Conflict of Interest

Thomas Sequist, MD

Has no real or apparent conflicts of interest to report.
Agenda

• Quality improvement framework

• Challenges with existing quality measurement system

• Partners Healthcare approach to measurement and improvement
Learning Objectives

• Assess the value and shortcomings of current quality metrics

• Evaluate new criteria to use to develop clinically-meaningful metrics

• Identify best practices for deploying new metrics to achieve population health goals

• Recognize the financial, efficiency and patient outcome benefits of precise, real-time insights
Our Health Care Ecosystem

- Ambulatory
- Hospital
- Home
- Post-Acute
Our Health Care Ecosystem
The Triple Aim Plus One

- Population Health
- Clinician Satisfaction
- Experience of Care
- Per Capita Cost
The Triple Aim Plus One

Model based on IHI: http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/MeasuresResults.aspx
To Improve, We Must Measure

How is Quality Measurement Currently Used?

1. To inform clinical care (quality improvement)
2. To ensure meeting a minimum standard (regulatory)
3. To inform decision making (transparency)
4. To incentivize behaviors (pay for performance and transparency)
Two Important Findings

Physician Practices Perceptions of Quality Measures

- Measures represent quality of care (% moderately or very representative)
- Extent of group use of quality scores to focus QI activities (% frequently or very frequently used)

Five Themes on Qualitative Review

- Burden of measurement on small practices
- Need for unifying measure set
- Need for specialty-specific measures
- Need for measures that better represent quality
- Need to easily and accurately extract data from EHRs

“Evidence mount[s] that even superb and motivated professionals [have] come to believe that the boatloads of measures, and the incentives to “look good,” [have] led them to turn away from the essence of their work.”

– Robert M. Wachter, Interim Chairman, UCSF Dept. of Medicine

The Big Challenges We Face Today

• Proliferation of **process measures** in hospital and primary care

• Yet large gaps persist in describing care
  - Ambulatory specialty care
  - Ambulatory safety
  - Patient reported outcomes
  - Transitions in care
  - Post acute care

• Measurement does not lead to improvement
  - Goal of improvement is not linked to measurement process
  - Measurement becomes a burden, or worse, a distraction
  - “If I perform better, are my patients better off?” (clinician loss of faith)
# One Example: CMS Incentive Programs

## Value Based Purchasing

**Patient Experience**
- Overall hospital rating
- Communication with nurses
- Communication with doctors
- Communication about medications
- Discharge information
- Responsiveness of staff
- Pain management
- Cleanliness and quietness

**Efficiency**
- Medicare Spend Per Beneficiary

**Effectiveness**
- AMI thrombolytic therapy
- AMI mortality
- CHF mortality
- Pneumonia mortality
- Influenza immunization
- Elective delivery prior to 39 weeks

## Hospital Readmissions Reduction Program

30-day readmission rates for:
- Acute myocardial infarction
- Congestive heart failure
- Pneumonia
- Elective total knee/hip arthroplasty
- Chronic obstructive pulmonary disease
- Coronary artery bypass graft

## Safety
- PSI 90 (composite measure)
- Central Line Associated Bloodstream Infections (CLABSI)
- Catheter Associated Urinary Tract Infections (CAUTI)
- Surgical Site Infection (SSI)
- Methicillin Resistant Staph Aureus (MRSA) bacteremia
- Clostridium Difficile (C. Diff) infection

## HAC Reduction Program
Why So Much Hospital and Primary Care Focus?
Translating Better Measurement to Better Care

- More clinically relevant measures
- Increased buy-in from clinicians
- Increased investment in tools and effort
- Improve on clinically relevant measures

Better Care
Translating Better Measurement to Better Care

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Better Care
Defining Successful Measurement

**Unifying**
- Buy in from stakeholders that this represents core mission

**Motivating**
- Poor performance makes stakeholders concerned

**Available**
- Metrics accessible and not excessively costly to gather

**Accurate**
- Correctly conveys the delivery of clinical care and outcomes

**Actionable**
- Metrics easily used to guide discussion and initiate change

**Balanced and Parsimonious**
- Limited number of metrics convey what is needed to know
Ambulatory Quality Measurement Road Map

2013 State: 100% of Quality metrics are claims-based HEDIS measures

2018 State: All Quality Metrics EHR-based clinically accurate measures

HEDIS for Primary Care
Claims-based
EHR-based
New Quality Metrics for Primary Care

New Quality Metrics for Specialty Care

1/3 of Quality metrics are Primary Care based
2/3 of Quality metrics are Specialty Care based
<table>
<thead>
<tr>
<th>Measure of Effective Preventive Medicine</th>
<th>Prevention Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure of Effective Chronic Disease Care</td>
<td>Cardiac Risk Reduction</td>
</tr>
<tr>
<td>Measure of Efficient Acute Care</td>
<td>Accurate Antibiotic Overuse Measure</td>
</tr>
<tr>
<td>Measure of Safety</td>
<td>Lung nodule follow-up</td>
</tr>
</tbody>
</table>
Predictive modeling allows us to determine whether our efforts will yield benefits.

In this example, smoking cessation activities would reduce this population’s 10-year risk of death or MI by 1%.
Safety Registries

From this….  

Test Results
- Lung nodules
- Abnormal GFR
- Abnormal PSA
- Positive FOBT

Referrals
- Colonoscopy
- Exercise Test
- Mammogram
- Oncology

Medications
- Annual labs
- Elderly meds
- Opioids
- Adherence

To this….  

