Performance Measurement Work Group Meeting

04/18/2018
Agenda

- Potentially Avoidable Utilization (PAU)
  - PAU in RY 2019
  - PAU in Future Years
- TCOC Model – Measurement Strategy Discussion
  - Critical Action List
  - Clinical Adverse Event Measures Work Group – Update
- RY 2020 QBR Status Update
- Maximum Penalty Guardrail and Aggregate at-Risk Update
RY2019 Potentially Avoidable Utilization (PAU) Savings Program (Preliminary)
**PAU: Purpose and Measure**

**Definition:** “Hospital care that is unplanned and can be prevented through improved care coordination, effective primary care and improved population health.”

[Diagram showing components of PAU: Potentially Avoidable Admissions and Readmissions/Revisits]

**HSCRC Calculates Percent of Revenue Attributable to PAU**
Potentially Avoidable Utilization (PAU) Savings at a glance

- **PAU Savings Concept**
  - The Global Budget Revenue (GBR) system assumes that hospitals will be able to reduce their PAU as care transforms in the state.
  - The PAU Savings Policy prospectively reduces hospital GBRs in anticipation of those reductions.

- **Mechanism**
  - Statewide reduction is scaled for each hospital based on the percentage of PAU revenue received at the hospital in a prior year.
    - Hospitals with higher than average PAU revenue will have a larger reduction than the statewide average.
    - Hospitals with lower PAU will have a smaller reduction.
RY2019 PAU Savings (Preliminary)

- Set the value of the PAU savings amount between 1.65 and 1.85 percent of total permanent revenue in the state, which is between a 0.20 and 0.40 percent net reduction compared to RY2018.
  - Final PAU Savings Adjustment has not been determined.
- Continue to cap the PAU savings reduction at the statewide average reduction for hospitals with higher socio-economic burden
  - Solicit input on phasing out or adjusting in subsequent years
- Evaluate expansion of PAU to incorporate additional categories of potentially avoidable admissions and potentially low-value care
  - Focus on maximizing PAU measurement while minimizing hospital measurement burden.
PAU RY2019 measure and performance

- Performance Period for RY19 is Calendar Year 2017.
- HSCRC updated to Prevention Quality Indicator (PQI) version 7 (previously version 6) to correct errors in AHRQ’s code
- Performance using current logic
Likely range of RY19 PAU Savings Adjustment is between 1.65% and 1.85%, so staff has modeled at 1.75%

<table>
<thead>
<tr>
<th>Statewide Results</th>
<th>Value</th>
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<tbody>
<tr>
<td>RY 2018 Total Approved Permanent Revenue</td>
<td>$16.3 billion</td>
</tr>
<tr>
<td>Total RY18 PAU %</td>
<td>11.00%</td>
</tr>
<tr>
<td>Total RY18 PAU $</td>
<td>$1.8 billion</td>
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<table>
<thead>
<tr>
<th>Statewide Total Calculations</th>
<th>Total</th>
<th>Last year</th>
<th>Net</th>
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</thead>
<tbody>
<tr>
<td>RY 2018 Revenue Adjustment %</td>
<td>-1.75%</td>
<td>-1.45%</td>
<td>-0.30%</td>
</tr>
<tr>
<td>RY 2018 Revenue Adjustment $</td>
<td>-$285 million</td>
<td>-$228 million</td>
<td>-$56 million</td>
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Hospital Protections Discussion

- **RY2019 recommendation:** Cap the PAU savings reduction at the statewide average reduction for hospitals with higher socio-economic burden*
  - Adjustments are calculated for hospitals meeting the criteria before and after protection and receive whichever is a smaller reduction

- **Rationale:** Hospitals serving populations with lower socio-economic status may need additional resources to reduce PAU %
  - PAU Savings does not include improvement, which may offer more of an opportunity for hospitals serving high need patients
  - Protections limits this potential annual disadvantage

- **Concern:** does this provide less incentive for reducing PAU among hospitals with lower socio-economic status?
  - In future years, should protection be adjusted based on improvement?
  - In future years, should protection be phased out?

