



HEALTH QUALITY & SAFETY  
COMMISSION NEW ZEALAND  
*Kupu Taurangi Hauora o Aotearoa*

# Planning for testing

Karen O'Keefe, quality  
improvement advisor

Mental health and addiction  
quality improvement  
programme



28 February/2 March 2023

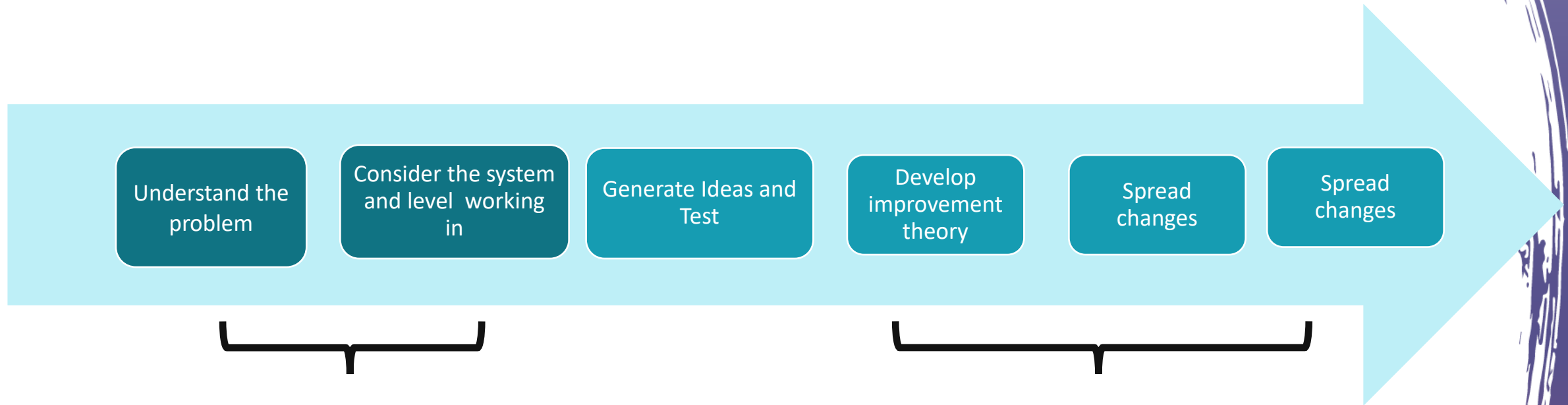
# Core concepts of improvement

## Theory of knowledge

- Need to be able to articulate what you believe about why things are the way they are (what do you know about your system, how do you know?).
- Describe what changes you think will make the difference toward the outcome you desire.



# The improvement journey



Informed by data –  
through capturing  
experience and  
other data

Data to monitor  
improvements over time



# Engaging the team and building will

**Shared purpose** goes way deeper than vision and mission; it goes right into your gut and taps some part of your primal self. If you can bring people with similar primal purposes together and get them all marching in the same direction, amazing things can be achieved.

# How is a theory different from a belief?

- From a scientific perspective, a theory can be tested (we can examine its validity).



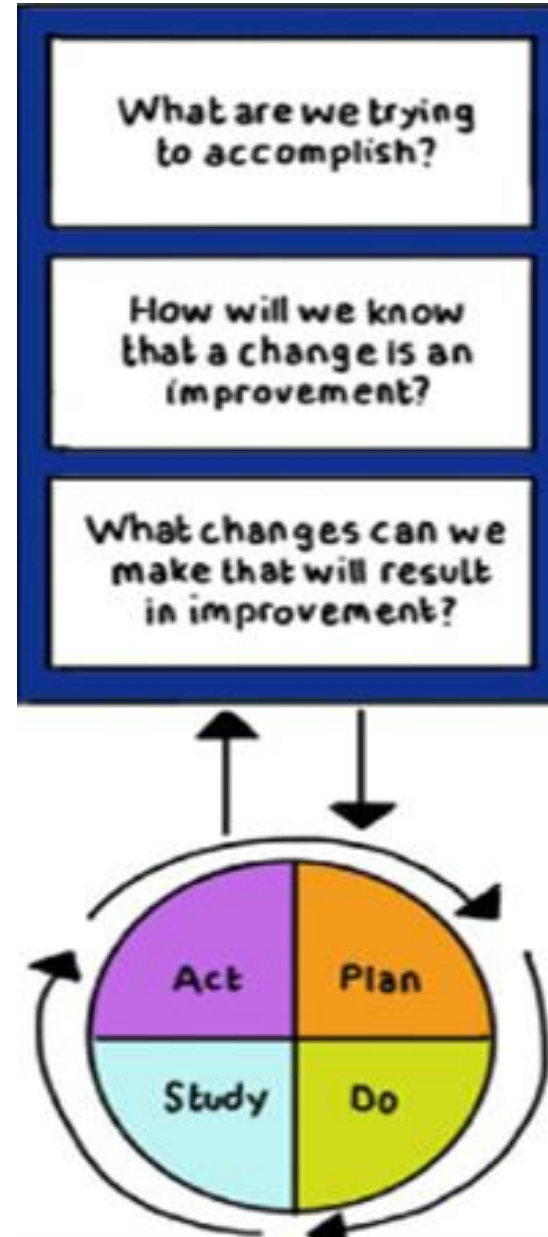
# How is a theory different from a belief?

