Future of Quality Reporting and the CMS Quality Incentive Programs
Current Quality Environment

• Continued expansion of quality evaluation
  • Increasing Reporting Requirements
  • Increased Public Surveillance/Scrutiny

• Increased attention to practice guidelines and efficiency

• Pay for reporting → Pay for Performance

• Meaningful Use

• Long term success dependent on executing quality strategies, forming new partnerships, and finding the right quality tools for improvement
Change Drivers for Quality

- ACA Mandated Quality Based Payment Reform
- Health care systems
- Complex patients
- Information technology
- Consumers
Critical Questions to Ask

• Can we assess all aspects of care routinely?

• Is this efficient and cost-effective?

• If we cannot assess all aspects of care, where should we focus our efforts?

• How will quality reporting/pay for performance change over time?
Identify Who at Your Hospital Is Responsible For:

- Initial input of patient demographic information
- Ensuring that Present on Admission (POA) is determined for every diagnosis that is written
- Discharge information
- CMS data abstraction
- Claims data submission to CMS
- Request for CMS validation records
- Notification of physicians with opportunity for improvement issues
- Communication with senior leaders related to outcomes of quality measures reporting
Essential Ingredients for Quality Improvement

• Data → Actionable Information (i.e. “Data with meaning”)
• Hospital Infrastructure/EHR
• Leadership and company culture
• Process redesign
• Continuous evaluation of quality and improvement opportunities
### Number of measures in the Medicare Inpatient Quality Reporting program, by data source, 2005-2016

<table>
<thead>
<tr>
<th>Payment update year (FY)</th>
<th>Total</th>
<th>Medical chart data</th>
<th>Medicare claims data</th>
<th>Patient survey (H-CAHPS®)</th>
<th>Structural</th>
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<td>2016</td>
<td>58</td>
<td>35</td>
<td>17</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

**Note:** FY (fiscal year), H-CAHPS® (Hospital Consumer Assessment of Healthcare Providers and Systems®). Examples of structural measures include reporting of participation in a systematic clinical database registry for specified conditions and safe surgery checklist use.

**Source:** Telligen 2013.

- New FFY 2015 IQR Payment Penalty = 25% of Market Basket Update
Medicare Quality Based Payment Reform (QBPR) Programs

• Mandated by the ACA of 2010
  • VBP Program (redistributive w/ winners and losers)
  • Readmissions Reduction Program (remain whole or lose)
  • HAC Reduction Program (remain whole or lose)

• National pay-for-performance programs

• Most acute care hospitals must participate; CAHs excluded

• Program rules, measures, and methodologies adopted well in advance (2013-2020+)
General Program Themes

- Adjusts payment under Medicare IPPS based on historical quality performance compared to national performance standards
- Dynamic programs that change each year
  - Quality measures and domains
  - Performance standards
- Increasing financial exposure

HAC = Hospital Acquired Condition (HAC) Reduction Program; RRP = Readmission Reduction Program; VBP = Value Based Purchasing Program

(844) - DATAGEN
Value Based Purchasing (VBP) Program

- 1st payment adjustment was Oct. 1, 2012 (FFY 2013)
- Provides incentives for meeting/exceeding quality metrics
- Redistributive program (Winners/Losers)
- Risk/reward: Hospital-specific IPPS payment increases or decreases
  - Funded by IPPS payment contribution of 1% in FFY 2013;
  - Contribution increases by 0.25%/year to 2% in FFY 2017
  - $0 impact per year nationwide (all contribution dollars redistributed between hospitals)
  - $1.4 Billion program
VBP Program Methodology

• Performance is evaluated on a measure by measure basis
  • Both quality **achievement** and **improvement** recognized
  • National performance standards

• Measures are grouped into program domains
  • FFY 2015 Domains:
    • Process of Care
    • Patient Experience of Care
    • Outcomes of Care
    • Efficiency *(New)*

• Domain scores are combined to calculate a **Total Performance Score (TPS)**

• Total Performance Score is converted to an **Adjustment Factor**
VBP FFY 2015 Domains

