Common barriers to improvement efforts

- Time
- Money
- Lack of Resources
- "We've always done it this way"
- Too much resistance to change
- Nobody wants to work on this
- Too many other priorities

Comparison of QA & QI

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<th>QA</th>
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<td>Motivation</td>
<td>Measuring compliance with standards</td>
<td>Continuously improving processes to meet standards</td>
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<td>Inspection</td>
<td>Prevention, monitor over time</td>
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<td>Attitude</td>
<td>Required, defensive</td>
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<td>Focus</td>
<td>Outliers or &quot;bad apples&quot;, individuals</td>
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<td>Responsibility</td>
<td>Few</td>
<td>All</td>
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AIM Statements

Aim Statement: A written statement of the accomplishments expected from improvement effort. It should:

- Describe the SYSTEM to be improved (location)
- Must be TIME specific (by when?)
- Must be MEASURABLE (how much?)
- Must define a SPECIFIC POPULATION (who exactly?)

EXAMPLES:

- Reduce emergency room visits (system) for asthma patients (population) by 30% (measurable) within 15 months (time)
- Increase the %age of flu vaccinations (system) given to asthmatic patients (population) at University Pediatrics to 85% (measurable) by the end of flu season (time)
The Model for Improvement

### Aim
- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

### Measures
- Act
- Plan
- Study
- Do

### Measurement
- Measures are used to guide improvement and test changes
- Integrate measurement into daily routine; use patient population database
- Plot data for the measures over time and annotate graph with changes

"You Can’t Manage What You Don’t Measure."

### Measures - 3 Types

**Outcome Measures**: Voice of the Customer. How is the system performing? What is the result?

**Process Measures**: Voice of the workings of the system. Are the parts/steps in the system performing as planned?

**Balancing Measures**: Looking at a system from different directions. What happened to the system as we improved the outcomes/process (e.g. unanticipated consequences, other factors influencing outcome)?

### Project Measure

A balanced set of measures helps to assure the **system** is improved
- Related to the aim’s measurable goals
- Easy to collect
- Show improvement quickly and include outcome
- Can display them graphically over time

### Usual Display of Measures

**Annotated Run Chart**
- Before
- After

**IMMUNIZATION RATES**

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**Model for Improvement**
- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?
Change Concepts:
- **Use change concepts**, models (Chronic Care Model), literature, shared experiences to develop specific changes
- Test: good ideas, ready for use or ready for adaptation to your environment

**Change Concept Generic Examples**
- Conduct trainings
- Focus on processes
- Work with suppliers/input
- Reduce setup and prep time
- Develop contingency/backup plans for special situations
- Use reminders
- Reduce # components/simplify

**Starbucks and Creative Destruction**
- Vague, creative
- Specific, actionable

**Example of a Change Concept:**
- Reduce backlog
- Make continuity of care a system property
- Identify patients' PCP
- Develop phone script for schedulers
- Pilot phone script for one day

**Model for Improvement**
- Act
- Plan
- Study
- Do

**What are we trying to accomplish?**
- What will we know that a change is an improvement?
- What change can we make that will result in improvement?

**How do you test the change?**

**The PDSA Cycle for Learning and Improvement**
- Act
- Plan
- Study
- Do

**Act**
- What changes are to be made? Next cycle?

**Plan**
- Objective
- Questions and predictions (why)
- Plan to carry out the cycle (who, what, where, when)
- Plan for data collection

**Study**
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was gained

**Do**
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

**Repeated Use of the PDSA Cycle**
- Multiple cycles
- Changes that result in improvement

**Learning from Data, Theories, Ideas**
- Proposals, A P D S
- A P D S
**Why Test?**

- Increase your belief that the change will result in improvement
- Opportunity for learning from “failures” without impacting performance
- Document how much improvement can be expected from the change
- Learn how to adapt the change to conditions in the local environment
- Evaluate costs and side-effects of the change
- Minimize resistance upon implementation

**PDSA- Plan**

- Create an AIM statement
- Form your hypothesis
- Predict what will happen when the test is carried out
- Develop measures determine if hypothesis is correct

**PDSA- Do**

- Collect data
- Chart and display the data
- Document problems, unexpected observations
- Describe what happened when you ran the test
- ‘Just enough’ data

**PDSA- Study**

- Determine
- Compare
- Describe

**PDSA- Act**

- Act on what you have learned
- Describe modifications to the plan from what you learned

**To PDSA or Not to...**

**To PDSA:**
- When testing new:
  - processes
  - tools
  - measures

**Not to PDSA:**
- Gathering data or information (patient lists—unless you want to learn about the data process)
- General “planning”, setting goals, objectives or completing tasks
K.I.S.S. -- Keep It Short and Simple

- Scale down size of test (# of patients, location)
- Conduct the test over a short time period
- Test with volunteers
- Do not try to get buy-in or consensus for the test
- Collect useful data during each test

Key Points for PDSA Cycles

- Successful test
  - As you move to implementation, test under as many conditions as possible
  - Test under special situations (e.g., busy days)
  - Factors that could lead to breakdowns (e.g., Different staff or physicians involved)
  - Things naysayers worry about (e.g., it will not work when Dr. King is not here)

Initially Use Smaller Scale Tests: The power of “one”

Conduct the initial test with...
- Conduct the test in one facility or office in the organization, or with one customer
- Test the change on a small group of volunteers
- Develop a plan to simulate the change in some way

Some inefficiencies of PDSAs

- Doing too much in one PDSA, instead of several cycles
- Running PDSA that are not PDSAs;
  - Collecting baseline data
  - Meetings
  - Brainstorming
  - Planning to change

References


Final Thought...

If you don’t have time to do it right, when will you have time to do it over?