- From a scientific perspective, a theory can be tested (we can examine its validity).
- We use theories to make predictions about the future, what we expect will happen, what we expect to observe, etc.



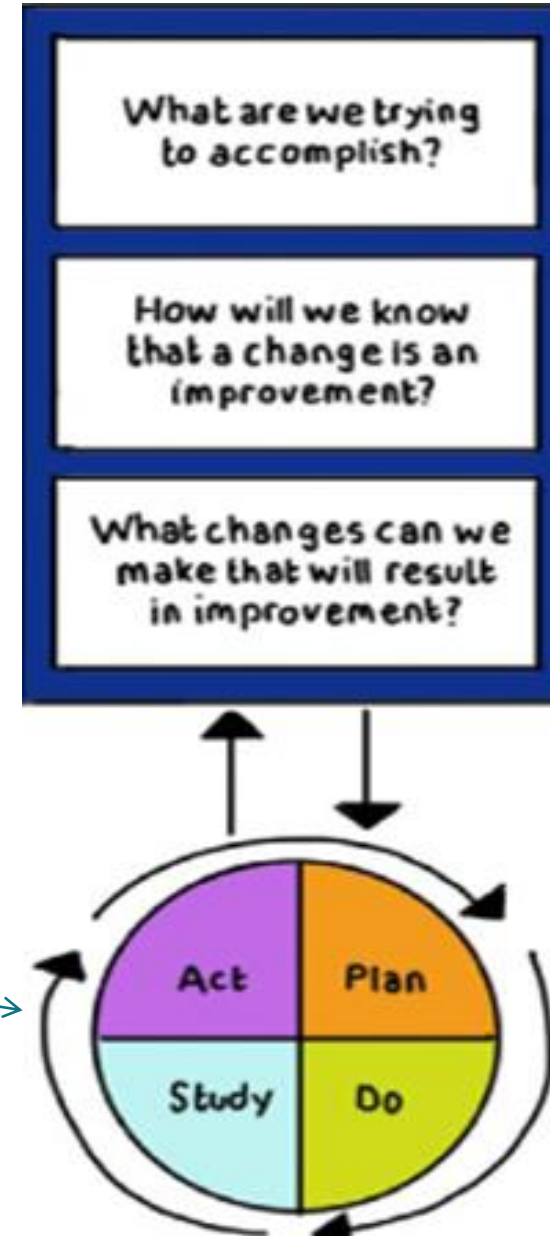
# Theory for improvement

- Develop an understanding of how things work now and how they might be improved – driver diagram



