Quality Improvement Overview
Care of Mental, Physical, and Substance use Syndromes

The project described was supported by Grant Number 1C1CMS331048-01-00 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies.
Objectives

At the end of this session you will be able to:

• Describe the purpose and goals of quality improvement
• Execute process mapping within your clinical setting
• Utilize PDSA cycles to run small tests of change
• Differentiate between adaptive and technical challenges
Why do clinical quality improvement?

“Measurement is the first step that leads to control and eventually to improvement. If you can’t measure something, you can’t understand it. If you can’t understand it, you can’t control it. If you can’t control it, you can’t improve it.”

- H. James Harrington (IBM Quality Expert)
Targeting the Triple Aim*

• Improve population health

• Improve patient experience of care, including quality

• Improve affordability by decreasing per capita costs

What is Quality Improvement?

• QI is a formal approach to the analysis of performance and systematic efforts to improve it.
  – Numerous models:
    » FADE
    » PDSA
    » Six Sigma
    » Continuous Quality Improvement (CQI)

• In medicine, focused on reducing errors and decreasing morbidity and mortality.
Different than Doing Research

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Measurement for Research</th>
<th>Measurement for Learning and Process Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>One large &quot;blind&quot; test</td>
<td>Many sequential, observable tests</td>
</tr>
<tr>
<td>Biases</td>
<td>Control for as many biases as possible</td>
<td>Stabilize the biases from test to test</td>
</tr>
<tr>
<td>Data</td>
<td>Gather as much data as possible, &quot;just in case&quot;</td>
<td>Gather &quot;just enough&quot; data to learn and complete another cycle</td>
</tr>
<tr>
<td>Duration</td>
<td>Can take long periods of time to obtain results</td>
<td>&quot;Small tests of significant changes&quot; accelerates the rate of improvement</td>
</tr>
</tbody>
</table>
The Model for Improvement

Aim

Measures

Hypothesis

Small Tests of Change

Langley, 2009 (IHI)
Organizing for Success

People

Goals

Method

Organizational Goals
Aims and Measures

Administration
Clinical Staff
QI
Champion

Adaptive Change

PDSA

COMPASS
Partnering for Mind-Body Health
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement Teams</td>
<td></td>
</tr>
<tr>
<td>QI Team Leader</td>
<td>Clinician Champion</td>
</tr>
<tr>
<td>Patient</td>
<td>Clinical Manager</td>
</tr>
<tr>
<td>Other staff - lab, ancillary, care team members</td>
<td>Data Analyst</td>
</tr>
</tbody>
</table>
Team Responsibilities

• Communicate the reason and evidence for the QI work

• Engage peers

• Identify barriers within the clinician workflow

• Contribute ideas to the team
Team Responsibilities cont.

• Enlist influential peers to support the work and help with the change

• Participate in QI work

• Be present for the small tests of change

• Share results with peers
The Model for Improvement

Aim
Measures
Hypothesis

Small Tests of Change

Langley, 2009 (IHI)
Characteristics of a “Good” Aim

- **Focused:** answers the question: “What are we trying to accomplish?”
- **Defines success:** includes a numeric target/goal to be achieved within a specific time period
- **Clinically meaningful:** related to characteristics that providers and patients care about
- **Specifies the patient population**
- **Measure is implied:** aim directly drives the measures
It’s Team Time!

– Develop Aim statement
– Refer to worksheet and check all the boxes
– Teams’ aim statements will vary
The Model for Improvement

Aim

Measures

Hypothesis

Small Tests of Change

Langley, 2009 (IHI)
Purposes of Measurement

• **Focuses** improvement efforts
• Facilitates **objective evaluation** of progress
• **Motivates** – provides feedback to the team, NOT JUDGMENT
• **Eliminates** wishful thinking
• Overall, **accelerates** improvement, doesn’t slow it down
Characteristics of a Measure

• **Provides an answer** to: “How will we know that a change is an improvement?”
• **Directly relates to the aim**
• **Trending measurement** over time reflects progress toward achieving the aim
• Clearly **identifies the patient population**
• Represents **small, frequent samples** expressed as %
Where to Start? Start with your Baseline

• Where are you right now?

