The Model for Improvement Key Points

<table>
<thead>
<tr>
<th>Why A Model? What Purpose?</th>
<th>Improvement Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Provide organizing structure to guide thinking</td>
<td>▪ Listen to customers</td>
</tr>
<tr>
<td>▪ Ensure discipline and thoughtfulness</td>
<td>▪ Tap knowledge of the system and people in it</td>
</tr>
<tr>
<td>▪ Support improvement principles</td>
<td>▪ Understand processes and interactions in system</td>
</tr>
<tr>
<td>▪ Facilitate improvement</td>
<td>▪ Use disciplined method in successive cycles to test changes</td>
</tr>
<tr>
<td>▪ Foster common language</td>
<td>▪ Test on small scale; move rapidly to improve</td>
</tr>
<tr>
<td></td>
<td>▪ Measure to learn and to understand variation</td>
</tr>
</tbody>
</table>

Model for Improvement

3 Key Questions for Improvement

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

How will we know that a change is an improvement?  
**MEASURES**

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

<table>
<thead>
<tr>
<th>Act</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>Do</td>
</tr>
</tbody>
</table>

Test Ideas & Changes in Cycles for Learning & Improvement

**Question 1: What are we trying to accomplish?**

**AIM:** A specific, measurable, time-sensitive statement of expected results of an improvement process.

A strong clear aim gives necessary direction to improvement efforts, and is characterized as:

▪ Intentional, deliberate, planned.
▪ Unambiguous, specific, concrete.
▪ Aligned with other organizational goals or strategic initiatives.
▪ Agreed upon and supported by those involved in the improvement and leaders.
Make your aim actionable and useful. Include:
- A general description of aim - should answer, “What are we trying to accomplish?”
- Rationale/importance
- Some guidance for carrying out the work
- Specify target population and time period
- Measurable goals

**Question 2: How will we know that a change is an improvement?**

**MEASURES:** Measures are indicators of change. To answer this key question (“How will we know that a change is an improvement”), several measures are usually required. These measures can also be used to monitor a system’s performance over time.

In improvement, project measures should:
- Clarify and be directly linked to aims and goals
- Seek usefulness over perfection.
- Be integrated into daily work whenever possible.
- Be graphically and visibly displayed, usually as run charts.

*Note these system or project measures are not the same as the “study” measures for PDSA cycles described below.*

**Question 3: What changes can we make that will result in an improvement?**

**IDEAS:** Ideas for change or change concepts to be tested in a P-D-S-A cycles can be derived from:
- Evidence - results of research / science
- Critical thinking or observation of the current system
- Creative thinking and extrapolations from other situations

When selecting ideas to test, consider the following:
- Direct link to the aim
- Likely impact of the change (Avoid low-impact changes.)
- Potential for learning
- Feasibility
- Logical sequencing
- Series of tests that will build on one another
- Scale of the test (e.g., 3 times NOT 30)
- Shortness of the cycle (1 week NOT 1 month)

**Tips to make the most of PDSA cycles and tests of change:**
- Always document the questions you want to address and make a prediction prior to doing a PDSA
- Scale down size of test (e.g., # of people involved)….A “cycle of 1”
- Do more cycles, at a smaller scale and faster pace instead of fewer, bigger, slower
- Test with volunteers or “friendly audience” first
- Don’t need to seek buy-in or consensus for the test – particularly early on
- Collect useful (and only just enough) data during each test
Test over a wide range of conditions prior to implementation

Think a couple of cycles ahead -- plan multiple cycles to test and adapt change

Learn from failures as well as successes

For "failed" tests (prediction not confirmed), ask these questions:
  - Was test conducted well?
  - Does the change tested need modification in our setting?
  - Were measures sufficient to detect improvement?
  - Was prediction/theory wrong?

Engage leadership support when implementing

Repeated PDSA Cycles To Test A Change

Test Ideas & Changes in Cycles for Learning & Improvement