maryland
health services
cost review commission

Performance Measurement Workgroup

April 19, 2023

HSCRC Quality Team

PMWG Members

Carrie	Adams	Meritus	Lily	Mitchell	CareFirst
Ryan	Anderson	MedStar - MD Primary Care Program	Jonathan	Patrick	MedStar Health
Kelly	Arthur	Qlarant QIO	Elinor	Petrocelli	Mercy Medical Center
Ed	Beranek	Johns Hopkins Health System	Mindy	Pierce	Primary Care Coalition of Montgomery County
Barbara	Brocato	Barbara Marx Brocato & Associates	Tricia	Roddy	Maryland Department of Health
Zahid	Butt	Medisolv Inc.	Farzaneh L.	Sabi	Kaiser Mid-Atlantic Permanente Medical Group
Tim	Chizmar	MIEMSS	Nitza	Santiago	Lifebridge 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
Laura	Goodman	MD Medicaid	Brian	Sims	Maryland Hospital Association
Toby	Gordon	Johns Hopkins Carey Business School	Mike	Sokolow	University of Maryland Medical Systems
Theressa	Lee	Maryland Health Care Commission	Geetika "Geeta"	Sood	JHU SOM,Division of Infectious Diseases.
Staci	Lofton	Families USA	April	Taylor	Johns Hopkins Health System
Patsy	Mcneil	Adventist Health	Bruce	VanDerver	Maryland Physicians Care
Stephen	Michaels	MedStar Southern Maryland Hospital	Jamie	White	Frederick Health

Workgroup Ground Rules

- Be prepared: please read materials before the meeting
- Be brief
- Share the floor: please monitor your contributions to make sure others have an opportunity to engage in the discussion
- No interruptions (except for the time-keeper)
- Stay on topic
- Questions are welcome
- Respect deadlines for written comments

REMINDER: These workgroup meetings are recorded.

Timeline of Deliverables (See PMWG Workplan document)

Month	Commission Meetings	CMMI	HSCRC/Other
October 2022	Draft QBR		
November	Final QBR Draft MHAC Hospital Population Health Policy Discussion		RY2023 Revenue Adjustments
December	Final MHAC	Annual report including Year 3 SIHIS Update	
January 2023	RRIP Policy Extension PAU Measurement Report on Avoidable ED Hospital Population Health Policy Discussion		
February			
March/April			Internal TCOC Model Expansion Recommendations
May	Draft PAU Savings RY 2024 report (in Draft Update Factor Policy)		RY 2024 Revenue Adjustments
June	Final PAU Savings RY 2024 report (in Final Update Factor Policy)	Exemption Request	

Meeting Agenda

- Quality and Population Health: Model Progression Plan Recommendations
  - Health Equity
  - Hospital Quality Programs
  - Hospital Accountability for Population Health
  - Statewide Population Health
- Potentially Avoidable Complications: Ambulatory Procedures
- IPPS Proposed Rule: Summary for Quality and Equity

Progression Plan Updated Health Equity Recommendations

Recommendation: Develop Population Health and Equity Incentive Program (PHEIP)

- Hospital incentive for improving population health and advancing health equity in Maryland
- Initially, reward only program with opportunity to receive funds for improving equity and population health
- Potential equity measures will include stratified measures of SIHIS, population health, and quality
  - E.g.: SIHIS- racial disparities in childhood asthma, SMM; Quality- readmissions disparity gap, etc
  - Population health measures will be addressed in later slides
- To qualify for incentive, hospital must meet CMS Commitment to Health Equity Structural Measure and submit a Health Equity Plan

PHEIP's Requirements

- Meet CMS Commitment to Health Equity Structural Measure
  - Attestation structural measure of 5 domains of health equity:
    - Equity as strategic priority, data collection, data analysis, quality improvement, leadership engagement
- Health Equity Plan
  - Explanation of how hospital is meeting each of the domains from the CMS Commitment to Health Equity Structural Measure annually
  - A plan on how the hospital plans to further advance health equity at the beginning of the model; will require annual updates on progress

Hospital Quality and Population Health Progression Plan

Future Model Planning: Hospital Quality and Population Health

Task: April report for HSCRC leadership outlining strategic plan for future model

- Convene workgroup members to discuss model evolution and outline 3-5 year plan for future of Quality programs
  - Population health metrics
  - Digital measures: electronic Clinical Quality measures (eCQMs)/hybrid measures
  - Additional disparity metrics
  - Expansion of hospital focus, e.g., patient-reported outcome measures, climate change
  - Consider providers and other care settings
  - Revise policy approach (e.g., service lines, unified policy per MedPAC Hospital Value Incentive Program (HVIP))

Hospital Quality Program Updates (MedPAC, Universal Foundation, CMMI, HSCRC)

