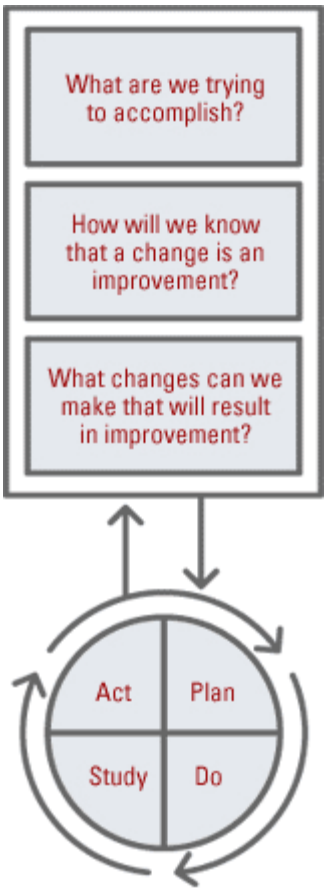
PDSA Directions and Examples

The Plan-Do-Study-Act method is a way to test a change that is implemented. By going through the prescribed four steps, it guides the thinking process into breaking down the task into steps and then evaluating the outcome, improving on it, and testing again. Most of us go through some or all of these steps when we implement change in our lives, and we don't even think about it. Having them written down often helps people focus and learn more.



For more information on the Plan-Do-Study-Act, go to the IHI (Institute for Healthcare Improvement) Web site or this PowerPoint presentation on Model for Improvement.

Keep the following in mind when using the PDSA cycles to implement the health literacy tools:

- **Single Step** - Each PDSA often contains only a segment or single step of the entire tool implementation.
- **Short Duration -** Each PDSA cycle should be as brief as possible for you to gain knowledge that it is working or not (some can be as short as 1 hour).
- **Small Sample Size -** A PDSA will likely involve only a portion of the practice (maybe 1 or 2 doctors). Once that feedback is obtained and the process refined, the implementation can be broadened to include the whole practice.

Filling out the worksheet

Tool: Fill in the tool name you are implementing.
Step: Fill in the smaller step within that tool you are trying to implement.
Cycle: Fill in the cycle number of this PDSA. As you work though a strategy for implementation, you will often go back and adjust something and want to test if the change you made is better or not. Each time you make an adjustment and test it again, you will do another cycle.

PLAN

I plan to: Here you will write a concise statement of what you plan to do in this testing. This will be much more focused and smaller than the implementation of the tool. It will be a small portion of the implementation of the tool.

I hope this produces: Here you can put a measurement or an outcome that you hope to achieve. You may have quantitative data like a certain number of doctors performed teach-back, or qualitative data such as nurses noticed less congestion in the lobby.

Steps to execute: Here is where you will write the steps that you are going to take in this cycle. You will want to include the following:

- The population you are working with – are you going to study the doctors' behavior or the patients' or the nurses'?
- The time limit that you are going to do this study – remember, it does not have to be long, just long enough to get your results. And, you may set a time limit of 1 week but find out after 4 hours that it doesn't work. You can terminate the cycle at that point because you got your results.

DO

After you have your plan, you will execute it or set it in motion. During this implementation, you will be keen to watch what happens once you do this.

What did you observe? Here you will write down observations you have during your implementation. This may include how the patients react, how the doctors react, how the nurses react, how it fit in with your system or flow of the patient visit. You will ask, "Did everything go as planned?" "Did I have to modify the plan?"

STUDY

After implementation you will study the results.

What did you learn? Did you meet your measurement goal? Here you will record how well it worked, if you meet your goal.

ACT

What did you conclude from this cycle? Here you will write what you came away with for this implementation, if it worked or not. And if it did not work, what can you do differently in your next cycle to address that. If it did work, are you ready to spread it across your entire practice?

Examples

Below are 2 examples of how to fill out the PDSA worksheet for 2 different tools, Tool 17: Get Patient Feedback and Tool 5: The Teach-Back Method. Each contain 3 PDSA cycles. Each one has short cycles and works through a different option on how to disseminate the survey to patient (Tool 17: Patient Feedback) and how to introduce teach-back and have providers try it. (Tool 5: The Teach-Back Method).

