Overview of the HSCRC’s Market Share Methodology

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Key Takeaways

• The market share adjustment is not a proxy for a fee-for-service model under Global budgets
• HSCRC intends for the market share adjustment to keep hospital’s interest on serving patients and providing needed services
• The market share adjustment is one of several adjustments where global budgets might be adjusted for volume
• Consumers and purchasers are increasing their focus on value. Consumers want hospitals to provide a balance of high quality needed services at appropriate unit rates
GLOBAL PERSPECTIVE ON INTENT OF MARKET SHARE ADJUSTMENT
The policy goals of the market share adjustment

- With the adoption of the Global Budget Revenue ("GBR") methodology across the State, the HSCRC needed to create a methodology which redistributed revenue based on patient activity.

The intent of the HSCRC is not to create financial winners and losers with the market share.
The policy goals of the market share adjustment

The intent is to ensure that hospitals are providing needed services and when services are shifted from one hospital to another that financial resources are also shifted across global budgets

Examples:
- Hospital Emergency Departments going on divert
- Retirement of a Physician
- Reduced operating capacity
- Shifts in physician practice patterns
The policy goals of the market share adjustment

- The adjustment impacts revenue, but hospitals also must consider the cost implications of a market share shift.

Example: Physician Practice Acquisition

- Implications:
  - Revenue will increase at most 50% variable with volume (likely much less)
    - With a one year lag
  - Significant additions to cost
    - Physician subsidies
    - Capital
    - Other staffing
The policy goals of the market share adjustment

Exhibit 1: Financial Impact of Acquiring 1 FTE Obstetrical Physician

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharges</td>
<td>50</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Professional Fees</td>
<td>$75,000</td>
<td>$120,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Practice Expenses</td>
<td>275,000</td>
<td>275,000</td>
<td>275,000</td>
</tr>
<tr>
<td>Net Profit / (Loss)</td>
<td>(200,000)</td>
<td>(155,000)</td>
<td>(125,000)</td>
</tr>
<tr>
<td>Hospital Market Share</td>
<td>$0 - $63,000</td>
<td>$0 - $79,000</td>
<td></td>
</tr>
</tbody>
</table>

Financial Impact Gain / (Loss)  

$(200,000)  $(155,000) - $(92,000)  $(125,000) - $(46,000)
The policy goals of the market share adjustment

• Unit rate flexibility is an important feature of Global Budgets

• Currently, hospitals are allowed to charge up to 5% of their unit rates. This may be extended to 10% upon review and approval of HSCRC Staff

• Special considerations will be applied to release corridors beyond 10% and hospital and HSCRC will need to understand what is causing volume declines beyond 10%
The policy goals of the market share adjustment

- Aggressive pursuit of market share is an alternative for hospitals under unit rate corridor pressure, but is incongruent with the policy incentives of the system.
- In a declining volume scenario, four response alternatives exist for hospitals:
  - **Undercharge GBR Cap**
    - May prompt discussions with HSCRC staff for cap reduction
  - **Charge to GBR Cap and Exceed Unit Rate Corridors**
    - One-time penalty charge
    - Potential required shared savings with HSCRC
  - **Increase Market Share**
    - May increase costs / revenue increase may be 10-25% variable
  - **Request corridor relief**
    - Hospitals can have released corridors with good rationale (may involve shared savings)
ADJUSTMENTS IN GLOBAL BUDGET REVENUE METHODOLOGY FOR CHANGES IN SERVICE VOLUME
There are several adjustments in the GBR model for changes in service volume

- The market share adjustment is not the only tool the HSCRC has to adjust rates for changes in utilization
- Additional adjustments include: categorical cases, ACA expansion and exceptional circumstances
The are several adjustments in GBR model for changes in service volume

Demographic Adjustment

Demographics

Change in Age Mix

Population

Change in Population Density

Efficiency

Change in PAU volume

Allowed Volume

Change in Use Rates

Source: HSCRC Staff update to Commissioners
The are several adjustments in GBR model for changes in service volume:

- **Goal:**
  - Ensure resources available at Academic Medical Center for high needs patients if large care pattern changes
  - Reduce community hospitals for significant changes in transfer patterns

**Transfer Adjustment**

- Tertiary Hospitals
- Quaternary Hospitals
- Community Hospitals
The are several adjustments in GBR model for changes in service volume

1) Closure of hospital programs
2) Movement of programs to unregulated settings
3) Opening of new programs
4) Significant changes in practice patterns
The are several adjustments in GBR model for changes in service volume

- A hospital which reduces PAU admissions will likely reach its unit rate corridors without backfilling with additional volume

