

The Plan-Do-Study-Act (PDSA) Worksheet

The Plan-Do-Study-Act (PDSA) cycle is a framework for testing and implementing changes on a small scale. While the change you are testing may be big, the test itself is small when using a PDSA cycle approach. This means that instead of making a big change to a system before you know whether it will result in improvement, you carry out multiple small-scale tests to build knowledge and increase the likelihood that the change will be successful.

This framework is highly applicable and relevant to social health integration. Integrating social health services, such as screening and resource navigation, into your care model requires making changes to existing processes, procedures, workflows, staff roles and responsibilities, the clinic environment, and more. In addition, social health integration is not a “one size fits all” set of changes. Rather, these changes will need to be adapted and tailored for the specific context or setting in which you are integrating services. This makes PDSA cycles a valuable tool for care teams engaged in social health integration. Iterative, small-scale testing accelerates learning and creates more opportunities for successful changes without completely disrupting the system in which you are working. PDSA cycles are also an important means of soliciting patient feedback as you make changes to integrate social health services.

Citation: *Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.*



PLAN-DO-STUDY-ACT (PDSA) CYCLE WORKSHEET

Fill in fields directly on the form — or feel free to print and expand with additional text.

Team:	Start Date:	End Date:
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Plan

Objective of this Cycle

The idea or change to be tested:

Questions – What questions do you want to answer?

- 1.
- 2.
- 3.

Predictions – What do you predict are the answers?

- 1.
- 2.
- 3.

Testing Strategy

What will be tested:

Who is responsible:

Where will it be done:

When will it be done:

Data Collection Plan

How data will be collected (check all that apply):

- | | | |
|---|---|-------------------------------------|
| <input type="checkbox"/> Data Collection Form | <input type="checkbox"/> Interviews | <input type="checkbox"/> Run Charts |
| <input type="checkbox"/> Check Sheet | <input type="checkbox"/> Flowcharts | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Written Surveys | <input type="checkbox"/> Swim Lane Maps | |

Do

Observations in Carrying Out the Plan

General Observations:

Problems/Challenges:

Unintended Outcomes:

Study

Predictions – What did you predict would happen?

- 1.
- 2.
- 3.

Findings – What actually happened?

- 1.
- 2.
- 3.

Data Analysis & Interpretation

How do your findings compare with your predictions? What does the data show?

What are the implications of any problems, challenges, or unintended outcomes?

Based on your findings, did the change lead to improvement? Why or why not?

Act

Conclusions from this Cycle

- Adapt** – We will modify the change strategy and/or widen the test conditions based on our learnings.
- Adopt** – We will implement and spread the change strategy across our program.
- Abandon** – We will stop testing and move on to a new change strategy.

Plan for Next Cycle



PLAN-DO-STUDY-ACT (PDSA) CYCLE WORKSHEET

Fill in fields directly on the form – or feel free to print and expand with additional text.

Team: Example Healthcare Organization

Start Date: 7/15/2019

End Date: 7/19/2019

Plan

Objective of this Cycle

The idea or change to be tested: To test a modified version of our patient-report health confidence outcome measure using a 3-point rating scale instead of a 10-point rating scale with 5 patients.

Questions – What questions do you want to answer?

1. How many patients will find the 3-point rating scale to be less confusing than the 10-point rating scale?
2. How many patients find the 3-point rating scale to be less biasing than the 10-point rating scale?
3. How many patients prefer the 3-point rating scale?

Predictions – What do you predict are the answers?

1. 5/5 patients will find the 3-point rating scale to be less confusing
2. 5/5 of patients will find the 3-point rating scale to be less biasing
3. 5/5 of patients will prefer the 3-point rating scale.

Testing Strategy

What will be tested: The CHW will administer a paper version of the health confidence measure either before or after providing patients with resource information. The CHW will first administer the health confidence measures using the

Who is responsible: One CHW will administer the measures to 5 patients and record their qualitative and quantitative responses in an Excel spreadsheet.

Where will it be done: The green pod

When will it be done: Week of July 15th

Data Collection Plan

How data will be collected (check all that apply):

Data Collection Form

Interviews

Run Charts

Check Sheet

Flowcharts

Other:

Written Surveys

Swim Lane Maps

Do

Observations in Carrying Out the Plan

General Observations: Patient #1 noted a slight preference for 3-point scale. Did not feel biased by the 10-point scale but noted that the tick marks in between response options were confusing. Also noted that the 10-point scale is

Problems/Challenges: Due to no-shows, data was only gathered on 3 patients instead of 5 as planned.

