Quality Improvement: Foundational Concepts

Topics

- What is quality improvement (QI)?
- Applying QI to your work
What Is Quality Improvement?

Defining Quality Improvement for Health Care

In health care, quality improvement (QI) is defined as “a structured organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality health care that meets or exceeds expectations”.

Source: McLaughlin & Kaluzny, Continuous Quality Improvement in Health Care
By Julie K. Johnson, William A. Sollecito
What does QI help us accomplish?

• Doing the right thing well
  – The right care for the right patient every time
    (Institute of Medicine report, “To Err is Human”)
• What is the right thing?
  – Evidence-based practice
  – Regulatory guidelines
  – Standards of practice
• What does it mean to do it well?
  – Benchmarking

Source: Institute of Medicine, 1999. To Err is Human,

QI Helps Bridge the Gap

Knowledge

Gap

Practice

Opportunities to improve are identified where there is a gap between what we know and how we practice.
QI: An Organized Approach

**Ideal**
- Prioritize areas to improve
- Analyze the problem, understand the current process and the root causes of problems
- Measure current performance against goals
- Choose option to implement
- Plan the change
- Implement and test changes (for example using PDSA cycles)

**What often happens**
- Pick any thing to work on
- Think of an option
- Implement
- Hit system barriers
- Fail

Foundations of QI

- Customer/patient-focused
- Process-oriented
- Team effort
- Data-driven
QI Foundation 1: Customer-focused

- Whom do we serve?
- Who are our customers?
  - Internal
  - External
- What does it take to delight our customers? (create the highest possible value)
- How can we help co-workers see how their work affects others in the process?

QI Foundation 2: Process-oriented

- Everything we do is a process
  - A sequence of steps that produce a desired product or outcome
- 85% of quality problems can be traced back to a process or system problem
- Well-defined processes reduce variation
QI Foundation 2: Process-oriented (cont.)

How does measurement help improve quality?
• By helping us:
  – Understand the variation that exists in a process
  – Monitor process over time
  – See the effect of a change in a process
• By providing:
  – A common reference point
  – A more accurate basis for prediction

QI Foundation 3: Team effort

• QI requires participation from all the stakeholders that act on a process
• Individuals contribute to the effort, but can’t accomplish QI without team involvement
• Build a QI team with process and leadership stakeholders
QI Foundation 4: Data-driven

• Quality data is essential for decision making
• Keep data collection and measurement simple
  – What data are you currently collecting that can be used?
  – Is another unit or department already collecting the data?
  – What data is already documented and stored in your systems?
• Don’t use gut feelings only – ‘trust but verify’

QI in Practice: A Few Tips

• If you can’t measure it, you can’t improve it
• Manage the processes, not the health care providers
• Put the right data in the right hands at the right time
• Engage the people who do and understand the work
What Supports Effective QI?

- Leadership that supports learning
- Culture of organizational change
- Systems thinking

What Supports Effective QI? (cont.)

- Fairness and accountability
- Engaging customers (patients), including staff
- Structured methods to make improvements
Applying QI:
Processes and Systems

Apply QI:

• Understand current evidence-based practice (risk identification, prevention, treatment)
• Assess your current practice to identify gaps (communication, knowledge, workflow, etc.)
• Use the Model for Improvement (QI methodology) to create your plan to address these gaps
• Implement, monitor, and revise plan as needed
• Continually look at processes and revise your approach and improvement plans
Process vs. System

- Process – a sequence of steps that produce a desired product or outcome
  - Often guided by policies and procedures
  - Needs to be developed to work within a system
- System – the combination and relationship between:
  - Processes
  - People and organizational culture
  - Environmental factors and equipment involved
  - Resources available

Process Thinking

- Seeing processes
- Teasing out the steps and decision points
- Diagraming the steps in sequence
- Finding where improvements can be made
**Systems Thinking**

- Understanding how aspects within the system influence one another
- Recognizing that the parts of a system can be best understood through how they relate to each other, rather than in isolation
- Using critical thinking skills to analyze, synthesize and evaluate information
- Having situational awareness

**Benefits and Pitfalls of Process and Systems Thinking**

**Benefits**
- Systems and processes make or break outcomes and results
- Decreases re-work and improves efficiency
- Necessary to effectively use QI tools and techniques

**Pitfalls**
- Can turn everything into a process
  - Get locked in to “this is how we do it”
  - Lose flexibility
- Get bogged down in detail
Process and Systems Examples

- System: Medical Home (clinic)
  - Process: shared decision making, care plan development
- System: Hospital medication administration
  - Process: Patient ID verification
- System: Airline pilot checklists
  - Process: take-offs and landings

Just Culture
What is ‘Just Culture’?

• Reflects what we know of:
  – Socio-technological system design
  – Human free will
  – Human fallibility
• We can:
  – Design safe systems that accommodate humans
  – Manage human choices and behaviors within the system

Just Culture Risk Categories

Human Error
Product of our current system design
Manage through changes in:
• Processes
• Procedures
• Training
• Design
• Environment

At-Risk Behavior
Unintentional risk-taking
Manage through:
• Removing incentives for at-risk behaviors
• Creating incentives for healthy behaviors
• Increasing situational awareness

Reckless Behavior
Intentional risk-taking
Manage through:
• Remedial action
• Disciplinary action

Source: David Marx, JD - Outcome Engineering
Identifying QI Projects

Focus on Patients

- Systems and processes that affect patient access
- Providing care that is evidence-based
- Patient safety
- Support for patient engagement
- Coordination of care with other parts of the larger health care system
- Cultural competence, including assessing health literacy of patients, patient-centered communication, and linguistically appropriate care

Identifying a QI Project

- Mission and strategies at your facility
  - Are you confident you know the mission and strategies?
  - Do you know how processes support the strategies?
- Steps you can identify to support your strategies
  - Think about gaps between knowledge and practice
  - Publicly reported QI program measures

Prioritizing QI Opportunities

- Low Performance Based on Data
- Potential Harm to Patients (severity)
- Number of Patients Impacted (frequency)
- Multiple or Broad Priorities
- Alignment with National, State, or Regional Quality Initiatives
- Enthusiasm
- Topic/Project
PICK Prioritization Matrix

The PICK Prioritization Matrix helps to prioritize work that impacts quality by evaluating and assessing the payoff.

PICK Prioritization Matrix (cont.)

QI Basics

PICK Prioritization Matrix

Introduction

The PICK prioritization matrix helps to project ideas and prioritize them based on opportunities to improve the most cost-effective system. It includes options for high or low payoffs, and easy or difficult challenges.

How to Use

The project team should complete the matrix. Whatever possible, it’s ideal to discuss it at an early stage meeting or to have video conferencing available so that all participants can see the results and projects that are assigned to quadrants in future improvement programs.
Stratis Health is a nonprofit organization that leads collaboration and innovation in health care quality and safety, and serves as a trusted expert in facilitating improvement for people and communities.

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $625,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official view of, nor an endorsement, by HRSA, HHS or the U.S. Government. (December/2018)