Agenda

1. Welcome and introductions
2. IPPS Final/OPPS Proposed Rules 2020- overview and implications
3. Total Cost of Care (TCOC) Model update and state goals
   Hospital quality measurement and incentives: work plan and quality strategy under the TCOC Model
   a. Medicare Performance Adjustment (MPA) update
   b. Readmission Reduction Incentive Program (RRIP)
      i. Subgroup direction and update
   c. Quality Based Reimbursement (QBR) Program
   d. Maryland Hospital Acquired Conditions (MHAC) Program
   e. Potentially Avoidable Utilization (PAU) per capita metrics
4. Other topics and public comment
IPPS Final and OPPS Proposed 2020 Rules, Implications Discussion
Starting with the CY 2020, the Hospital VBP Program will use the same data used by the HAC Reduction Program for purposes of calculating the CDC NHSN HAI Measures.

Finalized a minimum of a continuous 90-day period for EHR reporting.

Hospital IQR Program

Add one opioid-related electronic clinical quality measures (eCQMs) beginning with the CY 2021 reporting period/FY 2023 payment determination: Safe Use of Opioids — Concurrent Prescribing eCQM.

Remove the Claims-Based Hospital-Wide All-Cause Unplanned Readmission measure beginning with the July 1, 2023 through June 30, 2024 reporting period; replace with a mandatory Hybrid Hospital-Wide Readmission (HWR) measure beginning with July 1, 2023 through June 30, 2024 reporting period, impacting the FY 2026 payment determination.

For the CY 2020 and CY 2021 reporting periods, hospitals must submit one self-selected calendar quarter of discharge data for four self-selected eCQMs in the Hospital IQR Program measure set.

For the CY 2022 reporting period, hospitals must report one self-selected calendar quarter of data for: (1) three self-selected eCQMs and (2) the newly finalized Safe Use of Opioids — Concurrent Prescribing eCQM, for a total of four eCQMs.

Require EHR technology be certified to all eCQMs available to report for the CY 2020 reporting period/FY 2022 payment determination and subsequent years.
OPPS Proposed Rule

- Proposing removal of Total Hip Arthroplasty from the Inpatient Only list, making the procedure eligible for Medicare payment in both the inpatient and outpatient settings.
- Proposing removal of OP-33- External Beam Radiotherapy for Bone Metastases (web-based measure) for the CY 2022 Program Hospital Outpatient Quality Reporting (OQR) Program.
- Soliciting public comments on potentially adding four patient safety (ASC 1-4 measures) that are used in the Ambulatory Surgery Center (ASC) Quality Reporting program to the Hospital OQR program in future rulemaking, including:
  - ASC-1: Patient Fall;
  - ASC-2: Patient Burn;
  - ASC-3: Wrong Site, Wrong Side, Wrong Procedure, Wrong Implant; and
  - ASC-4: All-Cause Hospital Transfers/Admission
CMS Quality Program Exemption Update
"We officially grant the State of Maryland's exemption from HVBP, HAC, and HRRP based on the fact that Maryland under their state-based quality and value-based payment programs achieved performance results in terms of patient outcomes and cost savings that were as good as or better than if Maryland was participating in the national hospital quality and value-based payment programs."

**Quality Based Reimbursement direction from CMS:**

- Maintain the highest weight for the person and community engagement component along with the one emergency department wait time measure (ED-2b);
- Continue to monitor/measure early elective delivery (PC-01) to support the State's focus on improving maternal mortality and morbidity,

**PAU Saving.** CMS is in favor of the State evaluating PQIs on a per capita basis for the PAU Savings program starting in RY2021 and set a concrete per capita PQI reduction target.
CMS Waiver from VBP Program RY 2020

Medicare Performance Adjustment. CMS supports the addition of measures to the quality adjustment component of the MPA that align with the goals of the MDTCOC model and support the Statewide Integrated Health Improvement Strategy (SIHIS).

- Support continuing to refine the MPA scoring methodology, such as considering incorporating attainment in the future as needed to ensure a fair threshold for well-performing hospitals under the MPA.
- Requests the State to consider increasing the amount of revenue at risk under the MPA. It is not clear whether a Medicare Performance Adjustment to hospitals that is capped at 1yo (or less than 0.35% as a share of hospitals' all-payer revenue) is adequate to ensure hospitals' focus on the Medicare TCOC of their MPA-attributed populations.

Improvement Strategy. CMS supports the State’s efforts to include population health measures in the hospital pay for performance quality programs.