• **Process of Care**
  • Chart abstracted measures
  • Example: HF-1 - Heart failure patients given discharge instructions

• **Patient experience of care**
  • HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems)
  • Example: Patients who reported that their nurses "Always" communicated well

• **Outcomes of care**
  • Claims based measures:
    • Mortality Rates
    • PSI-90 Composite Measure
  • Chart abstracted measures:
    • CLABSI

• **Efficiency of care**
  • SPP-1: Medicare Spending per beneficiary
Once TPS scores are calculated for all eligible hospitals, the VBP slope is calculated such that all program contributions are paid out, making the program budget neutral nationally. The VBP slope/linear function is used to determine each hospital’s payout percentage (the amount of their contribution to the VBP pool they receive back) as well as final adjustment factors, and impacts under the program.

**Measure Score Calculation**

For each measure, hospitals can receive a score of 0-10 depending on where they fall in relation to national performance standards (achievement points) and/or how much they have improved from historical rates/ratios (improvement points). After achievement and improvement points are calculated, the higher of the two determines final points.

\[
\text{Achievement Points (all program measures)} = \left( 9 \times \frac{\text{Performance Period Score} - \text{National Threshold}}{\text{National Benchmark Score} - \text{National Threshold}} \right) + 0.5
\]

\[
\text{Improvement Points (all program measures)} = \left( 10 \times \frac{\text{Performance Period Score} - \text{Baseline Period Score}}{\text{National Benchmark Score} - \text{Baseline Period Score}} \right) - 0.5
\]

Final Points (all program measures) = Higher of Achievement or Improvement Points

**Patient Experience of Care - Consistency Points Calculation**

In addition to individual measure scores, the Patient Experience of Care domain scores hospitals based on how consistently they perform across all measures within the domain. Each hospital can receive between 0-20 consistency points based on the measure with the lowest Consistency Multiplier calculated as shown below:

\[
\text{Consistency Points Multiplier (patient experience of care measures)} = \left( \frac{\text{Hospital Performance Period Score} - \text{National Floor}}{\text{National Threshold} - \text{National Floor}} \right)
\]

\[
\text{Consistency Points (patient experience of care domain)} = \left[ 20 \times \text{Lowest Measure Consistency Points Multiplier} \right] - 0.5
\]
Once TPS scores are calculated for all eligible hospitals, the VBP slope is calculated such that all program contributions are paid out, making the program budget neutral nationally. The VBP slope/linear function is used to determine each hospitals payout percentage (the amount of their contribution to the VBP pool they receive back) as well as final adjustment factors, and impacts under the program.

**Domain Score and Total Performance Score (TPS) Calculation**

Individual measure scores for similar measures are combined to find overall Domain scores. On each domain, a minimum number of measures must be scored in order to be eligible for the domain. Once domain scores are calculated, a total performance score is calculated, combining domain scores based on the program year's applicable domain weights. For the FFY 2013 and 2014 programs, hospitals must be scored on all domains to be eligible for the program. For FFY 2015 and future program years, domain weights are reweighted proportionally when hospitals are not eligible for one or more domains.

\[
\text{Overall Domain Score} = \frac{\text{Sum of Final Points Earned on Each Scored Measure}}{\text{Maximum Possible Points on Each Scored Measure}}
\]

\[
\text{Proportionally Reweighted Domain Weight (FFY 2015+) = } \frac{\text{Original Weight of Domain}}{\text{Sum of Original Weights for all Scored Domains}}
\]

\[
\text{Total Performance Score (TPS) = } \left[ \text{Domain}_1 \text{ Score} \times \text{Domain}_1 \text{ Weight} + \text{Domain}_2 \text{ Score} \times \text{Domain}_2 \text{ Weight} \ldots \text{Domain}_N \text{ Score} \times \text{Domain}_N \text{ Weight} \right]
\]

**VBP Slope/Linear Function, Payout Percentage, Adjustment Factor, and Program Impact Calculation**

Once TPS scores are calculated for all eligible hospitals, the VBP slope is calculated such that all program contributions are paid out, making the program budget neutral nationally. The VBP slope/linear function is used to determine each hospitals payout percentage (the amount of their contribution to the VBP pool they receive back) as well as final adjustment factors, and impacts under the program.

