Plan (P D S A circle) **Do** (P D S A circle) **Study** (P D S A circle) **Act**

PDSA Tutorial

1. Gather ideas about what changes will lead to improvement
You need to understand some basic information about what are the existing challenges to increasing the number of patients who provide human milk for babies in the NICU.   For example, are the challenges you are facing related to role clarification, delegation, staff education, lack of leadership support, or tools and prompts? Consider who could offer insight into the particular area and ideas for improving it.

This is a "thinking" step that will help to explore the reasons why areas of practice have become less than optimal. Understanding barriers that prevent change will help you plan initiatives that anticipate and overcome barriers.

PDSA cycles are small tests designed to help you make progress toward a goal. Small tests do not necessarily mean small changes; rather, small tests represent small steps needed to achieve significant improvement.

PDSA Cycle

ACT   PLAN

How can we test very specific ideas in our setting?

STUDY   DO
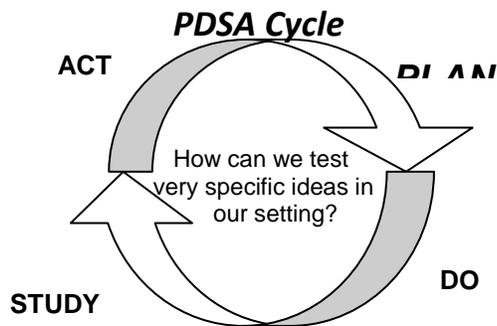
2. Plan the PDSA Cycle (PLAN)

It is important to develop a detailed plan for your PDSA so that you know exactly what needs to occur in your DO phase (who will do it, which patients it will involve, and how you will track your progress). When planning ask yourself the following questions:

- What are we testing?
- Who are we testing the change on?
- When are we testing?
- Where are we testing?
- Who will implement the cycle?
- What is our measurement plan?

Don't forget to make a prediction.
Anticipating the impact of your cycle will help you to focus on
- Planning
- Areas for improvement
- Clarifying measures
- Being creative

When predicting, ask yourself, "What do you expect to happen?" Making a prediction will assist in anticipating what might come next and whether or not the cycle was a success or failure. If it was a failure, it is important to take the time to understand why (Study).

Don't forget to include measurement plan.
Integrate the study part of the PDSA into the daily routine as much as possible. What you measure to show if your PDSA resulted in an improvement may or may not be the same as the measures you use for the Collaborative. Usually the study part of the PDSA cycle can be an observation, or asking one of the team members their impression of how the test of change went. Build on existing systems when re-designing. What examples of success within your unit can you learn from?

Example:
Goal: Increased number of women willing to hand express/pump milk for babies in NICU

What is being tested: Use of "Participating in your infant's care" by OB and Neo teams

Prediction: New tool will help educate moms on the importance of human milk for babies and convince even mom's not previously planning to breast feed that they should express/pump

When/Where/Who:
- In OB Outpatient or Hospital Antepartum Unit – share with all high risk patients
- In L&D share with mom who has delivered infant transferred to NICU
- NICU – use during first visit with mother (antenatal or after birth within 24 hours)

Plan for measurement:
- Track how moms responded to the new tool
- Track # willing to express or pump milk

3. Conduct the Cycle (DO)
Carry out the cycle, collect data and begin analysis. Don't forget to seek opinions about changes tested in this cycle.

Example:
Nurses gave the card to 4 new patients last month in antenatal when they were identified high risk for preterm delivery.

4. Analyze the Results (STUDY)

Studying the results allows you to answer the questions:

- Was this change an improvement?
- If yes, do we need more information before implementing the change with others in the practice (e.g., Test again on different
- If not, what have we learned from this test? What could we do differently next time to make it an improvement over the current system? What additional information do we need to achieve an improvement?

- Share your results: Plot data of key measures each week and display for others in the unit to see. Seek input from everyone in your unit.

