Innovations in Health Care Reform: Experience of Academic Health Centers

The Science of Quality
VBP, HAC, and More

October 28, 2011

Robert Panzer, MD
Chief Quality Officer
Associate VP, Patient Care Quality & Safety
Professor of Medicine, and of Community & Preventive Medicine

University of Rochester Medical Center
Topics

• How do we balance our priorities and work?
  – The P4P quality measurement Tsunami
  – Quality measures we respect and don’t respect

• Focusing attention
  – Board scorecard
  – Weekly Report of Harm
Topics

• How do we balance our priorities and work?
  – The P4P quality measurement Tsunami
  – Quality measures we respect and don’t respect

• Focusing attention
  – Board scorecard
  – Weekly Report of Harm
Linking Quality and Payment

- **Inpatient Pay for Reporting**
  - 27 Measures
  - Add Patient Satisfaction and 30-day Mortality Measures
  - Minus 2.0 percentage points
  - Minus 0.4 percentage points if not report

- **Expand Inpatient Pay for Reporting**
  - 21 Measures
  - Minus 2.0 percentage points

- **Expand Hospital Pay for Reporting**
  - 30 Measures
  - Minus 2.0 percentage points

- **2010 IPPS Proposed Quality Measures**
  - 72 Measures
  - Minus 2.0 percentage points

- **2011 IPPS Proposed Quality Measures**
  - 59 Additional Potential Measures
  - Minus 2.0 percentage points

- **Value-Based Purchasing Pending Congressional Approval**

**Timeline:**
- **2005**
- **2006**
- **2007**
- **2008**
- **2009**
- **2010**
- **2011**

- **Hospital Acquired Conditions**
  - 11 Conditions
  - Potential Payment Reductions
  - Minus 2.0 percentage points

- **Outpatient Pay for Reporting**
  - 7 Measures
  - Minus 2.0 percentage points

- **Candidate Hospital Acquired Conditions**
  - (6 additional conditions)
Increase Health Care “Value”

The Goal

Improve Quality

- Value-Based Purchasing
- Preventable Readmissions
- Hospital-Acquired Conditions
- Geographic Variation

Reduce Costs

- Medical Homes, Primary Care, Chronic Care Mgt.
- Bundled Payments
- Accountable Care Organizations

Information Technology

(Electronic Health Records, CPOE, TeleMedicine)

Tactics

Prerequisite

Source: HFMA-Modified
VBP Proposal – 3 Domains

Clinical Process Measures (Core Measures)
- Heart Attack
- Heart Failure
- Pneumonia
- Surgical Care Improvement Project

HCAHPS
- Patient Experience of Care

Outcomes
FFY 2014

FFY 2014 - Efficiency
FFY 2014 VBP Outcome Domain

30-Day Mortality Measures
- AMI
- Heart Failure
- Pneumonia

AHRQ Measures
- Mortality for selected medical conditions
- Complications/patient safety for selected indicators

Hospital-Acquired Conditions (HACs)
- Foreign object retained after surgery
- Air embolism
- Blood incompatibility
- Pressure ulcer stages III & IV
- Falls and trauma (includes: fracture, dislocation, intracranial injury, crushing injury, burn, electric shock)
- Vascular catheter-associated infection
- Catheter-associated urinary tract infection (UTI)
- Manifestations of poor glycemic control
CMS Pay for Performance in 2014

- Process (Core Measures) - 20%
- Outcomes (Mortality, HAC, PSI, IQ) – 30%
- Efficiency (Spending 3 days before to 30 days after stay) – 20%
- HCAHPS (Patient Experience) – 30%
Quality Measures – Non-Optional

- **CMS**
  - Core Measures (MI, HF, PN, SCIP)
  - Mortality (MI, HF, PN)
  - Readmissions (MI, HF, PN)
  - Hospital Acquired Conditions (HAC)
  - Patient Safety Indicators (PSI)
  - Inpatient Quality Indicators (IQ)