\[
\text{VBP Linear Function (Payout Percentage) = } \left[ \text{Total Performance Score} \times \text{VBP Slope} \right]
\]

\[
\text{VBP Adjustment Factor = } 1 + \left( \text{Program Contribution Percentage} \times \text{Payout Percentage} \right) - \text{Program Contribution Percentage}
\]

\[
\text{Annual Program Impact = } \left[ \text{IPPS Base Operating Dollars} \times \text{VBP Adjustment Factor} - \text{IPPS Base Operating Dollars} \right]
\]
VBP Program Trends

- Increasing Program Exposure/Contributions
  - FFY 2015 = 1.5% of Medicare Base Operating Dollars
  - FFY 2016 = 1.75% of Medicare Base Operating Dollars
  - FFY 2017+ = 2.0% of Medicare Base Operating Dollars

- Increasing focus on outcomes/efficiency
  - New Measures
    - FFY 2015: PSI-90 composite; CLABSI; SPP_1 (Medicare Spending Per Beneficiary)
    - FFY 2016: CAUTI, Surgical Site Infection – Colon, Surgical Site Infection – Abdominal Hysterectomy
    - FFY 2017: MRSA, C. Difficile
  - Domain weighting
    - FFY 2015: Outcomes (30%), Efficiency (20%)
    - FFY 2016: Outcomes (40%), Efficiency (25%)
    - FFY 2017: Safety of Care + Clinical Care – Outcomes (45%); Efficiency (25%)
• Increasing complexity of program measures
  • Process of care/HCAHPs vs. Outcomes/Efficiency
  • Multiple levels of risk-adjustment
  • Medicare Spending per Beneficiary:
• Overlap with other quality based payment reform programs
  • HAC Reduction Program: PSI-90, CAUTI, CLABSI, Surgical Site Infection (SSI) Measures
  • Readmission Reduction Program: AMI, HF, PN

• Chasing a moving target
  • Measures/Domains
  • National Improvement Trends
  • Performance Standards
## Kentucky VBP Performance

### 2013 - 2015 Performance Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process of Care</td>
<td>39 of 50</td>
<td>29 of 50</td>
<td>23 of 50</td>
</tr>
<tr>
<td>Patient Experience of Care</td>
<td>16 of 50</td>
<td>17 of 50</td>
<td>22 of 50</td>
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<tr>
<td>Outcomes of Care</td>
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<td>11 of 50</td>
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<tr>
<td>Efficiency of Care</td>
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<tr>
<td>TPS</td>
<td>32 of 50</td>
<td>32 of 50</td>
<td>19 of 50</td>
</tr>
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### Payback Percent and Total Impact

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<tr>
<th>Year</th>
<th>Payback Percent</th>
<th>Total Impact</th>
</tr>
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<tbody>
<tr>
<td>2013</td>
<td>96%</td>
<td>($528,000)</td>
</tr>
<tr>
<td>2014</td>
<td>96%</td>
<td>($744,700)</td>
</tr>
<tr>
<td>2015</td>
<td>104%</td>
<td>$943,600</td>
</tr>
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</table>

### Kentucky Hospital Payback Percent Distribution (FFY 2015)

- **Break even**: Indicates the payback percent at which the total impact becomes zero.

---

**Note**: The data represents the performance and financial impact of Kentucky's Value-Based Purchasing (VBP) program from 2013 to 2015, highlighting improvements in process of care, patient experience, outcomes, and efficiency. The payback percent and total impact show a trend of increased efficiency and financial gain over the three years.
Readmission Reduction Program (RRP) Overview

- 1\textsuperscript{st} payment adjustment was Oct. 1, 2012 (FFY 2013)

- Penalizes hospitals for exceeding expected readmissions based on national performance levels
  - Punitive only

- Program expands over time by adding new conditions

- Capped penalty increases each year
  - 1\% in FFY 2013;
  - 2\% in FFY 2014;
  - 3\% in FFY 2015+
RRP Program Methodology

