Connecting Quality Management to Passion, Change and Advocacy

National Health Care for the Homeless Conference 2016
Portland, Oregon

Coldspring Center For Social and Health Innovation
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Stay positive
Informal
Interactive
What We’ll Cover Today

• Introductions
• Organizational Infrastructure
• Tools
• Model for Improvement
• Change Leadership
Table Introductions

Share at your Table
• Name, Organization, Role
• How many years of experience with Quality Improvement?

Together as a Table
• How many total years of experience at your table?
• Average years of experience?
• Bonus: Min and Max?
Satisfaction Continuum Exercise

• Think about a recent health care experience (yours, or if you accompanied another person)
• How would you rate your experience?

1 = Horrid 10 = Excellent
Satisfaction Continuum Exercise

• Think about your clinic or program
• How would you rate your services?

1 = Horrid  10 = Excellent
Your Organization’s Infrastructure

FOUNDATIONS FOR QUALITY
A paradigm shift is a new way of thinking that challenges existing belief structures.
QI is not QA

**QA**
- Individual focused
- Perfection myth
- Solo practitioners
- Errors punished
- Few responsible for quality

**QI**
- Systems focused
- Fallibility recognized
- Teamwork & Consumers
- Errors are opportunities to learn
- All responsible for quality

Agency For Healthcare Research and Quality, Health Care/System Redisign
Example – Star Performer HIV Clinic

Status Quo = 87-89% Viral Suppression!

Focus = Who makes up the 11-13%?

Change = Test Case Management integration!

Status Quo = 87-89% Viral Suppression!
Quality Improvement

Quality improvement is an organizational approach to improve quality of care and services using a specified set of principles and methodologies.
Strategic Focus Areas for Quality Improvement

- Eliminate health disparities
- Increase patient and staff satisfaction
- Measure and assess specific care processes
- Improve clinical and non-clinical outcomes
- Enhance access to and availability of care
- Eliminate inefficiencies, errors, unnecessary steps and barriers
- Enhance communication and accountability
- Reduce burnout and increase staff effectiveness and morale
Principles on the Quality Improvement Journey...

• Success is achieved through meeting the needs of those we serve
• Most problems are found in processes, not in people
• Do not reinvent the wheel – Learn from best practices
• Achieve continual improvement through small, incremental changes
• Actions are based upon accurate and measured data
• Set Priorities and Communicate clearly
9 Critical Steps In Quality Management
Run, Flow, Drive, OH MY!

PRACTICAL TOOLS FOR QUALITY
Tools

- **Bar Chart**
  - Show comparison across categories

- **Run Charts**
  - Used to see performance over time

- **Flow Chart**
  - Graphic picture of the way a process works

- **Driver Diagram**
  - Simple visual to display cause/effects

- **Fishbone Diagram**
  - Understand many causes contribute to an effect
Special Issues – Housing Rent Increases in the Past Year

N = 469

- $1-$200: 26.9% (126)
- No Increase: 21.7% (102)
- $200-$400: 8.7% (41)
- $600-$800: 4.5% (21)
- $400-$600: 4.3% (20)
- More than $1,000: 1.7% (8)
Run chart

- Used to see performance over time
- May help you decide where to put focus for improvement
- Can help to show if changes result in improvement

http://www.ihi.org/resources/pages/tools/runchart.aspx
Run Chart Example

% of clients with Service Plan developed and/or updated two or more times in the measurement year

- Outlier
- 59%
- 46%
- Start QI Project

http://sixsigmastudyguide.com/run-chart/
Flowchart

- Graphic picture of the way a process works
- Can help you understand an existing process and create a proposed process
Flowchart Exercise

At your table –

• Build the best pizza ever!
• Use the basic flowchart shapes and sticky notes to document your process.
Flowchart Example – Test 1

Integrated visit (Test 1)

Prep Processes
- Software: Schedule Flags (Show clients in need of)
  