*defined as hospitals in the top quartile of % inpatient equivalent case-mix adjusted discharges (ECMADs) from Medicaid/Self-Pay over total inpatient ECMADs
Future Potentially Avoidable Utilization (PAU)
Potential PAU Timelines

**RY2021 PAU**
- Solicit input on broad areas of PAU and hospital-defined PAU (March-April)
- Develop workplan for RY2021 PAU and/or for incorporating hospital-defined PAU (April)
- Perform analyses and solicit continual input on RY2021 specific measures and their feasibility (Spring-Fall)
- Begin reporting on potential RY2021 PAU measures (Fall-Winter)
- Performance period for RY2021 PAU (CY 2019)

**RY2019 PAU Savings Policy**
- Draft RY19 PAU Savings Policy (May 2018)
- Final RY19 PAU Savings Policy (June 2018)
Broad Areas of PAU discussion

- Considerations:
  - **Capture larger amount** of potentially avoidable utilization
  - Be more **comprehensive** across hospital service lines
  - Be **aligned** with current and future hospital interventions
  - Grounded in literature

- What sorts of domains should the PAU expansion cover?
Alignment with example hospital interventions

Hospitals are implementing programs around population health and care coordination that may not be captured in current measurement of PAU.

<table>
<thead>
<tr>
<th>Hospital supported intervention examples</th>
<th>Potential type of measure</th>
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<tbody>
<tr>
<td>Physicians rounding in skilled nursing facilities</td>
<td>Avoidable admissions from nursing homes</td>
</tr>
<tr>
<td>90 day care coordination after admission</td>
<td>90 day readmissions</td>
</tr>
<tr>
<td>ED care management, chronic condition clinics</td>
<td>Condition-specific ED revisits (asthma, diabetes, etc.)</td>
</tr>
<tr>
<td>Fall prevention/ seniors at home programs</td>
<td>Fall-related ED or hospitalizations</td>
</tr>
<tr>
<td>Prenatal community care</td>
<td>Low birthweight PQI</td>
</tr>
<tr>
<td>Green and Healthy home initiatives</td>
<td>Pediatric PQIs</td>
</tr>
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</table>
Potentially low value care

- Low value care is defined as medical care in which potential harms outweigh potential benefits
  - Harms can include inappropriate treatment, false positives, clinical risks, and unnecessary consumer cost.
  - Example: cardiac imaging for individuals with low risk of cardiac disease

- Who determines what is low value?
  - Individual level: patients and doctors should determine whether services are appropriate and valuable in each particular circumstance
  - System level: High rates of low value care at certain hospitals may indicate unnecessary or harmful care for patients.

- Measures under consideration should be supported by clinical recommendations, consumer advocacy groups, and research.

- Ongoing stakeholder input on these measures is crucial as we consider the inclusion of low value care measures in PAU
Additional Considerations for specific PAU Measures and use

- **Measure details and availability**
  - Link to revenue?
  - Available on an All-Payer basis
  - Measurable/reportable in HSCRC case mix data?

- **Current use of PAU**
  - PAU Savings Program
  - Market Shift
  - Demographic Adjustment
  - Consideration in Rate Reviews

- **Should all the programs using PAU use the same definition or could there be different definitions?**
  - For example, market shift needs to be based on revenue, but the scaling for PAU Savings does not necessarily need to be based on revenue
Hospital-defined PAU concept

- Commissioner white paper suggestion that hospitals should have the opportunity to propose programs designed to reduce unnecessary care.
  - Proposals grounded in literature, data, physician leadership, etc.
  - Hospitals would submit specific details of planned programs and expected reductions.
  - Hospitals with approved proposals could be exempt from the standard PAU policy.

- RY2019 PAU Policy will discuss future directions for the PAU program, including the suggestion around hospital-defined PAU
  - Stakeholders are encouraged to submit responses through comment letters for May Commission or oral testimony at June Commission
Hospital-defined PAU Discussion

- Is there interest in hospital-defined measurement of PAU?