Unintended Outcomes: None

Study

Predictions – What did you predict would happen?

1. 5/5 patients will find the 3-point rating scale to be less confusing
2. 5/5 patients will find the 3-point rating scale to be less biasing
3. 5/5 patients will prefer the 3-point rating scale.

Findings – What actually happened?

1. 3/3 patients found the 3-point rating scale to be less confusing
2. 2/3 patients found 3-point rating scale to be less biasing
3. 3/3 patients preferred the 3-point scale

Data Analysis & Interpretation

How do your findings compare with your predictions? What does the data show?

Our predictions were generally correct. Overall patients prefer the 3-point scale, finding it less confusing and less biasing.

What are the implications of any problems, challenges, or unintended outcomes?

The most valuable outcomes of this test was patients' feedback:

Based on your findings, did the change lead to improvement? Why or why not?

Our findings suggest that using the 3-point rating scale will create a better experience for patients.

Act

Conclusions from this Cycle

- Adapt** – We will modify the change strategy and/or widen the test conditions based on our learnings.
- Adopt** – We will implement and spread the change strategy across our program.
- Abandon** – We will stop testing and move on to a new change strategy.

Plan for Next Cycle

We will adapt the measurement instrument to remove the tick marks and test with 5-10 patients over the next three weeks.



PLAN-DO-STUDY-ACT (PDSA) CYCLE WORKSHEET

Fill in fields directly on the form – or feel free to print and expand with additional text.

Team: St. Christopher's Hospital for Children

Start Date: 2/19/2019

End Date: 2/19/2019

Plan

Objective of this Cycle

The idea or change to be tested: To test a standardized process for following up with families to determine if the navigation and referral services we provide are useful.

Questions – What questions do you want to answer?

1. How many caregivers remember speaking to a care team member about their food and utility needs?
2. How many caregivers received resources to address their food and/or utility needs?
3. How many caregivers used at least one of the resources that they received?

Predictions – What do you predict are the answers?

1. Over 50% of caregivers will remember speaking to a care team member about their food and utility needs.
2. Over 50% of caregivers will report that they received resources to address their food and/or utility needs.
3. Less than 50% of caregivers will report that they used at least one of the resources that they received.

Testing Strategy

What will be tested: Two student navigators will call families seen in the ambulatory clinic in the past month who screened positive for food insecurity or utilities and whose screener was captured in the EHR. We will determine what

Who is responsible: Two student navigators will develop a basic list of questions to address on calls. The team lead will generate a report of patients meeting the selection criteria. The social worker will sit with the student navigators

Where will it be done: Ambulatory clinic

When will it be done: 2/19/2019

Data Collection Plan

How data will be collected (check all that apply):

- | | | |
|--|---|-------------------------------------|
| <input checked="" type="checkbox"/> Data Collection Form | <input type="checkbox"/> Interviews | <input type="checkbox"/> Run Charts |
| <input type="checkbox"/> Check Sheet | <input type="checkbox"/> Flowcharts | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Written Surveys | <input type="checkbox"/> Swim Lane Maps | |

Do

Observations in Carrying Out the Plan

General Observations: 31 families reported food and/or utility needs during Dec 2018/Jan 2019. 13 caregivers were successfully contacted and 8 agreed to speak with a student navigator. Among them, 5 had reported food insecurity

Problems/Challenges: 4 families had inactive phone numbers, 11 families did not answer when called, and 2 were excluded due to their involvement in the immunology clinic. Among the 13 families contacted, 2 were Spanish

Unintended Outcomes: Student navigators need to have a better idea of what resources are provided in the packet.

Study

Predictions – What did you predict would happen?

1. Over 50% of caregivers will remember speaking to a care team member about their food and/or utility needs.
2. Over 50% of caregivers will report that they received resources to address their food and/or utility needs.
3. Less than 50% of caregivers will report that they used at least one of the resources that they received.

Findings – What actually happened?

1. 87% (7 out of 8) caregivers remembered speaking to a care team member about their food and/or utility needs.
2. 87% (7 out of 8) caregivers received resources to address their food and/or utility needs.
3. 37% (3 out of 8) caregivers had used at least one of the resources that they received.