PDSA (plan-do-study-act) worksheet

TOOL: Patient Feedback **STEP:** Dissemination of surveys **CYCLE:** 1st Try

PLAN

I plan to: We are going to test a process of giving out satisfaction surveys and getting them filled out and back to us.

I hope this produces: We hope to get at least 25 completed surveys per week during this campaign.

Steps to execute:

1. We will display the surveys at the checkout desk.
2. The checkout attendant will encourage the patient to fill out a survey and put it in the box next to the surveys.
3. We will try this for 1 week.

DO

What did you observe?

- We noticed that patients often had other things to attend to at this time, like making an appointment or paying for services and did not feel they could take on another task at this time.
- The checkout area can get busy and backed up at times.
- The checkout attendant often remembered to ask the patient if they would like to fill out a survey.

STUDY

What did you learn? Did you meet your measurement goal?

We only had 8 surveys returned at the end of the week. This process did not work well.

ACT

What did you conclude from this cycle?

Patients did not want to stay to fill out the survey once their visit was over. We need to give patients a way to fill out the survey when they have time.

We will encourage them to fill it out when they get home and offer a stamped envelope to mail the survey back to us.

PDSA (plan-do-study-act) worksheet

TOOL: Patient Feedback **STEP:** Dissemination of surveys **CYCLE:** 2nd Try

PLAN

I plan to: We are going to test a process of giving out satisfaction surveys and getting them filled out and back to us.

I hope this produces: We hope to get at least 25 completed surveys per week during this campaign.

Steps to execute:

1. We will display the surveys at the checkout desk.
2. The checkout attendant will encourage the patient to take a survey and an envelope. They will be asked to fill the survey out at home and mail it back to us.
3. We will try this for 2 weeks.

DO

What did you observe?

- The checkout attendant successfully worked the request of the survey into the checkout procedure.
- We noticed that the patient had other papers to manage at this time as well.
- Per Checkout attendant only about 30% actually took a survey and envelope.

STUDY

What did you learn? Did you meet your measurement goal?

We only had 3 surveys returned at the end of 2 weeks. This process did not work well.

ACT

What did you conclude from this cycle?

Some patients did not want to be bothered at this point in the visit – they were more interested in getting checked out and on their way.

Once the patient steps out of the building they will likely not remember to do the survey.

We need to approach them at a different point in their visit when they are still with us – maybe at a point where they are waiting for the doctor and have nothing to do.

PDSA (plan-do-study-act) worksheet

TOOL: Patient Feedback **STEP:** Dissemination of surveys **CYCLE:** 3rd Try

PLAN

I plan to: We are going to test a process of giving out satisfaction surveys and getting them filled out and back to us.

I hope this produces: We hope to get at least 25 completed surveys per week during this campaign.

Steps to execute:

1. We will leave the surveys in the exam room next to a survey box with pens/pencils.
2. We will ask the nurse to point the surveys out/hand then out after vitals and suggest that while they are waiting they could fill out our survey and put it in box.
3. We will see after 1 week how many surveys we collected.

DO

What did you observe?

- Upon self report, most nurses reported they were good with pointing out or handing the patient the survey.
- Some patients may need help reading survey but nurses are too busy to help.
- On a few occasions the doctor came in while patient filling out survey so survey was not complete.

STUDY

What did you learn? Did you meet your measurement goal?

We had 24 surveys in the boxes at the end of 1 week. This process worked better.

ACT

What did you conclude from this cycle?

Approaching patients while they are still in the clinic was more successful.

Most patients had time while waiting for the doctor to fill out the survey.

We need to figure out how to help people who may need help reading the survey.

Completed PDSA Worksheet (NC Program on Health Literacy)

PDSA (plan-do-study-act) worksheet

TOOL: Teach-back **STEP:** MDs initially performing Teach-back **CYCLE:** 1st Try

PLAN

I plan to: We will ask the physicians in Wednesday PM to perform teach-back with the last person they see that day.

I hope this produces: We hope that all the physicians will perform teach-back and find that it was useful, did not take that much more time, and they will continue the practice.

Steps to execute:

1. We will ask the 5 physicians who hold clinic on Wednesday PM to perform teach-back with their last patient of the day.
2. We will show these physicians the teach-back video.
3. After their last patient checks out, we will ask the physicians if they felt
    a. it was useful?
    b. it was time consuming?
    c. they will do it again?