<table>
<thead>
<tr>
<th></th>
<th>Base Year</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approved Charge</td>
<td>Approved Charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>per Case</td>
<td>Cases</td>
<td>Charges</td>
</tr>
<tr>
<td>Admissions</td>
<td>$ 10,000</td>
<td>10,000</td>
<td>$ 100,000,000</td>
</tr>
<tr>
<td>PAU Admissions</td>
<td>$ 8,000</td>
<td>2,000</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$ 12,000</td>
<td>$ 116,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Necessary Increase to Unit Rates to Maintain Revenue

- It’s reasonable for regulators to expect to share cost savings with as hospitals become more efficient. Hospitals should be reducing costs with volume declines.
MECHANICS OF THE MARKET SHARE METHODOLOGY
# Mechanics of the Market Share Methodology

<table>
<thead>
<tr>
<th>Member</th>
<th>Affiliation</th>
</tr>
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<tbody>
<tr>
<td>Camille Bash</td>
<td>Drs. Hosp</td>
</tr>
<tr>
<td>Jack Cook</td>
<td></td>
</tr>
<tr>
<td>Stan Dorn</td>
<td>The Urban Institute</td>
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<tr>
<td>Hank Franey</td>
<td>UMMS</td>
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<td>The Commonwealth Fund</td>
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<tr>
<td>Stu Guterman</td>
<td>LifeBridge</td>
</tr>
<tr>
<td>Douglas Hall</td>
<td>JHHS</td>
</tr>
<tr>
<td>David Krajewski</td>
<td></td>
</tr>
<tr>
<td>Traci LaValle</td>
<td>MHA</td>
</tr>
<tr>
<td>Brett McCone</td>
<td>MHA</td>
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<tr>
<td>Paul Parker</td>
<td>MHCC</td>
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<tr>
<td>Mike Robbins</td>
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<tr>
<td>Kathy Talbot</td>
<td>MedStar</td>
</tr>
<tr>
<td>Gary Vogan</td>
<td>Holy Cross</td>
</tr>
</tbody>
</table>

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[Diagram of Payment Model Workgroup with Technical Advisory Group to advise]
Mechanics of the Market Share Methodology

- The development of the adjustment involved several different stakeholders:
  - Hospitals
  - Payers
  - Consumer Groups

- This represents the direct influence on policy that HSCRC is providing to consumers with the new All Payer Model implementation
Prospective Market Share Adjustment

- Key principles of the methodology:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiate between volume/utilization growth and market share shifts</td>
<td></td>
</tr>
<tr>
<td>Identify market share shifts at the product line and zip code level</td>
<td></td>
</tr>
<tr>
<td>Employs APG-like methodology for outpatient services (more details are needed)</td>
<td></td>
</tr>
<tr>
<td>Include inpatient and outpatient utilization (Equivalent Case mix Adjusted Discharges)</td>
<td></td>
</tr>
<tr>
<td>Variable Cost Factor of 50% is likely to be applied</td>
<td></td>
</tr>
<tr>
<td>Financial impact needs to be established (perhaps charge per ECMAD)</td>
<td></td>
</tr>
</tbody>
</table>
Mechanics of the Market Share Methodology

• There are several components of the market share adjustment which have significance:
  – Use of Equivalent Case-mix Adjusted Discharges ("ECMADs")
  – Use of service line groupings
  – The market share algorithm
Mechanics of the Market Share Methodology

• The HSCRC’s approach calculates aggregate volume changes, inpatient and outpatient, by zip code, product line
  – The aggregate volume changes are calculated using **Equivalent Case Mix Adjusted Discharges (ECMADs)**, a blend of case mix adjusted discharges and outpatient equivalents
Mechanics of the Market Share
Methodology

• Using case weights, the ECMAD approach gives greater weight to more intensive discharges and outpatient visits
  – The change in ECMADs inherently adjusts for the differences in service mix applied to the average charge, similar to the change in case mix applied to an average charge per case.
Mechanics of the Market Share Methodology

- ECMAD changes are calculated at a zip code/product line level, designed to isolate changes in service markets and related service offerings
  - Inpatient services are grouped in traditional service lines
  - Outpatient services are grouped in aggregate services: emergency care, observation, surgery, infusion, etc.
Mechanics of the Market Share Methodology

• Changes in hospital ECMADs by zip code/product line are compared to the aggregate change of all other hospital ECMADs by zip code/product line

• The HSCRC applies its algorithm to determine market share shifts

**The HSCRC has made recent changes to the algorithm**
## Mechanics of the Market Share Methodology

<table>
<thead>
<tr>
<th>Algorithm Prior to Dec 16\textsuperscript{th}</th>
<th>Revised Algorithm</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Compare each hospital’s change in ECMADs to the change for all other hospitals (by zip code/service line)</td>
<td>▪ Group and sum hospitals with increases and decreases</td>
</tr>
<tr>
<td>▪ A hospital only received a market shift adjustment if their volume change moved in the opposite direction of all other hospitals (e.g. not a change in use rates)</td>
<td>▪ Total increases are compared to the absolute value of the total decreases, the smaller utilization change becomes the market limit</td>
</tr>
<tr>
<td></td>
<td>▪ Spread the increases or decreases as a percent of total, subject to market limit</td>
</tr>
</tbody>
</table>
# Mechanics of the Market Share Methodology