- CMS will continue working with the State to create a vision for Maryland's quality and population health priorities and goals under the TCOC Model, in particular developing a framework for the Statewide Integrated Health Improvement Strategy (SIHIS).
- CMS requests the State to have the broad framework for SIHIS to be in place by December 2019 and the goals with measures and targets finalized as soon as possible in 2020.
TCOC Statewide Integrated Healthcare Improvement Strategy
Diverse Approaches for Integrated Health Improvement

1. Hospital Quality and Pay-for-Performance
2. Care Transformation Across the System
3. Total Population Health

Shared Goals and Outcomes
Potential Examples of Shared Outcomes and Goals

Hospital Quality & Pay-for-Performance

Total Population Health

Care Transformation Across the System

Hospital

Reduce within hospital readmission disparities
Reduce per capita PAU admissions
Reduce maternal morbidity
Increase value-based payment participation
Reduce diabetes burden
Improve on an SUD-related goal

Health Sector

State/Local Gov’t Communities
Guiding Principles for Maryland’s Integrated Health Improvement Strategy

- Maryland’s strategy should fully maximize the population health improvement opportunities made possible by the Model
- Goals, measures, and targets should:
  - Be specific to Maryland and established through a collaborative public process
  - Reflect an all-payer perspective
  - Target statewide improvements, including improved health equity
  - Be synergistic and mutually reinforcing across the three domains
  - Focus on outcomes whenever possible; milestones, including process measures, may be used to signal progress toward the targets
- Maryland’s strategy must promote public and private partnerships with shared resources and infrastructure
1. Hospital Quality & Pay-for-Performance under the TCOC Model

<table>
<thead>
<tr>
<th>Refine existing hospital pay-for-performance programs and quality reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain waivers from CMS</td>
</tr>
<tr>
<td>Maximize all-payer opportunity</td>
</tr>
<tr>
<td>Sustain and improve high quality care under capitated hospital model</td>
</tr>
<tr>
<td>Monitor additional types of performance metrics for holistic evaluation of hospital quality</td>
</tr>
</tbody>
</table>

Develop paradigm for including population health metrics into pay-for-performance and monitoring as well as various HSCRC financial methodology applications

Align with outcomes-based credit
Foster hospital accountability for population health
Utilize HSCRC hospital pay-for-performance expertise to support and align with other state value based initiatives to achieve statewide population health goals
## 2. Care Transformation Across the System

**Objective:** Create measure(s) of progress toward improved statewide outcomes and meaningful development of care transformation in Maryland

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change in practice of care</td>
<td>Providers accept value-based payments for patients in their own setting of care</td>
<td>Providers financially accountable for value and care quality for a population regardless of setting*</td>
</tr>
<tr>
<td>E.g., FFS payments for providers</td>
<td>E.g., Hospitals under global budgets accountable for services in the hospital</td>
<td>E.g., ACO, ECIP</td>
</tr>
</tbody>
</table>

Some link to value and quality of care may be included (e.g., MIPS) but do not fundamentally change the incentives

Moves to value within own setting but little/no financial accountability for outcomes or what happens in other settings

This could be an attribution-based approach (e.g., ACO, ECIP, EQIP) or it could include self-defined populations (e.g., hospitals’ Care Transformation Initiatives)

* For approaches beyond the Traditional MPA, which captures 100% of Medicare beneficiaries
3. Total Population Health: Strategy for Starting with Diabetes

- Leading cause of preventable death and disability
- Increasing prevalence reflecting significant racial, ethnic and economic disparities
- Evidence-based interventions (EBIs) can prevent or delay onset and improve outcomes
- *Maryland Medicaid* launching Diabetes Prevention Program (DPP) this Fall
- Diabetes/obesity cited as a priority by every jurisdiction’s Local Health Improvement Coalition (LHIC) and every hospital’s Community Health Needs Assessment (CHNA)
- Strong private sector support for a sustained statewide initiative
- Success provides credit in TCOC Agreement
Total Population Health Requires Broader Engagement: Work Led by MDH

ALIGN RESOURCES, MESSAGES AND ACTION

- Release Draft State Diabetes Plan for Public Comment
- Develop and Implement a Statewide Communication Plan
- Convene Local Health Improvement Coalitions
- Convene Hospital Population Health Team Leaders
- Launch an Interactive Online Inventory of Diabetes Resources
- Engage Academia in Building Evidence around Effective Strategies
- Engage Providers Through MDPCP, Newly Certified CHWs, etc.
- Engage Payers Beyond CareFirst
- Engage Businesses and Residents in Why and How
- Report to CMMI on Progress
What Has CMMI Said?

