Patient Safety and Quality

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Associate CMO, Chief Patient Safety Officer
Overview

- Transition to Value based care
- Patient Safety and Quality Measures
- Population Health
- Financial Impact of transition to Value Based Purchasing
Results of Fee for Service Healthcare Business Model

- High Cost
- High Chronic Illness

- Low Quality
- Low Access
Medicare Spending Before 1984

Total Medicare Payments ($M)

- 1967: $4,239
- 1968: $5,290
- 1969: $6,268
- 1970: $6,572
- 1971: $7,354
- 1972: $8,019
- 1973: $9,251
- 1974: $11,238
- 1975: $14,549
- 1976: $17,619
- 1977: $20,477
- 1978: $23,543
- 1979: $27,699
- 1980: $33,725
- 1981: $39,918
- 1982: $48,134
- 1983: $53,438

AUGUSTA UNIVERSITY
Medicare Spending After 1984

Total Medicare Spending ($M)

- Years: 1984 to 2012
- Spending: $0 to $350,000

The graph shows the increase in total Medicare spending from 1984 to 2012.
Change is coming | IHI Triple Aim

Photo credit: http://bhmpc.com/wp-content/uploads/2014/05/timthumb.png
Better Health (Population)

- Shift from episodic to continuous
- Examples: % of Attributed patients with HbgA1c >9%
Population Health Maturity

- Early Stage: Traditional Medical Management
- Intermediate Stage: Analytics Driven
- Advanced Stage: Collaborative, Community Scale

Limited Collaboration and Interoperability

Effective Partnerships to meet Triple Aim objective
Better Care (Experience)
Patient Experience

HCAHPS = Healthcare Consumer Assessment of Healthcare Providers and Systems

HCAHPS 25% + Core Measures 75% = VALUE-BASED PURCHASING PERFORMANCE SCORE
Lower Cost (MSPB)

MSPB = Medicare Spending per beneficiary
Measures of patient safety and Quality
Quality Measures

• CMS Core Measures
• Patient Experience / Access
  – Emergency Department Left Without Being Seen (LWOBS)
  – ED LOS (Admitted and Discharged)
Safety

- Falls with Injury
- Hospital Acquired Pressure Injury
- Hospital Acquired Infections
  - Catheter Associated Urinary Tract Infections (CAUTI)
  - Catheter Associated Blood Stream Infections (CLABSI)
  - Ventilator Associated Pneumonia (VAP)
  - Surgical Site Infections (SSI)
  - Clostridium Difficile (C.Diff)
Patient Safety Measures

• CLABSI (Central Line Associated Blood Stream Infections)
  – Central Line Bundle / “Certified” Lines
  – Reduce use and early removal
  – Scrub the hub / Sterile dressing changes
  – CLISA Score
• CAUTI (Catheter Associated UTI)
  – Strict competency for insertion and maintenance
  – Early removal
Patient Safety Measures (Con‘t)

- Falls
  - Identify high risk patients / institute precautions
  - Responsiveness of staff to calls (No Pass Zone)
  - Intentional rounding
  - Beers List
Hospital Acquired Pressure Injury

- HAPI Hospital Acquired Pressure Injury
  - Intentional Rounding
  - Predicted high risk – proactive intervention
  - Proactive turning and positioning
  - Device positioning
  - EMS Spine Boards (Use selective spinal immobilization)
Patient Satisfaction

- Patient Experience (HCAHPS)
  - Communication
  - Responsiveness of Staff
  - Cleanliness / quietness
  - Communication about Medicines
  - Discharge information
  - Overall rating
  - Recommendation

HCAHPS = Healthcare Consumer Assessment of Healthcare Providers and Systems
Enterprise Monthly Scorecard

Quality

Reducing Patient Harm

Patient Safety Indicator-90

Hospital Acquired Pressure Injuries

Falls With Injury

Safety

Number of Infections

CAUTI ■ CLABSI □ VAP

CMI-Adjusted LOS

Vizient Length of Stay Index (LOS)

