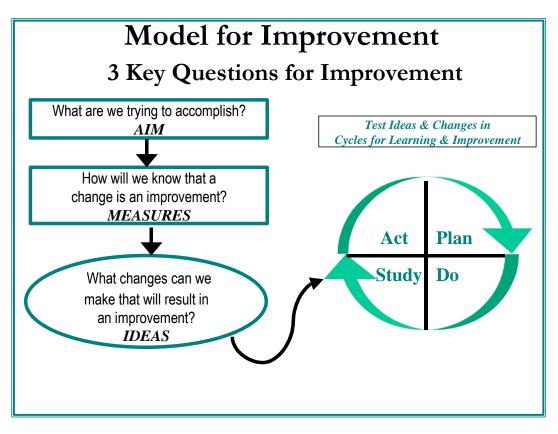


Model for Improvement¹ Key Points

Why A Model? What Purpose?	Improvement Principles
 Provide organizing structure to guide thinking Ensure discipline and thoughtfulness Support improvement principles Facilitate improvement Foster common language 	 Listen to patients and families Tap knowledge of the system by involving staff Understand processes and interactions in system Use disciplined method in successive cycles to test changes Test on small scale; move rapidly to improve Measure to learn and to understand variation



¹Langley, Nolan, Norman, and Lloyd P. Provost. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. New York: Jossey-Bass Inc., 1996.





commendations in this publication do not indicate an The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate. Original document included as part of *Bright Fatures Tool and Resource Kit.* Copyright © 2010 American Academy of Pediatrics. All Rights Reserved. The American Academy of Pediatrics does not review or endorse any modifications made to this document and in no event shall the AAP be liable for any such changes.

DEDICATED TO THE HEALTH OF ALL CHILDREN™

of Pediatrics



Model for Improvement Key Points

Question 1: What are we trying to accomplish?

AIM: A specific, measurable, actionable, realistic, and time-bounded (SMART) 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
- Measurable with a numeric goal, preferably one that provides a "stretch" to motivate significant improvement
- 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 what you hope to accomplish
- Specific patient population who will be the focus
- Some guidance for carrying out the activities to achieve aim

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 also can be used to monitor a system's performance over time. In Plan-Do-Study-Act (PDSA) cycles, measurement used immediately after an idea or change has been tested helps determine its effect.

In improvement, key measures and measurement should:

- Clarify and be directly linked to goals
- Seek usefulness over perfection
- Be integrated into daily work whenever possible
- Be graphically and visibly displayed
- For PDSA cycles, be simple and feasible enough to accomplish in close time proximity to tests of change



Model for Improvement Key Points

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 PDSA cycle can be derived from:

- Evidence or results of research/science
- Critical thinking or observation of the current system
- Creative thinking
- Theories, questions, hunches
- Extrapolations from other situations

When selecting ideas to test, consider the following:

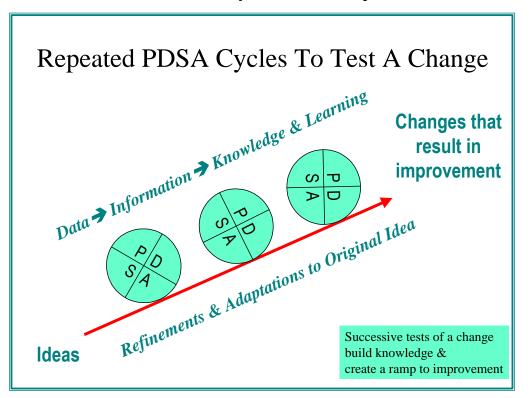
- Direct link to the aim and goals
- Likely impact of the change (avoid low-impact changes)
- Potential for learning
- Feasibility
- Logical sequencing
- Series of tests that will build on one another
- Scale of the test (3 patients, NOT 30)
- Shortness of the cycle (1 week, NOT 1 month)

Tips to make the most of PDSA cycles and tests of change:

- Think a couple of cycles ahead
- Plan multiple cycles to test and adapt change
- Scale down size of test (# of patients, location)....A "cycle of 1" is often appropriate
- Do more cycles, at a smaller scale and faster pace instead of fewer, bigger, slower
- Test with volunteers first
- Don't seek buy-in or consensus for the test
- Be innovative and flexible to make test feasible
- Collect useful (and only just enough) data during each test
- Test over a wide range of conditions
- Learn from failures as well as successes
- Communicate what you've learned
- Engage leadership support



Model for Improvement Key Points



Test Ideas & Changes in Cycles for Learning & Improvement •What refinements or •Objective modifications need to be made •Questions& predictions •What's the next cycle? (What will happen & why) •Plan to carry out the cycle (Who, what, where, when) Plan Act Study Do •Complete analysis •Carry out the plan •Compare to predictions •Document experience, •What did you learn? problems, surprises •What conclusions can you •Collect data as planned; draw from this test? begin analysis

Downloaded from: http://brightfutures.aap.org/