CONTINUOUS QUALITY IMPROVEMENT

An Introduction
Agenda

- What is CQI conceptually?
- What is CQI pragmatically?
- How do we “do” CQI?
What is CQI conceptually?

Continuous Quality Improvement (or CQI) is:
- A strategic approach to driving a cost-competitive method for meeting or exceeding customer expectations

Four premises of CQI
1) Success means meeting or exceeding the needs of external & internal customers
2) Most business problems are driven by process problems
3) Employees must be involved
4) Good data drives good decision-making

http://www.ehow.com/about_5110198 Basics-continuous-quality-improvement.html
1) Put the Customer First

- Understand who your customer is and what your customer wants
  - **External customers**
    - Products & services the customer pays for - including with his/her time!
  - **Internal customers**
    - Deliverable (info, product, data) to be used at some point in your process
- What do your customers **need?** **Expect?**

“The job can't be finished, only improved to please the customer.”

~ W Edwards Deming
I’m the public health expert – why do I have to put the customer first???
• You may “know what they need” BUT
• They know what they want AND they know what they expect
• Fail to meet their expectations / engage them = ultimately not helping them get what they need.
  • Arguably, this may be a bit challenging in public health
    • Who is the customer? (e.g., public health policy)
    • Hesitant to complain (i.e., something better than nothing)
    • Conflicting wants (e.g., tax increase on alcohol sales)
• But we can agree that
  • Ongoing improvement is critical
  • Questioning & thinking reflectively are important
  • Those involved in initiative should have role in decision-making about initiative
  • Systems approach is important (e.g., holistic nature of health promotion)
2) Take a Hard Look at Your Processes

• After defining success through eyes of your customer, grade yourself:
  • Do you deliver:
    • What the customer wants
    • When he/she wants it
    • At the quality level he/she wants?
  • Answers often point out problems with internal processes

• Define your process
  • Sequence of steps from request to output
  • DOCUMENT!!

“If you can't describe what you are doing as a process, you don't know what you're doing.” ~ W Edwards Deming
In theory, you could start with your logic model . . . (ahem, . . . remember that?)
Identify WHO does it

Or just map out reality . ..

Specify the timeline

Division /Section

ODH Program

Subgrantee

Compliance & Accountability Unit (CAU)

Grants Administration Unit (GAU)

Hold bidders conference

Plan for competitive review

Letter of intent (include who gets access)

Grant submitted

To plan for # of potential grantees

Request for Proposal posted

GMIS userid assigned

GMIS training offered

Type of grant: competitive or non-competitive

To be automated eventually
Distinguish between tasks . . .

- 6 months

- 30 days

- Performance Period

- 10-11 months

- 30 days

- Combined Review

- On Track? Y

- N

- Evaluation Okay? Y

- N

- Issue letter for continuation

- Complete 3rd quarter expense report

- Continue? Y

- N

- Terminate Grant

- Send payment

- Subgrantee will include $ amount requested in remaining 2 payments

- Compliance will "pre-identify" a small, random sample of subgrantees to provide supporting documentation for their expenditures.
You’ll probably be AMAZED at what you discover...
3) Engage Employees

• Engaging employees works on two levels:
  • The experts need to be involved in understanding the process issues and finding solutions
    • Improvements don’t “take” when handed down from management
    • Multiple experts = multiple perspectives = better understanding of the process AS IS (versus AS INTENDED)
  • Empowered employees often go beyond the obvious
    • Improve more than just the “obvious” problem
    • Create a solution that’s better than “ok”
• Don’t forget to CELEBRATE SUCCESS!!

“Quality is everyone's responsibility.”
~ W Edwards Deming
Why do I have to involve others?

What we see depends on:
~ where we’re looking
~ our own bias / history / beliefs
~ our knowledge and experience
~ our place in the process
4) Use Data to Make the Difference

• What you **THINK** the problem is and what the problem actually **IS** can be 2 different things
  • Pay attention to “data” of all types
    • Surveys (yes, of course)
    • Who comes back
    • Who complains
    • Referrals

• Gather the data and put it in a visual format
  • It’s easier to share, easier to understand

“One accurate measurement is worth a thousand expert opinions.”
~ Admiral Grace Hopper
Why does presentation matter?

