# MAYO CLINIC

## 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.

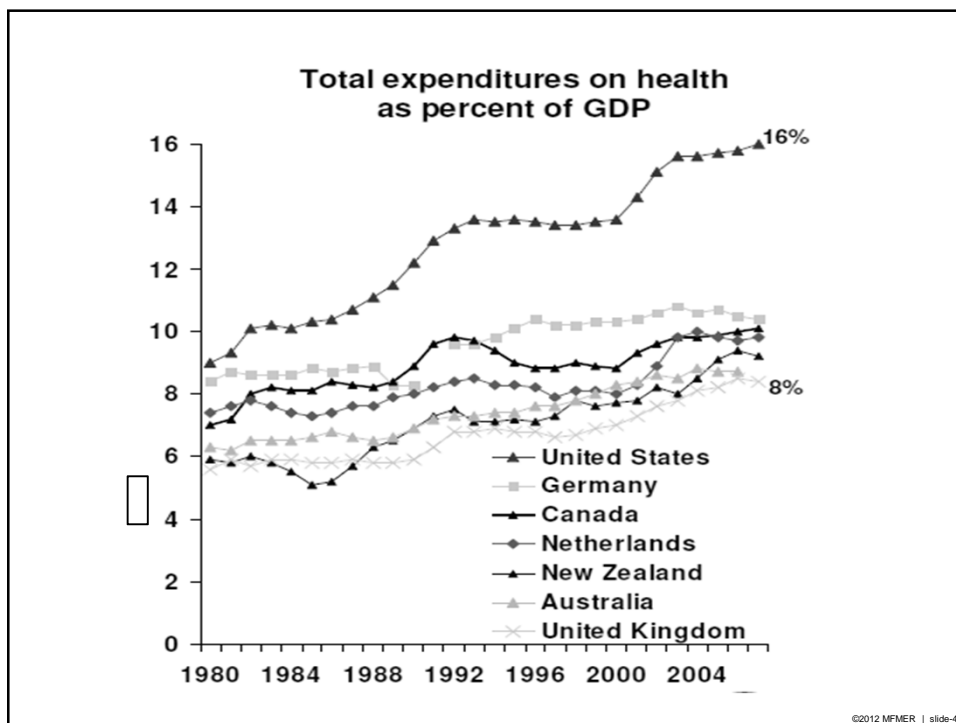4.  WHERE/HOW:  Recognize appropriate quality improvement tools that might be applied to appropriate clinical issues.

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Why?