- **NYS**
  - NHSN Hospital Acquired Infections (CLABSI, SSI, C Diff, VAP, CAUTI)
  - Medicaid Potentially Preventable Negative Outcomes (PPNO)
  - Serious Adverse Events (SAE)

- **Private Payers**
Topics

• How do we balance our priorities and work?
  – The P4P quality measurement Tsunami
  – Quality measures we respect and don’t respect

• Focusing attention
  – Board scorecard
  – Weekly Report of Harm
• Case-mix and severity-adjusted outcomes using administrative (billing) data
  – Mortality, Readmissions, HAC, PSI,
• Outcomes and processes measures based on clinical data collection: CMS, JCAHO, AHA, AHA (Heart), Leapfrog, SCIP, NSQIP, NHSN
  – Mortality – Coronary artery bypass grafting, Percutaneous coronary intervention
  – Complications – HAI, etc
  – Process measures – e.g. Acute myocardial infarction, Congestive heart failure, Pneumonia, Surgical Infection Prevention
Millenson, Michael L. *Demanding Medical Excellence: Doctors and Accountability in the Information Age*. With a new Afterword. 469 p. 6 x 9 1997, 1999


*Demanding Medical Excellence* is a groundbreaking and accessible work that reveals how the information revolution is changing the way doctors make decisions. Michael Millenson, three-time Pulitzer Prize nominee as a health-care reporter for the *Chicago Tribune*, illustrates serious flaws in contemporary medical practice and shows ways to improve care and save tens of thousands of lives.

"If you read only one book this year, read *Demanding Medical Excellence*. It's that good, the revolution it describes is that important."—*Health Affairs*

"Millenson has done yeoman's work in amassing and understanding that avalanche of data that lies beneath most of the managed-care headlines. . . . What he finds is both important and well-explained: inconsistency, overlap, and attention to quality measures in medicare treatment cost more and are more dangerous than most cost-cutting measures. . . . [This book] elevates the healthcare debate to a new level and deserves a wide readership."—*Library Journal*

"An involving, human narrative explaining how we got to where we are today and what lies ahead."—Mark Taylor, *Philadelphia Inquirer*

"Read this book. It will entertain you, challenge, and strengthen your quest for better accountability in health care."—Alex R. Rodriguez, M.D., *American Journal of Medical Quality*

"Finally, a health-care book that doesn't wring its hands over the decline of medicine at the hands of money-grubbing corporations. . . . This is a readable account of what Millenson calls a 'quiet revolution' in health care, and his optimism makes for a refreshing change."—*Publishers Weekly*

"With meticulous detail, historical accuracy, and an uncommon understanding of the clinical field, Millenson documents our struggle to reach accountability."—Saty Setya-Marti, M.

http://www.press.uchicago.edu/cgi-bin/lfh.cgi/00/13363.ctl

6/25/2007
Public Reporting – Motivations?

- Proprietary systems
  - e.g. HealthGrades, Thomson, US News
- Payor systems
  - e.g. Excellus
- Purchaser systems
  - e.g. Leapfrog Group, NYS Niagara business coalition
- Regulatory systems
  - e.g. JCAHO
- Government systems
  - e.g. CMS, NYS
<table>
<thead>
<tr>
<th>MEASURE</th>
<th>DEFINITION</th>
<th>HEALTH GRDES</th>
<th>CMS HOSPITAL COMPARE</th>
<th>THE JOINT COMMISSION</th>
<th>THE LEAPFROG GROUP</th>
<th>NIAGARA COALITION</th>
<th>NYS DOH</th>
<th>SOLUCIENT</th>
<th>U.S. NEWS &amp; WORLD REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Methodology Transparency</td>
<td>Is the complete methodology available, enabling hospitals to replicate and analyze internally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Adjustment</td>
<td>Is a statistical model applied to the data that adjusts for significant differences in patient illness severity?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure or Process Measures</td>
<td>Are there measures that rate key process steps or contributions to the end result?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Measures</td>
<td>Do the data include measures of the end result of the patient care in addition to services provided?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most Current Data</td>
<td>Does the measure rely upon the most current data available?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measures Aligned with Recognized and Major Programs</td>
<td>Are the measures NQF-approved and/or aligned with federal CMS measures such as HQA*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Consistency</td>
<td>Were comparative data points gathered from the same sources and timeframes?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Review</td>
<td>Are hospitals allowed to review the report prior to release to correct potential unreported errors?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Final Grade**

