In God We Trust, All Others Bring Data:
Using data, outcomes and documentation to accelerate the safety, quality and value journey

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Objectives

• Identify the strategic importance of improving outcomes
• Recognize how to use data to drive improvements
• Apply practices relating to quality and value in order to achieve better outcomes
The Future is Now: Value Based Purchasing

- Providers accepting financial risk
  - Bundled payments
  - Direct contracting with employers
  - Provider sponsored health plans
  - ACO
  - Payer contracts

- Quality metrics - with financial rewards and penalties
  - Readmissions
  - Core measures
  - Hospital Acquired Conditions
  - Contract specific (e.g. palliative care, STS, ACC)

How It Works

- Accuracy of data
- Use of Data in Performance Improvement
- Achieving and Sharing Results
Start with Accurate Information - Clinical Documentation Initiative

- Understand the relevance of accurate documentation
- Evaluated current state to understand opportunity (e.g. pneumonia, sepsis)
- Adopted a clinician based model to coach the care team on accuracy of documentation
- Worked with outside consultant to train clinicians (5 experienced nurses and 1 physician advisor)
- Embedded team in care units to provide real-time feedback
- Shared results with medical staff departments and individual providers
- Monitored impact on mortality ratio

Identifying Improvement Opportunities
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Case Study #3: Simple Pneumonia to Sepsis

- 88 y/o female admitted with dyspnea related to COPD exacerbation, also with healthcare associated pneumonia. Pt had a complicated post medical history of COPD, CAQ, Healthcare associated pneumonia, bladder ca, C-DRG, etc.
- COPD exacerbation treated with ceftriaxone, antibiotics, nusilap and placed on BiPap.
- Patient clinically worsened: developed new infiltrates in RLL. Minimal verbal response, confused, somnolent.
- Acute on chronic respiratory failure documented.

Query Opportunity

- There were 2 queries on this case. One for acute respiratory and one for sepsis:
  - Noted temp of 101.2, PR 107, RR 34 and PO2 of 92% on admission. WBC increased from 12.5 to 28.5 while hospitalized.
  - A query was placed for SIRS — non-infectious, Sepsis (please link organ dysfunction/Sepsis/DRG #1 localized infection; other and unable to determine.

- Response was: Patient met criteria for SIRS on admission

- Agree that there were 6/4 SIRS criteria, treated aggressively and that sepsis should have been followed up on as pt expired.

<table>
<thead>
<tr>
<th>DRG</th>
<th>Risk-DRG</th>
<th>Description</th>
<th>LOS</th>
<th>Exp. Mort. Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>150</td>
<td>Simple Pneumonia &amp; Pneumonia w/ MCC</td>
<td>8.9</td>
<td>1.86%</td>
</tr>
<tr>
<td>After</td>
<td>877</td>
<td>Septicemia Or Severe Sepsis w/o</td>
<td>5.1</td>
<td>36.22%</td>
</tr>
</tbody>
</table>

Observed: Expected Mortality Ratio
Case Mix Index

Case Mix Index

Net Revenue Per Case Growth

Net Patient Service Revenue per Adjusted Equivalent Admission
Data - Transparency and Deployment

- Standardized dashboards
- Included Patient Safety & Quality analysts in team reviews
- Data deployed through all levels of the organization
- Feedback and review of results
- Accountability for action
- Leadership and physician engagement
- Alignment with strategic plan
Physician Engagement

- Physician leadership
  - Structure: VPMA & 7 paid part-time Medical Directors
  - Empowerment: Physician leadership program with UW Business School
  - Support: Dyad partnership & Senior Leadership Council (Administrative and Medical Staff leaders)
  - Accountability

Physician Engagement

- Recognize data isn’t perfect- it never will be
- Be clear on how the data is used and who is reviewing
- The data is directional, not precise- look for gaps and trends in performance
- Ask questions of the involved caregivers to understand the data
- Commit to making the data better- and do it
EXAMPLES

- CLABSI rates
- Readmissions
  - CHF
    - OP, CHF clinic
    - inpatient triggers
    - home monitoring
    - home visit
    - scheduled clinic visit post discharge
  - PN
    - Similar strategy to CHF
    - Defined order set

Results - CAUTI

- Daily communication of days without CLABSI
- Multidisciplinary team focused on data review and improvement strategies
- Feedback to caregivers and physicians
- Standardized orders and practices to reduce variation
- Accountable executive
Results- Readmissions

- Multidisciplinary team including health plan, hospital and clinic
- In-process and outcome measures reviewed regularly
- CHF
  - OP, CHF clinic
  - inpatient triggers
  - home monitoring
  - home visit
  - scheduled clinic visit post discharge
- PN
  - Similar strategy to CHF
  - Defined order set
  - Accountable executive

The Future Really Is Now: Cross Continuum Collaboration

- Medical Value Program (MVP)- Using data from Health Plan, Hospitals & Clinic
  - Repatriation
    - Summit approach
    - Referral tracking
    - Outmigration trends
  - Joint replacement
    - Patient selection, education, preparation and perioperative approach
- Enhanced Recovery After Surgery (ERAS)
  - Beginning with Colorectal surgery
  - Patient selection, preparation and perioperative approach
- Emergency Services Utilization
  - Emergency Physician incentives
  - Hospitalist of the Day responsibilities
  - Claim data from Health Plan
The Journey Continues

- Regional deployment
- Outpatient opportunities
- Essential for accurate risk assessment for value based contracts (e.g. ACO, Medicare Advantage)

Conclusions

- Essential to report outcomes accurately
- Outcomes must be improved in the value-based world
- Use data to drive accuracy and improvements
- Data must be shared with stakeholders to drive improvement collaboratively
- It can be done
External Recognition of the Efforts

- St. Mary’s achieved 5-star rating by CMS based on outcome data, a designation offered to 9.5% of the hospitals in the country.
- Consumer Reports ranked St. Mary’s 4th in Wisconsin for patient safety. The Safety Score is a composite of five key measures of patient safety: readmissions, complications, communication, overuse of CT scans and infections.
- U.S. News & World Report ranked St. Mary’s in its Best Hospitals list. St. Mary’s was tied for 8th in Wisconsin.
- Press Ganey awarded St. Mary’s with the Beacon of Excellence for three years of consistently high patient care outcomes.
- Premier’s QUEST acknowledged St. Mary’s with a citation of merit for high value health care based on clinical and cost outcomes.

Questions?
Thank you