• It's the right thing to do
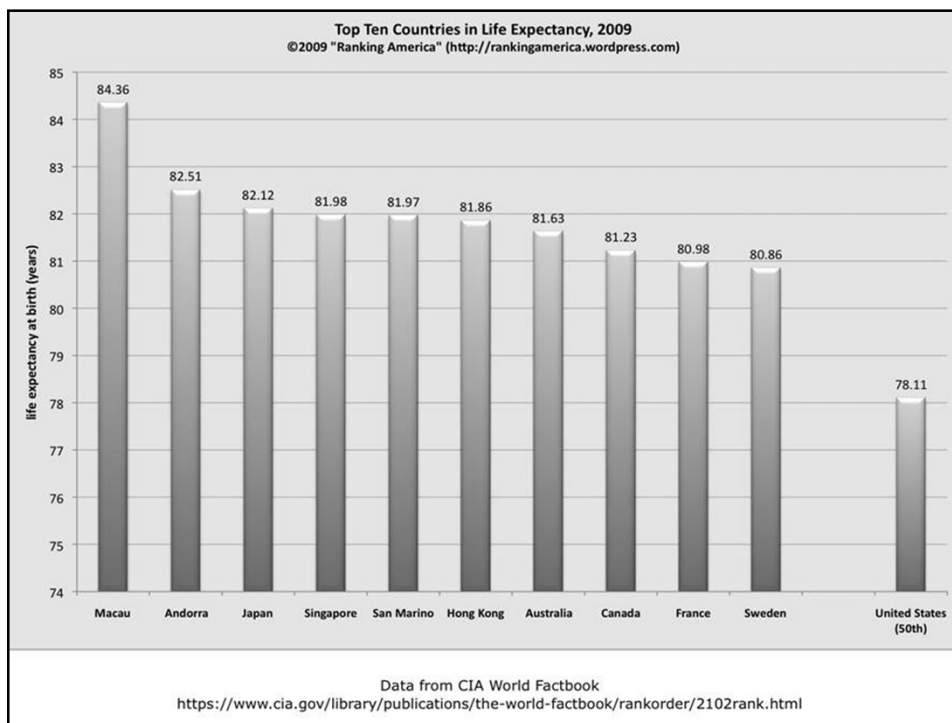
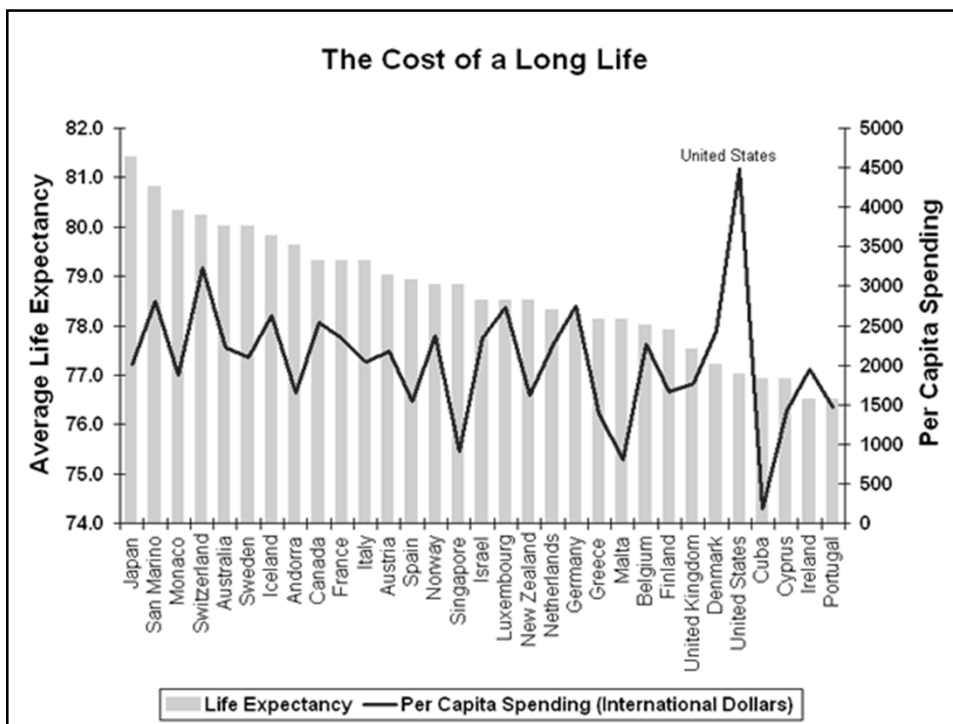• Our current model is financially unsustainable

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Total expenditures on health as percent of GDP

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## Why?

• It's the right thing to do

• Our current model is financially unsustainable

• We don't stack up

**Top Ten Countries in Life Expectancy, 2009**
©2009 "Ranking America" (http://rankingamerica.wordpress.com)

Data from CIA World Factbook
https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html

## The Cost of a Long Life

Average Life Expectancy (left axis, 74.0–82.0) — Per Capita Spending (right axis, 0–5000)

Countries (left to right): Japan, San Marino, Monaco, Switzerland, Australia, Sweden, Iceland, Andorra, Canada, France, Italy, Austria, Spain, Norway, Singapore, Israel, Luxembourg, New Zealand, Netherlands, Germany, Greece, Malta, Belgium, Finland, United Kingdom, Denmark, United States, Cuba, Cyprus, Ireland, Portugal

United States

Life Expectancy ⬛ ▬ Per Capita Spending (International Dollars)

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# Why?

**ONLINE FIRST**

## Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

NO MATTER HOW POLARIZED politics in the United States have become, nearly everyone agrees that health care costs are unsustainable. At almost 18% of the gross domestic product (GDP) in 2011, headed for 20% by 2020,[1,2] the nation's increasing health care expenditures reduce the resources available for other worthy government programs, erode wages, and undermine the competitiveness of US industry. Although Medicare and Medicaid are often in the limelight, the health care cost problem affects the private sector just as much as the public sector. Both need

The need is urgent to bring US health care costs into a sustainable range for both public and private payers. Commonly, programs to contain costs use cuts, 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—overtreatment, failures of care coordination, failures in execution of care processes, administrative complexity, pricing failures, and fraud and abuse—the sum of the lowest available estimates exceeds 20% of total health care expenditures. The actual total may be far greater. The savings potentially achievable from systematic, comprehensive, and cooperative pursuit of even a fractional reduction in waste are far higher than from more direct and blunter cuts in care and coverage. The potential economic dislocations, however, are severe and require mitigation through careful transition strategies.