Example:

- **All patients were interested and responded well to the message. 3 of 4 agreed to pump milk.**

- **One of them did deliver last week but she did not "really remember" what the handout said and asked us for another after her baby was delivered. She did then pump within 6 hours.**

5. Decide What to Do Next (ACT)

Identify what changes are to be made in the current cycle, from this, identify your next cycle. "The science in PDSA is in the act of reflection, learning from what one did. Those who want improvement to occur need to reserve specific times to ask, 'What did we learn, and how can we build on it?'"

Learning: **Feasible strategy for practice, but additional education and prompts are needed if given to moms prior to delivery**

Potential Next Cycles: **After OB gives the handout to high risk patient, the Neo will reinforce the counseling and education (bring another copy to that meeting)**

Documentation on the PDSA worksheet: Describe which of the 3 options are the most suitable based on your study results
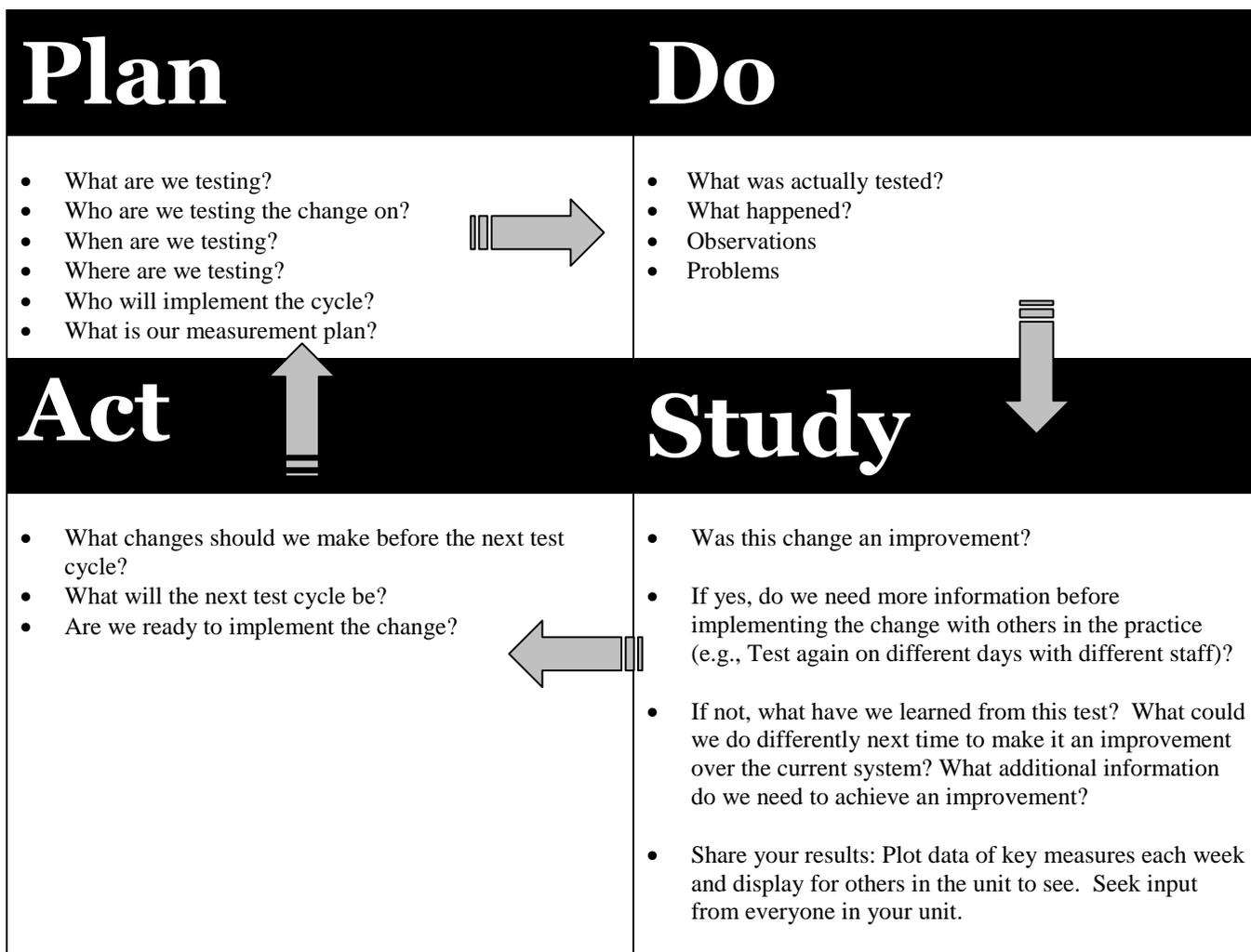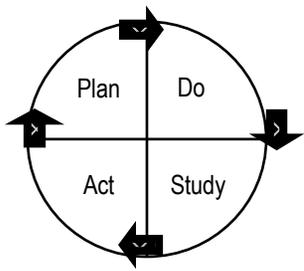
Example