RY23/CY21 and Prior	RY24/CY 22	RY 25/CY 23	RY 26/CY 24	RY27/CY25	RY 28/CY26	New TCOC Model
-Use absolute performance standards**	-Develop 30-day all condition mortality measure***	-Engage stakeholders in digital measures WG****	-Develop new targets for RRIP*	-Assess safety measure portfolio (PPCs, PSI, NHSN)	-Model and develop monitoring reports for streamlined quality program	**Implement Enhanced Hospital Quality Program/s**
-Use prospective targets**	-Begin state collection of digital measures/ eCQMs***	-Add perinatal eCQMs****	-Include ED wait times in payment policy*	-Evaluate QBR domains and measures	-Reassess revenue at-risk across quality programs	
-Use all-condition measures**		-Collaborate with MHA and on HCAHPS improvement***	-Consider adding perinatal or other eCQMs in payment policy*	-Assess risk-adjustment across programs		
-Distribute rewards based on a continuous scale of points**		-Implement TFU Medicaid***	-Develop infrastructure for PROMs*			
		-Implement 30 day mortality, TFU Beh Hlth, EDAC Monitoring Reports****				
		-Consider plan for all-payer patient reported outcome measures (PROMs)*				
		-Develop progression plan recommendations*				
		Consider options for streamlining Hospital quality programs*** Imbed payment incentives for Equity in Hospital Quality Programs***				

Recommendation

- Continue all-payer hospital quality and performance based payment programs/program components (QPP) that recognize:
  - Quality improvements that reinforce the incentives of the global budget system
  - Declining quality of care that may be an unintended consequence of a system that is constraining hospital expenditures
  - The significant opportunity hospitals in Maryland have to recoup funding through a GBR by improving the health and quality of care of the population

- The QPP program will allocate, at a minimum, the percent of revenue held at risk for the performance-based payments that equals the federal revenue at risk for similar programs (currently 6%).

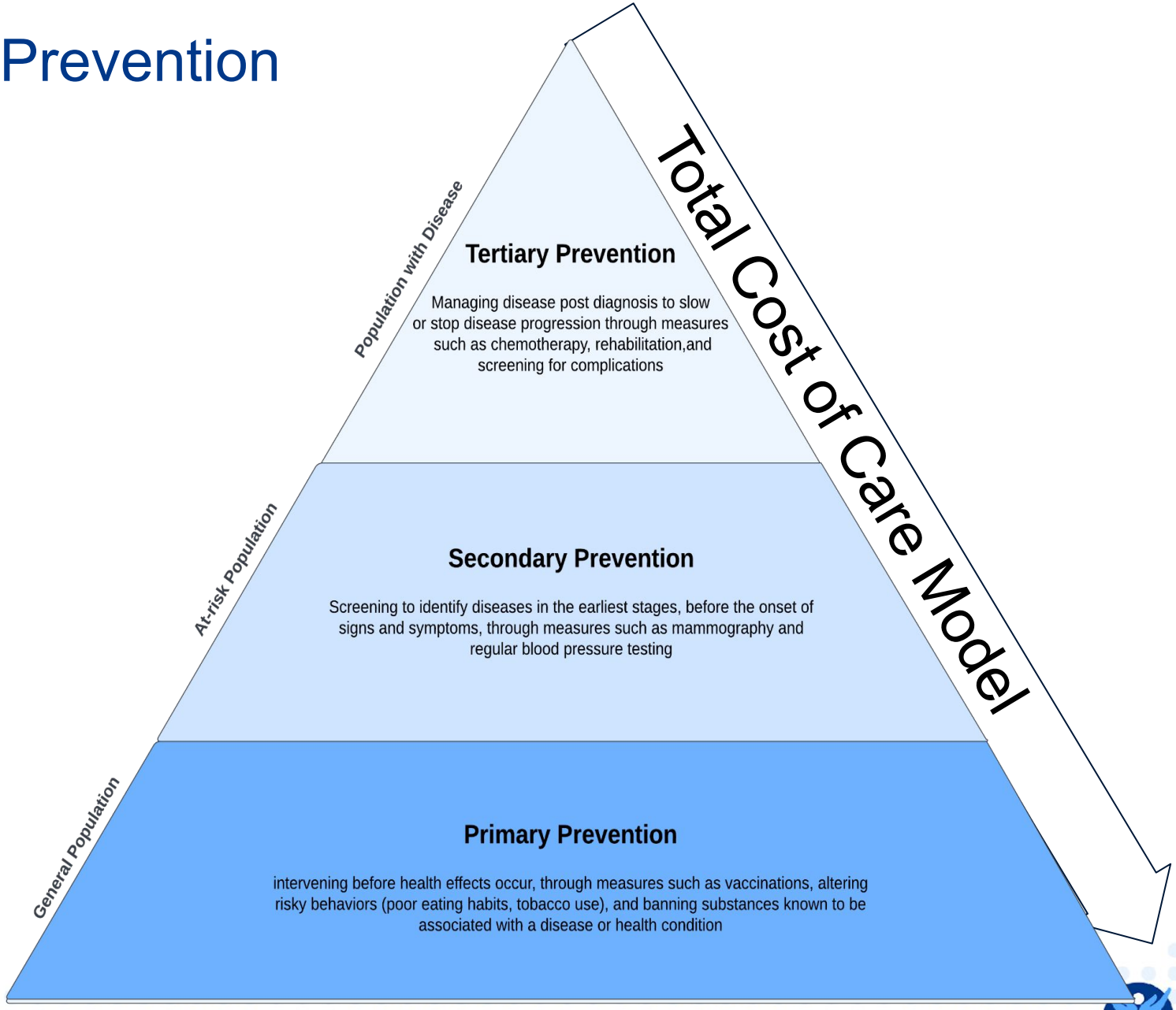
- In addition, the programs/components should be designed to provide the state with flexibilities for innovation to:
  - Address state specific priorities
  - Maintain and advance a patient-centered focus of measurement within the programs/components
  - Leverage advancements in digital measurement to minimize burden of assessing performance, and
  - Streamline/simplify hospital assessment of quality/performance based payment while maximizing fairness.

