PDSA: Plan-Do-Study-Act – Instruction

Why would I use this tool?

PDSA is the action component of the Quality Improvement Steps and is a fundamental tool in quality improvement (QI) work.

PDSA allows the team to create new knowledge by conducting small tests of change with a minimum of risk, and builds confidence in the impact of the changes proposed. Ideas with positive impact can be continued on a larger scale (PDSA ramps) to implementation while ideas that do not have a positive impact are discontinued. PDSA can be used effectively to engage staff who may be reluctant to change.

Quality Improvement Steps

PDSA cycles can be useful in almost every phase of your improvement journey.

Ontario Health

How do I use this tool?

PDSAs are carried out in a step-by-step process to build knowledge and create sustainable change.

Step 1: Plan

- Be specific about the aim of the test.
- Make predictions about what will happen and why, as this reflects beliefs about the operation of your system.
- Answer Who? What? When? Where? questions specifically, and include a data collection plan.

Step 2: Do

- Carry out the test.
- Document the outcome of the test and other observations, positive and negative.

Step 3: Study

- Analyze the data.
- Compare the data to your predictions.
- Discuss what has been learned.

Step 4: Act

- Depending upon the results, decide whether to adapt, adopt or abandon the next test.
- Start to prepare for the next PDSA cycle.

What do I need to use this tool?

Materials	Timing	Setup
• PDSA template • Pen/pencil	• PDSA can be done fairly quickly if you are clear on what you are trying to accomplish. • Tests of change can take an hour, a shift, or a day, depending upon the frequency of the change being tested.	Can be done as a team or by an individual

What tips and tricks will be useful in facilitating this tool?

Always complete the test in writing, including your predictions; this gives the tool structure, encourages thoughtfulness and increases the chance of success, especially when developing a change.

If the Improvement Team members seem to be stuck on a single idea to test, use a creativity tool or a concept fan to move them beyond this stage.

PDSA test cycles are best performed on a small scale – if you're thinking "all" patients, think one or two patients. If you're thinking "all" staff, think one staff member. If you're thinking months, think weeks or days.

Although it is ideal to work with willing participants in carrying out tests, this approach also can work to create willingness to try something new when there is a reluctance to change.

The PDSA scale should be determined by the team based on:

- Confidence that the change will result in an improvement
- The readiness of staff to accept the change.

Small tests are rarely stand alone; therefore, you should start to prepare the next test based upon your predictions. Often a change idea will go through multiple PDSA cycles as data is collected and the idea is refined (this is called a PDSA ramp); large-scale tests of changes may require multiple concurrent PDSA ramps before implementation.

PDSA: Plan-Do-Study-Act – Tool

Test Topic: **Cycle #:** **Date:**

Plan

The purpose of this cycle is to: ☐ Develop ☐ Test ☐ Implement

What questions do you want to answer?

What are your predictions?

Plan to collect data to answer your questions:

What data will be collected?	**How?** (checklist chart audit)	**Who?** (name or role)	**When?** (times, dates – be specific)	**Where?** (unit, area, charts)

List tasks necessary to set up test:

What?	**How?** (checklist chart audit)	**Who?** (name or role)	**When?** (times, dates – be specific)	**Where?** (unit, area, charts)

Do

What did you observe during the test? Were there any unexpected observations?

Study

Analyze your data and describe the results. How do the results compare with your predictions? What did you learn from this cycle?

Act

Are you ready to implement?

☐ Yes (I am confident that there is measured improvement, changes have been tested under different conditions and questions answered.)

☐ No (I have more questions, need to make adjustments, and test again, OR risks outweigh benefits – new idea required.)

What is your plan for the next cycle?

Team: _____

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