# Theory for improvement

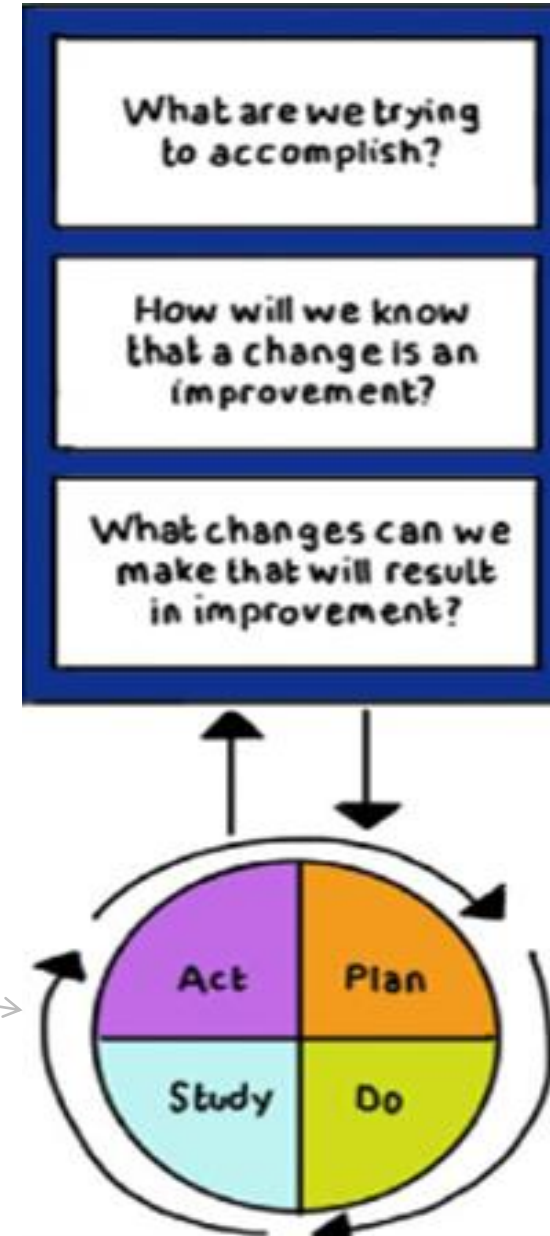
- Develop an understanding of how things work now and how they might be improved – driver diagram
- A driver diagram is a tool for building a testable hypothesis; it consists of stakeholders' shared expertise and knowledge.





# Theory for improvement

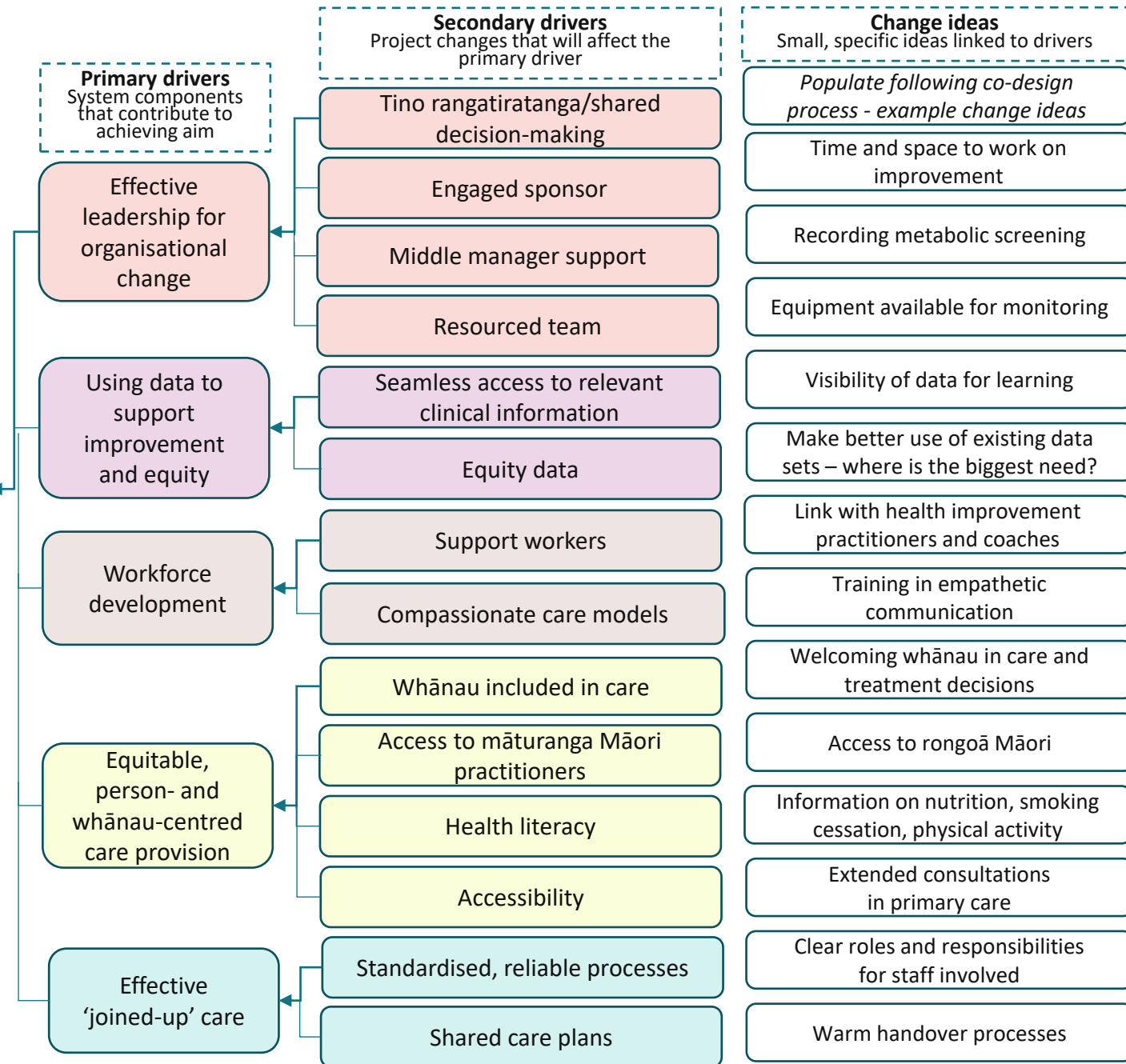
- Develop an understanding of how things work now and how they might be improved – driver diagram
- A driver diagram is a tool for building a testable hypothesis; it consists of stakeholders' shared expertise and knowledge.
- A broad prediction of the changes required to achieve the aim or outcome.