*JAMA. 2012;307(14):1513-1516*
Published online March 14, 2012. doi:10.1001/jama.2012.362

TO ERR IS HUMAN
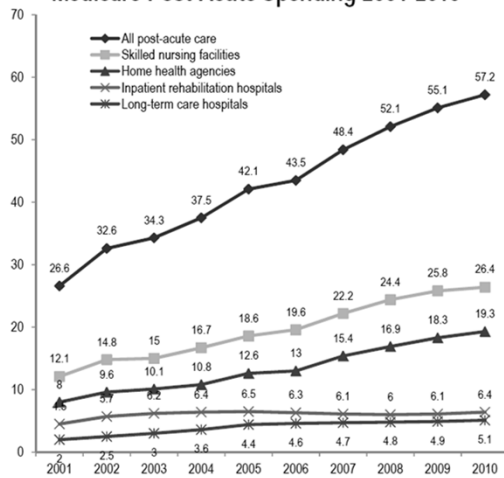
CROSSING THE QUALITY CHASM

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# What about us?

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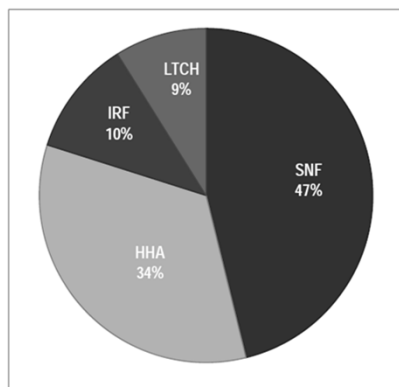  *Physical therapy is a significant expense*

- PAC spending also increasing

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Medicare Post-Acute Spending 2001-2010

2010 Post-Acute Medicare Spending

SNF = $26
HHA = $19.3
IRF = $6.4
LTCH = $5.1
Total = $57

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

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## Why?

Changing Focus

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

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## Why?

- Growing number of organizations



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# Why?

Mayo Clinic Job Descriptions - Two jobs

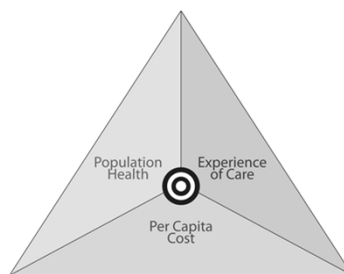      1) Doing the work
      2) Improving how the work gets done

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# Why?

### High Quality - Doing the right thing

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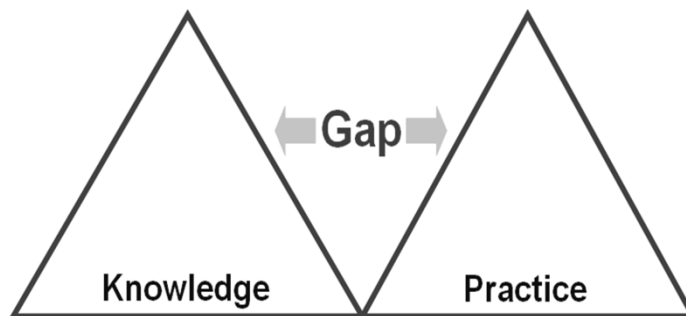  - *Regulatory standards*

- Where is it?
  - *Benchmarking*

Population Health
Experience of Care
Per Capita Cost

*IHI Triple Aim*

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## How?

• Close the gap



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

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## How?

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

|  | QA | QI |
|---|---|---|
| Model | Monitor and correct performance outliers | Processes/systems are in place that will affect performance today |
| Program Scope | Focused on organizational mistakes | Focused on outcomes and processes of organizational services |
| Population | Problem prone areas | High-risk, high-volume, problem prone areas |
| Data Collection | Retrospective data collection | Concurrent data collection Proactive risk reduction |

## 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*

**Value = Quality**
**(Outcomes, Safety, Service)**
_____
**Cost**

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## How?

Mayo's chosen quality framework
- DMAIC
  - Define
  - Measure
  - Analyze
  - Improve
  - Control

- Assists in selecting tools to use for improvement

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## When?

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

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## 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

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# Mayo Quality Fellows Program

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

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# 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

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# 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

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# Where?

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

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## Where?

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

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## Where?

### 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*

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Project Example - *Outpatient*

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Project Example - *Inpatient*

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## Group Discussion

- What are your experiences with quality improvement?

- What has been successful? Not so successful?

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## Take Home Message

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

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Thank you!

Questions & Discussion

Bibliography

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