Leveraging DMAIC & Active Management for Sustainable Quality Improvements:

Kristine Koontz, PhD, SSGB
Amy Diane Short, MHSA, CSSBB

Kristine Koontz, Ph.D.
• Clinical Psychology—Science Practitioner
• Six Sigma Green Belt
• Vice President of Quality and Corporate Integrity
• Oversight of Behavioral Health Organization
  • Residential and Community Settings
  • Intellectual Disabilities, Mental Health, Autism Spectrum Disorders
• Lifespan services
• USA: PA, DE & CT
• International: Moldova, India

Amy Short, MHSA
• BS Psychology
• MHSA (Master’s Health Services Administration)
• Certified Six Sigma Black Belt
• Operational Oversight of Hospital Functions
• QI Leadership of Implementation Research at Academic Health Center
• Patient Advisory Council Mentor
• University of Cincinnati IRB Member
• Administrative Director of Center of Improvement Science, Cincinnati CCTST
Presentation Overview

- A New Approach
- Getting to Know You
- DMAIC
- Stakeholder Engagement
- Control Revisited
- Managing the Game of Hot Potato
- Auditing and Active Management

**Active Learning**

Changes from YOUR Feedback

- Broad, Proven Concepts with a Deeper Dive on 1-2 Ideas
- Trace a Successful Project
- Balance Between Didactics and Activities

Icebreaker: Who Are You?

- Answer Privately in Socrative.com,
- Type in Room Number: **AMYSHORT**
- Login as Student
- Enter at Least One Letter as a Name

Or Use the App

Click Here for Menu

Click Here to Login
How Experienced Are You in QI?

• Answer Privately in Socrative.com,
• Type in Room Number: AMYSHORT
• Login as Student
• Enter at Least One Letter as a Name

Successful Organizations

• Understand what their customers want
• Understand how they are measuring up
• Can describe, monitor and adjust processes
• Can examine and support employee performance and functions
• Can quickly identify and respond to internal and external demands

Successful Organizations Use DMAIC

Define
Measure
Analyze
Improve
Control
What Compliance Issue Keeps You Up at Night?

DMAIC
- Define
- Measure
- Analyze
- Improve
- Control
Find a way to make the important measurable instead of making the measurable important

Where the Journey Begins: Data

Why Data?
  • You Cannot Manage what You Cannot Measure
  • Data → Information → Knowledge → Wisdom
“In God we trust. All others, bring data.”
- W.E. Deming

Measurement 101: “Eyeball your data”
• The Importance of Visual Inspection
• First Step in Analyzing and Understanding Your Data

Shhhhh….It’s a Secret

PROCESS > OUTCOME
Measure
The Process Map

Process Mapping in a Nutshell

“Every system is perfectly designed to get the results it gets.”

The only way to get different results is to change the system

Why Process Map?

• You Can’t Fix a Problem Until You Understand the Present State
• ... How It REALLY Works
• ... Everyone Shares the Same Understanding
• Process Maps Reveal Where Improvement Is Needed Most
• Process Mapping Helps Keep a Project in Scope
Process Map Errors
- Only Working with Those Distal to the Process
- Mapping the Improved Process First
- Mapping the Way a Process is "Supposed to Work"
- Incorrect Level of Abstraction
- Not Verifying Accuracy

DMAIC
- Define
- Measure
- Analyze
- Improve
- Control

Analyze
- Walk the Process Map and Refine It
- Spend Time with the People Who Do the Work
- Re-scope if Needed
- Capture Cycle Times
- Brainstorm Ideas for Improvement
  - Fishbone Diagrams
  - Affinity Diagrams
Piloting Improvement and Change

We must remember...

All Improvements stem from change, but not all changes are improvements &
Hope is not an improvement strategy

The Engine for Innovation & Change: PDSA Cycle

- **Define**
  - Objectives
  - Predictions
- **Measure**
  - Plan to carry out the cycle (who, what, where, when)
  - Plan for data collection (who, what, where, when)
- **Analyze**
  - Carry out the plan
  - Document observations
  - Record data
- **Improve**
  - Study
    - Action
      - What changes need to be made?
      - What cycle?
    - Compare reality to predictions
    - Determine if what was expected
- **Control**
  - Do
    - Context: what was done
    - Description: what was observed
    - Action: what was expected
    - Record data

START HERE
Hoorah for PDSA!

- Action-oriented Learning
- Scientific Process
  - Hypothesize
  - Experiment
  - Evaluate
  - Synthesize
- Avoid "Analysis Paralysis"
- Lessons in STUDY and ACT Become Public Knowledge and Speeds Generalization
- Minimal Expenditures $$
- Vertical Team Facilitates Buy-in

Test the Change

DMAIC
Define
Measure
Analyze
Improve
Control
**Now What?**

<table>
<thead>
<tr>
<th>C</th>
<th>O</th>
<th>N</th>
<th>T</th>
<th>R</th>
<th>O</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “Surface” Key Process and Outcome Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Timely Data Entry = “Knowable” Individual and Group Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Embed Use of Data into Management Repertoire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**CONTROL**

- This is the Most Difficult Phase in DMAIC
- Maintaining the Gains
- Safeguards: What Will Be Done to Keep This on Track?
- Responsibility Rests on the Process Owner (Role of KPI)
- What Happens in this Phase?
  - Pick the Right Control Method (Checklists, Monitoring, Reporting)
  - What is Acceptable Variance?
  - Document the Response Plan
Mission Impossible

It Takes a Team!