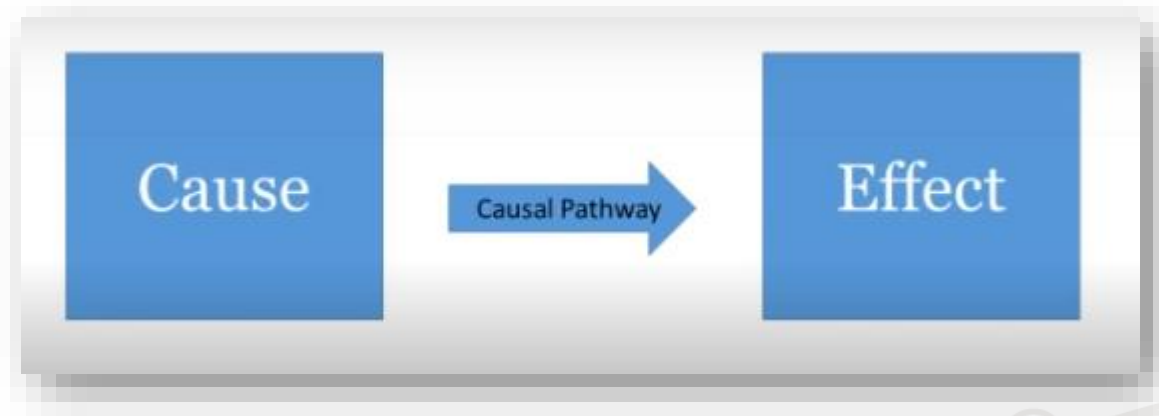
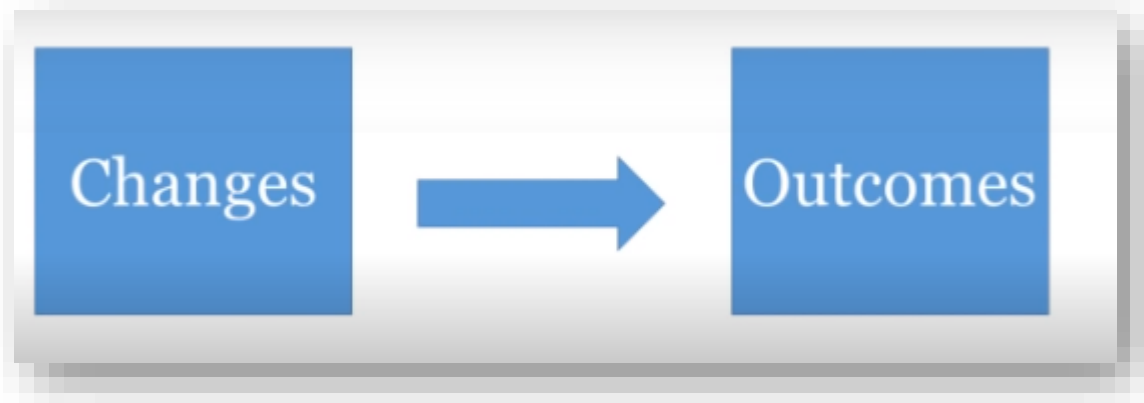
# Driver diagram Te whakanui ake i te hauora ā-tinana | Maximising physical health project (Feb 2023)

