

Plan Do Study Act Cycles

SCV Quality Improvement Toolkit

OFFICIAL

Once you have answered the 3 core questions of the Model for Improvement, it is time to start testing your change ideas. This is done by using the 'machine' of the Model for Improvement – Plan Do Study Act (PDSA) cycles.

Before you implement any changes, you need to test them using small-scale testing. It is important that the tests are structured, systematic and documented. The PDSA process helps provide this.

PDSA cycles start very small (with one patient, one day, or one team). Small tests are important so you can test safely, quickly, and build confidence in the effectiveness and appropriateness of the change idea. The PDSA approach allows you to gradually increase the size and complexity of your tests helping you to ensure they are robust and will help you achieve the improvement you are trying to accomplish.

Importantly, PDSA cycles are decision support tools. At the end of each PDSA cycle, you can choose if you adopt the change, adapt the change idea, or abandon the change idea all together.

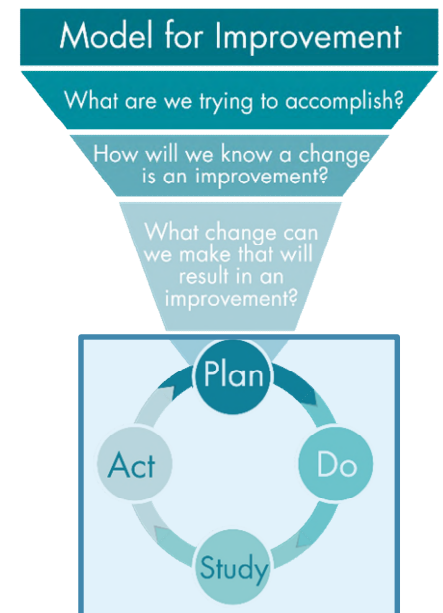
In partnership with the NSW Health Clinical Excellence Commission, we have developed a PDSA form to help you plan and document your PDSA cycles.

How to use the PDSA Cycles

Plan phase: the prediction, what, who, when, where, why and how

Select a change idea to test, ask yourself the following questions and record your responses.

1. *What* do you predict will happen? (What do you think will happen? You will need to compare what actually happens with what you thought would happen to identify gaps in your planning.)
2. What exactly will you do? (Clearly define tasks and activities that will be undertaken.)
3. Who will carry out the plan? (State the people who will be involved. Ownership is important.)
4. *When* will it take place? (Define the time period as specifically as possible. It should occur over a short period of time.)
5. *Where?* (State the location where the plan will be implemented/improvement.)
6. *What* data/information will you collect to know whether there is an improvement? (What data will you need to collect to check the outcome of the change and determine if there is an improvement.)



Plan Do Study Act (PDSA) Cycles



Do phase: the execution

It is important to do the activity and not get caught in the planning phase for too long. The doing phase should be as short as possible. It is important to document what really happened after the plan was carried out. Was the plan executed? Did it mean deadlines? What unexpected events or problems arose?

Study phase: the review

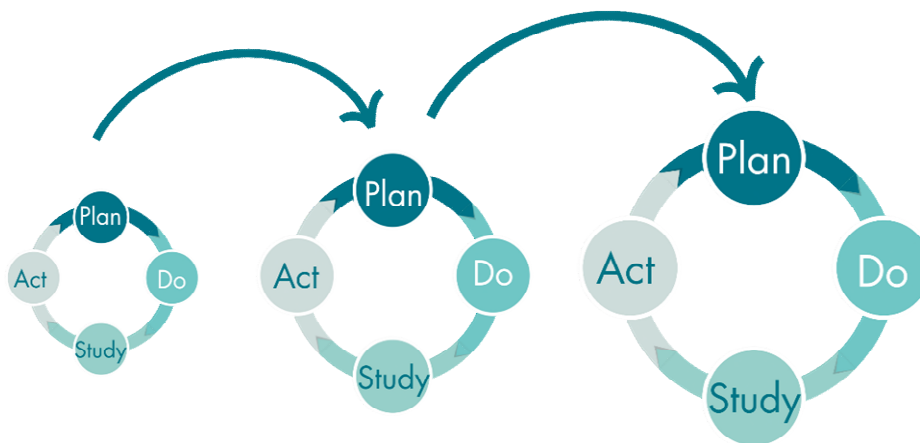
We use this phase to measure what happened. Study the data collected and think about its impacts. Think about what could have been done differently. Where were we, and where are we now? Has it made a difference? Were our expectations met in the real world? What could be done differently? What would I change?