Excess Readmission Ratios by Condition

Excess Readmission Revenue by Condition

Total Excess Readmission Revenue (all conditions)

RRP Adjustment Factor

Program Impact

Excess Readmission Ratio (by condition) = \frac{\text{Predicted Readmission Rate}^1}{\text{Expected Readmission Rate}^2}

Excess Readmission Revenue (by condition) = \left[\text{Excess Readmission Ratio}^3 - 1\right] \times \text{Condition Specific Base Operating Revenue}

Total Excess Readmission Revenue = \sum \text{Excess Readmission Revenue by Condition}

Readmission Reduction Program (RRP) Adjustment Factor^5 = \left[1 - \left(\frac{\text{Total Excess Readmission Revenue}}{\text{Total Inpatient Operating Revenue}}\right)\right]

Annual Program Impact = [\text{IPPS Base Operating Dollars} \times \text{RRP Adjustment Factor} - \text{IPPS Base Operating Dollars}^1]
THA/TKA Example

AMI Excess Readmission Ratio = \frac{\text{Risk adjusted AMI Readmission Rate}}{\text{Expected AMI Readmission Rate}}

AMI Excess Readmission Ratio = \frac{17.4\%}{16.4\%} = 1.0610

AMI Excess Readmission Revenue = [\text{Excess AMI Ratio} - 1] \times \text{AMI Revenue}

AMI Excess Readmission Revenue = [1.0610 - 1] \times $100,000 = $6,097

THATKA Excess Readmission Ratio = \frac{\text{Risk adjusted THATKA Readmission Rate}}{\text{Expected THATKA Readmission Rate}}

THATKA Excess Readmission Ratio = \frac{6.4\%}{5.4\%} = 1.1852

THATKA Excess Readmission Revenue = [\text{Excess Ratio} - 1] \times \text{THATKA Revenue}

THATKA Excess Readmission Revenue = [1.1852 - 1] \times $100,000 = $18,518

- Low rates on THA/TKA = Less margin for error
- Higher payment penalties under THA/TKA than other conditions/procedures
RRP Program Trends

• Program Expansion over time:
RRP Program Trends

- Improving national performance levels
  - Must keep pace with the pack

- Updated performance periods

<table>
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<td>FFY 2015 Program</td>
<td>Performance Period (All Conditions)</td>
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<td>FFY 2016 Program</td>
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<td>FFY 2016 Program</td>
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<td>FFY 2017 Program</td>
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<td>FFY 2017 Program</td>
<td>Payment Adjustment</td>
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Kentucky RRP Performance

<table>
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<tr>
<th>Kentucky FFY 2015 Impact</th>
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<tbody>
<tr>
<td>AMI</td>
<td>($1,618,901)</td>
<td>15.1%</td>
</tr>
<tr>
<td>HF</td>
<td>($2,225,793)</td>
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<tr>
<td>PN</td>
<td>($2,328,393)</td>
<td>21.8%</td>
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<tr>
<td>COPD</td>
<td>($2,748,510)</td>
<td>25.7%</td>
</tr>
<tr>
<td>TK</td>
<td>($1,766,178)</td>
<td>16.5%</td>
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<tr>
<td>Total</td>
<td>($10,687,775)</td>
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Existing Conditions = $6,173,087
New Conditions = $4,514,688

<table>
<thead>
<tr>
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<th>FFY 2013</th>
<th>FFY 2014</th>
<th>FFY 2015</th>
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<td>Kentucky Impact</td>
<td>($5,962,700)</td>
<td>($5,200,500)</td>
<td>($10,687,600)</td>
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<tr>
<td>US Impact</td>
<td>($300,000,000)</td>
<td>($227,000,000)</td>
<td>($428,000,000)</td>
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</table>

FFY 2013
Kentucky Impact ($5,962,700) ($5,200,500) 13% ($10,687,600) -106%
US Impact ($300,000,000) ($227,000,000) 24% ($428,000,000) -89%
FFY 2014 FFY 2015
HAC Program Overview