- How should/could hospital-defined PAU be used?
  - PAU Savings:
    - Given that PAU Savings Policy relatively ranks hospitals, how could PAU Program be redesigned to allow hospitals to opt out of standard?
    - How would hospitals opting out be evaluated?
  - Market Shift
  - Rate Reviews:
    - Should hospitals be able to propose approaches to reduce self defined PAU for the purposes of future year rate reviews?
TCOC Model – Measurement Strategy Discussion
General Priorities Discussion

- Critical Action List to determine priorities in coming years; under TCOC Model
  - PLEASE SEE HANDOUT

- HSCRC welcomes stakeholder feedback on these priorities and timelines.
Complications in TCOC Model – Update
Complications Sub-Group – Deliverables Update (RY 2021; CY 2019)

- Develop a **Measure Evaluation Framework**
  - Identify high priority clinical areas
  - Develop criteria for formal measure selection process.

- Create a Preliminary **MHAC Measures Under Consideration (MHAC MUC)** list from the existing inventory of available measures, including:
  - Current MHAC patient safety measures;
  - Current QBR patient safety measures; and/or
  - Other measures that meet criteria

- Conduct **in-depth analysis** on MUC measures, to include:
  - Reporting Requirements and Measure Definitions (including limitations)
  - Data Availability
  - Current Trends; by-Hospital distribution of Scores;

- Develop **consensus recommendation** on performance measures in the MHAC program regarding payment commitments under the TCOC Waiver
Complications Sub-Group: Anticipated Timeline for Phase I (Subject to Change)

- **Mar 27, 2018**
  - Reviewed CMS HAC measures
  - Discussed measure selection process and criteria
  - Discussed candidate measures inventory

- **Apr 24, 2018**
  - Continue discussion of candidate measures/review specification sources
  - Review 3M Potentially Preventable Complication (PPC) measures/methodology
  - Review Leapfrog Safety Grade methodology

- **May 22, 2018**
  - In-depth discussion of NHSN measure definitions; reporting requirements
  - Conceptual discussion of PSI measures
  - Continue discussion of candidate measures; Identify gaps in measurement

- **Jun 26, 2018**
  - Continue measure selection process
  - Discuss scoring and scaling issues

- **July-August Date TBD**
  - Review draft measure set with data sources, timelines, risk adjustment, scoring and scaling
  - Define gaps in measurement

- **September- Date TBD**
  - Deliverable: Measure recommendations for RY 2021
  - Include identified gaps in recommendation

- **October- Date TBD**
  - Deliverable: Final measure recommendations for RY 2021; including acknowledgment of measure gaps
QBR Status Update – ED Wait Times – Additional Adjustment
QBR – ED Wait Times – Additional Adjustment?

- Per final (approved) RY 2020 QBR policy, commissioners recommended that staff and industry explore additional risk adjustment beyond ED volume. By June 2018

- Additional factors under consideration:
  - Occupancy rates, urban/rural location, case-mix, behavioral health

- Next Steps
  - Mathematica completed initial analysis; refinements to analysis ongoing for June recommendation
  - MHA is also evaluating measure and potential adjustment
  - Plan to have draft recommendation for PMWG input at May meeting; updates will be provided as available.
RY 2020 ED Wait Time Measures

- Two ED Wait Time measures in RY 2020 QBR Program
  - Under **Person and Community Engagement** Domain
  - Weighted at ~4% each of total QBR score

- **ED-1b**: Median time (in minutes) patients spent in the ED, before they were admitted to the hospital as an inpatient. A lower number of minutes is better.