Progression Plan: Hospital Accountability in Population Health

Roadmap

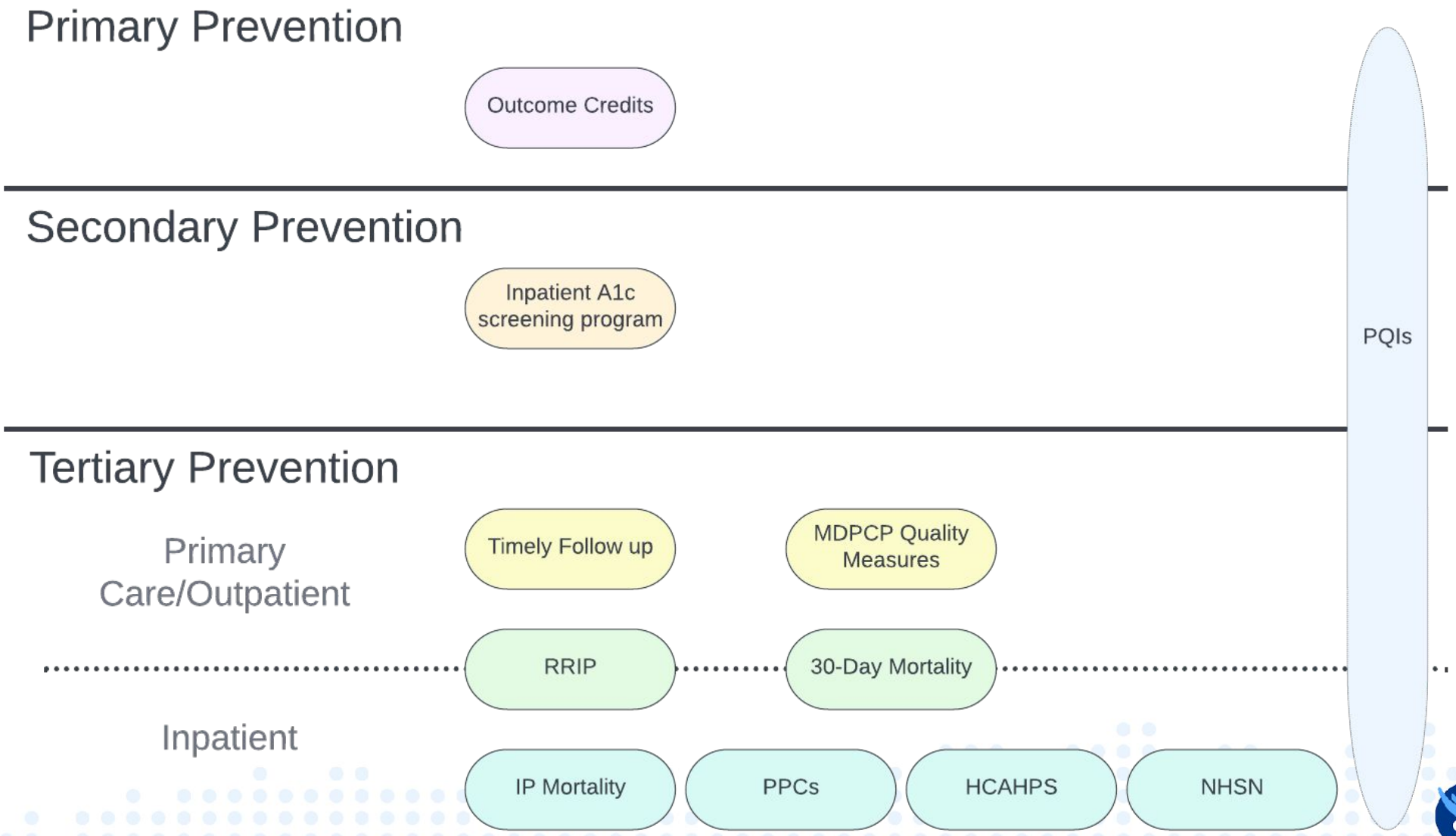
- Review of population health terminology & current policy portfolio
- Policy framework
- Population health outcomes
- Attribution strategy
- Policy options
- Discussion