  ◼️ Huddle

Patient Visit
- Client arrives
  - Reception/MCM question asked
  - Medical Assistant – to exam room and vitals
  - Physician/Exam
  - Medical Case Manager
  - Labs

MCM Issues identified? — Yes, MCM engaged
Drivers

- Simple visual to display cause/effects
- Helps you see where you are going
Fishbone Diagram Example

- **Equipment**
  - No software support
    - No
  - Required for every no matter what
  - Caseload size unreasonable
  - Imbalance between providers

- **System**
  - CM/Staff

- **Client**

- **CM**
  - Service Plan
  - Quality Measure
  - Bombing
BREAK
Paper Puppet Exercise

• Learning Objectives
  – Understand what a process is and how the design of the process affects quality
  – Build experience using tools for measuring a process
  – Build experience analyzing data about a process
INTRODUCTION TO THE MODEL FOR IMPROVEMENT
In 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this treatment?

1. 1602
2. 1689
3. 1757
4. 1796
In 1601, James Lancaster successfully conducted an experiment to illustrate the effectiveness of lemon juice to prevent scurvy. When did the British Navy adopt this treatment?

1. 1602
2. 1689
3. 1757
4. 1796 (195 years later)
Treatment of Scurvy

- In 1601 lemon juice, as protective against scurvy, is recorded by James Lancaster.
- In 1612, Woodall recommended citrus fruit for protection against scurvy on sea voyages.
- In 1753 James Lind published A Treatise on the Scurvy which portrays his experiment on-board the ship Salisbury in 1747.
- From 1772 to 1775 sailors on historic voyages with Captain James Cook remained free from scurvy.
- In 1796 lemon juice was officially introduced in the British Navy as a prophylactic against scurvy.
- In 1865 British Board of Trade adopted the policy for the merchant marine.
How long did the NIH take to recommend the treatment of ulcer as suggested by Dr. Marshall in his 1984 Lancet Article?

1. 2 years
2. 5 years
3. 10 years
4. 20 years
How long did the NIH take to recommend the treatment of ulcer as suggested by Dr. Marshall in his 1984 Lancet Article?

1. 2 years
2. 5 years
3. **10 years**
4. 20 years
Treatment of Ulcer – Dr Marshall

- 1979: Dr. Robin Warren, pathologist at Royal Perth Hospital, Australia found bacteria in stomach of patients
- 1981: Dr. Barry Marshall starts residency
- 1982: Marshall cultivates bacteria: Helicobacter pylori, 100% in Duodenal Ulcer and 77% in Gastric Ulcer
- 1984: first publication in Lancet; presents treatment of ulcer with common antibioticum
In a recent article in the Journal of Quality Improvement, 92 QI projects were compared. What was the timeframe from problem identification to completion of first pilot?

1. 23 days
2. 60 days
3. 397 days
4. 504 days
In a recent article in the Journal of Quality Improvement, 92 QI projects were compared. What was the timeframe from problem identification to completion of first pilot?

1. 23 days
2. 60 days
3. 397 days
4. 504 days
Survey of 92 Quality Improvement Projects in Journal of Quality Improvement

504 days from problem identification to completion of first pilot

- 397 days from first team meeting to the end of first cycle
- 75 days to describe current situation in flowchart
- 62 days for data collection if change was improvement
How can we accelerate change and improvements in our programs?
Multiple Rapid Tests

• Increase confidence that the change will result in an improvement
• Learn how to adapt the change to conditions in the specific setting
• Minimize resistance when you move to implement
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are we trying to accomplish?</td>
<td>Model for Improvement</td>
</tr>
<tr>
<td>How will we know that a change is an improvement?</td>
<td>Model for Improvement</td>
</tr>
<tr>
<td>What change can we make that will result in improvement?</td>
<td>Model for Improvement</td>
</tr>
</tbody>
</table>
Model for Improvement