|          | D | A | B | C | C | A | D | D |

**Key**

- **LOMEST**
- **HIGHEST**

*NQF: National Quality Forum  CMS: Centers for Medicare and Medicaid Services  HQA: Hospital Quality Alliance*
How Can the Agency for Healthcare Quality (AHRQ) Quality Indicators be used in Quality Assessment?

Case-mix and severity-adjusted outcome methods used by most public reporting groups
“The QIs were developed as a screening tool to provide an accessible and low-cost approach to identifying potential problems in quality of care for organizations that lack the resources to develop their own quality assessment program.

Because they were designed to use existing hospital discharge abstract data that are readily available in many States, additional data collection efforts are not required.”
“However, because of known limitations in discharge data, the QIs are a screen—they are not designed to be used as a tool to sanction organizations or to make purchasing decisions.

Furthermore, the Inpatient Quality Indicators and Prevention Quality Indicators should be used cautiously for public reporting with disclosure of hospital identities.”

Later: “The Patient Safety Indicators are not recommended for public reporting with disclosure of hospital identities.”
Topics

• How do we balance our priorities and work?
  – The P4P quality measurement Tsunami
  – Quality measures we respect and don’t respect

• Focusing attention
  – Board scorecard
  – Weekly Report of Harm
<table>
<thead>
<tr>
<th>Metric</th>
<th>Performance Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI - Hospital-Wide</td>
<td>HAC, VBP, NYS PPNO, UHC Indicator (PSI-7), Partnership for Patients</td>
</tr>
<tr>
<td>SSI - CABG</td>
<td>NYS PPNO</td>
</tr>
<tr>
<td>SSI - COLON</td>
<td></td>
</tr>
<tr>
<td>SSI - Orthopaedic Surgery</td>
<td>NYS PPNO</td>
</tr>
<tr>
<td>SSI - All clean surgeries</td>
<td>Partnership for Patients</td>
</tr>
<tr>
<td>VAP (adult ICU)</td>
<td>Partnership for Patients</td>
</tr>
<tr>
<td>C. diff (HA)</td>
<td></td>
</tr>
<tr>
<td>CAUTI</td>
<td>HAC, VBP, NYS PPNO, Partnership for Pts</td>
</tr>
<tr>
<td>Falls (w/severe injury)</td>
<td>HAC,NYS PPNO, Partnership for Patients</td>
</tr>
<tr>
<td>Injury from Other Trauma Note</td>
<td>NYS PPNO</td>
</tr>
<tr>
<td>PU (stage 3,4, DTI)</td>
<td>HAC, VBP, UHC Indicator (PSI-3), Partnership for Patients</td>
</tr>
<tr>
<td>Foreign Object Retained After Surgery</td>
<td>HAC and NYS PPNO</td>
</tr>
<tr>
<td>Air Embolism</td>
<td>HAC and NYS PPNO</td>
</tr>
<tr>
<td>Blood Incompatibility</td>
<td>HAC and NYS PPNO</td>
</tr>
<tr>
<td>Manifestations of Poor Glycemic Control</td>
<td>HAC and NYS PPNO</td>
</tr>
<tr>
<td>Iatrogenic Pneumothorax</td>
<td>VBP and UHC Indicator (PSI-6)</td>
</tr>
<tr>
<td>Post-operative DVT/PE</td>
<td>VBP and UHC Indicator (PSI-12)</td>
</tr>
<tr>
<td>DVT or PE (joint replacement)</td>
<td>NYS PPNO</td>
</tr>
<tr>
<td>Post-operative Hip Fracture</td>
<td>VBP (PSI-8)</td>
</tr>
<tr>
<td>Post-operative Sepsis</td>
<td>VBP (PSI-13)</td>
</tr>
<tr>
<td>Post-operative Wound Dehiscence</td>
<td>VBP (PSI-14)</td>
</tr>
<tr>
<td>Accidental Puncture or Laceration</td>
<td>VBP (PSI-15)</td>
</tr>
<tr>
<td>Post-op Hemorrhage and Hemotoma</td>
<td>UHC Indicator (PSI-9)</td>
</tr>
<tr>
<td>Post-operative Respiratory Failure</td>
<td>UHC Indicator (PSI-11)</td>
</tr>
<tr>
<td>Adverse Drug Events</td>
<td>Partnership for Patients</td>
</tr>
<tr>
<td>Obstetrical Adverse Events</td>
<td>Partnership for Patients</td>
</tr>
</tbody>
</table>
C Difficile Interventions