[X]   **Adapt: Improve the change and continue small scale testing - After OB gives the handout to high risk patient, the Neo will reinforce the counseling and education (bring another copy to that meeting)**

[ ]   Adopt: Continue working on this change by testing on a larger scale and develop a plan for wide scale implementation

[ ]   Abandon: Discard this change idea and try a different one

PDSA Cycle

Plan

- What are we testing?
- Who are we testing the change on?
- When are we testing?
- Where are we testing?
- Who will implement the cycle?
- What is our measurement plan?

Do

- What was actually tested?
- What happened?
- Observations
- Problems

Act

- What changes should we make before the next test cycle?
- What will the next test cycle be?
- Are we ready to implement the change?

Study

- Was this change an improvement?

- If yes, do we need more information before implementing the change with others in the practice (e.g., Test again on different days with different staff)?

- If not, what have we learned from this test? What could we do differently next time to make it an improvement over the current system? What additional information do we need to achieve an improvement?

- Share your results: Plot data of key measures each week and display for others in the unit to see. Seek input from everyone in your unit.

OPQC PDSA WORKSHEET

Team Name:		Date of test:		Test Completion Date:
Overall team/project aim:				
What is the objective of the test?				
What 90 day goal does the change impact?				

PLAN:

Briefly describe the test (when and exactly who will do exactly what process change for how many cases):

How will you know that the change is an improvement (eg RN will properly use checklist for 2 pts)?

What Key Driver does the change impact?

What do you predict will happen (how many successes? What observations are expected?)

PLAN

List the tasks necessary to set up this PDSA for success (what)	Person responsible (who)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

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

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: List what you will improve, change or continue testing:

☐ Adopt: What changes will you implement on a larger scale? What is your plan for spreading success and how will you assure sustainability?
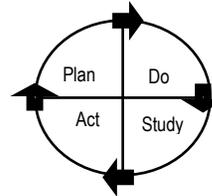
☐ Abandon: What is the next process change you will test?

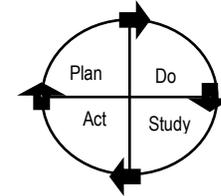| OPQC Team:	PDSA Topic:		
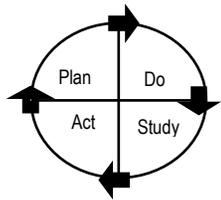
TEST 1
What (describe the specific process change):

Person performing process change:

Who (population to test on):

Where:
When: From   To

Results (describe #s and observation):

Adapt (describe your next PDSA based upon these results):
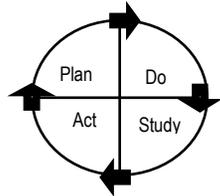
TEST 2
What (describe the specific process change):

Person performing process change:

Who (population to test on):

Where:
When: From   To

Results (describe #s and observation):

Adapt (describe your next PDSA based upon these results):

TEST 3
What (describe the specific process change):

Person performing process change:

Who (population to test on):

Where:
When: From   To

Results (describe #s and observation):

Adapt (describe your next PDSA based upon these results):

TEST 4
What (describe the specific process change):

Person performing process change:

Who (population to test on):

Where:
When: From   To

Results (describe #s and observation):

Adapt (describe your next PDSA based upon these results):