Patient Satisfaction

Trend: Apr 2016 - Feb 2017
Percentile: FYTD

HCAHPS

CGCAHPS

PCAHPS

EDCAHPS

Clinical Data Analytics Team, Quality Management
Transition to Value-Based Care Delivery
Value = \frac{Quality^*}{Payment^+}

* A composite of patient outcomes, safety, and experiences
+ The cost to all purchasers for purchasing care

The part of the above equation that has the greatest opportunity for influence in meeting the “value-based” requirement of any health system is Quality!
THE TRANSITION: FROM FEE FOR SERVICE TO VALUE-BASED PAYMENT

Source: Georgia Society of CPAs
Value-based payment models

• Shared savings
• Bundles
• Shared risk
• Global capitation
The Population Health Model

*5 Steps Toward Success in a Value-based Structure*

1. **Connect:** Acquire, aggregate, and leverage your data to support clinical integrations

2. **Analyze:** Once connected, financial and clinical data must be translated into actionable insight

3. **Intervene:** Use analysis to create care coordination and care management workflows which proactively drive interventions

4. **Engage:** 3 key levels of engagement—patient, physician, and stakeholder network

5. **Support:** Leverage advisory, operational, and care coordination tools and services to lay the foundation for organizational processes

Content adapted from: http://www.mckesson.com/population-health-management/population-health/get-started/
## CMS Overall Star rating vs Value Based Purchasing

<table>
<thead>
<tr>
<th>Measure Group</th>
<th>FY 2017 HVBP Weight</th>
<th>FY 2018 HVBP Weight</th>
<th>Overall Star Rating Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes - Mortality (7)</td>
<td>25%</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>Outcomes - Safety (8)</td>
<td>20%</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>Outcomes - Readmission (8)</td>
<td>--</td>
<td>--</td>
<td>22%</td>
</tr>
<tr>
<td>Patient Experience (11)</td>
<td>25%</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>Process - Effectiveness (11)</td>
<td>5%</td>
<td>--</td>
<td>4%</td>
</tr>
<tr>
<td>Process - Timeliness (7)</td>
<td>--</td>
<td>--</td>
<td>4%</td>
</tr>
<tr>
<td>Efficiency - Imaging (5)</td>
<td>--</td>
<td>--</td>
<td>4%</td>
</tr>
<tr>
<td>Efficiency - Cost</td>
<td>25%</td>
<td>25%</td>
<td>--</td>
</tr>
<tr>
<td>Category</td>
<td>Category Weight</td>
<td>Examples of Included Metrics</td>
<td>Number of Metrics</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Mortality</td>
<td>22%</td>
<td>30-day mortality rate for patients suffering from a heart attack or receiving coronary artery bypass graft surgery</td>
<td>7</td>
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<td>Readmission</td>
<td>22%</td>
<td>30-day readmissions rate for patients suffering from a heart attack or receiving coronary artery bypass graft surgery</td>
<td>8</td>
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<tr>
<td>Safety of Care</td>
<td>22%</td>
<td>Catheter-associated urinary tract infection rate Overall <em>Clostridium difficile</em> infection rate</td>
<td>8</td>
</tr>
<tr>
<td>Patient Experience</td>
<td>22%</td>
<td>Patient’s perception of information communicated by doctors and nurses.</td>
<td>11</td>
</tr>
<tr>
<td>Effectiveness of Care</td>
<td>4%</td>
<td>Patient and caregiver were offered influenza immunization</td>
<td>11</td>
</tr>
<tr>
<td>Timeliness of Care</td>
<td>4%</td>
<td>Time taken for various events in the emergency department, such as time from arrival to discharge.</td>
<td>7</td>
</tr>
<tr>
<td>Efficient Use of Imaging</td>
<td>4%</td>
<td>Assess the clinical necessity of imaging</td>
<td>5</td>
</tr>
</tbody>
</table>
What does it mean to be a 3 star hospital?
## Categories Used to Calculate the Leapfrog Group Hospital Safety Grade

