 Inpatient Length of Stay Policy: Final Recommendations

June 10, 2026: The IP LOS monitoring policy passed at the 643rd Commission Meeting

1. Implement a monitoring program for all-payer inpatient length of stay (IP LOS) for acute-care hospitals.
    a. Assess the risk-adjusted, mean IP LOS for acute admissions, with clinical exclusions and winsorization to minimize the effect of extreme outlier cases.
    b. Provide summary level reports and patient level files that allow hospitals to track IP LOS and stratify by patient characteristics (i.e., primary diagnosis, patient disposition) or other factors to identify areas of opportunity.
    c. Publicly report trends in IP LOS statewide and by hospital at HSCRC Commission meetings.
2. Propose inclusion of IP LOS for payment in RY2029 or RY2030 as part of the portfolio of hospital quality and population health incentives for Maryland Global Budgets (i.e., non-Medicare hospital global budgets).
3. Monitor to ensure the measurement approach is valid and the policy is achieving its intended result (lower IP LOS and ED LOS) and for unintended consequences, including readmission rates and ED revisits.

IP LOS Monitoring Policy Timeline

- July/August 2026 CRISP release: Summary level reports and detailed patient level files will be populated in the HSCRC regulatory reports on the CRISP portal
  - Metrics: Total eligible discharges, Observed LOS, Expected LOS, and the O/E Ratio.
  - Norms: Derived from 2023 HCUP National Inpatient Sample, adjusted for APR-DRG, Severity of Illness (SOI), and Payer.
  - Report will provide CY 2023 through current CY YTD.
  - Detail level file will include patient and visit level characteristic (e.g., APR-DRG, payer) to allow hospitals to stratify results.
- September 2026: Present first IP LOS monitoring report to the Commission

THANK YOU!

Next Meeting: August 19, 2026

Appendix

Overview of Readmission Measures

Measure	Data Source	Current use	Observation stays included?	Measure
Plan All-Cause Readmissions	Claims	AHEAD Core Measure Core Set	Yes	The risk adjusted ratio of observed-to-expected unplanned all-cause readmissions
Hybrid Hospital-Wide Readmissions	Claims and EHR	CMS Hospital IQR Program	No	The risk adjusted ratio of predicted to expected unplanned all-cause readmissions summed across specialty cohorts
Hospital-Wide Readmissions (modified)	Claims	TCOC model measure to assess MD performance compared to nation	No	The risk adjusted ratio of predicted to expected unplanned all-cause readmissions summed across specialty cohorts
All-Payer Readmission Rates (RRIP)	Case mix	Readmission Reduction Incentive Program	No (HSCRC PAU measure includes OBS >23 hrs)	The risk adjusted ratio of observed-to-expected unplanned all-cause readmissions
Condition-specific 30-day Readmissions (HRRP)	Claims	CMS Hospital Readmissions Reduction Program	No	The risk adjusted ratio of predicted-to-expected unplanned all-cause readmissions for given condition (or procedure)

Readmission Measures: Overview

Measures	Data Sources			Population				Hospital Type	
	Payer Claims	EHR	Case-Mix	Medicare	Medicaid	Commercial /MA	Uninsured	Acute Short Stay	Specialty
NCQA Plan All Cause Readmissions	x			x	x	x incomplete		x	x Psych
Hybrid HWR	x	x	All-payer HSCRC	x				x	
CMS HWR	x			x				x	
MD HWR (TCOC)	x			x				x	
RRIP			x	x	x	x	x	x	x
HRRP Condition Specific Readmissions	x			x				x	

Readmission Measures: Inclusions

Measures	Measure Inclusion				
	All-Condition Admissions	All-Cause Readmissions	Unplanned	Observation Stays	Excludes readmission as index
NCQA Plan All Cause Readmissions	x	x	x	x	
Hybrid HWR	x	x	x		
CMS HWR	x	x	x		
MD HWR (TCOC)	x	x	x		
RRIP	x	x	x		
HRRP Condition Specific Readmissions		x	x		x

Readmission Measures: Exclusion Criteria

Measures	Exclusion Criteria												
	Died during stay	Transfers to another hospital (definition is measure specific)	Continuous enrollment (definition is measure specific)	Outliers	Primary Psych	Rehab	Oncology (definition is measure specific)	Pregnancy or perinatal related	Newborns	<18	Age 18-64	Left Against Medical Advice	Hospice
NCQA Plan All Cause Readmissions	x	x	x	x		x	x	x	x	x			x
Hybrid HWR	x	x	x		x	x	x	x	x	x	x	x	
CMS HWR	x	x	X		x	x	x	x	x	x	x	x	
MD HWR (TCOC)	x	x	x		x	x	x		x	x		x	
RRIP	x	x				x			x			x	
HRRP Condition Specific Readmissions	x	x	x		x	x	x	x	x	x	x	x	