• Infection Prevention Measures:
  – Contact precautions (gloves and gown) and private room
  – Increase dedicated equipment
  – Hand hygiene, emphasizing soap and water

• Environmental Measures
  – Cleaning and disinfection of equipment and the environment

• Antibiotic Stewardship
The Central Line Insertion Intervention

• Five evidence-based procedures recommended by the CDC and identified as having the greatest effect on the rate of CLABSI and the lowest barriers to implementation
  – Hand washing
  – Full-barrier precautions
  – Clean the site with chlorhexidine
  – Avoid the femoral site if possible
  – Remove unnecessary catheters
Central Line Maintenance

• Multiple components involved in line maintenance require consistent application of best practices
  – Dressing changes
  – Site assessment and care
  – Documentation
  – Tubing changes
  – Lab draws
  – Accessing lines to administer medications
  – Administering multiple medications per port
  – Caring for lines placed in other clinical areas
Topics

- How do we balance our priorities and work?
  - The P4P quality measurement Tsunami
  - Quality measures we respect and don’t respect
- Focusing attention
  - Board scorecard
  - Weekly Report of Harm
Weekly Report of Harm

- Johns Hopkins Model – 2008
- Selling the idea – Fall 2008
- Mock report
- Gathering the data
- Start January 2009
- Expansion to affiliated community hospital
Weekly Report of Harm
(Selected Adverse Events)

For Week Ending: 07/03/2010
(for further information contact Dr. Panzer at Robert_Panzer@urmc.rochester.edu or at 273-4438)

Inpatient Report of Hospital Acquired Infections

Central Line Associated Blood Stream Infections, hospital acquired

<table>
<thead>
<tr>
<th>Week Ending Date</th>
<th>05/15</th>
<th>05/22</th>
<th>05/29</th>
<th>06/05</th>
<th>06/12</th>
<th>06/19</th>
<th>06/26</th>
<th>07/03</th>
<th>Total</th>
<th>Weeks since last</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac units (non-ICU)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ventilator Associated Pneumonia, hospital acquired

<table>
<thead>
<tr>
<th>Week Ending Date</th>
<th>05/15</th>
<th>05/22</th>
<th>05/29</th>
<th>06/05</th>
<th>06/12</th>
<th>06/19</th>
<th>06/26</th>
<th>07/03</th>
<th>Total</th>
<th>Weeks since last</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surgical Site Infections (by week of procedure)

<table>
<thead>
<tr>
<th>Month</th>
<th>05/15</th>
<th>05/22</th>
<th>05/29</th>
<th>06/05</th>
<th>06/12</th>
<th>06/19</th>
<th>06/26</th>
<th>07/03</th>
<th>Total</th>
<th>Weeks since last</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABG Leg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABG Sternotomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* indicate counts that have been updated since last report
Questions