MHA Transparency Initiative

Price and Quality Transparency Initiative

November 10, 2015
Why Transparency?

• Unprecedented volumes of health care data is being released, but the information is difficult to navigate. Empowering consumers with information they understand will enable value-based decision making, which is essential for positive market change.¹

₁ HealthSparq, “U.S. Healthcare Reform: The Call for Greater Cost and Quality Transparency.”
MHA Board Action — Fall 2014

- Following recommendations from the MHA Price Transparency Work Group and the MHA Strategic Quality Advisory Committee, the MHA Board of Trustees approved a phased approach for voluntary, hospital-specific public reporting of price and quality data.
  - Hospital-specific data and education has been provided throughout 2015.
  - The public release of price and quality data will be in January 2016.
Transparency Strategy

• **Strategy:** Support hospitals in implementing the Triple Aim of better health, better care and lower costs

• **Goals**
  - Reduce variation
  - Coordinate care across the continuum of care
  - Increase transparency through non-competitive methods
  - Implement population-based health management and improvement strategies

• **MHA Action**
  - Focused technical and adaptive support
    - Importance – validity – accuracy – reliability – feasibility
  - Engagement
Transparency Initiative Milestones

✔ Agreement to participate
✔ Education
✔ Website development

• Data
  ➢ Two modifications
Price Data

• Inpatient
  ➢ 100 most prevalent statewide DRGs for FY2014
  ➢ Minimum, maximum and median charges are calculated with the lowest and highest 10 percent outliers removed at the hospital and aggregate level

• Outpatient
  ➢ Emergency department services will be grouped in the five facility levels. Note: Emergency department admissions will not show in the ED category.
  ➢ Outpatient data omitted — 45 procedural codes based on Clinical Classification System
DRGs

DRGs are translated into layman’s language and grouped into categories similar to Medical Diagnosis Categories.

- Nervous System
- Ear, Nose, Mouth and Throat
- Respiratory System
- Circulatory System
- Digestive System
- Hepatobiliary System/Pancreas
- Musculoskeletal/Connective Tissue
- Skin/Subcutaneous Tissue/Breast
- Endocrine/Nutritional/Metabolic
- Kidney/Urinary Tract
- Female Reproductive
- Pregnancy/Childbirth/Newborn and Other Neonates
- Blood/Related
- Neoplasms/Related
- Infection/Parasites
- Mental Disorders
- Substance Abuse
- Injury/Poisoning
- Other Factors
Review

- Members have had the opportunity to review and validate their price data on HIDI Analytic Advantage® since September 17.

- A reminder was sent October 13 that noted the removal of the 45 outpatient procedures.
Communication Tools

- Member toolkit — will be shared in tandem with the website preview.
  - News release
  - Data explanation
  - Background
  - Talking points
  - How to use website visual
Quality Outcome Data

Readmission Risk-Adjustment
**Topic Analysis: Measure Selection**

- **Quality of measure**
  - Validity — NQF endorsed
  - Reliability — defined numerator and denominator
  - HEN, eCQM, ACO
  - Claims data to reduce hospital burden

- **Financial implications**
  - Regulatory impact
  - Value-based purchasing
  - Readmission reduction
  - HAC

- **Ability to improve**
  - Variation across state
  - Variation from goal

- **Population health**
  - Align with CHNA
  - Impact through continuum

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**Care Coordination**

- Manage Chronic Disease
  - Chronic Obstructive Pulmonary Disease (COPD)
  - Hypertension
  - Diabetes
  - Congestive Heart Failure (CHF)

- Reduce Readmissions
  - Hospital-Acquired
  - Congestive Heart Failure (CHF)
  - Heart Attack (AMI)
  - Pneumonia
  - Chronic Obstructive Pulmonary Disease (COPD)
  - Hip or Knee Replacement

**Clinical Excellence**

- Reduce Infections
  - Post-operative Sepsis
  - Catheter-associated UTI
  - Central line-associated Blood Stream Infection
  - *Clostridium difficile* (C-diff)
  - Methicillin-resistant Staphylococcus Aureus (MRSA)
  - Surgical Site Infections – Colon
  - Surgical Site Infections – Abdominal Hysterectomy

- Reduce Harm
  - Falls
  - Venous Thromboembolism
  - Mortality
  - Pressure Ulcers
Problem Statement

• Risk-adjustment for age, gender and comorbidities to address variation in acuity is accepted methodology and practice.

