

The Three Question Model, combined with the Plan-Do-Study-Act (PDSA) cycle, forms the basis of a model for improvement. It is a simple way to build and execute a change and the PDSA cycle can help to sustain this change.

The model helps when presenting and gaining acceptance for suggested changes that:

1. Are uncertain (the change may or may not result in an improvement, but it does not invalidate the aim).
2. Contribute to the aim but are not guaranteed to deliver (a way to describe, present and get approval for smaller changes).

**The Three Question Model uses three fundamental questions:**

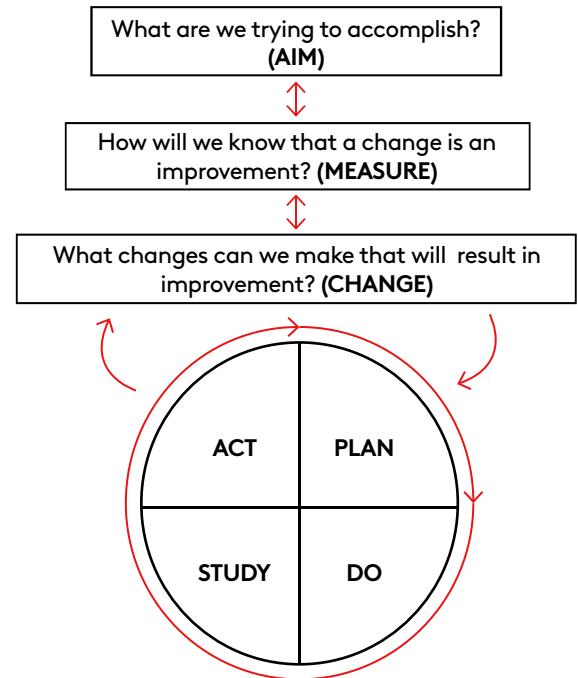
- What are we trying to accomplish? What is the **aim**? (e.g. within six months we will reduce wait times for new patients referred to our speciality clinic from 43 days to 21 days).
- How will we know that a change is an improvement? What will we **measure**? (e.g. Outcome measure; infection rates, wait times and fall rates. Process measure; supply and demand and high-risk patient intervention rates. Balancing measure; staff and client satisfaction, and financial implications).
- What changes can we make that will result in improvement? What will we **change**? (e.g. balance supply and demand every day would be a change concept. Scheduling pre-booked appointments on days of the week that have the least demand would be a change idea).

Any endeavour to improve something could be described by providing answers to these three questions. The questions can be posed in any order.

## Implementation

### Prerequisites

- There must be an understanding of the current situation and where the problems, delays and gaps are in a process or a product.
- Have pens and sheets of paper ready to document your findings.



## Answering the three fundamental questions:

Write your answers on one sheet of paper (a few sentences for each question). This is all the space you should need to give clear, concise answers.

3. State the aim clearly. Make it specific to a process, a target group and a timeframe. Include numerical goals if relevant.
4. Establish the measures that will determine whether a specific change leads to an improvement. These need to cover all stages of the process and relate to your goal. There are three types of measure:
  - Outcome measures – the customer and product performance. What are the results?
  - Process measures – the workings of the product. Are the steps in the processes that support the product performing as planned?
  - Balancing measures – the performance of the processes. Are changes designed to improve one part of the process causing new problems to other parts of the process?
5. Describe the change that needs to be made.

## PDSA cycle

Once you have an answer to the three fundamental questions, now use the PDSA cycle to trial the change and assess its impact. Write the answers on one sheet of paper.

- **Plan** – List the tasks needed to apply the change. Predict what will happen when the change is made and determine who will implement the change.
- **Do** – Try it out and identify what happens. Describe problems and record observations.
- **Study** – Analyse the results and compare these to the predictions.
- **Act** – Act on what has been learned to determine what your next PDSA cycle will be based on.

## Next steps

PDSA allows you to learn from each small change and refine it. If the initial test of a change shows the predicted improvement, you should implement the change to a specific target group before broadening to a whole work area or unit.

Once a change has been shown to be an improvement, every opportunity should be taken to spread the success of implementing the change to other parts of the organisation.

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If you want to learn more, consider reading:

Quality By Design: A Clinical Microsystems Approach edited by Eugene C. Nelson, Paul B. Batalden, Marjorie M. Godfrey