<table>
<thead>
<tr>
<th>Category</th>
<th>Category Weight</th>
<th>Examples of Included Metrics</th>
<th>Number of Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process and Structural</td>
<td>50%</td>
<td>Use of computerized physician order entry Patient’s perception of information communicated by doctors and nurses.</td>
<td>15</td>
</tr>
<tr>
<td>Outcome</td>
<td>50%</td>
<td>Catheter-associated urinary tract infection rate Overall <em>Clostridium difficile</em> infection rate</td>
<td>15</td>
</tr>
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### Categories of Metrics Used to Calculate the Truven Analytics Top 15 Health System Rankings

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<thead>
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<th>Category Weight</th>
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</thead>
<tbody>
<tr>
<td>Inpatient Outcomes</td>
<td>22%</td>
<td>Risk-adjusted inpatient mortality index(^1) (11% of total score) Risk-adjusted complications index(^2) (11% of total)</td>
<td>2</td>
</tr>
<tr>
<td>Process of Care</td>
<td>11%</td>
<td>Prophylactic treatment for thromboembolisms is given to stroke patients and others when indicated</td>
<td>9</td>
</tr>
<tr>
<td>Extended Outcomes</td>
<td>22%</td>
<td>30-day mortality rate for heart attacks 30-day readmissions rate for heart attack</td>
<td>11</td>
</tr>
<tr>
<td>Efficiency</td>
<td>33%</td>
<td>Severity-adjusted length of stay(^3) (11% of total score) Medicare spend per beneficiary(^4) (11% of total score) Time from emergency department arrival to departure</td>
<td>6</td>
</tr>
<tr>
<td>Patient Experience</td>
<td>11%</td>
<td>Patient’s rating of the hospital overall; one question from HCAHPS(^5)</td>
<td>1</td>
</tr>
<tr>
<td>Category</td>
<td>Category Weight</td>
<td>Example Metrics</td>
<td>Number of Metrics</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Inpatient Outcomes</td>
<td>20%</td>
<td>Risk-adjusted inpatient mortality index¹ Risk-adjusted complications index²</td>
<td>2</td>
</tr>
<tr>
<td>Process of Care</td>
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<tr>
<td>Extended Outcomes</td>
<td>20%</td>
<td>Mortality from heart attack Readmissions from heart attack</td>
<td>11</td>
</tr>
<tr>
<td>Process Efficiency</td>
<td>20%</td>
<td>Severity-adjusted length of stay³ (10% of total score) Time from emergency department arrival to departure</td>
<td>4</td>
</tr>
<tr>
<td>Cost Efficiency</td>
<td>10%</td>
<td>Medicare spend per beneficiary⁴ Adjusted inpatient expense per discharge⁵</td>
<td>2</td>
</tr>
<tr>
<td>Financial Health</td>
<td>10%</td>
<td>Adjusted operating margin⁶</td>
<td>1</td>
</tr>
<tr>
<td>Patient Experience</td>
<td>10%</td>
<td>Patient’s rating of the hospital overall; one question from HCAHPS⁷</td>
<td>1</td>
</tr>
</tbody>
</table>
Categories of Metrics Used to Calculate the USNWR Best Hospital Rankings

Twelve of the 16 specialty rankings are calculated using quality metrics organized into the categories listed in the table below. Each metric category is weighted to compute the specialty scores, as listed in the table below. The remaining four specialty scores and ranks are entirely based on reputation.

<table>
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<th>Number of Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>37.5%</td>
<td>30-day risk-adjusted mortality for each specialty</td>
<td>12</td>
</tr>
</tbody>
</table>
| Structure         | 30%             | Designated as a Level 1 or 2 Trauma center  
Has advanced imaging and other technologies                                                                                                                   | 9                 |
| Process           | 27.5%           | USNWR uses reputation as a proxy for gauging a hospital’s process of care. For the Cardiology and Heart Surgery specialty, 3.0% of this score is determined by whether a hospital reports data to the ACC or STS                   | 16                |
| Patient Safety    | 5%              | Postoperative hemorrhage or hematoma  
Accidental puncture or laceration                                                                                                                                                                                         | 6                 |
Summary

- Transition to Value Based Model
- Transition will create a straddle
- Patient Safety Strategies
- VBP Models combine Quality, Safety, Patient Satisfaction