• Despite national discussion, no consensus on which variables and how to adjust for social determinants that influence quality of care outcomes, e.g. readmissions.

➤ The Hospital Readmission Reduction Program penalizes hospitals for readmissions, but does not adjust for social determinants.
Sociodemographic Status: National Discussion

• Exploratory research and perspective published
• National Quality Forum
  ➢ Technical report June 2014
  ➢ Testing 2015-2017
• Congress
  ➢ S. 688 & H.R. 1343 - Establishing beneficiary equity in the Hospital Readmission Program Act of 2015. Would require CMS to adjust for SDS.
• Centers for Medicare & Medicaid Services
  ➢ 2015 Rand report to CMS, CMS call letter and S. 2104 - A bill to amend Title XVIII of the Social Security Act to provide relief to Medicare Advantage plans with a significant number of dually-eligible or low-income subsidy beneficiaries and to prevent the termination of two star plans.
Opportunity

• Decrease variation of reported readmission rates among hospitals based on socio-demographic status for the transparency initiative on the consumer website.
• Encourage and advance the national policy discussion.
• Test and promote a better methodology, consistent with current research.
Competing Models

- **Standard CMS/Yale Method**
  - Adjust for age, gender and clinical comorbidities
  - Compare hospital performance to other hospitals within the context of patient clinical acuity

- **Socio-demographic Status (SDS) Enriched Method**
  - Adjust for age, gender, clinical comorbidities, Medicaid status and census tract-level poverty
  - Compare hospital performance to other hospitals within the context of patient community

Henry Ford, Detroit

Mayo, Phoenix
Methodological Comparison: Reduction in Variance

### CMS/Yale Method and CMS/Yale w/ SDS-Enrichment for All MO Hospitals

<table>
<thead>
<tr>
<th>Measure</th>
<th>CMS Risk-Adjusted Rate Minimum</th>
<th>CMS Risk-Adjusted Rate Maximum</th>
<th>SDS Risk-Adjusted Rate Minimum</th>
<th>SDS Risk-Adjusted Rate Maximum</th>
<th>Range (% points) CMS</th>
<th>Range (% points) SDS</th>
<th>Percent Change in Range (Reduction in Variance w/SDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI</td>
<td>7.8%</td>
<td>12.2%</td>
<td>9.3%</td>
<td>11.8%</td>
<td>4.4%</td>
<td>2.5%</td>
<td>-43.2%</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>11.7%</td>
<td>23.9%</td>
<td>14.9%</td>
<td>18.6%</td>
<td>12.3%</td>
<td>3.7%</td>
<td>-69.9%</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>9.3%</td>
<td>20.6%</td>
<td>12.5%</td>
<td>16.1%</td>
<td>11.3%</td>
<td>3.6%</td>
<td>-68.1%</td>
</tr>
<tr>
<td>COPD</td>
<td>11.1%</td>
<td>23.8%</td>
<td>12.8%</td>
<td>18.9%</td>
<td>12.7%</td>
<td>6.1%</td>
<td>-52.0%</td>
</tr>
<tr>
<td>Total Knee &amp; Hip</td>
<td>2.4%</td>
<td>6.7%</td>
<td>3.5%</td>
<td>4.1%</td>
<td>4.3%</td>
<td>0.5%</td>
<td>-88.4%</td>
</tr>
<tr>
<td>Hospital-wide</td>
<td>7.5%</td>
<td>15.9%</td>
<td>9.3%</td>
<td>12.2%</td>
<td>8.4%</td>
<td>2.9%</td>
<td>-65.5%</td>
</tr>
</tbody>
</table>
# Methodological Comparison: Impact Distribution