• **Improvement is about learning**
  – trial and error (scientific method)
  – improvements require change, however not all changes are an improvement

• **Measure your progress**
  – only data can tell you whether improvements are made
  – integrate measurement into the daily routine

• **Improvements thru continuous cycles of changes**
  – Plan-Do-Study-Act approach
  – changes are initiated on a small scale to test them before implementation
# Model For Improvement Worksheet

**Model For Improvement Worksheet**

<table>
<thead>
<tr>
<th>What are we trying to accomplish?</th>
<th>What change can we make that will result in improvement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypotheses:</td>
<td>Hypotheses:</td>
</tr>
<tr>
<td>Measurement:</td>
<td>Measurement:</td>
</tr>
<tr>
<td>What can we know that our change is an improvement?</td>
<td>What can we know that our change is an improvement?</td>
</tr>
</tbody>
</table>

## PDSA Worksheet

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date of Initiation:</th>
<th>Date of Completion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Project Aim:</td>
<td></td>
<td>What is the objective of the test?</td>
</tr>
</tbody>
</table>

## Plan

- **Describe the test:**
  - How will you know the change is an improvement?
  - What drives the change impact?
  - What changes will happen?

## Do

- Test the change:
  - Was the change carried out as planned?
  - Record data and observations.
  - What did you observe that was not part of our plan?

## Study

- Did the results match your predictions?
  - Compare the result of your test to your previous performance.

## Act

- **Act:**
  - Decide to Adjust, Adapt, or Abandon:
    - Adjust: Revise the change and continue testing plan.
    - Adapt: Make changes for sustainability.
    - Abandon: Discard the change and try a different one.

---

Plan for collection of data:

1. 
2. 
3. 
4. 
5. 

Plan this: **Plan**

**More Information:**
- What do we want to know about our change?
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?

**Set an aim:**
- Answer the question, “What are we trying to accomplish?”
- The aim needs to be measurable and have a timeframe
AIM:
What are we trying to accomplish?

In the next six months, increase access to case management (CM) for high-risk patients
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?

Establish measures:

• Answer the question, “How will we know that a change is an improvement?”

• If we don’t measure what we’ve done, we don’t know if what we did is better
Model for Improvement

**MEASUREMENT:**

How will we know that our change is an improvement?

Process Measure: *More high-risk patients receive CM services*

Outcome Measure: *Enhanced health outcomes for high-risk patients*

Balance Measure: *Patient satisfaction*
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?

Take action:
- Select new ideas to test
- Answer the question: “What changes can we make that will result in improvement?”
Model for Improvement

HYPOTHESES:
What change can we make that will result in improvement?

Hire more CM
Incentivize high-risk patients for attending CM visits offsite
Provide transportation to CM visits offsite
Improve coordination between clinic and external CM organizations
Seamlessly integrate CM services into clinic visit
## Model for Improvement Worksheet - Exercise

<table>
<thead>
<tr>
<th>What are we trying to accomplish?</th>
<th>MODEL FOR IMPROVEMENT WORKSHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will we know that a change is an improvement?</td>
<td>Team Name:</td>
</tr>
<tr>
<td>What change can we make that will result in improvement?</td>
<td>Date:</td>
</tr>
</tbody>
</table>

**AIM:**
What are we trying to accomplish?

**HYPOTHESES:**
What changes can we make that will result in improvement?

**MEASUREMENT:**
How will we know that a change is an improvement?
Tennis Ball Exercise

• Learning objectives
  – Know how to design changes to a process
  – Know how to test these changes and build on them to design subsequent changes
Many PDSA Cycles

Hunches
Theories
Ideas

DATA

Follow-up tests
Very small scale test

Changes That Result in Improvement

Implementation of change

Wide-scale tests of change
PDSA Cycle – Step 1: Plan

- Choose change to test
- Plan should be comprehensive
- Small, simple & fast
  - Oneness
  - Can you do the test by next Tuesday?
PDSA Cycle
Step 1: Plan

**PLAN:**

Briefly describe the test:

High-risk patients will be referred by clinic staff (MA, nurse, provider) to a CM onsite for one day

How will you know that the change is an improvement?