DO

What did you observe?

All physicians found the teach-back video informative and seemed eager to try this new tool.

STUDY

What did you learn? Did you meet your measurement goal?

4 out of 5 physicians performed teach-back on at least one patient in the afternoon. The 1 physician who did not indicated she did not quite know how to integrate it into her visit.

ACT

What did you conclude from this cycle?

4 out of 5 felt comfortable with it and said they would continue using it.

For the 1 who was not sure how to integrate it, we will look for other teach-back resources to help address this.

Ready to introduce to entire clinical staff.

Completed PDSA Worksheet (NC Program on Health Literacy)

PDSA (plan-do-study-act) worksheet

TOOL: Teach-back **STEP:** MDs continuing to perform Teach-back **CYCLE:** modified 2nd try

PLAN

I plan to: We will see if the physicians in Wednesday PM clinic are still performing teach-back by asking them after their last patient leaves. (3 weeks have gone by since initial introduction.)

I hope this produces: We hope that each of the physicians will have performed teach-back on at least 3 of their afternoon patients.

Steps to execute:

1. We will approach the 5 physicians on Wednesday PM after their last patient leaves and ask them to count the number of patients they performed teach-back on this afternoon.
2. We will ask the physicians if they still feel
    a. it was useful?
    b. it was time consuming?
    c. they will do it again?

DO

What did you observe?

Some physicians could not find appropriate situations for teach-back.
All still felt it was a worthy tool during their patient visits but feel they need to remember it and practice it more.

STUDY

What did you learn? Did you meet your measurement goal?

3 out of 5 physicians said they did perform teach-back on 3 of their patients.
1 performed it in one instance.
1 did not perform it at all (same one as before).

ACT

What did you conclude from this cycle?

Teach-back is being used, maybe not as readily as I had anticipated.
Maybe the goals of '3 out of 6 patient encounters should contain teach-back' is unrealistic. We may put a sign in the clinic rooms, in view of the physicians, to remind them about teach-back.
Will measure again in 6 months.

Completed PDSA Worksheet (NC Program on Health Literacy)

PDSA (plan-do-study-act) worksheet

TOOL: Teach-back **STEP:** MDs continuing performing Teach-back **CYCLE:** 3rd Try

PLAN

I plan to: We want to see if the signs put up in the exam rooms help physicians remember to do teach-back and increased its utilization.

I hope this produces: We hope that all the physicians will perform teach-back 3 out of 6 times.

Steps to execute:

1. We will put signs reading "Teach it Back" taped on the exam room desk/work area to remind physicians to use the technique.
2. We will ask physicians if they notice the signs and if they reminded them to perform teach-back.
3. We will see if Wednesday PM clinic had increased use of teach-back.

DO

What did you observe?

Nurses felt the sign will get in the way.

STUDY

What did you learn? Did you meet your measurement goal?

4 out of 5 physicians did teach-back on 3 patients Wednesday afternoon. 1 did it on 1 patient.
4 out of 5 said they did see the sign and that it was a reminder to do teach-back.

ACT

What did you conclude from this cycle?

That a reminder is needed (especially initially) to help physicians use this tool in their visit.

No further intervention needed at this point.

PDSA Worksheet Template

Project Lead		Title	
Team		Change	
Date Range		Cycle #	
		Key Words	

BACKGROUND: What led you to start this project? Is this cycle a continuation of another cycle? Why is this topic relevant? Include any baseline data that has already been collected. Include relevant information from literature.

PLAN:

Aim/Objective Statement for this cycle What do you hope to learn? What are you trying to improve (aim), by how much (goal) and by when (timeframe)?

Specific questions to address in this cycle:
1.
2.
3.

Predictions/Hypotheses (What do you think will happen?)

Plan for change/test/intervention
Who (target population):
What (change/test):
When (dates of test):
Where (location):
How (description of plan):

Measures (What will you measure in order to meet your aims? How will know that a change is an improvement? Will you use outcome or process measures?)

Plan for data collection
Who (will collect):
What (measures):
When (time period):
Where (location):
How (method):

DO: Carry out the change/test. Collect data.
Note when completed, observations, problems encountered, and special circumstances. Include names and details.

