Quality and Performance Improvement

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Crossing The Quality Chasm:
A New Health System For The 21st Century

The U.S. health care delivery system does not provide consistent, high-quality medical care to all people. Americans should be able to count on receiving care that meets their needs and is based on the best scientific knowledge—yet there is strong evidence that this frequently is not the case. Health care harms patients too frequently and routinely fails to deliver its potential benefits. Indeed, between the health care that we now have and the health care that we could have lies not just a gap, but a chasm.


Institute of Medicine Quality Chasm

- Preventing Medication Errors: Quality Chasm Series (2007)
- Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series (2006)
- Priority Areas for National Action: Transforming Health Care Quality (2003)
- Health Professions Education: A Bridge to Quality (2003)
- Fostering Rapid Advancement in Health Care: Learning from System Demonstrations (2002)
- Crossing the Quality Chasm: A New Health System for the 21st Century (2001)
- To Err Is Human: Building a Safer Health System (2000)
Defining Quality

How would you define quality in health care?


Value Equation

Value = Quality

Cost
Patient Protection and Affordable Care Act

Enacted to:
• Increase the quality and affordability of health insurance
• Lower the uninsured rate by expanding public and private insurance coverage
• Reduce the costs of healthcare for individuals and the government

Pressuring Quality: Agencies

- Institute of Medicine (IOM)
- Agency for Healthcare Research and Quality (AHRQ)
- National Institutes of Health (NIH)
- National Quality Forum (NQF)
- National Database of Nursing Quality Indicators (NDNQI)
- Centers for Disease Control and Prevention (CDC)
- Division of Laboratory Sciences and Standards (DLSS)
- American Society of Health System Pharmacists (ASHP)
- Institute for Safe Medication Practices (ISMP)
- The Joint Commission (TJC)
- Centers for Medicare and Medicaid Services (CMS)

Pressures
Pressuring Quality: Demanding Value

Pressuring Quality: Demanding Value

The Cost of a Long Life

Pressuring Quality: Programs

Centers for Medicare and Medicaid Services (CMS)
- Partnership for Patients Program (HIN 2.0)
- Healthcare Innovations Grants
- Value Based Purchasing (VBP)
- Hospital Value-Based Purchasing
- Hospital Readmissions Reduction Program
- Hospital Acquired Condition Penalty
- Medicare Electronic Health Record Incentive Program (Meaningful Use)
- Transforming Clinical Practices Initiative Physician Quality Reporting System (PQRS) & Group Practice Reporting Option
- Value Based Modifier Program
Quality and Cost for Value Based Modifier Program

Ambulatory Care-Sensitive Condition (ACSC) Composite measures:
- CMS-1: Acute Condition Composite
  - Bacterial Pneumonia (PQI #11)
  - Urinary Tract Infection (PQI #12)
- CMS-2: Chronic Conditions Composite
  - Short Term Complications from Diabetes (PQI #15)
  - Uncontrolled Diabetes (PQI #16)
  - Lower Extremity Amputation among Patients with Diabetes (PQI #20)
  - Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults (PQI #21)
  - Heart Failure (PQI #4)

The 30-day All-Cause Hospital Readmission measure

Value Based Modifier:

Table 1: Distribution Using 2013 Data of Quality and Cost Tiers for 106 Physician Groups with 100 or More Eligible Professionals that Electrolyte Tolerating and had Sufficient Data to Calculate a Cost and Quality Composite
Pressuring Quality: Insurers

Measuring Quality: NQF
The National Quality Forum (NQF)
- Over 600 NQF endorsed measures
- Over 250 of them related to medication use
Pressuring Quality: Reporting

Compare Hospitals

<table>
<thead>
<tr>
<th>Hospital</th>
<th>General Information</th>
<th>Survey of patient satisfaction</th>
<th>Length of stay</th>
<th>Readmission rate</th>
<th>Use of medical imaging</th>
<th>Medicare penalty</th>
<th>Location of hospital/patient</th>
</tr>
</thead>
</table>

Comparison

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Essential Health Plan</th>
<th>Sanford Health</th>
<th>Mayo Clinic</th>
<th>North Dakota Avera</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
</tbody>
</table>
Pressuring Quality: Reporting

Formative Assessment
- Improve performance or quality

Summative Evaluation
- Determine if meeting or not meeting a standard
Pressuring Quality: Accreditation

Benefits of accreditation

- Helps organize and strengthen patient safety efforts.
- Strengthens community confidence in the quality and safety of care, treatment and services.
- Improves risk management and risk reduction and may reduce liability insurance costs.
- Provides a customized, intensive review useful for directing improvements.
- Enhances staff recruitment and development.
- Provides deeming authority for Medicare certification.
- Recognized by insurers and other third parties.
- Provides a framework for organizational structure and management.
- May fulfill regulatory requirements in select states.
- Provides practical tools to strengthen or maintain performance excellence.