High-risk patients see CM during their clinic visit
Satisfaction of patients, clinic staff, and CM

What driver does the change impact?

Driver: Access to CM
Barrier: High-risk patients are unlikely to access CM onsite

What do you predict will happen?

Patients will be identified as high-risk and referred to CM
Patients will accept CM services
Patients, clinic staff, and CM will be satisfied with new process

Plan for collection of data:

Collect number of patients seen by CM
Satisfaction of patients collected upon existing clinic
Clinic staff and CM record experience/satisfaction in notes

<table>
<thead>
<tr>
<th>List the tasks necessary to complete this test (what)</th>
<th>Person responsible (who)</th>
<th>When</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify high-risk patients</td>
<td>MA, Nurse, Provider</td>
<td>During visit</td>
<td>Clinic</td>
</tr>
<tr>
<td>2. Offer CM services</td>
<td>MA, Nurse, Provider</td>
<td>During visit</td>
<td>Clinic</td>
</tr>
<tr>
<td>3. Provide CM services</td>
<td>CM</td>
<td>During visit</td>
<td>Clinic</td>
</tr>
<tr>
<td>4. Assess patient satisfaction</td>
<td>Front desk person</td>
<td>End of visit</td>
<td>Clinic</td>
</tr>
<tr>
<td>5. Assess CM satisfaction</td>
<td>CM</td>
<td>End of day</td>
<td>Clinic</td>
</tr>
<tr>
<td>6. Assess clinic satisfaction</td>
<td>MA, Nurse, Provider</td>
<td>End of day</td>
<td>Clinic</td>
</tr>
</tbody>
</table>
PDSA Cycle – Step 2: Do

- Try the new way
- Consider how it’s going

**Act**

**Plan**

**Study**

**Do**

- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data
PDSA Cycle – Step 2: Do

**DO:** Test the changes.

Was the cycle carried out as planned?  X Yes  □ No

Record data and observations
20 patients seen in clinic, 4 referred, 2 accepted

What did you observe that was not part of our plan?
Clinic staff didn’t use a standardized method to identify high-risk patients to refer to CM
Patients didn’t provide detailed feedback regarding their satisfaction, general responses weren’t informative
PDSA Cycle – Step 3: Study

- What are the results of the test?
- Was our prediction correct?

**Act**

**Plan**

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

**Do**
PDSA Cycle – Step 3: Study

**STUDY:**
Did the results match your predictions?  □ Yes  X No

Compare the result of your test to your previous performance:
**First test:**
Fewer patients were identified for CM services than expected
Some high-risk patients were missed
Impacted provider and CM satisfaction
No standardized way to capture details on patient satisfaction

What did you learn?
A standardized process to identify high-risk patients is needed
A standardized tool to gather patient satisfaction data is needed
PDSA Cycle – Step 4: Act

- Adopt, Adapt, Abandon

Act

Plan

What changes are to be made?
Next cycle?

Study

Do
PDSA Cycle – Step 4: Act

**ACT**: Decide to Adopt, Adapt, or Abandon.

- **Adapt**: Improve the change and continue testing plan.
  