## CMS/Yale Method and CMS/Yale w/ SDS-Enrichment for All MO Hospitals

<table>
<thead>
<tr>
<th>Condition</th>
<th>CMS/Yale Method</th>
<th>CMS/Yale w/ SDS-Enrichment</th>
<th>Moving from Under to Over Expected Rate (SDS SRR &gt;1)</th>
<th>Moving from Over to Under Expected Rate (SDS SRR &lt;1)</th>
<th>No change in Over to Under 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI</td>
<td>53.7%</td>
<td>46.3%</td>
<td>19.6%</td>
<td>5.3%</td>
<td>75.1%</td>
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<tr>
<td>Heart Failure</td>
<td>52.3%</td>
<td>47.7%</td>
<td>16.2%</td>
<td>11.7%</td>
<td>72.1%</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>55.2%</td>
<td>44.8%</td>
<td>18.1%</td>
<td>9.5%</td>
<td>72.4%</td>
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<tr>
<td>COPD</td>
<td>48.7%</td>
<td>51.3%</td>
<td>16.5%</td>
<td>8.7%</td>
<td>74.8%</td>
</tr>
<tr>
<td>Total Knee &amp; Hip</td>
<td>52.5%</td>
<td>47.5%</td>
<td>20.0%</td>
<td>15.0%</td>
<td>65.0%</td>
</tr>
<tr>
<td>Hospital-wide</td>
<td>57.7%</td>
<td>42.3%</td>
<td>26.8%</td>
<td>4.1%</td>
<td>69.1%</td>
</tr>
</tbody>
</table>
Methodological Comparison

- Calibration and reduction in variance (CHF example)

**Reduction in Variance: Shrinkage Plot**

**Scatter Plot**

- No Difference
- SDS Significant (95%)
- CMS Significant (95%)
- Both Significant (95%)
Evaluation Process

✓ Internal review of MHA staff
✓ External reviewers
  ➢ David Nerenz, Ph.D., Henry Ford Health System
  ➢ Katherine Baicker, Ph.D., Harvard economist
  ➢ Bruce Hall, M.D., Ph.D., BJC and Washington University
✓ District council meetings
✓ Strategic Quality Advisory Committee recommendation
✓ MHA Board of Trustees decision
  • November-December — member feedback
Balancing Risk

Pros

- Reduced statistical variation among hospitals for population characteristics
- Current HIDI model promising
- “Essential for fair comparison”
- Aligns with MHA advocacy and policy agenda
- Additive information for the NQF pilot
- Advances national policy discussion
- Opportunity to introduce other SDS-related quality outcomes
- Public messaging

Cons

- Ahead of CMS and NQF
- “Masking disparities”
- No national consensus yet on which variables are most appropriate
- Rigor of national research still in process
- Public messaging
Conclusions

- SDS adjustment
  - Reduces variation beyond hospitals’ control
  - More equitable comparison
  - Advance important policy agenda
  - Contribute to national research
Timeline and Resources
# Launch Timeline

<table>
<thead>
<tr>
<th>Action</th>
<th>Status</th>
<th>Implementation Date</th>
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</thead>
<tbody>
<tr>
<td>Data Use Agreement</td>
<td>90 percent of all hospitals have signed</td>
<td>September 1</td>
</tr>
<tr>
<td>Hospital-specific quality data updates</td>
<td>Quarterly updates on HIDI Analytic Advantage® PLUS</td>
<td>February, May, July, October</td>
</tr>
<tr>
<td>Hospital-specific price data updates</td>
<td>Annual updates on HIDI Analytic Advantage® PLUS</td>
<td>September 17</td>
</tr>
<tr>
<td>Focus on Hospitals website</td>
<td>Redesign in process</td>
<td>November 15</td>
</tr>
<tr>
<td>Web-based member education</td>
<td>Ongoing throughout 2015</td>
<td>December 11</td>
</tr>
<tr>
<td>Hospital preview period for all participating hospitals to view all participating data (will require permission)</td>
<td>Pending website readiness</td>
<td>November 16 to December 15</td>
</tr>
<tr>
<td>Public launch</td>
<td></td>
<td>January 15</td>
</tr>
</tbody>
</table>
MHA Staff

- Mary Becker — mbecker@mhanet.com
  ➢ Overall project, price data, website and communication strategy
- Mat Reidhead — mreidhead@mhanet.com
  ➢ Data methodology, including socio-demographic status
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  ➢ Overall project, education and quality data
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