Quality Improvement in Physical Therapy: Why, How, When and Where

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Course Objectives

1. WHY: Describe the role of quality improvement in healthcare.

2. WHAT: Understand Mayo Clinic's chosen quality improvement framework.

3. WHEN: Understand Mayo Clinic's current program for educating staff in quality improvement.

4. WHERE/HOW: Recognize appropriate quality improvement tools that might be applied to appropriate clinical issues.
Why?

• It’s the right thing to do

• Our current model is financially unsustainable
Why?

• It’s the right thing to do

• Our current model is financially unsustainable

• We don’t stack up
Why?

Enlightening Waste in US Health Care

The need is urgent to bring US health care costs into a sustainable range for both public and private payers. Currently, programs to contain costs cost, such as reductions in payment levels, benefit structures, and eligibility. A less harmful strategy would reduce waste, not value-added care. The opportunity is immense. In just 6 categories of waste—redudent, failure of care coordination, lack of utilization of contraceptive means, inferior quality, and costs and coverage—the potential economic dislocations, however, are severe and require mitigation through cost reduction strategies.

David M. Berlin, MD, MPH

What about us?

- Post-Acute care (PAC)
  
  *Physical therapy is a significant expense*

- PAC spending also increasing

Source: CMS, Office of the Actuary
Post-Acute Care Case Study - November 11, 2011
Why?

Changing Focus

- Greater transparency
  - Mandatory state and national quality metrics
- Outcomes-based payments
  - “Never events”
- Bundled payments
  - Managing the continuum

Why?

- Growing number of organizations

Logos:
- Intermountain Healthcare
- ASQ
- APTA
Why?

Mayo Clinic Job Descriptions - Two jobs

1) Doing the work
2) Improving how the work gets done

Why?

High Quality - Doing the right thing

• What is it?
  • Evidence-based practice
  • Patient-centered care
  • Regulatory standards

• Where is it?
  • Benchmarking
How?

• Close the gap

Opportunities to improve are identified when there is a gap between what you know and how you practice.

How?

• Understanding of QI
  • Customer-focused
  • Process oriented
  • Data driven

<table>
<thead>
<tr>
<th>QA</th>
<th>QI</th>
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<tbody>
<tr>
<td>Monitor and correct</td>
<td>Process/Systems are in place that will affect performance</td>
</tr>
<tr>
<td>performance outliers</td>
<td>today.</td>
</tr>
<tr>
<td>Focused on organizational</td>
<td>Focused on outcomes and</td>
</tr>
<tr>
<td>mistakes</td>
<td>processes of organizational services.</td>
</tr>
<tr>
<td>Problem prone areas</td>
<td>High-risk, high-volume, problem prone areas.</td>
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<tr>
<td>Retrospective data</td>
<td>Concurrent data collection</td>
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<tr>
<td>collection</td>
<td>Proactive risk reduction</td>
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How?

- Mayo Value Creation System
  - Coherent approach to delivering a single high-value practice
  - It is designed to bolster trust and improve affordability for patients.

**Mayo Clinic Value Equation**

\[
\text{Value} = \frac{\text{Quality}}{\text{Cost}} \quad \text{(Outcomes, Safety, Service)}
\]

How?

Mayo’s chosen quality framework

- DMAIC
  - Define
  - Measure
  - Analyze
  - Improve
  - Control

- Assists in selecting tools to use for improvement
When?

- Employment entry
  - Common QI language
- Progressive development
- Levels
- Requirements

When?

- Mayo Quality Fellows Vision
  - Recognize and award achievement for QI competency
  - Build capacity for QI
  - Transform to culture of high value health care
  - Multiple levels
Mayo Quality Fellows Program

- Certification program
- Four levels
  - Bronze
  - Silver
  - Gold
  - Diamond
- Required scholarly activity increases with movement through levels dramatically

Mayo Quality Fellows Program

- Purpose
  - To provide a fellowship program to learn, develop and apply new knowledge for continuous improvement
- Audience
  - Physicians, nurses, allied health & administrative professionals
- Outcome
  - Increased knowledge, skills and tools needed to design, improve, implement and evaluate sustainable quality improvement
When?

- Mayo Quality Fellows - Guiding Principles
  - Engage engineers, scientists, physicians, nurses, students, administrators & allied staff
  - Recognize team and individual competency
  - Competency based curriculum with **knowledge, skills & attitudes/behaviors** to improve health care value
  - Apply engineering and improvement methods with a healthcare focus
  - Inter-professional, team-based education
  - Flexibility for alternate pathways to show competency

Where?

- Forms of Waste
  - Waiting
  - Inventory
  - Overproduction
  - Motion (movement)
  - Transportation (goods)
  - Defects
  - Over processing
  - Mis-utilization of skills
  - Defects
### Where?

<table>
<thead>
<tr>
<th>Define</th>
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<th>Control</th>
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</table>
| • Charter  
• SIPOC-R  
• Stakeholder Analysis | • Visual Stream Mapping  
• Flow Charts - Current State  
• Observations  
• Surveys  
• Interviews | • Fishbone diagram  
• Affinity Diagrams  
• 5 Whys  
• Brainstorming  
• Data Visualization (Pareto, histograms, etc.) | • PDSA (Plan, Do, Study, Act)  
• Flow Charts - Future State  
• 5S | • Data Visualization (Control charts, etc) |

### Common Pitfalls

- No charter, or charter not specific enough
- Problem not fully defined  
  - *Jumping to solutions*
- Problem too big
- Scope creep
- Communication breakdowns
- Lack of control  
  - *Process regresses*
Project Example - *Outpatient*

Project Example - *Inpatient*
Group Discussion

• What are your experiences with quality improvement?

• What has been successful? Not so successful?

Take Home Message

• Where are your gaps?
• Education – Tap your resources
• Start small, but make sure to start!
Thank you!

Questions & Discussion

Bibliography


- Snee R. 2007 DMAIC as a framework.