Overview of risk adjustment

Measure	Risk Adjustment
Plan All-Cause Readmissions (PCR)	• Separate regression-based risk adjustment models are used for commercial, Medicare, and Medicaid. • Risk adjustment factors: presence of observation stay status at discharge, surgeries, discharge condition, comorbidity, age, and gender.
Hospital-Wide Readmissions (HWR)	• Separate hierarchical regression model for each specialty cohort (Surgery/Gynecology, Cardiorespiratory, Cardiovascular, Neurology, and Medicine) • Risk adjustment factors: age, sex, CMS Condition Category comorbidities • Hospital-specific readmissions score is calculated as a volume-weighted logarithmic mean of the given hospital's SRRs across specialty cohorts.
Hybrid Hospital-Wide Readmissions (Hybrid HWR)	• Same as HWR above, except clinical data from hospital electronic health records are linked with claims to risk adjust the measure. • First set of vital signs and basic laboratory tests including:
All-Payer Readmission Rates (RRIP)	• Indirect standardization used to adjust for case mix • Case-mix adjustment factors: Discharge APR-DRG and severity of illness (SOI), which are based on patient's procedure codes, diagnosis codes, age, and sex.
Condition-specific 30-day Mortality (HRRP)	• Separate hierarchical regression model for each condition/procedure: AMI, CABG, COPD, HF, PN, THA/TKA • Risk adjustment factors: age, sex, CMS Condition Category comorbidities

Comparison of readmission measures

Measure	Advantages	Disadvantages
PCR	• Proposed AHEAD metric with statewide goal that MD must reach biannually • Contains observation stays – which is a CMS priority • Multipayer (Medicare, Medicaid, Commercial) • National benchmarks publicly available for Medicare Advantage and Medicaid	• Requires by payer claims data • Ability to execute this measure in real time is significantly constrained by timing of final HEDIS specification and risk adjustment table releases • Claims data does not have ERISA plan data or uninsured
Hybrid HWR	• Addresses concerns that claims do not fully depict the hospital's case mix by adding clinical data • CMS will use this measure for Hospital IQR Program starting with the July 1, 2026 through June 30, 2027 reporting period	• Significant lag for data and risk-adjustment, less able to track adjusted metric during year • CMS version is Medicare only; all-payer version would be MD specific adaptation and requires development
MD HWR (TCOC)	• Claims based, can be estimated/run with data received by CMMI • Used to measure Maryland's readmission performance for TCOC model	• CMS is replacing CMS HWR measure with the hybrid version • Medicare only; all-payer version would be MD specific adaptation and require development
RRIP	• All-payer including the uninsured • Able to track metric with minimal lag since based on HSCRC case-mix data	• Lacks national comparison • Indirect standardization reduces risk-adjustment factors that can be included
HRRP	• CMS uses these measures for the HRRP Program	• Six separate measures makes interpretation of overall performance more complex • Less comprehensive than all-condition measure • Medicare only; all-payer version would be MD specific adaptation and require development

Hospital CCN Key

Hospital ID	Hospital
210001	Meritus
210002	UMMS- UMMC
210003	UMMS- Capital Region
210004	Trinity - Holy Cross
210005	Frederick
210008	Mercy
210009	JHH- Johns Hopkins
210011	Saint Agnes
210012	Lifebridge- Sinai
210015	MedStar- Franklin Square
210016	Adventist- White Oak
210017	Garrett
210018	MedStar- Montgomery
210019	Tidal- Peninsula
210022	JHH- Suburban
210023	Luminis- Anne Arundel
210024	MedStar- Union Mem
210027	Western Maryland
210028	MedStar- St. Mary's
210029	JHH- Bayview
210032	ChristianaCare, Union
210033	Lifebridge- Carroll
210034	MedStar- Harbor
210035	UMMS- Charles
210037	UMMS- Easton
210038	UMMS- Midtown
210039	Calvert
210040	Lifebridge- Northwest
210043	UMMS- BWMC
210044	GBMC
210048	JHH- Howard County
210049	UMMS-Upper Chesapeake
210051	Luminis- Doctors
210056	MedStar- Good Sam
210057	Adventist- Shady Grove
210060	Adventist-Ft. Washington
210061	Atlantic General
210062	MedStar- Southern MD
210063	UMMS- St. Joe
210065	Trinity - Holy Cross Germantown