- **ED-2b**: Median time (in minutes) patients spent in the ED, after the doctor decided to admit them as an inpatient before leaving the ED for their inpatient room. A lower number of minutes is better.
Current Risk Adjustment and Protections

- **Risk Adjustment:** Performance benchmark is stratified by ED volume in recognition that ED size impacts wait times

<table>
<thead>
<tr>
<th>CY 2016</th>
<th>National ED-1b</th>
<th>Maryland ED-1b</th>
<th>National ED-2b</th>
<th>Maryland ED-2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>334</td>
<td>433</td>
<td>136</td>
<td>186</td>
</tr>
<tr>
<td>High</td>
<td>296</td>
<td>365</td>
<td>119</td>
<td>150</td>
</tr>
<tr>
<td>Medium</td>
<td>258</td>
<td>428</td>
<td>89</td>
<td>168</td>
</tr>
<tr>
<td>Low</td>
<td>214</td>
<td>291</td>
<td>58</td>
<td>84</td>
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- **Protection:** Benchmark of National median is lower than for other QBR/VBP measures (VBP benchmark is typically the 95th percentile)
  - Hospitals performing better than benchmark receive full 10 points, regardless of improvement

- **Protection:** Hospitals that earn at least 1 improvement point receive better of QBR score with or without the ED wait time measures
Risk-Adjustment Considerations

- Risk-adjustment is important for fair comparisons across hospitals that differ on certain types of characteristics
  - CMS and HSCRC recognize distinction between size of ED.
- HSCRC staff remain concerned about further risk-adjustment that excuses/masks worse performance and reduces incentive for improvement for hospitals with more risk-factors.
  - Rather than calculating volume-adjusted ED wait time, HSCRC is stratifying by volume because it is significantly correlated with longer ED wait times and makes it more transparent
  - If additional factors are risk-adjusted for a regression model may be needed
Based on HSCRC request and literature review, MPR assessed the following variables for relationship with ED Wait Times:

- Volume
- Occupancy
- Bed Size
- Case-mix
- DSH patient percentage
- SSI status
- Teaching status
- Region
- Urbanicity

Used following mathematical analyses to quantify relationship:

- Spearman Correlations
- Univariate Analyses
- Multivariate Analyses
Analysis yielded the following **general conclusions:**

- **Volume** is positively and significantly correlated with ED Wait Times.
- **Occupancy** is significantly correlated with ED Wait Times; but also significantly correlated with Volume, for which QBR already adjusts.
- **DSH patient percentage** is moderately associated with longer ED Wait Times.
- **SSI status; Case mix**; and other factors were weakly associated with longer ED Wait Times.
## Risk adjustment and mean wait time difference: Maryland and National Average

<table>
<thead>
<tr>
<th>Risk-Adjustment</th>
<th>Regression Description</th>
<th>ED_1b</th>
<th>ED_2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Unadjusted average wait time difference US and MD</td>
<td>120</td>
<td>63</td>
</tr>
<tr>
<td>Volume Only</td>
<td>Average wait time difference adjusted for volume</td>
<td>86</td>
<td>37</td>
</tr>
<tr>
<td>Full Model</td>
<td>Average wait time difference adjusted for all factors</td>
<td>74</td>
<td>28</td>
</tr>
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Next Steps on ED Wait Time – Additional Adjustment

- Potential Next Steps to Consider:
  - Additional Analysis of **Occupancy** variable; additional consideration of **DSH patient percentage** variable
    - Is it necessary to add occupancy since it is significantly correlated with Volume?
    - Does it make sense from a policy perspective to adjust for **DSH patient percentage**?
    - Are any additional variables needed since volume has the highest explanatory power? Any additional variable may require a more complicated regression based risk-adjustment.
  - Staff will produce draft recommendation in **June** for Commissioner review.
    - Will present update in May to PMWG
Maximum Penalty Guardrail and Aggregate at-Risk
RY 2020 Max Guardrail Policy

- Policy provides single recommendation to limit overall penalties across HSCRC global budget adjustments based on performance
- RY 2019 limit was 3.5% of total revenue
  - Do not anticipate materially changing for RY 2020 but may update with latest revenue and IP percentages
- HSCRC is proposing to delay this policy until we have final RY 2019 revenue adjustments, which is the best estimate for RY 2020 potential penalties
Our next **Performance Measurement Work Group** Meeting is scheduled to take place **Wednesday, May 16\(^{\text{th}}\), 2018 at 9:30 AM**
Contact Information

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