The Strategy Unit.

Plan, Do, Study, Act (PDSA)

NHS
Midlands and Lancashire
Commissioning Support Unit

Objective

- Plan, Do, Study, Act (PDSA) cycles, developed by Walter Shewhart and Edward Deming, are a common model used for testing small scale changes.

- **Using these cycles enables you to test whether the proposed change will succeed, before rolling out full implementation.**

- PDSA cycles can support stakeholder engagement, and are also a good learning mechanism for when ideas don’t work.

Key questions

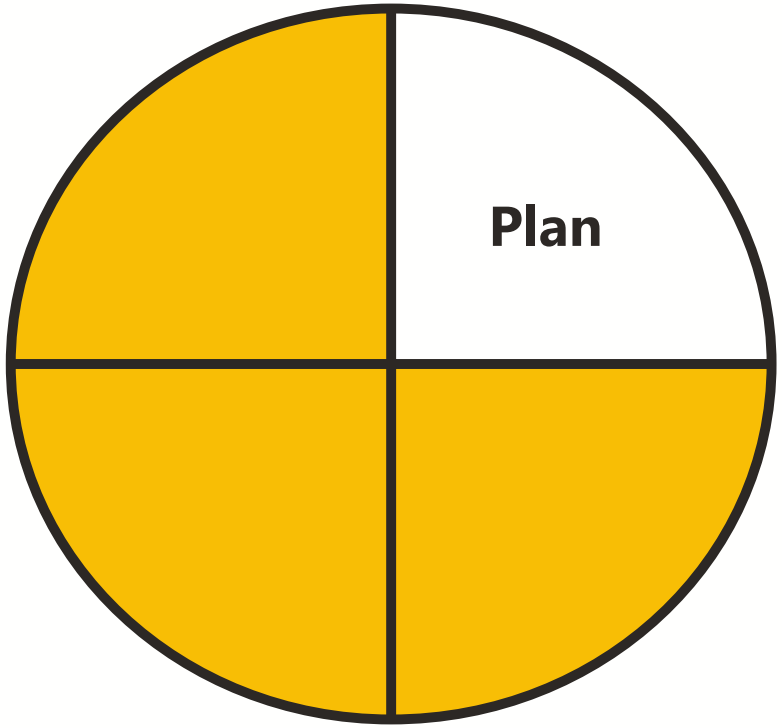
There are three key questions to ask before you begin to make your change:

1) What are we trying to accomplish (aims)?
2) How will we know if the change is an improvement? What will we measure?
3) What changes can we make that will result in improvement? (What are you testing?)

You can plan multiple simultaneous cycles to test a number of different ideas – however be aware of how the cycles may impact one another.

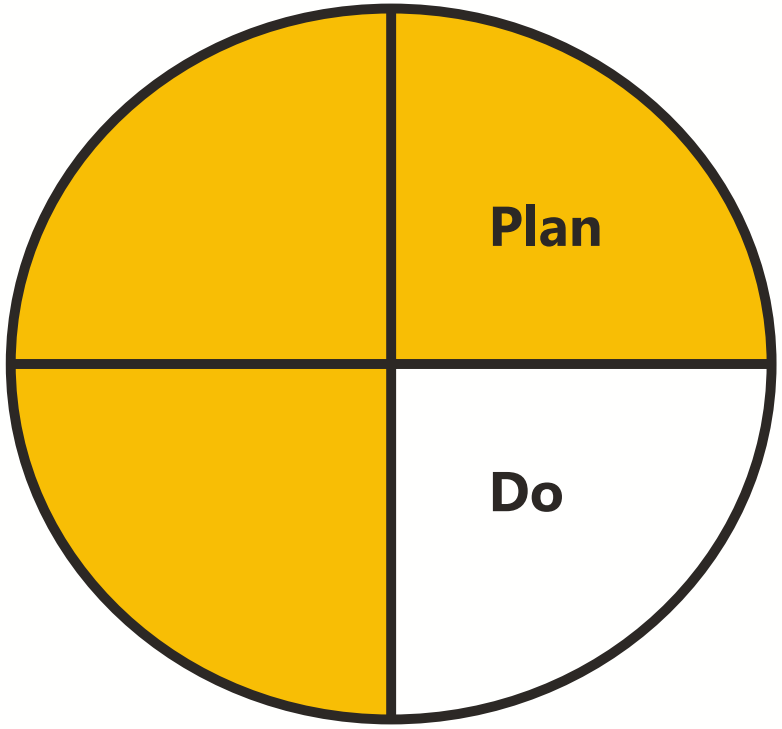
Step 1: Plan

1) Set clear and measurable objectives.
2) Plan how you will deliver your change (Who, what, where?)
3) Plan how you will collect the data to measure your changes.