Pressuring Quality: Accreditation

Healthcare Facilities Accreditation Program (HFAP)
The Joint Commission (TJC)
National Committee for Quality Assurance (NCQA)
Community Health Accreditation Program (CHAP)
Accreditation Commission for Health Care (ACHC)
Healthcare Quality Association on Accreditation (HQAA)
Accreditation Association for Ambulatory Health Care (AAAHC)
Pressuring Quality: Accreditation

- The Joint Commission
- Achieve the Gold Seal

Pressuring Quality: Recognition

- Certification
  - Joint Commission Specialty Certifications
  - Baldrige Award
  - Leapfrog
  - Planetree
  - Magnet
  - American Heart Association: Get with the Guidelines
  - Medical Home Certifications
The Magnet Recognition Program® recognizes healthcare organizations for quality patient care, nursing excellence and innovations in professional nursing practice. Consumers rely on Magnet designation as the ultimate credential for high quality nursing. Developed by the American Nurses Credentialing Center (ANCC), Magnet is the leading source of successful nursing practices and strategies worldwide.
Pressuring Quality: Recognition

The Malcolm Baldrige National Quality Improvement Act of 1987: Public Law 100-107

The nation’s public-private partnership dedicated to performance excellence.

- Raises awareness about the importance of performance excellence in driving the U.S. and global economy
- Provides organizational assessment tools and criteria
- Educates leaders in businesses, schools, health care organizations, government and nonprofit agencies about the practices of best-in-class organizations
- Recognizes national role models and honors them with the only Presidential Award for performance excellence

Pressuring Quality: Recognition

Congratulations to The 2013 Leapfrog Top Hospitals!

Click here for the list of Top Hospitals
Scientific Method

1. Ask a question
2. Develop a hypothesis
3. Test the hypothesis
4. Analyze data
5. Draw conclusions
6. Evaluate

Nursing Process

1. Assessment
2. Planning
3. Implementation
4. Evaluation
Improving Quality: Process

- Define the Problem: What is the problem and why is it happening?
- Measure: Did our plan work?
- Develop a Plan: What are we going to do?
- Implement Plan: Carry out the intervention.

Improving Quality: 3 Methods

- Six Sigma
- Lean
- PDSA

Improving Quality: Six Sigma

- Define: Define problem in detail
- Measure: Measure a “defect”. Turn into “defects per million” – Sigma Level
- Analyze: In-depth analysis using process measures, flow charts, defect analysis to determine under what conditions defects occur
- Improve: Define and test changes aimed at reducing defects
- Control: What steps will you take to maintain performance
Improving Quality: Six Sigma

- 3.4 defects per million opportunities
- 99.99966% defect-free

www.mathisfun.com

Improving Quality: Reduce Variation

- Changes in standard deviation

Improving Quality: Move Avg.
Improving Quality: Lean

- **Identify Value**
  - Define value from the perspective of the final customer
- **Map the Value Stream**
  - Identify all specific actions required to bring a specific product through a process.
- **Eliminate Waste**
  - Categorize waste in the Current State, and eliminate it!
- **Establish Flow**
  - Eliminate barriers and improve lead-time.
- **Enable Pull**
  - Let the customer pull products as needed, eliminating the need for a sales forecast.
- **Pursue Perfection**
  - Reducing effort, time, space, cost, and mistakes takes continuous effort.

Improving Quality: PDSA

- **Act**
  - Adopt the change, abandon it or run through the cycle again.
- **Plan**
  - What do we want to achieve?
- **Study**
  - Examine the process. What did we learn? What went wrong?
- **Do**
  - Carry out the change or test aimed at improvement.

Improving Quality: IHI

- What do we want to achieve?
- What changes will drive us forward?
- How will we measure our progress?
- Improve? Increase? Reduce? Decrease?
- Interventions?
- Outcome measures? Process measures?
Improving Quality: PDSA

Correct dose is given at the right time 100%

Improve dosing and timing of antibiotic administration

Sanford Improvement

Sanford Improvement is Patient Centered Leadership Directed and Data Driven.

It calls us to Apply Improvement Principles Intentionally Manage Projects Skillfully Choose Tools Wisely and Hardwire Accountability Consistently.

Teen Births

Figure 1: Birth rates per 1,000 females ages 15-19, by race/ethnicity, 1999-2013

US Department of Health and Human Services Office of Adolescent Health
High School Drop Outs

Source: National Center for Education Statistics

Alcohol Related Fatalities

Source: Alcohol Alert

Smoking

Source: CDC/NCHS Health, United States, 2015

Patrick Schultz
Presenter
“Critical Access Hospitals (CAHs), Rural Health Clinics (RHCs) and Sole Community Hospitals (SCHs) are the safety net providers for rural North Dakota. They are the cornerstone for health care services in rural and remote communities, and without them, many rural Americans would not have access to medical care.”

- Rural population: 354,087
- CAHs: 36
- RHCs: 57
- SCHs: 2


North Dakota’s Critical Access Hospitals identified several different health needs through the 2011-2013 Community Health Needs Assessment (CHNA) process. Many individual communities selected needs similar to each other’s as the most significant for their community. The top needs across North Dakota were:

- Healthcare workforce shortage
- Obesity and physical inactivity
- Mental health, including substance abuse

https://ruralhealth.und.edu/projects/community-health-needs-assessment

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