<table>
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<tr>
<th>Chronic Disease/Condition</th>
<th>Year</th>
<th>Ohio</th>
<th>Rate per 100,000</th>
<th>U.S. (SEER)</th>
<th>Rate per 100,000</th>
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<tbody>
<tr>
<td>Cancer Incidence: All Types Combined(^1,2)</td>
<td>2007</td>
<td>459.7</td>
<td>537.4</td>
<td>461.1</td>
<td>536.6</td>
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<td>Male</td>
<td></td>
<td>407.7</td>
<td>407.2</td>
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<tr>
<td>Female</td>
<td></td>
<td>447.7</td>
<td>482.0</td>
<td></td>
<td></td>
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<tr>
<td>Black</td>
<td></td>
<td>15.1</td>
<td>6.4</td>
<td></td>
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<tr>
<td>Adults (20+)</td>
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<td>638.5</td>
<td>639.8</td>
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<td>Cancer Incidence: Lung and Bronchus(^1,2)</td>
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<td>124.7</td>
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<td></td>
<td>20.8</td>
<td></td>
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<td>Cancer Late (Regional and Distant) Stage at Diagnosis(^1,2,3)</td>
<td>2007</td>
<td>197.9</td>
<td></td>
<td>208.1</td>
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</table>

2 U.S. Source: Surveillance, Epidemiology and End Results Program, National Cancer Institute, April 2010.
3 Note: The rate of unstaged/unknown stage at diagnosis was 44.3 per 100,000 in Ohio and 26.0 per 100,000 in the U.S. in 2007.

Which format makes it quicker & easier to identify the types of cancer with the highest incidence rates in Ohio and the U.S.?
What is CQI pragmatically?

- A way to continually ask:
  “Are we implementing our program **HOW** we intended to?”

**HOW** = approach & quality

- Goes hand-in-hand with evaluation question:
  “Are we seeing the **EFFECTS** we intended from our program?”
The Basic Steps of CQI

1) **Identify**: a need/issue/problem and develop problem statement

2) **Specify**: what are component parts of the issue, identify problem areas, develop target improvement goal
   - “AIM Statement”

3) **Analyze**: understand root cause(s) of the problem
   - Use charts & diagrams as needed

4) **Act** – action plan outlining ways to address root cause(s), specific actions to be taken
   - Be specific about who, what, where and when

5) **Evaluate** – confirm that problem & root cause(s) have improved & measure whether target has been met
   - Share results (before & after) in graphic way

6) **REPEAT** (moving on to the next need/issue/problem)
How do we “do” CQI?

• Informally
  • Conversations with co-workers
  • Staff meeting reviews

• Formally
  • Develop CQI team
  • Institute CQI process in your organization
  • Tie performance management to CQI (?!?)
    • NOTE: not about where the organizational issues are (i.e., don’t blame employees) rather, it’s about their willingness to change, to learn, to improve, to participate in CQI and benefit from it
Keep in mind . . .

• Important to have regular CQI meetings with all staff (even if it’s 1 agenda item on regular staff meeting)
  • If you don’t make time for it, it’s not important
• Designate a Quality Coordinator
  • Someone who can champion CQI
• Set targets for improvement & establish priorities
• Start with small and easy-to-handle projects
• Use the tools!
• Prepare annual plans & reports on CQI
Now for those tools . . .

- In public health, the most common roadmap for CQI is PDCA
  - **Plan**: recognize an opportunity and plan a change
  - **Do**: Test the change – carry out small scale study
  - **Check**: Review the results; adjust as necessary
  - **Act**: Take action based on what you learn – either full implementation or do the cycle again until you get it right.

http://patientsafetyed.duhs.duke.edu/module_a/summative_experience/example_3.html
• Affinity Diagram
  • Generate all potential ideas/issues & organize them
    • Team members move sticky-notes around WITHOUT TALKING!
  • Consensus when they stop moving things around
    • (or if you need to make 2 notes that say the same thing)
  • For each group, create summary card with a word or phrase that captures the central idea
Some specific tools of CQI

- Fishbone diagram (Ishikawa Diagram)
  - Identify the potential causes of an issue / challenge / problem
  - "The 4 Ss"
    - Surroundings
    - Suppliers
    - Systems
    - Skills
Focused Fishbone

Sample Fishbone
• Pareto
  • Highlight the most important among a (typically large) set of factors.
  • The point is to use data to drive decision making, rather than assumptions
Sample Pareto

Summary of Mobilized Staff

Significant amounts of time, energy & frustration were associated with re-work by staff and programs

VALUE
Change = WIN-WIN
ICS & ODH Programs

Reasons Staff were unavailable
Some specific tools of CQI

- **Flowchart**
  - Identify the actual sequence of events that a product or service follows
    - Shows unexpected (& often unnecessary) complexity
    - Can compare ideal vs actual
    - Can serve as training to understand complete process if staff only work on part of the process
And so many more . . . !

Gantt Chart

Tree Diagram

Run Chart

Quality ingredients

Good recipe

Prompt attention

Professional waiter

Happy atmosphere

Good table presentation

Pleasing decor

Satisfied customers

Good service

Pleasant surroundings
Thought for the Day

• You already have everything you need to be brilliant . . . and we’re here if you’d like some assistance in figuring out just how brilliant you are.
CONTACT INFORMATION
(for questions or technical assistance)

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