Levels of Prevention



https://www.cdc.gov/pictureofamerica/pdfs/picture_of_america_prevention.pdf

Current Policy Portfolio



Policy Framework

An ideal population health policy would:

- Reflect hospital population health investment/effort (more hospital investment or effort = better measure performance)
- Prioritize primary prevention, while also encouraging progress/discouraging backsliding on secondary and tertiary prevention
- Rely on valid, reliable, current all-payer data accessible to stakeholders
- Reinforce statewide population health goals such as SIHIS and outcome credits
- Enhance health equity
- Accelerate hospital partnerships with other healthcare providers, public health, and community organizations

Potential Outcomes

Current Thinking: Specific population health measures (e.g., diabetes incidence)

- Capture population benefit associated with work on specific state health priorities
- Further upstream, thus may be more readily translated into programs by stakeholders
- Data lag and availability challenges
- No direct connection to CMMI model or health systems effectiveness measures
- Do not capture population impacts of some things hospitals may already doing well (tertiary care)

Potential Evolution: General population health measures (e.g. life expectancy, healthy life expectancy)

- Capture all population benefit of model, including tertiary prevention
- Limits complexity (one widely accepted measure)
- Specifically referenced in CMMI population health model
- Readily available data (vital statistics)
- Long history of use in health systems effectiveness comparisons
- May appear to be too far downstream to motivate stakeholders

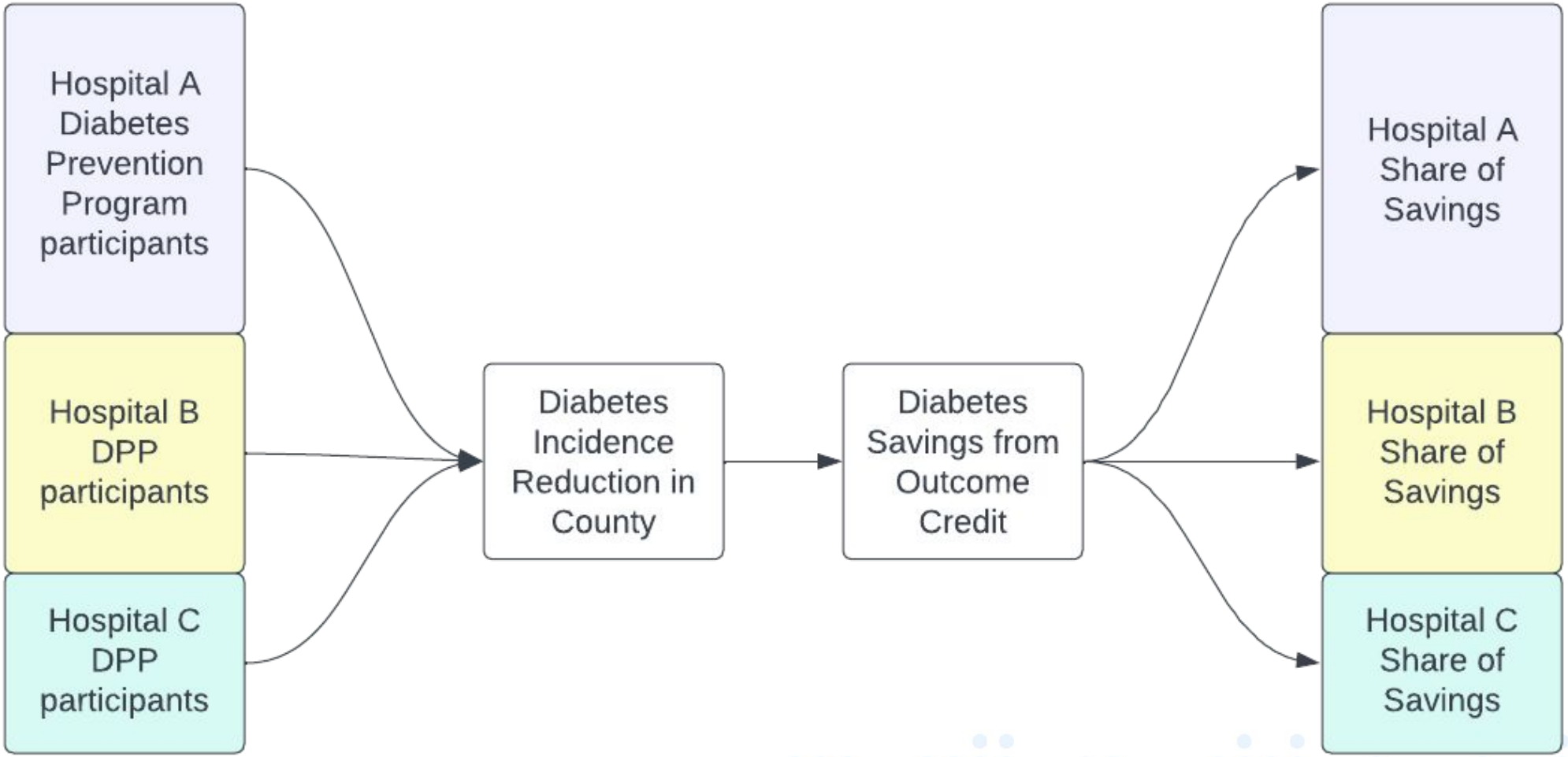
Linking Hospitals to Outcomes: Population Attribution