• 1st payment adjustment was Oct. 1, 2014 (FFY 2015)

• Penalizes hospitals for having high rates of HACs

• HAC Rates compared to all other eligible hospitals

• 1% Penalty applied to hospitals in the top quartile of HAC rates (worst performing)
  – 25% of hospitals will always receive a penalty

• Penalty is in addition to existing HAC DRG policy
Performance is evaluated on a measure by measure basis
- 1 – 10 Scoring (1 = best; 10 = worst)
- Based on national deciles for all program eligible hospitals
- Improvement is not recognized

Measures are grouped into program domains
- Domain 1 (FFY 2015):
  - PSI-90 Composite Measure
- Domain 2 (FFY 2015):
  - CAUTI
  - CLABSI

PSI-90, CLABSI, and CAUTI also evaluated under the VBP Program
- PSI-90 & CLABSI beginning FFY 2015
- CAUTI beginning FFY 2016
Domain scores are combined to calculate a **Total HAC Score**

- Domains are not equally weighted
  - **Domain 1**: AHRQ Measures (35%)
  - **Domain 2**: CDC Measures (65%)

- Total HAC Score determines top quartile of hospitals who receive 1% payment penalty
HAC Program Trends

• Domain 2 set to expand over time (Measures & Domain Weight)
  – FFY 2016: Surgical Site Infection (SSI) measure
    • SSI: Colon
    • SSI: Abdominal Hysterectomy
  – FFY 2017: Methicillin-Resistant Staphylococcus Aureus (MRSA) and Clostridium difficile (C. difficile) infection measures

• National performance levels/deciles

• 1% penalty stays constant; penalty hospitals will vary
Estimated Kentucky HAC Summary

- **Statewide Dollars at Risk***: ($19,100,100)
- **Estimated Statewide Impact (FFY 2015)**: ($7,496,400)
- **Number of Eligible Hospitals**: 65
- **Number of Penalty Hospitals**: 10
- **Percent of Hospitals Receiving Penalty**: 15.4%

*Does not include outliers or low volume hospital payments

---

**Kentucky Hospital Total HAC Score Distribution**

- 75th Percentile HAC Score
Kentucky Hospital Association Quality Resources

- ‘Nuts and Bolts’ Analyses
  - VBP Impact Analysis (Quarterly)
  - P4P Measure Trends (Quarterly)
  - RRP Impact Analysis and Trends (Annual)
  - HAC Impact Analysis (Annual)
  - QBPR 1-Page Performance Overview (Annual)
  - Quality Reference Guides (Annual)

- Analysis Descriptions
  - Data Sources & Timeframes
  - Analysis Methodology
Other Resources

- **CMS’ Hospital Compare**
  - [http://www.medicare.gov/hospitalcompare/search.html](http://www.medicare.gov/hospitalcompare/search.html)

- **Quality Net Resources:**
  - **Preview Reports**
    - Timing varies by measure type/data source
    - 30 day review and corrections period
    - Provides additional measure detail (i.e. PSI-90, Readmission Rates)
  - **Program Specific reports**
    - VBP Baseline Measures Report
    - VBP Percentage Payment Summary Report
    - RRP Hospital Specific Report
    - HAC Reduction Program Hospital Specific Report
Key Takeaways

- This is not just collection/reporting; payment levels are at stake
- Hospitals are competing against each other
- Program targets move with national performance
- Complexity of quality data sources:
  - Patient records
  - Patient surveys
  - Claims/billing data
- Historical data will continue to drive these programs
- Readmissions penalties are additive (new conditions = ↑exposure)
- HACs will always have a top 25%
Moving Forward

• Know your data

• Examine opportunities to improve data and recommend improvements in methodologies

• Develop focused QI collaboratives in selected areas (e.g., reduce infections or medication safety or others)

• Statewide and national partnerships (e.g., with the Institute for Healthcare Improvement, the American Hospital Association, or others)

• Public education/awareness campaigns
Questions
Contact Information

Mason Forando
mforando@hanys.org
(518)431-7762

Mary Therriault
mtherria@hanys.org
(518) 431-7757