Data Analysis & Interpretation

How do your findings compare with your predictions? What does the data show?

More caregivers remembered speaking with a care team member and received resources than we expected. Fewer caregivers

What are the implications of any problems, challenges, or unintended outcomes?

We learned that we should determine whether families are Spanish-speaking before we conduct the follow-up calls. Also, we

Based on your findings, did the change lead to improvement? Why or why not?

Yes, our findings suggest that conducting routine follow-up calls could help us to better understand the impact and effectiveness

Act

Conclusions from this Cycle

- Adapt** – We will modify the change strategy and/or widen the test conditions based on our learnings.
- Adopt** – We will implement and spread the change strategy across our program.
- Abandon** – We will stop testing and move on to a new change strategy.

Plan for Next Cycle

We will conduct follow-up calls to families who screened positive for food and/or utility needs during the month of February. We will remove immunology patients from the call list, add a question to assess whether the resource helpful, and add a stress



PLAN-DO-STUDY-ACT (PDSA) CYCLE WORKSHEET

Fill in fields directly on the form – or feel free to print and expand with additional text.

Team: CHI Health Nebraska

Start Date: 9/24/2018

End Date: 10/8/2018

Plan

Objective of this Cycle

The idea or change to be tested: In an attempt to reduce the number of cases closed as "unsuccessful outreach with no contact," student navigators will test calling patients at the preferred time noted on the screening form.

Questions – What questions do you want to answer?

1. How much will this new process decrease the percent of cases closed as unsuccessful outreach with no contact?
2. How many patients will be reached at the preferred time noted on the screening form?
3. How many patients will be reached at a different time than what was noted on the screening form?

Predictions – What do you predict are the answers?

1. There will be a 10% decrease overall.
2. 50% of patients will be reached at the preferred time.
3. 15% of patients will be reached at a different time.

Testing Strategy

What will be tested: Student Navigators will make a first attempt at contacting patients utilizing the phone number and best time to call listed on the screening form. If a patient cannot be reached, Student Navigators will make a second

Who is responsible: Student Navigators, Program Manager

Where will it be done: University Campus and L Street Clinics

When will it be done: 9/24/2018-10/8/2018

Data Collection Plan

How data will be collected (check all that apply):

- | | | |
|--|---|-------------------------------------|
| <input checked="" type="checkbox"/> Data Collection Form | <input type="checkbox"/> Interviews | <input type="checkbox"/> Run Charts |
| <input type="checkbox"/> Check Sheet | <input type="checkbox"/> Flowcharts | <input type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Written Surveys | <input type="checkbox"/> Swim Lane Maps | |

Do

Observations in Carrying Out the Plan

General Observations: Of the 57 unsuccessful initial calls documented for the time period 9/24/2018-10/8/2018, 34 were made during the preferred time specified on the screening form.

Problems/Challenges: The challenge is that there are a significant number of screening forms that do not have a preferred time noted and/or patients do answer the phone despite providing a designated contact time (n=60%).

Unintended Outcomes: None.

Study

Predictions—What did you predict would happen?

1. There will be a 10% decrease overall.
2. 50% of patients will be reached at the preferred time.
3. 15% of patients will be reached at a different time.

Findings – What actually happened?

1. There was a 15% decrease overall.
2. 67% of patients were reached at the preferred time.
3. 12% of patients were reached at a different time.

Data Analysis & Interpretation

How do your findings compare with your predictions? What does the data show?

For those Student Navigators who participated, this approach did not appear to significantly improve the success rate of calls nor

What are the implications of any problems, challenges, or unintended outcomes?

We found that 21% of patients had not indicated a preferred time on the screening form. This may make it difficult to implement

Based on your findings, did the change lead to improvement? Why or why not?

Based on the information noted in this cycle, one would conclude that this process was very effective. However, when taking a

Act

Conclusions from this Cycle

- Adapt** – We will modify the change strategy and/or widen the test conditions based on our learnings.
- Adopt** – We will implement and spread the change strategy across our program.
- Abandon** – We will stop testing and move on to a new change strategy.

Plan for Next Cycle

For our next test, we will extend the testing period in order to more accurately depict if the process being tested is effective and not just a result of increased case closures resulting from efforts made in previous weeks.