- Attributes geographically defined population to hospital
- Advantages:
  - Reinforces TCOC financial attribution
  - Encourages hospitals/health systems to work collaboratively outside hospital walls
  - Methodologically straightforward
- Disadvantages
  - Risk of interference issues - One hospital's intervention affects another's attributed population, thus providing incentives to the wrong players
  - Population may change over time in ways that are not under hospital's control

Linking Hospitals to Outcomes: Process Metrics

- Reward depends on geographic area's progress toward population goal and hospital performance on process measures
  - Progress on process measures related to defined population health goal drives rewards (and possibly penalties later on)
- Advantages:
  - Reduces interference problem
  - Provides hospitals with road map to achieving population health progress by specifying the processes that count
- Disadvantages:
  - Selection of process measures may be time consuming, difficult, and limit innovation
  - Establishes accountability system that differs from TCOC attribution

Attribution/Reward Example



Policy Options: Specific Population Health Outcomes

- Use diabetes/hypertension/OUD incidence as outcomes
- Attribution options:
  - Attribute population to hospitals using geographic attribution
  - Attribute outcomes to hospitals using process measures
- Scale incentives based on available outcome credit dollars

Potential Evolution: General Population Health Outcomes

- Use healthy life expectancy as outcome
- Attribution:
  - Attribute population using process measures
  - Attribute population to hospitals using geographic attribution
- Scaling approach:
  - Scale incentives based on available outcome credits
  - Other options?

Policy Options: Hybrid Approach

- 1) Provide incentive based on process measures for initial years of model
- 2) Transition to geographical attribution for second phase of model
  - Outcome Options:
    - Use disease-specific outcome measures
    - Use life expectancy as outcome measure
    - Use healthy life expectancy as outcome
- Scale incentives based on available outcome credit dollars or pre-specified target for healthy life expectancy

Progression Plan: Statewide Population Health

Statewide Population Health Recommendations

- Continue and expand upon Statewide Integrated Health Improvement Strategy measures within the domains of:
  - Hospital Quality
  - Chronic Condition Management
  - Health Equity
  - Behavioral Health
- Outcomes Based Credits
  - Does PMWG recommend that HSCRC staff advocate for continuing and potentially expanding OBCs under future model?
  - Should OBC amount be more directly tied to hospital payments?

Population Health Progression Timeline

RY25/CY23	RY26/CY24	RY27/CY25	RY28/CY26
Evaluate A1c screening, avoidable ED measure performance Submit opioid and HTN outcome credit methodologies Update diabetes credit methodology to address added test volume, measurement challenges Evaluate need for EMS handoff incentive	Transition A1c, avoidable ED measures into payment policy Evaluate need for additional secondary prevention measures Identify data requirements for developing hospital accountability measures on primary prevention	Implement additional secondary prevention measures Bring enhanced pop health data online Develop & monitor primary prevention hospital accountability measures Evaluate need for pop health equity measures Consider stand-alone pop health payment policy	Move primary prevention hospital accountability measures into payment policy Evaluate state population health progress and update focus for SIHIS/outcome credits/hospital accountability based on disease burden estimates

IPPS FY 2024 Proposed Rule: Quality and Equity

URL:
https://www.federalregister.gov/public-inspection/2023-07389/medicare-program-proposed-hospital-inpatient-prospective-payment-systems-for-acute-care-hospitals

Proposed Measure Updates

Add to the list of optional hospital eCQMs:

- 1. Pressure Injury, 2. Acute Kidney Injury, 3. Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography (CT) in Adults CY 2025 reporting period/FY 2027 payment determination.

Modify three current measures:

- Include Medicare Advantage for Hybrid hospital-wide all-cause risk standardized mortality and readmission measures beginning with the FY 2027 payment determination.
- COVID-19 Vaccination among Healthcare Personnel (HCP) measure, beginning with the Quarter 4 CY 2023 reporting period/FY 2025 payment determination, use CDC vaccine"up to date" definition.

Remove three measures:

- Remove from IQR Hospital-level risk-standardized complication rate following elective primary total hip arthroplasty and/or total knee arthroplasty measure beginning with the FY 2030 payment determination in conjunction with the proposal to adopt the updated measure in the Hospital Value-Based Purchasing Program.
- Remove Medicare spending per beneficiary (MSPB) hospital measure beginning with the FY 2028 payment determination from the Hospital IQR Program in conjunction with the proposal to adopt the updated measure in the VBP Program.
- Remove Elective delivery prior to 39 weeks' gestation (PC-01) beginning CY 2024/FY 2026 payment determination.