"Your computer has every alert, alarm and reminder possible...enough with the sticky notes!!!"
PROMs: Total Knee Replacement: Relief from Knee Pain

Our patients report, on average, little to no knee pain one year after knee replacement.

This graph measures the severity of your knee pain before a total knee replacement and after a total knee replacement.

A higher score means you feel better and have less pain. Most patients see a dramatic increase in their scores from less than 40 out of 100 before surgery up to almost 90 out of 100 one year after surgery, representing very little pain.

The vertical line at time 0 represents the time of surgery.

Patients usually have severe knee pain before surgery.

Knee pain improves rapidly over the first few months after surgery ...

... and continues to improve over the course of a year.

After one year, many of our patients are nearly pain free.
Prostatectomy PROMs: Multiple Dimensions

- Bowel Symptoms
- Vitality
- "Hormonal" Symptoms
- Incontinence
- Sexual Dysfunction
- Urinary Irritation
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- Leadership engagement
- Transparency
- Policy and Incentives
- Training and education
- EHR and electronic tools
- Process improvement
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PHS Quality Transparency Website

Welcome to the Partners HealthCare Quality and Safety website. Here you will find performance reports on how our hospitals and primary care providers are delivering care compared to national benchmarks and industry standards. Partners HealthCare clinicians work to continuously improve the quality, safety, and efficiency of patient care. For each area of performance, we talk about what we’re doing to improve in that area.

Partners has made a commitment to quality and safety since our founding in 1994—we invite you to learn more about our efforts:

> Our Commitment to Quality and Safety

Committed to Quality

Partners HealthCare sees its commitment to quality through the lens of each patient’s experience with the health care system. We strive to deliver patient-focused care, avoid unnecessary costs for our patients, leverage technology and best practices to ensure patient safety, and measure our performance on key metrics to continuously improve.

Understanding Quality of Care

What does it mean to receive high quality health care? At Partners hospitals, and throughout our system, it means that we are providing care that is both safe and effective, but also appropriate for each patient. Learn more about how we define high quality health care.

Performance Reports

View our performance reports in greater detail to learn how Partners providers perform on specific measures of health care quality. Our most recent updates include refreshed Prevention and Chronic Care measures and new Primary Care Patient Experience measures. We plan to update many other measures early in 2018.

Data and screenshots available at www.partners.org
Leg pain is a symptom caused by spinal stenosis and it is quickly, dramatically, and sustainably relieved for most of our patients.

**Laminectomy for Spinal Stenosis: Leg Pain**

- **Score Change (Scale):**
  - 0: No pain
  - 10: Severe pain

- **Days From Procedure (Insufficient Data Collected after 100 Days):**
  - -30 to 0: Before surgery
  - 0 to 120: Days after surgery

**Summary:** A higher score means more leg pain. This is a standard pain scale from 0-10, where 0 is no pain and 10 is the most pain. Most patients see a dramatic decrease in leg pain very quickly after surgery, often because the nerves from their spine are no longer being compressed. Once it is gone, the pain stays away, even improving a bit more by 6 months after surgery. The vertical line represents the time of surgery.
Other Transparency Initiatives

Patient Experience Surveys

Patient Notes
Translating Better Measurement to Better Care

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- Transparency
- **Policy and Incentives**
- Training and education
- EHR and electronic tools
- Process improvement
A Word About Policies
A Word About Policies
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- Process improvement
The Partners’ Clinical Process Improvement Leadership Program (CPIP) facilitates the development of skills and competencies needed by senior leaders, middle management, and front-line health professionals across Partners HealthCare to actively lead and participate in clinical process improvement efforts.

The course consists of three installments of teaching with one final day of project presentations over a four month period. It features diverse teaching methods, including seminars, expert panels, case examples and small group sessions.

Participants apply and attend the course as interdisciplinary team leaders, charged with addressing a clinical problem in their environment. Completing a project during the course allows participants to translate theory into action.

Teams convene a larger interdisciplinary team, attempt to understand the problem with diagnostic data, identify a measure, test interventions, and measure whether or not a change was made.

Data was abstracted from 262 final project presentations completed by 566 attendees of 14 courses from March 2010 through January 2016. (Figure 1)

Clinical Process Improvement Leadership Program

CONCLUSIONS

- Project success improves with more than one role group.
- All teams are using diagnostic data, variety makes associations with success difficult.
- Stronger interventions did not impact success rates.
- Increasing number of interventions did improve success rates.
- Focus on one IOM aim appears to have success more than multiple areas of focus.
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- Process improvement
Data Analytics Tools

- Allow analysis of practice or individual MD performance
- Facilitates benchmarking
Successful Quality Improvement

% Screened or Achieving Target

- CRC Screening
- Breast Ca Screening
- Cervical Ca Screening
- HTN-BP Control
- CVD-Lipid Control
- DM-Lipid Control
- DM-BP Control

Sep-16 vs Oct-17
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- Process improvement
30 to 40 focused leadership quality collaboratives

Annual large system conferences
A Selection of Recent Work….

- Managing acute stroke
- Improving care for mechanically ventilated patients
- Chest pain care in the emergency department
- Orthopedic hip and knee replacement and post-acute care
- Use of opioids post-cesarean section
- Collecting patient safety events related to Epic
- Measuring social risk factors and health equity
- Innovative approaches to assessing patient experiences
- Improving care for chronic kidney disease
• How do we engage external stakeholders in a new measurement system (payers, regulatory agencies)?

• How do we ensure that our measures are valid and reliable?

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