But... I’m All Alone
Sustainable, transformative, change requires an engaged, interdisciplinary, team

- Let your leadership know what you need

- Work these principles as best you can in your own sphere
  - It takes time
  - It takes constant effort
  - It’s worth it!
Successful Organizations

• Understand what their customers want
• Understand how they are measuring up
• Can describe, monitor and adjust processes
• Can examine and support employee performance and functions
• Can quickly identify and respond to internal and external demands

...Is multifactorial and complicated!

• Today’s focus is on:
  • Stakeholder engagement
    • Communication (bite sized!)

Stakeholder Engagement

Stakeholder: Anybody who can affect or is affected by an organization, strategy or project

From OGC: Successful Delivery Toolkit 2005
Stakeholder Engagement

What you get from stakeholder engagement:

• Agreement on purpose and direction (i.e. buy-in) of a project or program
• Early identification of potential issues, conflicts and benefits
• Generation of new ideas
• Defusion of conflict situations before they impede progress
• Increased community cohesion and strengthened shared identity

REVIT Stakeholder Engagement: A Tool Kit

Stakeholder Engagement

Key elements for stakeholder identification:

• Who is directly responsible for the decisions on the issues?
• Who is influential in the area, community and/or organization?
• Who will be affected by any decisions on the issue (individuals and organizations)?
• Who runs organizations with relevant interests?
• Who is influential on this issue?
• Who can obstruct a decision if not involved?
• Who has not been involved, but should have been?

REVIT Stakeholder Engagement: A Tool Kit

Who Are Your Stakeholders?

Adapted from "Mainstreaming Participation"
Prioritize Your Stakeholders

Stakeholder Actions

• **High power, interested people**: these are the people you must fully engage and make the greatest efforts to satisfy.

• **High power, less interested people**: put enough work in with these people to keep them satisfied, but not so much that they become bored with your message.

Stakeholder Actions

• **Low power, interested people**: keep these people adequately informed, and talk to them to ensure that no major issues are arising. These people can often be very helpful with the detail of your project.

• **Low power, less interested people**: again, monitor these people, but do not bore them with excessive communication.
Understand Your Stakeholders

- What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- What motivates them most of all?
- What information do they want from you?
- How do they want to receive information from you? What is the best way of communicating your message to them?
- What is their current opinion of your work? Is it based on good information?
- Who influences their opinions generally, and who influences their opinion of you?

www.mindtools.com

Understand Your Stakeholders

- Do some of these influencers therefore become important stakeholders in their own right?
- If they are not likely to be positive, what will win them around to support your project?
- If you don’t think you will be able to win them around, how will you manage their opposition?
- Who else might be influenced by their opinions? Do these people become stakeholders in their own right?

www.mindtools.com

Strategic Tip: Be Compelling

Don’t "push it through” – it’s much better to convince people that it’s important and urgent – only that way can you get a clear commitment from others

- What conditions create the need for change?
- What are the underlying causes?
- Have you identified and made a case for the change?
- Have you identified the one crucial reason for change?
- "WIIIFM"?

www.mindtools.com
Strategic Tip: Get the Word Out

One size does not fit all for communication

- Which stakeholders will need regular one on one chats?
- Do you need to do organization wide “town halls”?
- Do people at your organization read emails reliably?
- Can you put articles in the company newsletter?
- Which regular operational or staff meetings should you attend?
- Is a special activity required to gain attention?

But... I’m All Alone

Sustainable, transformative, change requires an engaged, interdisciplinary, team

- Let your leadership know what you need
- Work these principles as best you can in your own sphere
  - It takes time
  - It takes constant effort
  - It’s worth it!

Successful Organizations

- Understand what their customers want
- Understand how they are measuring up
- Can describe, monitor and adjust processes
- Can examine and support employee performance and functions
- Can quickly identify and respond to internal and external demands
Focus and Streamline

Changing the Approach is Key to Success

Typical
- Plan/Define
- Data Collection/Measure
- Data Analysis
- Data Utilization/Improve
- Follow-up/Control

Desired

Quality Assurance or Improvement?

Key Performance Indicators (KPIs)

- How do you measure success
- Type of performance measurement
- Help an organization define and measure progress
- Linked to an organization's mission and vision
- Should include regular examinations of goals/expectations

Are We Consistently Meeting Stakeholders Service Expectations And Goals?
Why Are KPIs Important?

- Sustainability in a new era
- Performance information is front and center
- Increase the pace of effective decision-making
- Decisions need to be targeted and informed
- Use of KPIs embedded into management will enable these abilities

Scorecard

Active Management vs. Auditing
### Active Management vs. Auditing

<table>
<thead>
<tr>
<th>Component</th>
<th>Active Management with Data</th>
<th>Auditing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Population</td>
<td>Sample</td>
</tr>
<tr>
<td>Time</td>
<td>Close to real time</td>
<td>Retrospective</td>
</tr>
<tr>
<td>Opportunities to examine</td>
<td>Frequent</td>
<td>Dependent on audit schedule</td>
</tr>
<tr>
<td>Performance Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus</td>
<td>Current and Future</td>
<td>Retrospective and Future</td>
</tr>
<tr>
<td>Organizational Risk</td>
<td>Catch issues quickly</td>
<td>Depends on Audit timeframe</td>
</tr>
</tbody>
</table>

---

### Whoever Owns the Process, Shoulders the Responsibility

PUTTING IT ALL TOGETHER
Questions?