Quality Improvement in Public Health: An Overview

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Betty Mallen
If we always do what we have always done, we will get what we've always got."

--Adam Urbanski
Quality

Quality is never an accident; It is always the result of:
- High intention
- Intelligent direction
- Skillful execution

“It (quality) represents the wise choice of many alternatives.”  ~Will A. Foster
Mission: Promoting and Protecting the Health of Iowans

- Prevent Epidemics & the Spread of Disease
- Protect Against Environmental Hazards
- Strengthen the Public Health Infrastructure
- Prepare for, Respond to, & Recover from PH Emergencies
- Prevent Injuries
- Promote Healthy Behaviors
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Quality

Today the most progressive view of quality is:

- Defined entirely by the customer or end user
- Based upon that person's evaluation of his or her entire customer/client experience
Benefits of quality to clients

- Improved services
- Improved choices
- Expectations met or exceeded
- Client oriented employees
- Friendlier atmosphere
Benefits of quality to employees

- Pride in services delivered
- Job satisfaction
- Improved communications
- Streamlined work processes
- Happier clients
- Strong client relationships
Benefits of quality to the agency

- Improved/expanded services
- Client oriented employees
- Improved client relations
- Improved community relations = better political relations
- Lower costs/cost contained
- Improved funding
Summary

Quality improvement is a continuous and ongoing effort to achieve measureable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community.
QA & QI - They are not the same!!!

**Quality assurance:**
- Reactive; works on problems after they occur
- Regulatory
- Led by management
- One point in time

**Quality improvement:**
- Proactive – works on processes before problems occur
- Self determined
- Led by staff
- Continuous
- Exceeds expectations

Source: Public Health Foundation
### Contrasting Big “QI”, Little “qi”, and Individual “qi”

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<th>Little ‘qi’ – program/unit</th>
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<td>Individual program/unit level plans</td>
<td>Individual performance plans</td>
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**Source:** Public Health Foundation
Importance of Quality Improvement

Quality Improvement:
- no longer optional if an agency wants to stay viable and competitive
- market demands it
- funders demand it
Importance of Quality Improvement

Quality Improvement positions an agency to achieve:
- Customer satisfaction
- Efficient use of resources
- Measurable outcomes
- Community impact
Quality Improvement Models

- PDCA/PDSA
- Lean
- Six Sigma
- Kaizen
- Total Quality Management (TQM)
Deming Cycle – PDCA or PDSA

PDCA was made popular by Dr. Deming who is considered by many to be the father of modern quality control; however it was always referred to by him as the "Shewhart cycle."

Source: Public Health Foundation
Continuous Improvement

The continuous improvement phase of a process is how you make a change in direction. The change usually is because the process output is deteriorating or customer needs have changed.

Source: Public Health Foundation
PDCA should be repeatedly implemented in spirals of increasing knowledge of the system that converge on the ultimate goal, each cycle closer than the previous.

Article: Rapid Cycle PDCA

Source: Public Health Foundation
The SDCA and PDCA cycles are separate but rather integrated. Once we have made a successful change we standardize and hold the gain. When the process is not performing correctly we go from SDCA to PDCA and once we have the process performing correctly we standardize again. This switching back and forth between SDCA and PDCA provides us with the opportunity to keep our process customer focused.

Source: Public Health Foundation
Plan

1. Identify and Prioritize Opportunities
2. Develop AIM Statement
3. Describe the Current Process
4. Collect Data on Current Process
5. Identify All Possible Causes
6. Identify Potential Improvements
7. Develop Improvement Theory
8. Develop Action Plan

Check/Study

1. Reflect on the Analysis
2. Document Problems, Observations, and Lessons learned

Do

1. Implement the Improvement
2. Collect and Document the Data
3. Document Problems, Observations, and Lessons learned

Act

Adopt
Standardize

Adapt

Plan

The ABC’s of PDCA, G. Gorenflo and J. Moran

Source: Public Health Foundation
Developing AIM Problem Statements

- Discrete
- Time Bound
- Measurable

Source: Public Health Foundation
Elements of an Aim Statement

- What is the team striving to accomplish?
- What is the timeline?
- What is the specific numerical measure the team wishes to achieve?
- Who is the target population?

Source: Public Health Foundation
Sample Aim Statement

We will improve the number of hearing tests given by the health department.

Between September 1 and December 15, 90% of first grade students enrolled in the county’s schools will receive hearing tests.

Source: Public Health Foundation
Sample Aim Statement

Increase adolescent immunizations.

Seventy-five percent of adolescents ages 13 – 15 in IDPH Region 4 will have evidence of a Tdap booster in IRIS by June 1, 2011.

Source: Public Health Foundation
QI tools help you get over the obstacles.

"Obstacles are those frightful things you see when you take your eyes off the goal."

--Henry Ford
The Basic Tools of QI

- Flow Chart
- Cause and Effect Diagrams
- Pareto Chart
- Check Sheet
- Histogram
- Scatter Diagram
- Control Chart

Source: Public Health Foundation
Pareto Principle: 20% of sources cause 80% of any problem

Why do fewer clients in clinic B receive HIV tests?

Reasons | #
---|---
Too much time | 3
Client does not want | 5
Not offered | 39
Unable to return | 1
Language barriers | 2
General Approach On How To Use The Basic Tools Of Quality Improvement

“I AIM”

Issue To Consider

Brainstorm & Consolidate Data

Flow Chart Existing Process

Cause & Effect Diagram – Greatest Concern

Brainstorming Force and Effect

Greatest Concern

Use 5 Whys To Drill Down To Root Causes

Gather Data On Pain Points

Translate Data Into Information

Solution and Effect Diagram

Run Charts

• Pie Charts

• Control Charts

• Pareto Charts

• Histograms

• Scatter Plots, etc.

Data Management Strategy – Ch. 14

“As Is” State

New Process

Monitor New Process & Hold The Gains

“As Is” State to “Should Be” State

Getting Buy In

- Make it fun!
- Find QI champions on your staff!
- Start small!
- Keep it simple!
- Celebrate all successes!
- Make it fun!
“Quality is not an act. It is a habit”

Aristotle 384BC-322BC, Greek philosopher and scientist, student of Plato and teacher of Alexander the Great

Source: Public Health Foundation
Thank You!

Questions?!
Many Thanks!

To the Public Health Foundation, Jack Moran, and Grace Duffy for encouraging shameless stealing and senseless sharing.