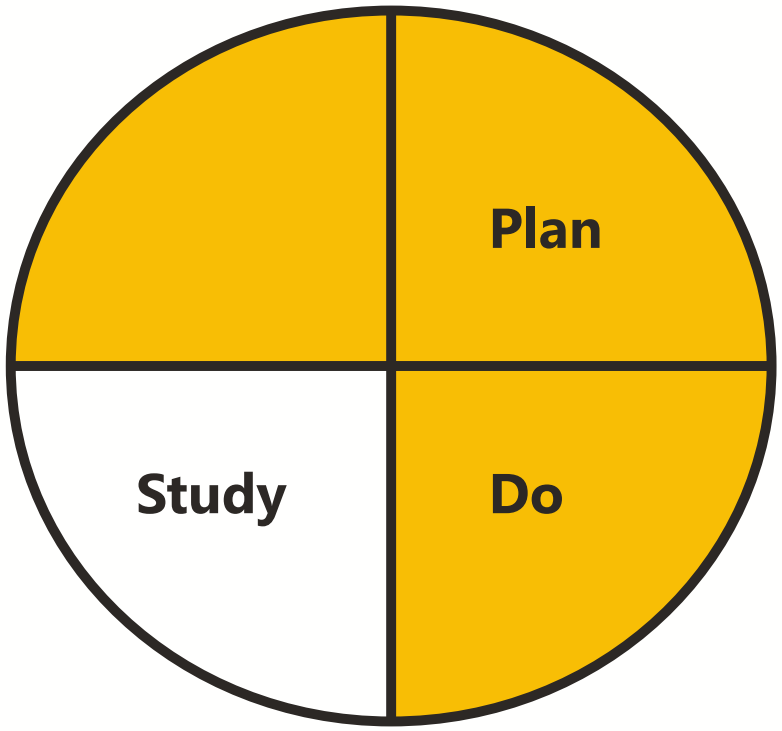
Step 2: Do

1) Make your changes.
2) Remember to document clearly what you have done and any initial observations.



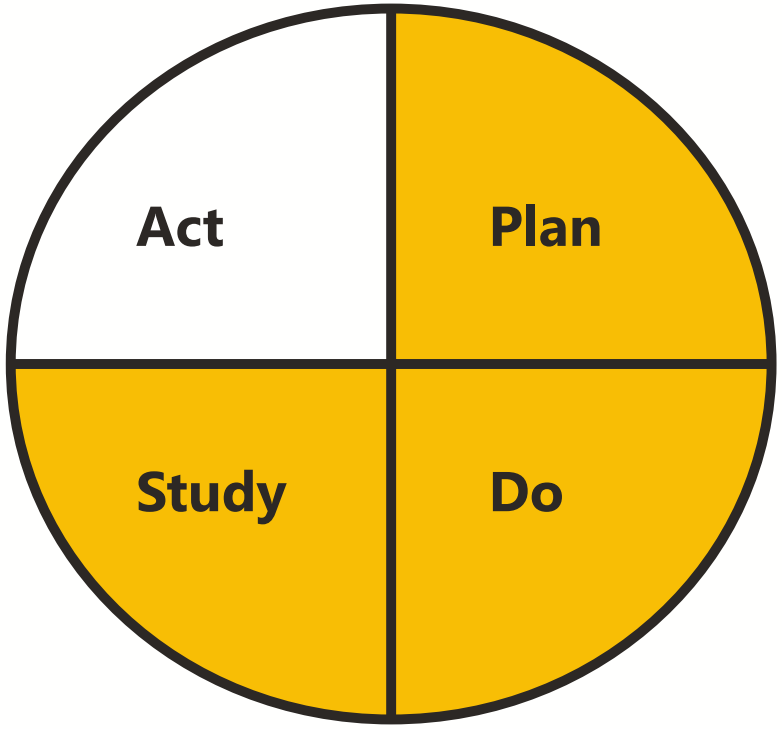
Step 3: Study

1) Analyse your data.
2) Compare to initial objectives and hypothesis.
3) Summarise learning.