- CMMI insists that for the TCOC Model to be “expanded” (made permanent) based on data through 2021:
  - Targets must be set and progress shown in the domains of hospital quality, care transformation, and population health
  - Although outcomes are preferred to show success, they are less likely to be obtained in 2021 data

- CMMI requested the State to agree to amend the TCOC Contract, but instead accepted having an MOU that:
  - Establishes a framework and process that would be agreed on by the end of 2019
  - Requires the State to establish targets in all three domains as soon as possible in 2020
  - Each goal/measure could have, for example, a 2021 milestone, a 2023 interim target, and a 2026 target
Process for Establishing Targets and Being Successful

▶ Set the Goals: Establish a collaborative process to select targets, measures and milestones (discussions beginning)
   1. Hospital Quality and Pay-for-Performance (HSCRC Performance Measurement WG)
   2. Care Transformation Across the System (HSCRC TCOC WG)
   3. Total Population Health (MDH, Diabetes Action Team)
▶ Message the Goals: Develop communications/outreach strategy for statewide engagement
▶ Resource the Goals: Develop multisector alignment of investments and accountability
▶ Act on the Goals: Launch and support a statewide network of effective change
▶ Monitor the Progress: Evaluate outcomes, reassess investments, adjust approaches accordingly
Hospital Quality Measurement and Incentives Under the TCOC Model: Work Plan and Strategy
Guiding Principles For HSCRC Performance-Based Payment Programs

- Program must improve care for all patients, regardless of payer
- Program incentives should support achievement of total cost of care model targets
- Program should prioritize high volume, high cost, opportunity for improvement and areas of national focus
- Predetermined performance targets and financial impact
- Hospital ability to track progress
- Reduce disparities and achieve health equity
- Encourage cooperation and sharing of best practices
- Consider all settings of care
HSCRC Hospital Quality Strategic Planning

1. Strategic planning sessions with Commissioners to develop critical action items
2. Strategic planning session with CMMI to discuss vision for Maryland quality
3. Contractor procurement with subject matter and stakeholder engagement expertise to help develop strategic plan:
   a. Meet with key internal and external stakeholders, including cross agency Secretary level meetings and routine engagement with Hospital CEO’s
   b. Develop and implement a measure evaluation framework to assess the reliability and validity of HSCRC’s current performance-based payment measures and methodologies, as well as newly proposed measures and methodologies
   c. Identify and affirm important strategic goals under the TCOC model
   d. Identify strategic objectives and implementation timeline
HSCRC Hospital Quality Strategy under the TCOC Model - Pay-for-Performance

► Refine existing all-payer hospital pay-for-performance programs for Maryland
  ► Focus complications program to narrower measure set that has greater opportunity for improvement; move to attainment only system
  ► Responsibly modernize statewide readmissions target
    ► Safeguard against unintended consequences
    ► Consider general utilization incentives in GBR model
    ► Measure and monitor disparities following NQF guidelines
► Evaluate Quality Based Reimbursement program; consider additional metrics
  ► Consider outpatient Quality measures; quality under specific service lines
► Reform Potentially Avoidable Utilization program to reflect greater focus on per capita metrics
HSCRC **Hospital** Quality Strategy under the TCOC Model - Beyond P4P

- Continue to expand **monitoring of all-payer quality outcomes** beyond those used in CMS hospital pay-for-performance programs
  - Monitor and report on **health disparities and healthcare access**
  - Consider approaches to measuring hospital commitments to community benefit investments to improve population health and achieve health equity
  - Maximize all-payer opportunities by focusing on areas of concern like maternal and child health
- Identify **additional data sources** (e.g. electronic medical records; broader use of CCLF data); optimize use of non-traditional data sources
- Further invest in quality assurance and coding audits
Additional Areas of Focus

These topics are general updates of areas of focus; specific updates may be coming in the fall/winter

1. Ongoing efforts to incorporate SDOH and Social Resources into reporting
   ▶ CRISP work on capturing data from EMRs
   ▶ Hospital-led work (Infrastructure-funded; RP-funded)
   ▶ Addition of race filters to hospital reports
   ▶ Z-code use in Case-mix

