




PDSA PLAN....DO...STUDY....ACT

	<p><i>What is it?</i></p>	<p>The Plan-Do-Study-Act (PSDA), or shorthand for testing a change by planning it, trying it, observing the results and acting on what has been learned. This is the scientific method used for action-oriented learning.</p>
	<p><i>Why use it?</i></p>	<ul style="list-style-type: none"> • To increase your belief that the change will result in improvement. • To decide which of several proposed changes will lead to the desired improvement. • To evaluate how much improvement can be expected from the change. • To decide whether the proposed change will work in the actual place of change. • To decide which combinations of changes will have the desired effects in the important measures of quality. • To evaluate costs, social impact and side effects from a proposed change. • To minimize resistance upon implementation.
	<p><i>How do I do it?</i></p>	<p>Steps in the PDSA cycle</p> <p>Step 1: Plan Plan the test of observation, including a plan for collecting data:</p> <ul style="list-style-type: none"> • state the objective of the test • make predictions about what will happen and why • develop a plan to test the change (Who? What? When? Where? And what data will need to be collected?) <p>Step 2: Do Try out the test on a small scale:</p> <ul style="list-style-type: none"> • carry out the test • document problems and unexpected observations • begin analysis of the data <p>Step 3: Study Set aside time to analyze the data and study the results:</p> <ul style="list-style-type: none"> • complete the analysis of the data • compare results to your predictions • summarize and reflect upon what was learned <p>Step 4: Act Refine the change, based on what was learned from the test:</p> <ul style="list-style-type: none"> • determine what modifications should be made • prepare a plan for the next test

Tips for testing changes and an example are shown on the next page.

Source: www.ihi.org (see improvement tools)



Capital Health

10,000 employees & volunteers
10,000 medical staff
10 campuses
36 buildings
One shared calling.

PDSA IMPROVEMENT CYCLE

Tips for testing changes:

- 1. Stay a cycle ahead.**
Plan multiple cycles of a test of change. When designing a test, imagine at the start what the subsequent test or two might be, given various possible findings in the “study” phase of the PDSA Cycle.
- 2. Scale down the scope of tests.**
Dimensions of the tests that can be scaled down to include the number of patients, staff members and physicians and others involved in the test. Consider a sample to test to start with 10 rather than 200; also, consider the location and test it on one patient unit for one week rather than an entire site.
- 3. Pick willing volunteers.**
Work with those who want to work with you.
- 4. Avoid the need for consensus, buy-in or political solutions.**
Save those for later stages. When possible, choose changes that don't require a long process of approval, especially in the early testing phase.
- 5. Don't reinvent the wheel.**
Instead, replicate changes made elsewhere.
- 6. Pick easy changes to try.**
Look for concepts that seem most feasible and will have the greatest impact.
- 7. Avoid technical slowdowns.**
Don't wait for a new computer to arrive; instead, try recording test measurements and charting trends with paper and pencil instead.
- 8. Reflect on the results of every change.**
After making a change, a team should ask, What did we expect to happen? What did happen? Were there unintended consequences? What was the best thing about this change? The worst? What might we do next? Too often, people avoid reflecting on failure. Remember that teams often learn important lessons from failed tests of change.
- 9. Be prepared to end the test of a change.**
If the test shows that a change is not leading to improvement, the test should be stopped. Note: “Failed” tests of change are a natural part of the improvement process. If a team experiences very few failed tests of change, it is probably not pushing the boundaries of innovation far enough.

Example of a test of change (PDSA Cycle)

Depending on their aim, teams choose promising changes and use small PDSA Cycles to test a change quickly in a small scale, see how it works and refine the change as necessary before implementing it on a broader scale. The following example shows how a team started with a small-scale test.

Example: Diabetes: planned visits for blood sugar management

Plan: Ask one patient if he would like more information on how to manage his blood sugar.

Do: Dr. Smith asked his first patient with diabetes on Tuesday.

Study: Patient was interested; Dr. Smith was pleased with the positive response.

Act: Dr. Smith will continue with the next five patients and set up a planned visit for those who say yes.