<table>
<thead>
<tr>
<th>Zipcode 21000 General Surgery</th>
<th>ECMAD CY13 A</th>
<th>ECMAD CY14 B</th>
<th>ECMAD Growth C=B-A</th>
<th>Proportion of Hospital D=C/Subtotal C</th>
<th>Market Shift E=D*Allowed Market Shift</th>
<th>Original Formula Other Hospitals</th>
<th>Market Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLY CROSS 1,000</td>
<td>1,000</td>
<td>1,500</td>
<td>500</td>
<td>76%</td>
<td>99</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>SUBURBAN 500</td>
<td>500</td>
<td>600</td>
<td>100</td>
<td>15%</td>
<td>20</td>
<td>425</td>
<td>0</td>
</tr>
<tr>
<td>MONTGOMERY GENERAL 50</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>8%</td>
<td>10</td>
<td>475</td>
<td>0</td>
</tr>
<tr>
<td>JOHNS HOPKINS -</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>1%</td>
<td>1</td>
<td>521</td>
<td>0</td>
</tr>
<tr>
<td><strong>Utilization Increase</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINAI 500</td>
<td>500</td>
<td>500</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>525</td>
<td>-</td>
</tr>
<tr>
<td>UPPER CHESAPEAKE HEALTH 500</td>
<td>500</td>
<td>400</td>
<td>(100)</td>
<td>78%</td>
<td>(100)</td>
<td>625</td>
<td>(100)</td>
</tr>
<tr>
<td>SHADY GROVE 50</td>
<td>50</td>
<td>25</td>
<td>(25)</td>
<td>19%</td>
<td>(25)</td>
<td>550</td>
<td>(25)</td>
</tr>
<tr>
<td>UNIVERSITY OF MARYLAND 4</td>
<td>4</td>
<td>-</td>
<td>(4)</td>
<td>3%</td>
<td>(4)</td>
<td>529</td>
<td>(4)</td>
</tr>
<tr>
<td><strong>Utilization Decline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zip Total 525</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allowed Market Shift</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>129</td>
</tr>
</tbody>
</table>

**Calculations:**

- **Original Formula:**
  
  \[ E = D \times \text{Allowed Market Shift} \]

**Utilization Increase:**

- **HOLY CROSS:**
  
  \[ A = 1,000, B = 1,500, C = B - A = 500, D = \frac{C}{\text{Subtotal C}} = \frac{500}{\text{Subtotal C}} \]
  
  \[ E = D \times \text{Allowed Market Shift} = \frac{500}{\text{Subtotal C}} \times 99 = 99 \times 25 = 2,475 \]

**Utilization Decline:**

- **SHADY GROVE:**
  
  \[ A = 50, B = 25, C = B - A = 25, D = \frac{C}{\text{Subtotal C}} = \frac{25}{\text{Subtotal C}} \]
  
  \[ E = D \times \text{Allowed Market Shift} = \frac{25}{\text{Subtotal C}} \times 25 = 25 \times 25 = 625 \]

- **UNIVERSITY OF MARYLAND:**
  
  \[ A = 4, B = - (4), C = B - A = -4, D = \frac{C}{\text{Subtotal C}} = \frac{-4}{\text{Subtotal C}} \]
  
  \[ E = D \times \text{Allowed Market Shift} = \frac{-4}{\text{Subtotal C}} \times 4 = 4 \times 4 = 16 \]

**Zip Total:**

- **Zip Total Utilization Increase:**
  
  \[ \sum E = 2,475 + 625 + 16 = 3,116 \]

- **Zip Total Utilization Decline:**
  
  \[ \sum E = 625 + 16 = 641 \]

- **Zip Total Allowed Market Shift:**
  
  \[ \sum E = 129 \]
Mechanics of the Market Share Methodology

• The calculated ECMAD market share shifts are summed by hospital

• The sum of each zip code / produce line subtotal reflects the total hospital market share impact

• An average charge per ECMAD is then applied to the hospital’s market share change in ECMAD’s
  
  – NOTE: THE FINANCIAL IMPACT CALCULATION HAS NOT BEEN FINALIZED BY STAFF.
Key Takeaways

• The market share adjustment is not a proxy for a fee-for-service model under Global budgets
• HSCRC intends for the market share adjustment to keep hospital’s interest on serving patients and providing needed services
• The market share adjustment is one of several adjustments where global budgets might be adjusted for volume
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QUESTIONS?