2. PRPA innovation initiatives (Care Redesign, EEP, ECIP, re-vamp of RPs)

3. General non-hospital data sources (CCLF; MDS; OASIS; APCD; other)

4. Quality Reporting and Monitoring for Maternal Health
   ▶ Understanding of existing initiatives
     ▶ Legislative Taskforce
     ▶ MHCC Work Group
<table>
<thead>
<tr>
<th>Program</th>
<th>Draft Recommendation</th>
<th>Final Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPA</td>
<td>October 2019</td>
<td>November 2019</td>
</tr>
<tr>
<td>QBR</td>
<td>November 2019</td>
<td>December 2019</td>
</tr>
<tr>
<td>MHAC</td>
<td>December 2019</td>
<td>January 2020</td>
</tr>
<tr>
<td>RRIP</td>
<td>February 2020</td>
<td>March 2020</td>
</tr>
<tr>
<td>PAU Savings*</td>
<td>Included in update factor May/June 2020</td>
<td></td>
</tr>
</tbody>
</table>

*PAU savings measurement update or policy will be brought to the Commission prior to update factor.
MPA
Overview

What is it?
A scaled adjustment for each hospital based on its performance relative to a Medicare Total Cost of Care (TCOC) benchmark

Objectives
Brings direct accountability to individual hospitals on Medicare TCOC performance
Links non-hospital costs and quality measures to the TCOC Model, allowing participating clinicians to be eligible for bonuses under MACRA
How is TCOC performance measured?

- Based on Medicare per beneficiary per year cost (PBPY) for all Maryland Medicare beneficiaries with both Part A and Part B enrollment
- Aims to attribute beneficiaries and their TCOC to hospitals based on relationships between beneficiaries and providers, and providers and hospitals
- Differs from most HSCRC other policies that are based on hospital use
How is performance assessed?

- Improvement only in RY2020 and RY2021
  a. Exploring attainment in future years

- Benchmark set at national Medicare growth rate for the performance year less a Trend Factor of 0.33%
  a. Calculate hospital-specific target as prior year performance with benchmark applied

- Score calculation
  a. \[
  \frac{(\text{Hospital-specific target} - \text{Hospital performance})}{\text{Hospital-specific target}}
  \]
  b. Result x (1 + \text{Quality Adjustment})
MPA Quality Adjustment

▶ Rationale
  ▶ Payments under an Advanced APM model must have at least some portion at risk for quality
  ▶ Because the MPA connects the hospital model to the physicians for MACRA purposes, the MPA must include a quality adjustment

▶ Other requirements
  ▶ Must be aligned with measures in the Merit-Based Incentive Payment System (MIPS) to the extent possible
  ▶ Required to include, at minimum:
    ▶ Adjustments from Readmission Reduction Incentive Program (RRIP) and Maryland Hospital-Acquired Conditions (MHAC)
Y3 MPA Quality Adjustment

- For Y3 (RY2022) MPA Policy, considering new measures
  - CMMI push to add in additional relevant measures
  - Ensure efforts to reduce TCOC do not harm quality or access to care
- Opportunity to utilize Medicare claims data and other data sources to capture quality of care not possible in case-mix
- As always, use validated or existing measures whenever possible
- New measures should be aligned with TCOC goals
  - Align with Maryland Primary Care Program (MDPCP)
  - Align with statewide population health goals
  - Align with outcomes based credits
PMWG input needed

- RY2022 MPA Policy is written and presented at Commission in Fall 2019.
- Need input from PMWG on adding quality/population health measures
  - Strong CMMI interest in additional measures
  - Do not plan on changing the small amount at risk based on quality adjustment, would just change the proportion based on MHAC and RRIP
## Example Measures for Consideration: Status

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
<th>Current availability</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Follow up after discharge</td>
<td>YES</td>
<td>Modeled in CCW</td>
</tr>
<tr>
<td>Diabetes Prevention</td>
<td>Diabetes Incidence</td>
<td>No</td>
<td>expect future availability</td>
</tr>
<tr>
<td></td>
<td>BMI Screening and followup</td>
<td>No</td>
<td>Subject to availability in claims</td>
</tr>
<tr>
<td></td>
<td>Diabetes Screening</td>
<td>No</td>
<td>Subject to availability in claims</td>
</tr>
<tr>
<td></td>
<td>Well-visits for at risk adults</td>
<td>No</td>
<td>Feasible depending on definition of “at risk”</td>
</tr>
<tr>
<td>Management of patients with diabetes</td>
<td>Eye and foot exams</td>
<td>No</td>
<td>Feasible</td>
</tr>
<tr>
<td></td>
<td>HbA1C Testing/Control</td>
<td>No</td>
<td>Not available in claims</td>
</tr>
<tr>
<td></td>
<td>Nephropathy screening</td>
<td>No</td>
<td>Subject to availability in claims</td>
</tr>
<tr>
<td></td>
<td>Follow-up after hospitalization</td>
<td>No</td>
<td>Feasible</td>
</tr>
<tr>
<td>Utilization of patients with diabetes</td>
<td>PQIs</td>
<td>YES</td>
<td>MPA Reporting</td>
</tr>
<tr>
<td></td>
<td>Readmits</td>
<td>YES</td>
<td>MPA Reporting</td>
</tr>
<tr>
<td></td>
<td>Hospitalizations</td>
<td>YES</td>
<td>MPA Reporting</td>
</tr>
<tr>
<td></td>
<td>ED Visits</td>
<td>YES</td>
<td>MPA Reporting</td>
</tr>
</tbody>
</table>
Follow up after discharge