• Where were you in the last week? Last month? Last quarter? Last year?

http://bizarrocomics.com/
## How Data & Measurement Is Used

### Research, Improvement & Accountability

<table>
<thead>
<tr>
<th>Type</th>
<th>Audience</th>
<th>Purpose</th>
<th>Character</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Scientific community</td>
<td>New knowledge</td>
<td>Complex, slow, precise</td>
</tr>
<tr>
<td>I</td>
<td>Providers of care</td>
<td>Understand processes, confirm results or efforts</td>
<td>Simple, rapid, motivating</td>
</tr>
<tr>
<td>A</td>
<td>Customers (patients, purchasers)</td>
<td>Provide basis for choice, reassure</td>
<td>Comparative, summarized</td>
</tr>
</tbody>
</table>

*Solberg, 1997*
Tips About Measurement

• Seek usefulness, not perfection
• Don’t wait for the information system
• Use small, frequent sample sizes
• Use qualitative and quantitative data
Common Pitfalls of Measurement

• Developing measures without a clear aim, uses, and users

• Starting without the commitment to a common aim by those who will be using the measures

• Starting too big and measuring too many things
What is Process Mapping?

The creation of a process map that identifies what is **valuable** and what is **non-value added** to the **customer/patient** OR those who are involved in the process.
Benefits of Process Mapping

• Makes the problem areas visible
• Includes all the roles of the process
• Bridges functional boundaries
• Fast - Use pencil and paper (quick and crude, not slow and elegant)
• Post in large presentations to create interactive team tool
• Creates “AHA!” moments
Steps to Create a Process Map

• Start with the ends in mind – start to finish
• Be the patient or the staff person
• Watch/Walk the process from end to end
  * Optimal = 8-10 times
• Draw process boxes (from left to right)
• Optional: Include “wait/walk” time between steps
Process Map
Think About What Contributes to Flow

• What roles are involved in this process?
• How will we know which patients?
• Where can we prompt or flag?
• What would make it seamless for the patient?
• Electronic or paper?
• How will we communicate? What format?
Team huddle in AM with quick ID of patient eligible for CRC screening →
CMA rooms patient, vitals and provided CRC information →
MD creates shared agenda with patient →
MD reviews CRC options available to patient, SDM discussion →
Patient schedules follow-up screening appointments
Pick a part of the process and PDSA!

- Choose easy fixes first
- Brainstorm about ideas on how to address
- Ask around for ideas – get staff involved
- Pick one and test it
- Try out on a small group, i.e., 1 doc/1 nurse
- Trial for a short time and ask for feedback
Performance Improvement Process

**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)

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

**DO**
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data
Performance Improvement Process

Plan

– Define the problem
– Define the scope
– Current measures
– Define the goals and targets
– Describe the current situation
– Describe the needed change
– Define who needs to be involved in the team
– Define who is impacted by the change
The Data Collection Plan

• What data will be collected?
• How will you collect it?
• How much data to collect?
• Who will collect it?
• What tools will you use?
Performance Improvement Process

Do

• Implement the change
• Gather data
• Observe the process
• Communicate:
  - Problem
  - Purpose
  - Process
Performance Improvement Process

Study

– Did the plan achieve the desired outcome?
– What was learned?
The Run Chart

• The basic data display tool for continuous improvement
• Provides a cumulative record over time
• Requires no statistical calculations
• Is readily understood by all involved
Example of a Run Chart
Performance Improvement Process

Act

• If improvement was achieved, what is the plan to sustain the change?
• If it wasn’t, identify needed change and begin the planning phase and continue to work on improving the system.
7 Tips On How To Provide Data Feedback

1. Acknowledge up front that we are all trying to do the right thing

2. Let folks know what you are doing ahead of time

3. Ask for input about what will be measured, and how you are measuring it

4. Don’t start by attaching rewards & punishments – transparency itself typically reduces variation

5. Be open to constructive criticism – measurement methods can always be improved

6. Data doesn’t have to be perfect to be actionable

7. You may want to start by blinding it
Adaptive Leadership
Complex Issues Require Change in

- Habits
- Attitudes
- Values
Framing the Issues

Technical Challenges

• Problem well defined
• Answer can be found within present structure
• Implementation is clear
• Value of “expert” to provide answer
Framing the Issues

Adaptive Challenges

• Situation is complex, solution not obvious
• Can’t be done within present system
• Need to change/address deeply held beliefs, habits, and values
• Loss is inherent part of process
Remember…

The biggest issue may be adaptive! It’s important to recognize the difference.
Resources

Care of Mental, Physical, and Substance use Syndromes

The project described was supported by Grant Number 1C1CMS331048-01-00 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies.
THANK YOU