HCAHPS

- Modify survey measure beginning with the CY 2025 reporting period/FY 2027 payment determination: include three new web-first modes, remove prohibition on proxy respondents, extend data collection from 42 to 49 days, limit number of supplemental items to 12, require the official Spanish translation, and remove two administration methods not used.

Geriatric Care

- CMS is requesting comment from stakeholders on the potential future inclusion of: two geriatric measures- the geriatric hospital and geriatric surgical structural measures; and, a publicly reporting hospital designation to capture the quality and safety of patient-centered geriatric care.

Proposed Medicare Promoting Interoperability Program Updates*

CMS is proposing the following changes to the Medicare Promoting Interoperability Program for eligible hospitals and CAHs:

- Modify requirements for the Safety Assurance Factors for EHR Resilience (SAFER) Guides measure to require eligible hospitals and CAHs to attest "yes" to having conducted an annual self-assessment of all nine SAFER Guides at any point during the calendar year in which the EHR reporting period occurs, beginning with the EHR reporting period in CY 2024, in order to satisfy the definition of a meaningful EHR user under 42 CFR 495.4.
- Amend the definition of "EHR reporting period for a payment adjustment year" for participating eligible hospitals and CAHs to define the EHR reporting period in CY 2025 as a minimum of any continuous 180-day period within CY 2025.
- Amend the definition of "EHR reporting period for a payment adjustment year," for eligible hospitals that have not successfully demonstrated meaningful EHR use in a prior year, to remove the requirement to attest to meaningful use by October 1st of the year prior to the payment adjustment year, beginning with the EHR reporting period in CY 2025.
- Modify the response options related to unique patients or actions, for objectives and measures for the Medicare Promoting Interoperability Program, for which there is no numerator and denominator, and for which unique patients or actions are not counted. The response option would read "N/A (measure is Yes/No)."
- Adopt three new eCQMs for eligible hospitals and CAHs to select as one of their three self-selected eCQMs, in alignment with the Hospital IQR Program, beginning with the CY 2025 reporting period:

*In 2011, CMS established the Medicare and Medicaid EHR Incentive Programs (now known as the Medicare Promoting Interoperability Program and the Promoting Interoperability performance category in the Merit-based Incentive Payment System) to encourage eligible professionals, eligible hospitals, and critical access hospitals (CAHs) to adopt, implement, upgrade, and demonstrate meaningful use of certified EHR technology (CEHRT).

VBP's Proposed Health Equity Adjustment (HEA)

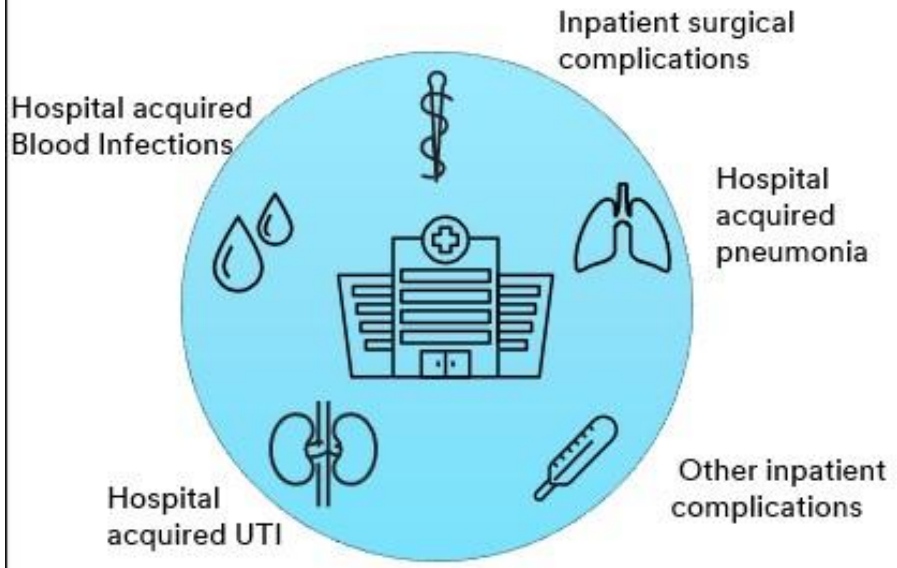
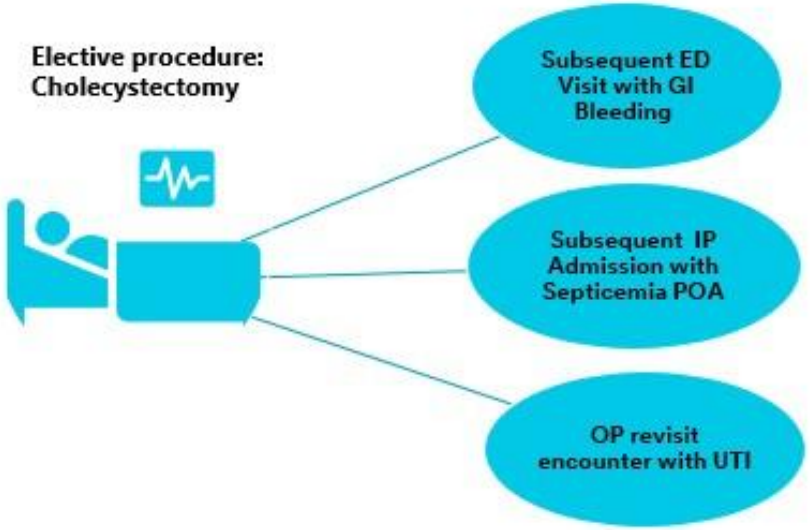
- Beginning with the FY 2026 program year, CMS is proposing modifications to the existing VBP scoring methodology to reward excellent care in underserved populations.
- Rewards Hospitals Based on Their Performance and the Proportion of Their Patients Who Are Dually Eligible for Medicare and Medicaid
- HEA bonus points would be calculated as the product of the measure performance scaler and the underserved multiplier.
  - "measure performance scaler" is the sum of the points awarded to a hospital for each domain based on the hospital's performance on the measures in that domain.
  - "underserved multiplier" is the number of inpatient stays for patients with DES out of the total number of inpatient Medicare stays during the calendar year two years before the start of the respective program year.
- The HEA bonus points are designed to award higher points for hospitals that (1) serve greater percentages of underserved populations and (2) have higher quality performance.
- The HEA bonus point calculation is purposefully designed to not reward poor quality (see appendix for example calculation)