- 14 day follow up after discharge from regulated Maryland hospital (Medicare)
  - Should this be linked to the MPA-attributed hospital or the hospital of discharge?
  - Based on CCW, hospital results range from low of 51.2% of patients receiving a follow-up visit to a high of 81.1%

<table>
<thead>
<tr>
<th>Year</th>
<th>Statewide with followup</th>
<th>Discharges (denominator)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>65.6%</td>
<td>161,209</td>
</tr>
<tr>
<td>2014</td>
<td>65.0%</td>
<td>159,249</td>
</tr>
<tr>
<td>2015</td>
<td>66.6%</td>
<td>158,535</td>
</tr>
<tr>
<td>2016</td>
<td>68.5%</td>
<td>155,477</td>
</tr>
<tr>
<td>2017</td>
<td>69.8%</td>
<td>150,220</td>
</tr>
<tr>
<td>2018</td>
<td>70.7%</td>
<td>145,704</td>
</tr>
</tbody>
</table>
Existing measures in MPA reporting suite (released this month!)

Utilization Measures Related to Attributed Beneficiaries with Diabetes Chronic Condition Flag

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Diabetes Flagged Benes</td>
<td>222,123</td>
</tr>
<tr>
<td>ED Visits per K</td>
<td>619</td>
</tr>
<tr>
<td>IP Visits per K</td>
<td>448</td>
</tr>
<tr>
<td>HCC Score</td>
<td></td>
</tr>
<tr>
<td>PQI93 Per K</td>
<td>17</td>
</tr>
<tr>
<td>30 day Readmission per K</td>
<td>96</td>
</tr>
<tr>
<td>30 Day Readmission Rate</td>
<td>21%</td>
</tr>
</tbody>
</table>
PMWG input needed

- RY2022 MPA Policy is written and presented at Commission in Fall 2019.
- Need input from PMWG on adding quality/population health measures
  - Strong CMMI interest in additional measures
  - Do not plan on changing the small amount at risk based on quality adjustment, would just change the proportion based on MHAC and RRIP

What do you think?
Readmission Sub-group Update
RRIP Program RY 2021

▶ Incentive program started with all-payer model and was implemented to reduce readmissions to national Medicare rate by 2018.

▶ Currently working with subgroup of stakeholders to redesign RRIP under the Total Cost of Care model.

▶ **Performance Metric**: Case-mix adjusted, 30 day, all cause, all hospital readmission rates, with planned readmissions, deaths, transfers, oncology and rehabilitation hospitals excluded.

▶ Hospital are evaluated on attainment or improvement and rewards or penalties are determined based on preset scales.
Readmission Sub-group Update

Sub-group has met five times since February 2019 and has explored the following six topic areas:

1. **Statewide Improvement and Attainment Goals** -
   - Initial Targets have been proposed
   - Additional work to discuss/solidify

2. **Benchmarking similar geographies (Medicare and Commercial)**
   - For both Medicare and Commercial comparable geographies, MD performing on par (slightly worse or slightly better) than benchmarked counties

3. **Updates to Existing Measure** -
   - Remove AMA cases, include subset of Oncology cases

4. **Shrinking Denominator/Case-mix Adjustment** -
   - Concerns did not materialize in analytics; case-mix adjustment handles the shrinking denominator concern but can revisit issue over time
Readmission Sub-group Update

5. Social Determinants of Health - Monitoring to Reduce Disparities
   ▶ Combined measure of Adversity (including Medicaid, Race, and ADI)
   ▶ Measure of Within Hospital Disparities for Monitoring
   ▶ Potential upside risk in disparity reduction goal

6. Non-traditional Measure(s) of Readmission - [Longer-term]
   ▶ EDAC - Excessive Days in Acute Care (Condition-specific, on CMS Hospital Compare)
   ▶ eCQM (Electronic Clinical Quality Measure) of Readmissions