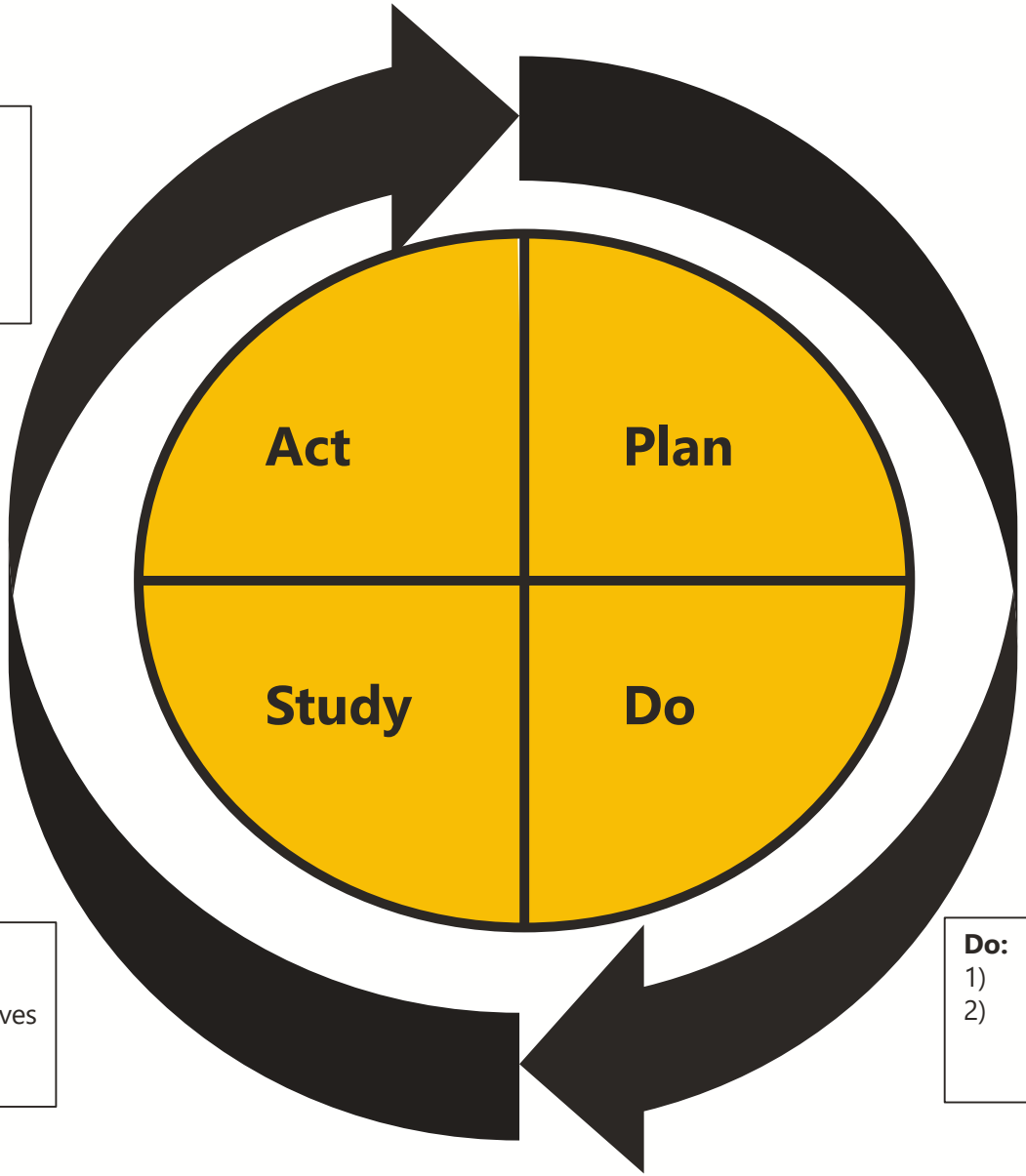
Step 4: Act

1) Refine your change idea based on lessons learned.
2) Document any changes made.
3) Begin cycle again.



The PDSA cycle

Act:
1) Refine your change idea based on lessons learned
2) Document any changes made
3) Begin cycle again



Plan:
1) Set clear and measurable objectives
2) Plan how you will deliver your change (Who, what, where?)
3) Plan how you will collect the data to measure your changes

Study:
1) Analyse your data
2) Compare to initial objectives and hypothesis
3) Summarise learning

Do:
1) Make your changes
2) Remember to document clearly what you have done and any initial observations.

Continuous / Sequential cycles

When planning your first PDSA cycle, reviewing evidence from literature or previous improvement programmes can support your decision making.

Whilst completing cycles, make sure to record changes made and outcomes – for future learning and building a further evidence base.

Start small with your cycles and test under different conditions. As you gain confidence that the change is working, you can begin to roll out to other areas.