Model for Improvement

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Objectives of this Session

- Participants will be able to:
  - Identify Model for Improvement
  - Create an Aim statement for project with concrete goals
  - Constitute Plan Do Study Act (PDSA) cycles to test improvements, using the project change package, tools and resources
# Research vs. Quality Improvement

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

- What are we trying to accomplish?

- How will we know that a change is an improvement?

- What changes can we make that will result in an improvement?
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?

Act
Plan
Study
Do

AIM
MEASURES
IDEAS
What Are We Trying to Accomplish?

Aim: A written statement of the accomplishments expected from this improvement effort

Key components:
- A general description of aim – should answer, “what are we trying to accomplish?”
- Some guidance for carrying out the work and rationale
- Specific target population and time period
- Measurable goals
Example (Poor)

- Our practice team will improve assessment and identification of genetic conditions for all of our patients, using the GPCI-QIP change package.
Sample Aim

By September 2013, Pediatric Practice, Inc. will improve the assessment and identification of genetic conditions for all of our patients aged 0-21 years old, as part of the health supervision visit by:

- Creating or updating/maintaining multi-generational family histories at health supervision visits, using the family history components defined by the project, for 90% of our patients
- Discussing current family histories with 90% of our patients/families
- Documenting in the chart that 90% of our patients with a positive family history and/or identified clinical concerns of a genetic condition have a follow-up/plan of care that was discussed with the patient/family
- Planning for and accommodating 90% of our patients w/special needs at office visits
- Creating/maintaining a system for reminding/recalling our patients due/overdue for preventive services
- Creating/maintaining a referral tracking mechanism to be used for our patients in need of that follow-up
- Creating/maintaining a process/written protocol for use of a standardized family history tool
SMAART Aim

- **Specific**: Understandable, unambiguous
- **Measurable**: Numeric goals
- **Actionable**: Who, what, where, when
- **Achievable** (but a stretch)
- **Relevant** to stakeholders and organization
- **Timely**: with a specific timeframe
AIM Worksheet

The (name of your team) **intend to accomplish**

**By** (date)

**For** (population)

**because**

**Our goals include:**

**Special guidance that will help us stay on track:**
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?

AIM

MEASURES

IDEAS

Act

Plan

Study

Do
How will we know a change is an improvement?

- Requires **measurement**
- Build measurement into daily work routine
  - Data should be easy to obtain and timely
  - Small samples over time
- Use qualitative & quantitative data
  - Qualitative data is highly informative
  - Qualitative data is easy to obtain
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?

Model for Improvement

Act

Plan

Study

Do

AIM

MEASURES

IDEAS
What Changes Can We Make That Will Result in Improvement?

Tests of Change need 2 components:

1. Change concepts (ideas): ready for use or ready to adapt to your unique environment (**Use results from pre-work assessment to inform what you need to change**)

2. PDSA test method
The PDSA Cycle for Learning and Improvement

**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 learned

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

“Let’s try it!”

“Did it work?”

“What’s next?”

“What will happen if we try something different?”
PDSA: Break it Down/Simplify...

**Plan** - Figure out the questions you want to answer, plan a way to answer the questions, and predict results

**Do** - “Just do it” (i.e. do the plan)

**Study** - What did you learn?
   - Did your prediction hold?
   - What assumptions need revision?

**Act** - What will you do with the knowledge you learned?
   - Adapt? Adopt? Abandon?

*What do you want to do next?*
Use of the PDSA Cycles

Multiple cycles

Evidence
Best Practice
Testable Ideas

Changes that Result in Improvement
Implementation of Change
Wide-Scale Tests of Change
Follow-up Tests
Very Small Scale Test

Data

APSD

APSD

APSD

APSD
What are Tests?

Putting a change into effect on a temporary basis and on a small scale and learning about the potential impact
Task or Test?

- Task
  - To do’s
  - Meetings
  - Posters
  - Policy
  - Committees

- Test
  - Question
  - Prediction
  - Data
  - Usually involves patient
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
Decrease the Time Frame for a PDSA Test Cycle

- Years
- Quarters
- Months
- Weeks
- Days
- Hours
- Minutes

Drop down next “two levels” to plan Test Cycle!
What Can We Do Now!

By Next Week,
By Tuesday,
By Tomorrow

That won’t harm a hair on the head of a patient?
Sequential Building of Knowledge
Include a Wide Range of Conditions in the Sequence of Tests

- Test on a small scale
- Test a wider group
- Spread
- Implement
- Breakthrough Results
- Test new conditions
- Learning and improvement
- Evidence & Data
- Theories, hunches, & best practices
Overall Aim: To improve the provision of genetic services in primary care

Use of a Family History tool

Use of Health Supervision Guidelines

Referral tracking and follow-up

Coordinated care, across all settings
Form for planning a PDSA cycle supports prediction and keeping one step ahead.

### MODEL FOR IMPROVEMENT

<table>
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<th>Cycle:____</th>
<th>Date:____</th>
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#### Objective for this PDSA Cycle

#### PLAN:

**Questions:**

**Predictions:**

**Plan for Change or Test:** Who, What, When, Where

**Plan for Collection of Data:** Who, What, When, Where

#### DO: Carry out the change or test; collect data and begin analysis.

#### STUDY: Complete analysis of data; summarize what was learned.

#### ACT: Are we ready to make a change? Plan for the next cycle.
From Charles Darwin:

“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.”
Questions/Comments?
Thank you!
References