● Sub-group will meet again next Tuesday, Sep 24
● Status of priority issue areas will be solidified with sub-group at that time
  ○ Anticipate this will be final meeting; sub-group members welcome to come to PMWG to continue the conversation
Next Steps to Build RY2022 RRIP Policy

- Readmission work will return to PMWG throughout the fall, we assume with the following work (subject to change):
  - Finalize 30-day All-Cause Readmission Measure with minimal/meaningful updates
  - Finalize Statewide Improvement Goal (Five-years, with chance to re-evaluate)
  - Finalize Statewide Attainment Targets
  - Implement disparities measure, reporting structure, statewide goal

- Ongoing work separate from RRIP Sub-group/PMWG:
  - Analyze operational needs for Readmission eCQM
  - Work with Contractor support to build All-Payer EDAC measure
  - Continue to evaluate hospital utilization trends with benchmarking geographies
Social Determinants of Health (SDOH) - Update
Introduction

- HSCRC is interested in establishing formal goals around reducing disparities and promoting health equity under TCOC model

- Staff are evaluating methods to:
  - Assess patient level adversity, i.e. risk adjust based on sociodemographic factors
  - Measure within-hospital disparity for monitoring or payment program inclusion, in line with NQF recommendations

- Key issues
  - Selection of covariates to determine patient level adversity
  - Sufficiency of distribution of hospital patient level adversity to evaluate disparities in outcomes
  - Reporting templates for hospital monitoring
The connection between social factors and readmission risk

Table 2. Readmission Risk at Different Percentiles of ADI and Safety-Net Index*

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Marginal Effect† of Safety-Net Index (95% CI)</th>
<th>Marginal Effect† of ADI (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>0.116 (0.105-0.127)</td>
<td>0.125 (0.118-0.132)</td>
</tr>
<tr>
<td>25th</td>
<td>0.121 (0.113-0.129)</td>
<td>0.128 (0.121-0.134)</td>
</tr>
<tr>
<td>50th</td>
<td>0.131 (0.126-0.135)</td>
<td>0.132 (0.127-0.138)</td>
</tr>
<tr>
<td>75th</td>
<td>0.141 (0.132-0.150)</td>
<td>0.137 (0.133-0.142)</td>
</tr>
<tr>
<td>90th</td>
<td>0.148 (0.134-0.161)</td>
<td>0.141 (0.136-0.145)</td>
</tr>
</tbody>
</table>

Recommendations Related to NQF Criteria and Processes Related to SDS Adjustment

Recommendation 1: When there is a conceptual relationship (i.e., logical rationale or theory) between sociodemographic factors and outcomes or processes of care and empirical evidence (e.g., statistical analysis) that sociodemographic factors affect an outcome or process of care reflected in a performance measure:

- those sociodemographic factors should be included in risk adjustment of the performance score (using accepted guidelines for selecting risk factors) unless there are conceptual reasons or empirical evidence indicating that adjustment is unnecessary or inappropriate;

AND

- the performance measure specifications must also include specifications for stratification of a clinically-adjusted version of the measure based on the sociodemographic factors used in risk adjustment.
The Patient Adversity Index (PAI) Methodology: Description

1. Regress each adversity metric against readmission (using separate models)
   - ADI
   - Medicaid
   - Race
   • Regression coefficient from each model indicates strength of association with readmission
2. “Weight” each discharge’s adversity values by the coefficients
3. Sum weights across discharge
   • Estimate joint effect of ADI/Medicaid/race
   • Larger value = higher adversity
The Patient Adversity Index (PAI) Methodology: Modeling Weights

- Medicaid (dual or only): 3.4
- ADI (change of 1 SD): 1.5
- Black race: 2.6
  - Comparison to patients of all other races
  - Excludes patients with unknown/missing race
- Interpretation: Patients with Medicaid status have a readmission rate 3.4% higher than others.
The Patient Adversity Index (PAI) Methodology: The Math

Baking a PAI

<table>
<thead>
<tr>
<th>Hospid</th>
<th>EID</th>
<th>Black</th>
<th>Black Weight</th>
<th>Medicaid</th>
<th>Medicaid Weight</th>
<th>ADI</th>
<th>ADI Weight</th>
<th>PAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>210001</td>
<td>2</td>
<td>1</td>
<td>2.6</td>
<td>1</td>
<td>3.4</td>
<td>0.8</td>
<td>1.5</td>
<td>7.2</td>
</tr>
<tr>
<td>210003</td>
<td>4</td>
<td>0</td>
<td>2.6</td>
<td>0</td>
<td>3.4</td>
<td>0.2</td>
<td>1.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

\[(1\times2.6) + (1\times3.4) + (0.8\times1.5) = 7.2\]

PAI Score is then normalized so that statewide mean is 0. Each one point change in the scale represents a change of one standard deviation.
There is substantial overlap across hospitals in the distribution of PAI values, i.e. individual hospitals do not exclusively serve disadvantaged or advantaged populations.

