Quality Improvement Basics
*From QA to QI*

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April 27, 2009

Objectives
At the conclusion of this session participants will be able to:

- Understand the difference between quality assurance (QA) and quality improvement (QI)
- Apply QI concepts to organizational initiatives
- Identify three foundations of quality improvement
- Describe the PDSA quality framework
Defining Quality Improvement

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

Defining Quality Improvement

Turning what we know into everyday practice

Opportunities to improve . . .

. . . are identified where there is a gap between what we know and how we practice
Quality Assurance vs. Quality Improvement

<table>
<thead>
<tr>
<th>QA</th>
<th>QI</th>
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<tbody>
<tr>
<td>Model</td>
<td>Monitor and correct performance outliers</td>
</tr>
<tr>
<td>Program Scope</td>
<td>Organizational mistakes</td>
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<td>Population</td>
<td>Problem prone areas</td>
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<td>Data Collection</td>
<td>Retrospective data collection</td>
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From QA to QI

<table>
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<tr>
<td>Review Pressure Ulcer QI and QMs</td>
<td>-Understand current evidence based practice (risk identification, prevention, treatment) -Assess your current practice to identify gaps (communication, knowledge, workflow, etc.) -Use Model for Improvement (QI methodology) to create your plan to address these gaps -Implement, monitor, and revise your plan as needed -Continually look at where process(s) may have failed when a new pressure ulcer develops</td>
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From QA to QI

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<td>Review Physical Restraint QI and QMs</td>
<td>-Determine causes of medical conditions or other problems for which restraints are used or considered -Develop protocols to address underlying conditions that lead to restraint use -Identify individualized alternatives to restraint use -Develop protocols for management of restraints if there are no alternatives -Monitor impact of restraints -Regularly reevaluate the situation to reduce or eliminate the restraint</td>
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From QA to QI

• How can your unit/department make the change to QI?
  – Practice looking for potential gaps in care during your work day, e.g. stand-up meetings, walking rounds
    • These activities are data collection and process improvement opportunities

Foundations of QI

• Customer focused
• Process oriented
• Data driven

QI Foundation #1: Customer Focused

• Who do we serve? Who are our customers?
  – Internal
  – External

• What does it take to delight our customers?

• 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
- 85% of quality problems can be traced back to a process or system problem
- Well-defined processes reduce variation

QI Foundation #3: Data Driven

- How does measurement help improve quality?
  - By helping us:
    - Understand the variation that exists in a process
    - Monitor a 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: Data Driven

- Keep data collection and measurement simple
  - What data are you currently collecting that can be used?
  - Is another unit/department already collecting the data?
  - Can data be collected concurrently?
- Don’t use “gut” reactions only
QI Model for Improvement

- Encourages learning by testing change on a small scale
  - Pilot the change in one department, with one nurse, on one shift, etc.
- Eliminates studying the problem to death
  - Moves the team from contemplation to action
- Minimizes data collection/data overload
- Works well with “small numbers”
- Uses three questions as a framework

QI Model for Improvement

- Three basic questions:
  - What are we trying to accomplish?
  - How will we know that a change is an improvement?
  - What changes can we make to achieve our aim/goal?
1. What are we trying to accomplish?
   • Improvement begins with setting aims
     – State aim clearly
     • Gain agreement from team
     – Make aim measurable
     • Use a % goal
     – Make aim achievable
     • Should be a “stretch” goal

Example

Aim:
   Reduce the use of chair alarms by 50% throughout the facility.

2. How will we know that a change is an improvement?
   • Measurement allows us to determine if change is improvement.
Example

Measure:
Reduction of use of chair alarms by 50% in residents identified at high risk for falls.

3. What changes can we make to achieve our aim?

- Need to understand what is currently happening
  - Clarify *actual* current processes - Flow chart
  - Look for (examples):
    - Redundant tasks
    - Logical placement of tasks
    - Forgotten tasks
    - Delays
    - Missed opportunities
    - Workarounds
    - Continuity of care across units/disciplines

Example

- Identify opportunities for process change
  - Why are we using alarms?
  - Patterns in alarm going off
    - Time of day
    - Environmental triggers
    - Correlation with staffing patterns
  - Staff input
Suggestions

- Look for ways to limit variation in the process, streamline, and simplify
- Learn what has worked at other facilities
- **COPY, COPY, COPY**
- Remember, you don’t need a perfect solution the first time

Model for Improvement

- **Plan**
- **Do**
- **Study**
- **Act**

Plan

- What change are we testing?
- Who is included in the test?
- When are we testing?
- Where are we testing?
Plan

- Prediction:
  - What do you expect will happen?
    - Develop aims
    - Develop measures

Plan

- Process Measure
  - Measures an activity that is carried out to provide care or service
    - Timing of toileting after meals
    - Pressure ulcer risk assessment for residents
    - Alternatives to physical restraints considered, implemented, documented

- Outcome Measure
  - Measures what happens or does not happen as the result of a process
    - Pressure Ulcer QI/QM
    - Physical Restraint QI/QM

Plan

- What data are you already collecting?
- What additional data do you need?
- What is your plan to communicate with others?
Do

• Test the plan on a small scale pilot
  – Implement the change
  – Collect data
    • Baseline and test of change
  – Make observations

Study

• Evaluation
  – Analyze data
  – Compare data to recommendations, plan, and goal
  – What was learned?
    • Problems
    • Successes
    • Surprises
  – Are you satisfied with results?

Act

• What changes should be made before the next cycle?
• What will the next test be?
• Are you ready to implement more broadly?
• How will you maintain gains?
• Establish a new plan-PDSA cycle
Why Document QI?

- Regulatory requirements?
- Organizational policy?
- To demonstrate the good work my unit/department is doing?
  - Communication tool and affirmation

"You can't manage what you can't measure..."
- A. Banker

(... and you can't manage it if you haven't documented it!)
“Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction, and skillful execution. It represents the wise choice of many alternatives.”

- Source Unknown

Questions?

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