  Plans/changes for next test:
  
  Nurses implement standardized screening tool to identify high-risk patients, Front desk staff will implement standardized patient satisfaction survey

- **Adopt**: Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability

- **Abandon**: Discard this change idea and try a different one
Many PDSA Cycles

Hunches
Theories
Ideas

Very small scale test
Follow-up tests

DATA

Wide-scale tests of change
Implementation of change

Changes That Result in Improvement
Many PDSA Cycles - Example

Hunches
Theories
Ideas

Test CM presence in Clinic Visit

Test Screening Tool & Patient Satisfaction Tool

Test Huddles

Test Larger Population

Changes That Result in Improvement

DATA
# PDSA Worksheet - Exercise

## PDSA WORKSHEET

<table>
<thead>
<tr>
<th>Team Name:</th>
<th>Date of Test:</th>
<th>Test Completion Date:</th>
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**Overall Team/Project Aim:**

**What is the objective of the test?**

### PLAN

**Briefly describe the test:**

**How will you know that the change is an improvement?**

**What driver does the change impact?**

**What do you predict will happen?**

**List the tasks necessary to complete this test (include Person Responsible):**

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]

**Plan for collection of data:**

### DO

**Test the changes:**

- Was the cycle carried out as planned? [Yes, No]
- Record data and observations.
- What did you observe that was not part of our plan?

### STUDY

**Did the results match your predictions?** [Yes, No]

**Compare the result of your test to your previous performance:**

**What did you learn?**

### ACT

**Decide to Adopt, Adapt, or Abandon:**

- [ ] **Adopt:** Improve the change and continue testing plan.
- [ ] **Adapt:** Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability.
- [ ] **Abandon:** Discard the change idea and try a different one.
Creating Energy and Momentum For Change

QUALITY AND CHANGE LEADERSHIP
Step 1: Establish Leadership & organizational structure

Step 2: Establish quality management plan

Step 3: Determine performance measures & collect baseline data

Step 4: Analyze data

Step 5: Develop project specific QI plan

Step 6: Study and understand the process

Step 7: Develop and implement Tests/Change(s)

Step 8: Re-measure

Step 9: Celebrate Success, Communicate, Evaluate
Quality management shifts responsibility for excellence from the individual to a strategic system for improvement.
Leaders must...

- Identify assumptions and question them
- Find best practices and spread them throughout the organization and beyond
- Manage standards (defined, observable and measurable requirement, target or goal)
  - Understand the standard
  - Have a way of comparing a process to the standard
  - Know how much variation is acceptable
  - Take action when practices are not in line with the standard

Kemp, 2006
Elephant & Rider

The Elephant (Emotion)
- Gives energy to change
- Provides motivation
- Loves instant gratification
- Overpowers the rider

Heath & Heath, 2010
Dangers that Shift Focus Away from Excellence

• Change is Stress!!!
  – Make sure there is room in the cup
  – Eustress and Cognitive Dissonance

• Self-care and Healthy Organizational Cultures Prevent
  – Toxic Stress & Burnout
  – Compassion Fatigue
  – Vicarious Trauma
  – Secondary Trauma

Bloom & Farragher, 2011
Elephant & Rider

- The Rider (Intellect)
  - Provides direction
  - Thinks long term
  - Gets stuck easy
Elephant & Rider

Direct the Rider!  Motivate the Elephant  Shape the Path

- Follow the Bright Spots
- Point to the Destination
- Script the Critical Moves
- Find the Passion
- Shrink the Change
- Celebrate Wildly
- Tweak the Environment
- Build Healthy Habits
- Rally the Herd

Status Quo  Change

Heath & Heath, 2010
Quality Improvement in an Organizational Context

• Utilize PDSA Cycle:
  – Pursue a vision towards excellence
  – Support Mission and values
• Provide focus and motivation for strategic change
• Striving for Excellence
  – Motivating the elephant
  – Giving the rider a direction
  – Creating process that lead to a better future state
Resources

  - HCH Quality Leaders: A Case Study, November 2012
  - Improving Quality of Care: Clinician Tip Sheet, March 2013
- Health Resources and Services Administration (HRSA)
- Institute For Healthcare Improvement (IHI), IHI.com
- National Quality Center (NQC), nationalqualitycenter.org.
- Stephen J. Bown, SJ. (2004). Scurvy: How a Surgeon, a Mariner, and a Gentleman Solved the Greatest Medical Mystery of the Age of Sail; St. Martin's Press.