Analysis suggests it is appropriate to compare disparity by PAI between hospitals.
PAI: Comparing the extremes

Hospitals with mean PAI values at opposite ends of the range overlap in the types of patients they treat
What To Do With the Disadvantage Index?

- Stratify patients within hospitals into two groups (high and low)
  - (-) Creates binary values from continuous variable
  - (+/-) Holds hospitals responsible for all sources of disparity
- Multilevel regression model
  - (+) Treats disadvantage as continuous variable
  - (+) Accounts for disparities external to the hospital
  - (+) Addresses small cell size
Sources of Disparities

- Hospital policies & environment
- County, local policies & environment
- State policies & environment
- National policies & environment

Disparities
Measuring Within Hospital Disparity: Risk Difference Approach

- Reflects absolute difference in readmission rate for low and high-PAI patients
  - Adjusted for APR-DRG/SOI risk, age, gender, hospital mean PAI value
- Relatively easy to understand, provides actual rates for each patient group
- Does not reflect whether hospital’s performance is better/worse than others
- Year-over-year decrease in risk difference represents improvement on disparities
Measuring Within Hospital Disparity: Risk Difference Approach

Risk difference disparity score reflects the difference in readmission rates for low- and high-PAI patients.
Comparing disparity estimates

A hospital with a large race disparity in readmission may be average or better on Medicaid disparity or ADI disparity. Removing one of the three ingredients of the PAI will leave important aspects of disparities unaddressed.
Concluding Thoughts

- PAI captures meaningful variation in patient exposure to social/environmental factors across three dimensions

- There is wide variation in mean PAI scores by hospital, but all hospitals treat a full range of patients, so cross-hospital differences in outcomes by level of PAI may be informative

- The within-hospital disparity score varies substantially across hospitals, and some differences are not explained by chance alone
Recommendation & Next Steps

- Implement risk difference disparity scoring methodology using PAI with upside risk only.
- Additional work will need to be done to integrate disparity performance into RRIP revenue adjustment methodology
# Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Plan A</th>
<th>Plan B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2019</td>
<td>Finalize within-hospital disparity measure</td>
<td>Finalize within-hospital disparity measure</td>
</tr>
<tr>
<td>CY 2020</td>
<td>Include measure in RRIP program at small domain weight for improvement (reward only)</td>
<td>Measure reporting, consider goal for disparity reduction</td>
</tr>
<tr>
<td>CY 2021</td>
<td>Consider refinements to measure, attainment/penalty options</td>
<td>Include measure in RRIP program at small domain weight for improvement (reward only)</td>
</tr>
</tbody>
</table>
Sample hospital reporting: Social factors

Patient Adversity Index

Race distribution

- White
- Black
- Hispanic
- Asian/Pacific Islander
- Native American
Sample hospital reporting: Disparity performance

Readmission rate, low and high PAI patients

- Hospital XXX
- Other hospitals
Quality Based Reimbursement (QBR) Program
Memo with RY 2020 QBR Adjustments sent to hospitals on 9/6

While adjustments not effective until January 2020, the HSCRC has automated quarterly QBR reports for tracking and this automation means that the end of year scores are available earlier for the hospitals.
Quality Based Reimbursement

RY 2021 QBR Consists of 3 Domains:

- **Person and Community Engagement (HCAHPS)** - 8 measures + 1 ED wait time measure

- **Clinical Care** - 1 measure of in-patient mortality + THA-TKA Complication measure (new)

- **Safety** - 6 measures of in-patient Safety (NHSN healthcare associated infections).

Scoring and Revenue Adjustments:
- Convert Measure Rates 0-10 Points
- Better Improvement or Attainment
- Scaled rewards or penalties up to 2%
- Preset scale 0-80%, cut point of 41%
QBR Considerations RY 2022

Potential topics for discussion:
- Measure updates/changes
  - Considerations for developing 30 day mortality measure for RY2023
- Outpatient cases subsequently admitted (e.g., obstetrics, hip/knee replacements)
- Inclusion of palliative care (when not POA)
- Stakeholder/Industry concerns?

