

Plan – Do – Study - Act (PDSA)

PDSA cycles are an ideal quality improvement tool that can be used to test an idea by temporarily trialling a change and assessing its impact. There are four distinct stages to the PDSA cycle:

Plan – the change that needs to be tested or implemented

Do – carry out or test the change

Study – data before and after the change and reflect on what is learned

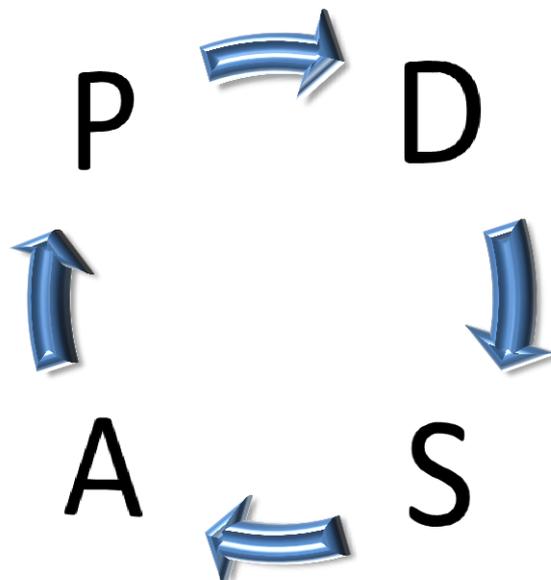
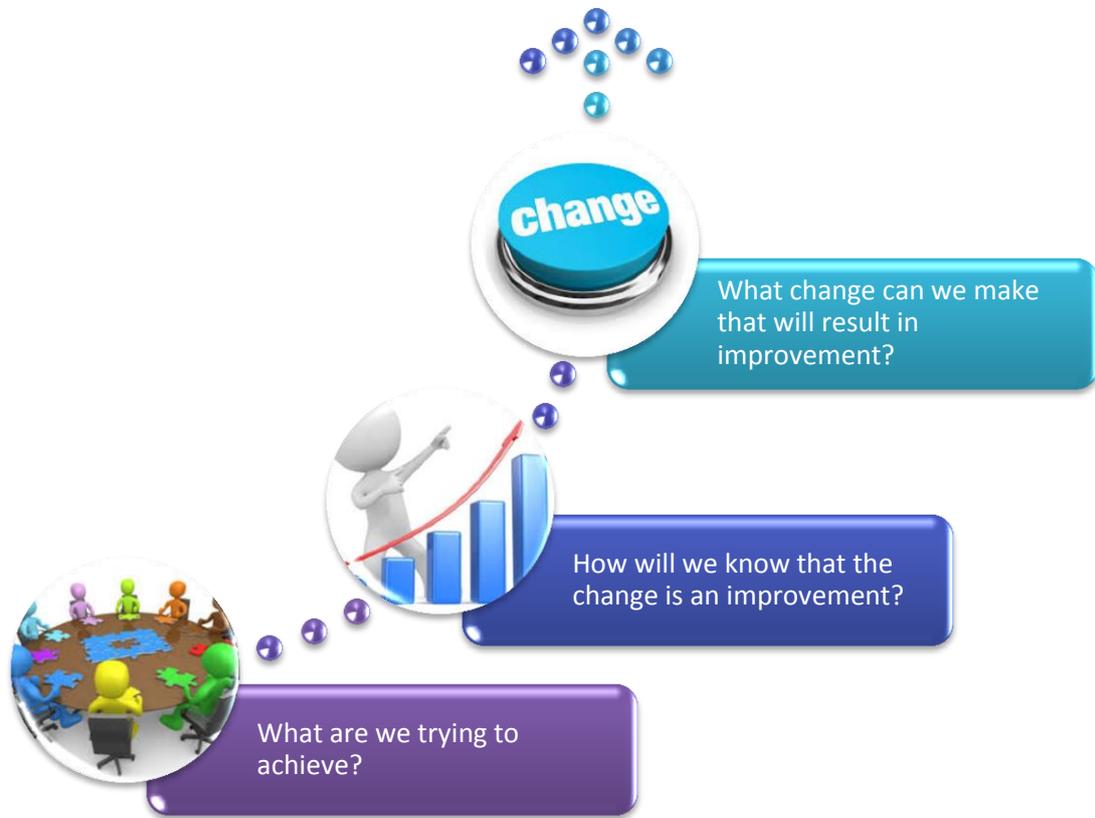
Act – plan the next change cycle or full implementation

You may not get the results you expect when making changes to your processes, so it is safer, and more effective to test out improvements on a small scale before implementing them across the board. As with any change, ownership is key to implementing the improvement successfully. If you involve a range of colleagues in trying something out on a small scale before it is fully operational, you will reduce the barriers to change.

PDSA is typically used for small to medium scaled quality improvement initiatives.

THE PDSA MODEL FOR IMPROVEMENT

The PDSA model for improvement poses three key questions:



The NHS Institute for Innovation and Improvement advocates the following:

What are we trying to achieve?

Teams need to set clear and focused goals. These goals require clinical leadership; they should focus on problems that cause concern, as well as patients and staff.

How will we know that the change is an improvement?

You will need to measure outcomes in order to answer this question. If we make a change, this should affect the measures and demonstrate over time whether the change has led to sustainable improvement. The measures in this model are tools for learning and demonstrating improvement, not for judgment. Each project team should collect data to demonstrate whether changes they have made result in improvement

What changes can we make that result in improvement?

