# Plan-Do-Study-Act (PDSA) Essentials & Worksheet

PDSA Essentials

- Some say the PDSA is the heart of the Model for Improvement[1].
- PDSAs help us understand whether a change is likely to result in improvement.
- We have turned it into a verb: "Let's PDSA that".
- PDCA – plan-do-check-act – is essentially the same as PDSA.
- A PDSA is not a project plan or a pilot (usually). It is **ONE** change on a small scale.
- Designing and executing PDSAs is a skill. Don't expect everyone to know what it is or how to do it.
- Build skill by practice and feedback. Using "See one. Do one. Teach one." hardwires PDSA expertise.
- Data collection for a PDSA should not take months.
- Make sure we complete the STUDY and ACT portion of the PDSA!
- Run PDSAs under different conditions (e.g., different clinician, alternate clinic location) to make sure our assumptions and conclusions are accurate.
- The more PDSAs we conduct, the faster we learn and improve our processes.

---
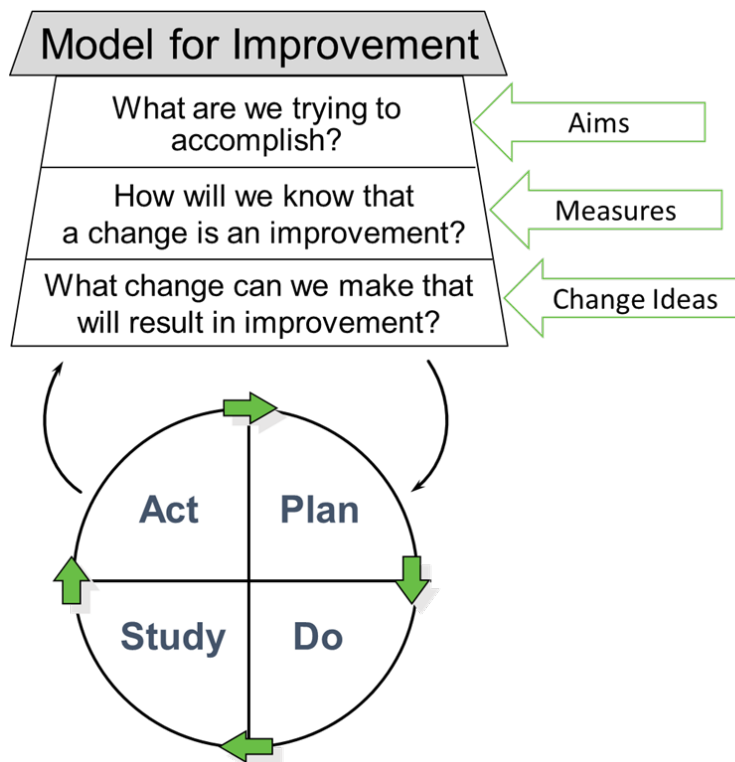
[1] *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. G. Langley, K. Nolan, T. Nolan, C. Norman, L. Provost.

PDSA Worksheet

If you don't already have a PDSA form, try this one, which was developed and improved over the past 10+ years by a health care consultant at Comagine Health. An example of a telehealth related PDSA is included below.

PDSA Cycle:	Date:
Objective for this PDSA cycle:	
Specific change being tested:	
PLAN Questions: Predictions (what do we think will happen): Plan for change or test (include communication plan!): Plan for collection of data (who, what, when, where):	
DO (carry out the change or test; collect data and begin analysis):	
STUDY (complete analysis of data; summarize what was learned):	
ACT (will we adapt, adopt, or abandon the change? if we adopt, how will we ensure/measure sustainability? plan for the next cycle):	

PDSA Telehealth Example

PDSA Cycle: 1	Date: Feb 2, 2022

Objective for this PDSA cycle: Our telehealth processes have changed, and we do not have a standard way to identify and address gaps in care during telehealth visits. With this and subsequent PDSAs we seek to decrease our missed opportunity rate for our telehealth visits.

Specific change being tested: Dedicate time at the end of the provider portion of the telehealth visit for handoff to medical assistant (MA) to address any preventive or chronic gaps in care.

PLAN

Questions that we have:

1. Will having the MA use time after the provider cause a bottleneck in getting patients ready for the next visit (regardless of visit type)?
2. Will MAs consistently complete pre-visit planning (PVP) to identify who is due for what?
3. Will patients mind staying on the call/visit to meet with the MA?
4. Does this provide an opportunity to address other aspects of care (e.g., SDoH, enrollment in Chronic Care Management)?
5. Will we have any pushback from MAs – one more thing they have to do?

Predictions (what do we think will happen):

1. The missed opportunity rate will decrease.
2. We may have some MA pushback if we don't ensure this doesn't impact their other duties.
3. Patients will appreciate this approach.

Plan for testing the change (include communication plan!):

1. Dr. Evans and Mason (MA) will be our team to test this change for two weeks because they are one of the highest users of telehealth.
2. Maria (QI Coordinator) will talk to Dr. Evans and Mason about testing this change along with the plan for data collection and any barriers or issues they anticipate.
3. Maria will observe the first 10 visits to learn about the process/change.

Plan for collection of data (who, what, when, where):

- Maria will choose a representative 2-week period from the past two months to establish baseline data on the missed opportunity rate (i.e., the patient had a visit, and we did not identify and address preventive and chronic gaps in care). Our missed opportunity rate is defined by:
  - Denominator = number of identified preventive and chronic care gaps (e.g., due for colorectal cancer screening, A1C due, due for vaccines) by day, week or other specified timeframe
  - Numerator = number of gaps in care identified in the denominator that were addressed (care ordered or delivered, patient declines (must be documented as structured data), or care is deferred to later date per patient or provider (with specific plan to address on or before the date deferred))
- Maria will confer with Mason on each of the two Fridays to solicit his subjective feedback on positives, negatives, and things he would change.
- Once the 2-week test is completed, Maria will run the report on missed opportunities and will report back to the QI team and share the data with Dr. Evans and Mason.

DO (carry out the change or test; collect data and begin analysis):

Dr. Evans and Mason chose Feb 7-11 and Feb 14-18 for their two-week trial. We ended up tracking the missed opportunity rate day-by-day to see if there were fluctuations that might offer additional opportunities to improve. Mason talked to Maria almost every day because it was inconvenient and difficult to remember feedback and ideas about the change for a once weekly discussion.

STUDY (complete analysis of data; summarize what was learned):

- Baseline missed opportunity rate was 52% and decreased to 36% for week 1 and to 13% for week 2.
- Dr. Evans and Mason noted that the process usually went well but sometimes Mason did not have time to do PVP or to meet with the patient following the visit. Additionally, when patients declined some services, there was not the opportunity for the provider to talk to the patient, which was requested by a few patients.
- Dr. Evans and Mason suggested that the improvement from week 1 to week 2 was due to streamlining their process and messaging to the patient about the post-visit time with the MA.
- Dr. Evans added that he feels as though this is true team-based care and is reassured that patients will not fall through the cracks or have missed/delayed diagnoses.

ACT (will we adapt, adopt, or abandon the change? if we adopt, how will we ensure/measure sustainability? plan for the next cycle):

We will adapt this change, possibly switching the time with the MA to before the visit with the provider but will need to figure out how to do this without impacting the provider being able to complete the visit in the scheduled time and not begin to run behind. Scheduling everyone 10 minutes earlier may not work because not all patients need that much time to discuss/address gaps in care. Alternatively, we may test using 5-min huddles to better coordinate addressing gaps in care (e.g., patient may not need any extra time or may need longer, especially if it is a new patient over 65).