Other annual updates
- Domain Weighting
- Consider pre-set scale and reward/penalty cut point

Subgroup will be convened during CY 2020 to consider options for overhauling the QBR program
QBR RY 2022 Proposed Measurement Timeline

**Hospital Compare THA /TKA Complications Base Period April 1, 2012-March 31, 2015**
Next Steps: Draft Policy November Commission Meeting

October PMWG Meeting:
- Final performance data for RY 2020
- Apply new performance standards to RY 2020 results to model scores and revenue adjustments

November PMWG Meeting:
- Updated draft policy
Maryland Hospital Acquired Conditions (MHAC) Program
Maryland Hospital Acquired Conditions (MHAC) Program

- Uses Potentially Preventable Complications (PPCs) measures developed by 3M.
- PPCs are post-admission (in-hospital) complications that may result from hospital care and treatment, rather than underlying disease progression.
  - Examples: pulmonary edema/respiratory failure, in-hospital trauma or fractures, septicemia and severe infections.
- Relies on Present on Admission (POA) Indicators.
- Links hospital payment to hospital performance by comparing the observed number of PPCs to the expected number of PPCs.
MHAC Program Redesign CY 2019

**All-Payer Model**
- 45+ Complication Measures
- Improvement and Attainment
- Weighted PPCs into 2 Tiers
- Scores range 0-100%, Cutpoint 50%, Hold Harmless
- Max Penalty = 2%, Max Reward = 1%

**TCOC Model**
- Focused list of 14 complications, that are clinically significant, actionable, higher rates and variation
- Attainment Only, with wider performance range to differentiate hospital performance
- Weighted by PPC specific 3M cost estimates as proxy for patient harm
- Scores range 0-100%, Reward-Penalty Cutpoint 65%, Maintain Hold Harmless
- Max Penalty = 2%, Max Reward = 2%
MHAC Considerations for RY 2022

- Potential topics for discussion:
  - PPC Measures (see handout)
  - Monitoring plan
  - Outpatient cases subsequently admitted (e.g., obstetrics, hip/knee replacements)
  - Inclusion of palliative care (when not POA)
  - Stakeholder/Industry concerns?

- Other annual updates
  - Grouper version
  - Historical data period for performance standards
  - Revenue adjustment scale
RY 2021 PPC Performance

- See handout for 14 payment program PPC trends
PPC Monitoring

- HSCRC has excel reports to monitor all PPCs; will be developing in Tableau with CRISP
  - By PPC
  - By Hospital
  - By Status (payment, monitoring, serious reportable event)

Will update and provide more info at October/November meeting with 6 months of data.
Next Steps: Draft Policy December Commission Meeting

October PMWG Meeting:
- Analyze final performance data through June and YTD revenue adjustments
- Review data on PPCs with recoded POA
  - Related to concerns of patients going from outpatient to inpatient
- Assess impact of palliative care exclusion

November PMWG Meeting:
- Model performance standards using FY 18 and FY 19
- Model scores and revenue adjustments using 12 months final data

December PMWG Meeting:
- Updates on draft policy to commission
Potentially Avoidable Utilization (PAU) Program
PQIS: Avoidable Utilization Tableau Report - NOW LIVE!

- PQI and PDI per capita by hospital using the MPA attribution and geography
- CRISP webinar on Tuesday, September 24 · 2:30 – 4:00pm
Future iterations of avoidable admissions

- Risk Adjustment
  - AHRQ age and gender risk adjustment to calculate observed and expected values
- Out-of-state Medicare PQIs
- Workflows to MADE CCLF for MPA-attributed Marylanders
Readmissions

▶ HSCRC staff considering using the same methodology for readmissions as last year
  ▶ Calculate the average cost* of an intra-hospital readmission (to and from the same hospital)
  ▶ Apply average cost to the total number of sending readmissions for that hospital

*Adjust average costs to account for outlier intra-hospital readmission costs
RY2021 Adjustment

- % Reduction
  - Plan on using the inflation-based calculation developed last year to calculate the PAU Savings amount in the spring

- Performance metric scaling
  - Over next few months will provide options for how to scale the Savings amount based on the PQI/PDI per capita and readmissions measures
RY2022 and beyond

▶ Given the number of changes in RY2021, staff does not plan on proposing significant changes for RY2022.
▶ We will begin working on exploring new measures for RY2023 in the next few months.
Next Work Group Meetings

PMWG - Wednesday, October 16th

RRIP Sub-group - Tuesday, September 24th