3M Ambulatory Potentially Preventable Complications

Potentially Preventable Complications (PPC)--Ambulatory Care

- TCOC model pushes serves down the continuum of care from inpatient to outpatient care
- 3M has developed an ambulatory PPC grouper that can identify complications that occur in outpatient hospitals or ambulatory surgery centers
  - Includes benchmarking to national standards (currently confirming if all-payer)
- HSCRC staff are interested in testing Ambulatory PPC grouper on Medicare, Medicaid, or APCD data to understand fuller picture of quality in Maryland
- HSCRC has regulatory authority over outpatient hospitals but not ambulatory surgery centers
  - Current analysis is exploratory

Difference between Inpatient PPCs and Ambulatory PPCs

Inpatient PPCs	Ambulatory PPCs
What could happen during an inpatient stay?	What could happen following an outpatient procedure?
Identifies complications occurring while in a facility and therefore is only applicable to inpatient claims	Identifies complications that occur after an elective outpatient procedure and that are identified within the emergency department, IP admission, OP revisits.
Based on services not being present on admission [POA]	Based on services being present on admission [POA]
	

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Input and output: AM-PPCs

Not all input and output fields are shown. Input and output pearls are only the most important of many steps needed for valid analysis

INPUT

Data source: Outpatient claims (including ED) and Inpatient claims tied by unique patient identifiers across facilities

- Patient Identifier and age
- Bill Types, Place of Service Codes
- Diagnoses and POA indicators
- Procedures (HCPCS/CPT, ICD-10-PCS)
- Procedure Service Dates
- Revenue Codes

AM-PPC Grouper

Available in:

- Core Grouping Software (CGS)
- Grouper Plus Content Services (GPCS)

OUTPUT

- Unique patient ID
- Event ID
- Event Chain ID
- Event Type (ED, IP, OP, ASC)
- Event Status (at-risk, excluded, complication)
- PSG assignment
- AM-PPC assignment

Input Pearls

- Accurate patient identifiers and Claim Bill Types are essential
- Check completeness, accuracy, and formatting on diagnosis, POA (inpatient admissions), procedures, and line-items (HCPCS/CPT codes, HCPCS modifiers, Service Dates and revenue codes).

Output Pearls

- Check records with error codes
- Check findings for reasonableness against similar studies done on other populations
- Be mindful of difference between ambulatory procedures at-risk (OA) and those with a subsequently identified complication (O1-O4)

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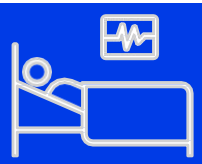
Identifies, Locates and Quantifies Procedural Complications

Procedure Groups

- 93 Procedure Groups which include >2900 elective procedures.
- PSGs include similar procedures that also share the same relative risk.
- A classification hierarchy is applied to select a single and primary procedure group that best classifies outpatient encounters.



Complication Groups (AM-PPCs)

- 35 total complication groups which include >1500 unique complications.
- Complications must meet defined timing requirements (example: 48 hrs. for infection)
- Complications plausibly related to the procedure