PDSA Worksheet Template

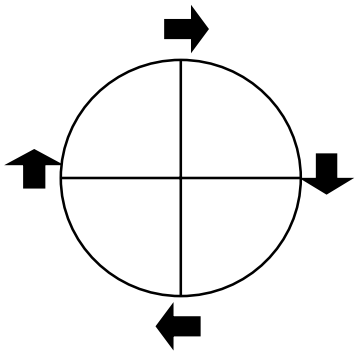
STUDY: Summarize and Analyze data (quantitative and qualitative). Include charts, graphs.

ACT: Document/summarize what was learned. Did you meet your aims and goals? Did you answer the questions you wanted to address? List major conclusions from this cycle.

1.
2.
3.

Define next steps. Are you confident that you should expand size/scope of test or implement? What changes are needed for the next cycle?

1.
2.
3.



PDSA WORKSHEET

Team Name:_____Date of test: _____Test Completion Date: _____

Overall team/project aim: _____

What is the objective of the test? _____

PLAN:

Briefly describe the test:

How will you know that the change is an improvement?

What driver does the change impact?

What do you predict will happen?

List the tasks necessary to complete this test (what)	Person responsible (who)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

PDSA Worksheet Template

Plan for collection of data:

DO: Test the changes.

Was the cycle carried out as planned? YES ____ NO _____

Record data and observations.

What did you observe that was not part of our plan?

STUDY:

Did the results match your predictions? YES ____ NO _____

Compare the result of your test to your previous performance.

What did you learn?

ACT: Decide to Adopt, Adapt, or Abandon.

☐ **ADAPT: Improve the change and continue testing plan.**
Plans/Changes for next test:

☐ **Adopt: Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability**

☐ **Abandon: Discard this change idea and try a different one**

PDSA Worksheet for Testing Change—Option 2

Aim: (overall goal you wish to achieve):

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	**Person responsible**	**When to be done**	**Where to be done**

Plan:

List the tasks needed to set up this test of change	**Person responsible**	**When to be done**	**Where to be done**
		.	

Predict what will happen when the test is carried out	**Measures to determine if prediction succeeds**

Do: **Describe what actually happened when you ran the test**

Study: **Describe the measured results and how they compared to the predictions**

Act: **Describe what modifications to the plan will be made for the next cycle from what you learned**

PDSA Worksheet for Testing Change

Achieving our goal will require multiple small tests of change to reach an efficient process and the desired results.

Date: _____ **Cycle: _____**

Change Champion: _____

3 Fundamental Questions for Improvement

1. What are we trying to accomplish (Aim or long-range goal)?

2. How will we know that a change is an improvement/how will we measure the test?

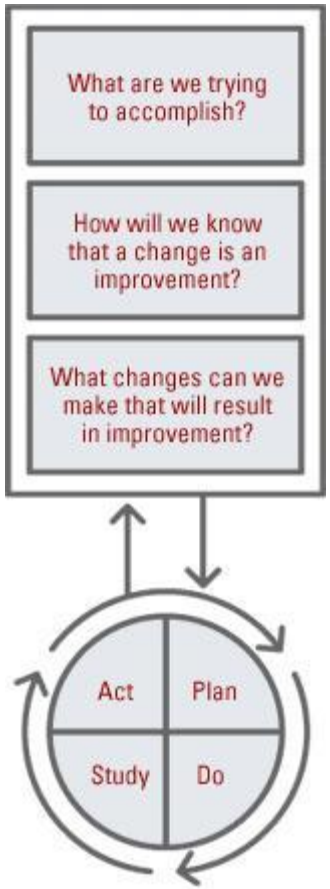
3. What changes can we make that will lead to improvement?

PLAN (short-range goal)		
We plan to (include anticipated date of completion)**:**		
We hope this produces:		
Steps to execute the plan:	**Assigned to:**	**Date to be completed:**
1. 2. 3.		
DO		
What happened when we ran the test? What did we observe?		

PDSA Worksheet for Testing Change—Option 2

STUDY
What did we learn/conclude from this cycle? Why was/was not the test successful? ▪ ▪

ACT	**Date:**
What are our next steps? ❑ We are going to adopt this test and _____ ❑ We are going to adapt this test and repeat PDSA for another cycle ❑ We are going to abandon this test and start a new PDSA	



PDSA Worksheet for Testing Change
Instructions

The Plan-Do-Study-Act (PDSA) Worksheet is a useful tool for documenting a test of change. The PDSA cycle is shorthand for testing a change by developing a plan to test the change (Plan), carrying out the test (Do), observing and learning from the consequences (Study), and determining what modifications should be made to the test (Act). PDSA is the "action" portion of the Model for Improvement shown at right.