There are many potential changes your team could make. However, evidence from scientific literature and previous improvement programmes suggests that there are a small number of changes that are most likely to result in improvement.

It is possible that there may be several PDSA cycles running sequentially, or even simultaneously. Sequential cycles are common when the study reveals results which suggest a different approach is needed

Simultaneous cycles may occur when the changes are more complex, possibly involving several departments. It is important that you identify any interactions between simultaneous cycles, as a change in method in one cycle may alter the impact of another somewhere else. For example, you are making changes to the way that secretaries process letters, so that they are printed and stuffed into envelopes in a central department. As another part of the project, a PDSA cycle looks at when doctors sign their correspondence and concludes that it should be done in the secretary's office. Obviously the two solutions conflict.

The cycles in use:

Produce a first draft. Check it against this guidance. Make changes. Is it easy to read? Produce another draft and check it with members of your team. Do rapid cycles of testing until it seems easy to read?

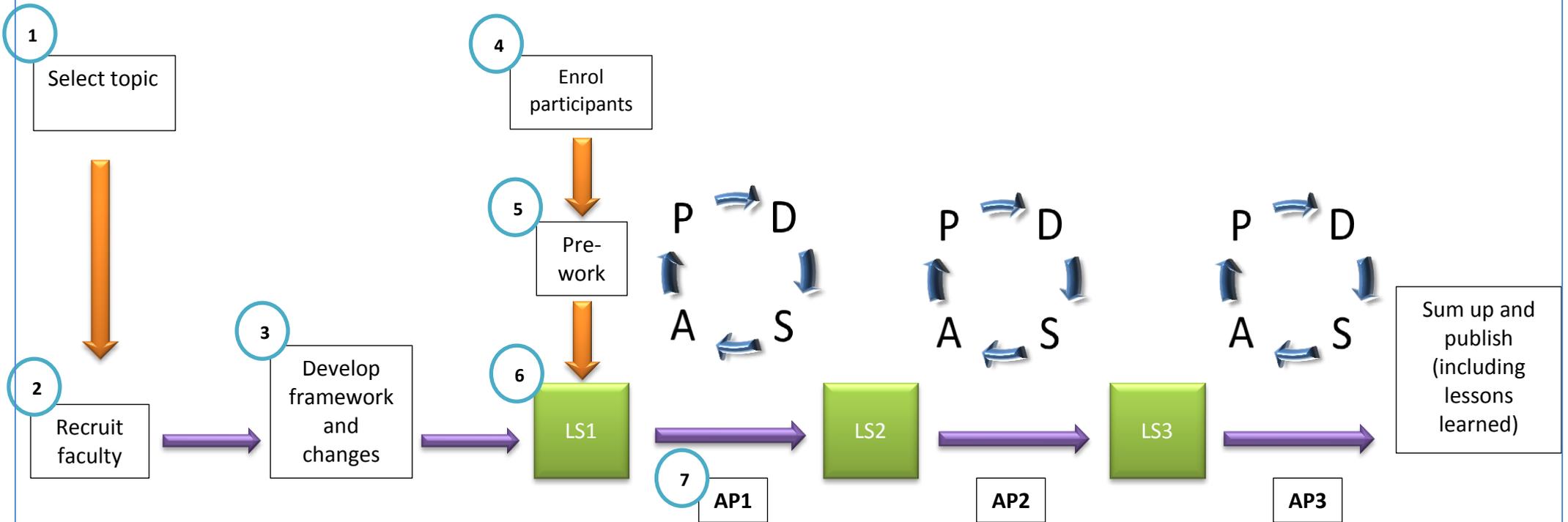
Is it right?

Produce another draft and check it with colleagues, clinicians, experts, patient support groups. Think about people like secretaries and booking staff. If you have to send it to someone, always give them a deadline.

Is it good for patients?

Produce another draft and check it with patients or people in the hospital who are unfamiliar with the topic area.

THE PDSA CYCLE



LS1 Learning Session

AP1 Action Period

P → D
A ← S
Plan – Do – Study - Act

How does the cycle work?

1. Select a topic
Decide on what the issue is that you need to address.
2. Recruit faculty
Your faculty is made up of your clinical experts. These are the people that will provide the most significant input into what the issues are and what is or is not practical to try.
3. Develop framework and changes
This is your 'experts' meeting which may involve additional stakeholders other than the clinicians within your faculty. Prior to this meeting a comprehensive data package is drawn together and presented with any relevant information that may impact on the changes you want to make. It gives you the opportunity to discuss areas of concern that are backed up by robust evidence; agree the changes that need to be made to improve what is happening and define your change package/briefing paper.
4. Enrol participants
It's time to engage your teams. Decide who you need to go off and 'do the doing' i.e. who is most practical to carry out the PDSA on a day to day basis
5. Pre-work
Gather any equipment, supply any materials or learning resources that the teams may need and refine the briefing paper (if required)
6. Learning Session
Deliver the briefing paper. Inform them of the change that needs to happen and the rationale for the change. Address any issues they may have and identify any quick wins you can put in place to secure engagement
7. Action period
It's at this point that the PDSA cycle comes into its own. Teams should undertake the first change and test its success. An action period is typically 4-6 weeks before the team comes back together for the second Learning Session to agree what has been successful and what should be done in the next Action Period.

There are typically three or four cycles in an average smaller project. However, large scale projects may need to adopt a full learning collaborative approach and will typically take over a year to complete.