Act phase: deciding on next steps

In this section, you need to think about what you have learned and what further tests are needed to build your degree of belief in the change idea. In other words:

- will you **Adopt**, **Adapt** or **Abandon** the change idea?
- what are your reasons and evidence for the decision?

PDSA cycles should be scaled up over time. This means making decisions about different conditions you will start to combine together for your tests. The more conditions, and complex combinations of conditions you test, the greater the degree of belief you will have that your change idea will help achieve the improvement you are trying to accomplish. Conditions you may test with include different times, locations, expertise/experience of people involved in testing or number of people involved in the testing. Gradually building up the scale and complexity of your tests is called **PDSA Ramping**.

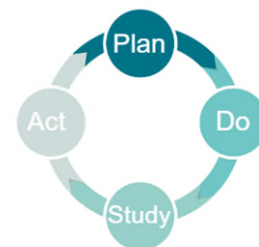


References

Clinical Excellence Commission, Quality Improvement Toolkit. 2022; Sydney: NSW; NSW Health.

Institute for Healthcare Improvement (IHI). Model for Improvement.

Nolan T, Resar R, Haraden C, Griffin FA. Improving the Reliability of Health Care. IHI Innovation Series white paper. 2004; Boston: Institute for Healthcare Improvement.



Plan Do Study Act (PDSA) Cycles

PDSA Form – Completed example

Plan	Cycle #: 2	Date: 12/9/2023
Change you will be testing: Describe the change you will be testing	We will test use of a new patient feedback survey using QR code access to have a better understanding of patient satisfaction	
Aim What are your predictions?	We aim to test the patient feedback survey & QR code access on 5 patients attending the Podiatry outpatient clinic next Tuesday (19/09/2023) to ensure that the survey is easy to read, understand and complete. We predict that patients will find the tool easy to access, understand and help motivate them to provide feedback.	
Team Members & Roles Names, roles & responsibilities	Sue – Podiatrist Mike – Allied Health Assistant Beth – Administration	
How are you going to test? What / when / how	During clinic hours, we will ask 5 patients if they would like to test and provide feedback on the newly developed tool and the method for completion.	
Data to be collected What / when / how	Survey completion, Time to complete Number of issues faced by participants Qualitative data / feedback on tool and collection method	
Do		
Observations What happened?	Most patients found the survey easy to complete. One patient required carer/relative support to complete.	
Problems/ barriers Did PDSA go as planned? If not, why not?	PDSA went as planned – patients were eager to provide feedback and overall found it easy to access and use but language was a difficulty for 1 patient.	
Study		
Data Analysis: What did you learn? Any surprises? Were your predictions accurate?	5 people tested survey Average completion time was 4.5mins For patients who spoke English, the tool worked well. Adaptation needed to support patients who speak languages other than English to complete the survey.	
Act		
Decision:	Adopt: <input type="checkbox"/> Adapt: <input checked="" type="checkbox"/> Abandon: <input type="checkbox"/>	
Next Steps: Is this change ready to be scaled up, implemented, or spread	Identify main language groups among patients. Translate main language other than English & test.	



Plan Do Study Act (PDSA) Cycles

PDSA Form

Plan	Cycle #:	Date:
Change you will be testing: Describe the change you will be testing		
Aim What are your predictions?		
Team Members & Roles Names, roles & responsibilities		
How are you going to test? What / when / how		
Data to be collected What / when / how		
Do		
Observations What happened?		
Problems/ barriers Did PDSA go as planned? If not, why not?		
Study		
Data Analysis: What did you learn? Any surprises? Were your predictions accurate?		
Act		
Decision:	Adopt: <input type="checkbox"/>	Adapt: <input type="checkbox"/>
Next Steps: Is this change ready to be scaled up, implemented, or spread	Abandon: <input type="checkbox"/>	