Directions

Use the PDSA Worksheet to help your team document a test of change. Fill out one Worksheet for each test you conduct.

Your team will test several different changes, and each change will go through several PDSA cycles. Keep a file (electronic or hard copy) of all PDSA Worksheets for all changes your team tests.

Step 1—Respond to the 3 fundamental questions for improvement

1. What are we trying to accomplish (aim)?
2. How will we know that change is an improvement (measures)?
3. What change can we make that will result in an improvement (ideas, hunches, theories)?

Step 2—Fill in your plan

- What is your hunch that you would like to test?
- What do you expect to happen?
- Who will it involve (e.g. one resident, one unit, one floor, one department)?
- How long will the change take to implement?

Step 3—Do

- Implement the change. Try out the test on a small scale.
- Document problems and unexpected observations.

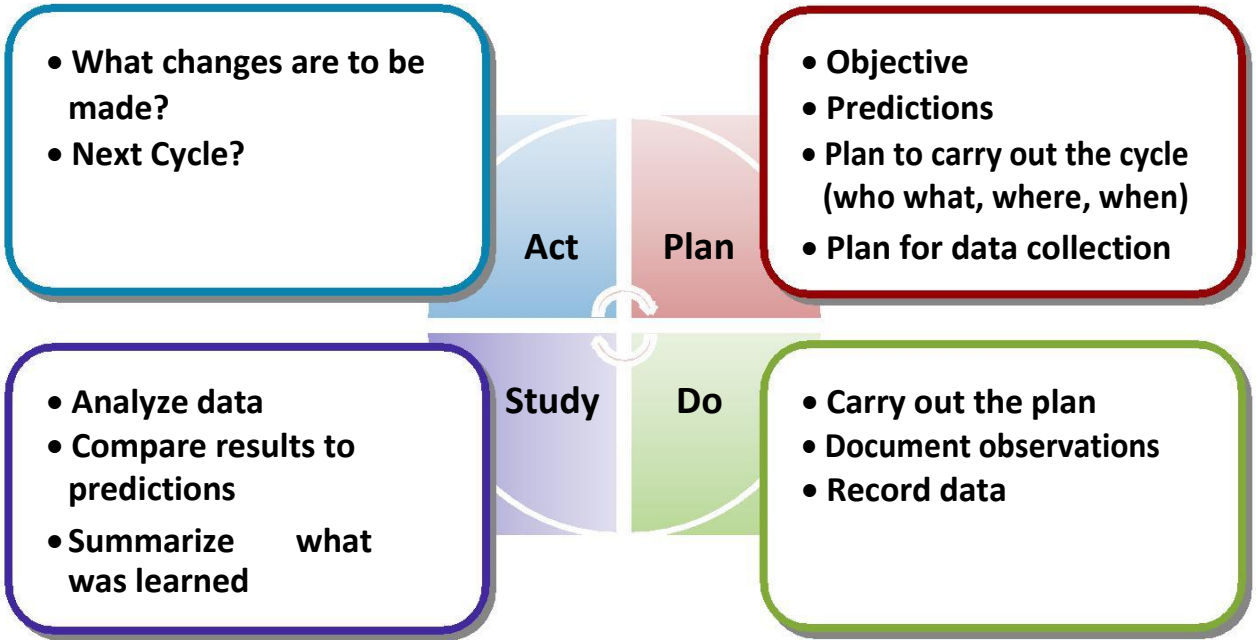
PDSA Worksheet for Testing Change—Option 2

Step 4—Study

- Set aside time to study the results and determine if the change resulted in the expected outcome.
- Reflect on what happened and what was learned.
- Look for unintended consequences, surprises, successes, failures.

Step 5—Act

- Adopt—If your test was successful, consider expanding the changes to additional residents, staff, units.
- Adapt—If your test was moderately successful, but did not produce the desired results, refine the changes based on what was learned from the test, and do another round of PDSA.
- Abandon—If the results were not what you wanted and you feel you have tried every change possible, abandon this test and consider a new approach.



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