Sepsis, UTIs, Bleeding, Pneumonia, Infections, Hemorrhage

Complication Setting

- Emergency Room Visits
- Inpatient Admission
- Outpatient Encounters

Available on premise (CGS) or cloud (GPCS) w/ Medicare and National Benchmarks

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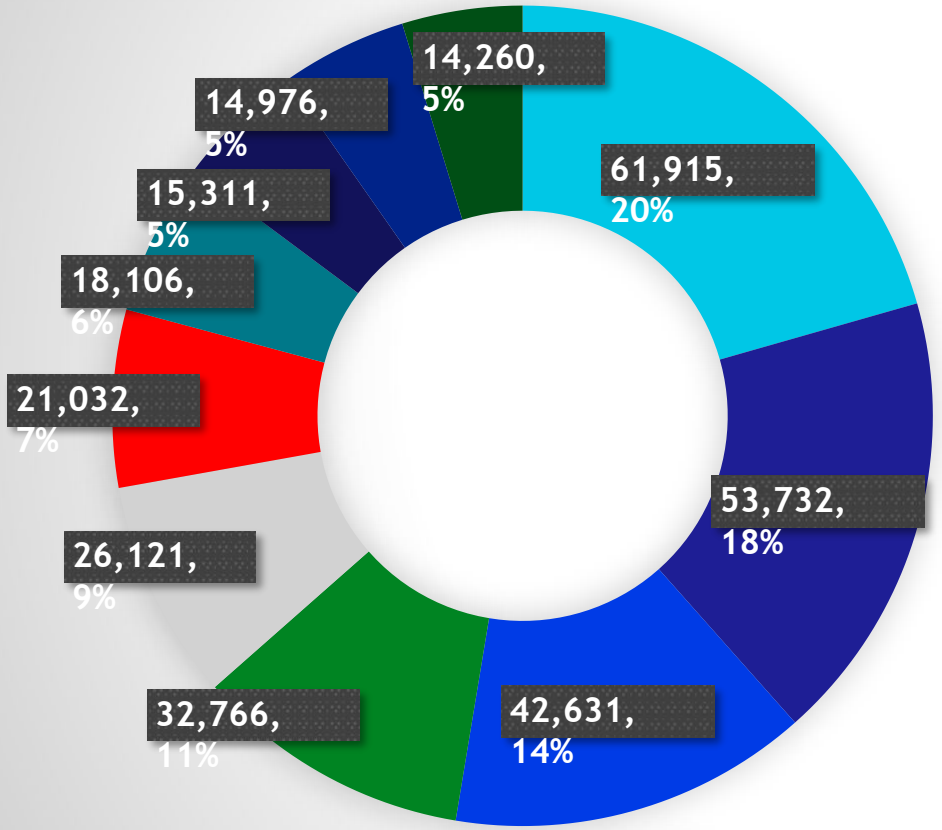
Improve the Quality of Care by Reducing PPCs

Complication Frequency Medicare 2020



- Septicemia and Severe Infections
- Urinary Tract Infection
- Other Pulmonary Complications
- Moderate Infections
- Hemorrhage & Hematoma
- Mechanical Complication of Device, Implant and Graft
- Pneumonia and Other Lung Infections
- Infection, Inflammation and Other Complications of Devices, Implants or Grafts Except Vascular Infection
- Major Gastrointestinal Complications or Significant Bleeding
- Post-Hemorrhagic and Other Acute Anemia

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Next Steps

- Work with MEDA team to implement testing of ambulatory PPC grouper
- Review complication rates by procedure group, setting, patient characteristics and geography
- Timeline: TBD

THANK YOU!

Next Meeting: Wednesday, May 17, 2023

Appendix

Health Equity Adjustment Example Calculation Steps 1-2:

Table V.K.-13 : Example of the Measure Performance Scaler Assigned to Hospital Based on Performance by Domain

Domain	Hospital 1 - High Performance		Hospital 2 - Middle performance		Hospital 3 - Low performance	
	Performance Group	Value	Performance Group	Value	Performance Group	Value
Clinical	Top third	4	Top Third	4	Bottom Third	0
Cost & Efficiency	Top third	4	Middle Third	2	Bottom Third	0
[redacted]						
Safety	Top third	4	Middle Third	2	Middle Third	2
Person and Community Engagement	Top third	4	Bottom Third	0	Bottom Third	0
	Total Measure Performance Scaler Value	16	Total Measure Performance Scaler Value	8	Total Measure Performance Scaler Value	2

The underserved multiplier calculation would thus be:

Underserved Multiplier = Logistic Function (Number of Inpatient Stays for Patients with DES / Total Medicare Inpatient Stays)

Health Equity Adjustment Example Calculation Steps 3-4:

Table V.K.-14: Example of the Health Equity Adjustment Bonus Points Calculation

Hospital	Measure Performance Scaler	Underserved Multiplier	Health Equity Adjustment bonus points
Hospital 1	16	0.8	10
Hospital 2	16	0.2	3.2
Hospital 3	8	0.3	2.4
Hospital 4	8	0.1	0.8
Hospital 5	2	0.8	1.6
Hospital 6	2	0.2	0.4

Table V.K.-15: Example of the Health Equity Adjustment Bonus Points Calculation

Hospital	Total of Weighted Domain Scores	Health Equity Adjustment bonus points	TPS
Hospital 1	100	10	110
Hospital 2	90	3.2	93.2
Hospital 3	48	2.4	50.4
Hospital 4	47.2	0.8	48.8
Hospital 5	20	1.6	21.6
Hospital 6	20	0.4	20.4