**Aim:** To increase the rate of screening for cardiometabolic risk to 90 percent for consumers at risk due to antipsychotic medication treatment (clozapine and intramuscular injection) by 1 May 2024

- National outcome measures**
1. Percent of cohort prescribed metformin or other hypoglycaemic medication
  2. Percent of cohort dispensed lipid-lowering medication
- National process measures**
1. Percent of cohort who receive physical health screening
  2. Percent of cohort enrolled with general practitioner



# Linking theory to change ideas



# Processes and process measures

- Processes refer to workflow – how things are accomplished, what steps are taken in what order to complete a task.
- Process measures: *voice of the workings of the system*
  - measures that capture the changes your quality improvement efforts make to the inputs or steps that contribute to system outcomes

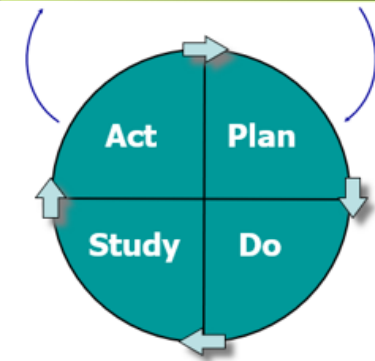
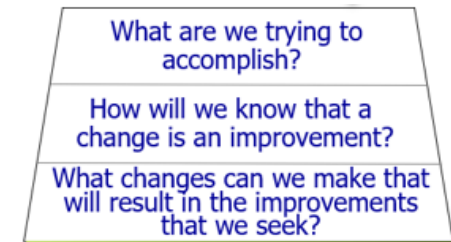
**Example:** percentage of consumers who have completed training modules.



# Introducing plan-do-study-act (PDSA) cycles



A cycle for learning and improvement



# Why test?

- Forces us to think small.
- Increases belief that the change will result in improvement.
- Provides opportunities for learning without affecting performance.
- Helps teams adapt good ideas to their specific situation.



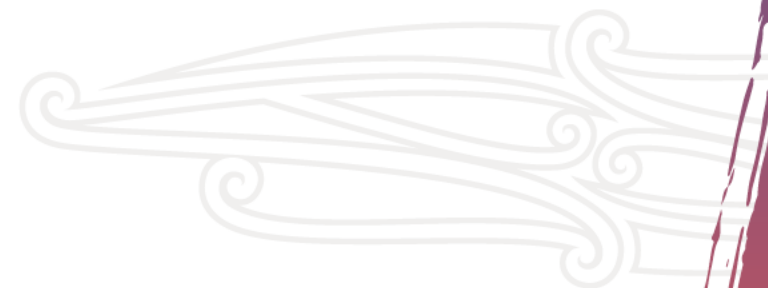
# Linking PDSA cycles and tests of change

- Testing changes is an ongoing process: the completion of each PDSA cycle leads directly into the start of the next cycle.
- From the test, a team learns:
  - what worked
  - what didn't work
  - what should be kept, changed or abandoned.



# Linking PDSA cycles and tests of change

- This new knowledge is used to plan the next test – the team continues linking tests in this way, refining the change until it is ready for broader implementation.
- People are far more willing to test a change when they know that changes can and will be modified as needed.
- Linking small tests of change helps overcome an organisation's natural resistance to change and encourages team buy-in.





# Why predict?

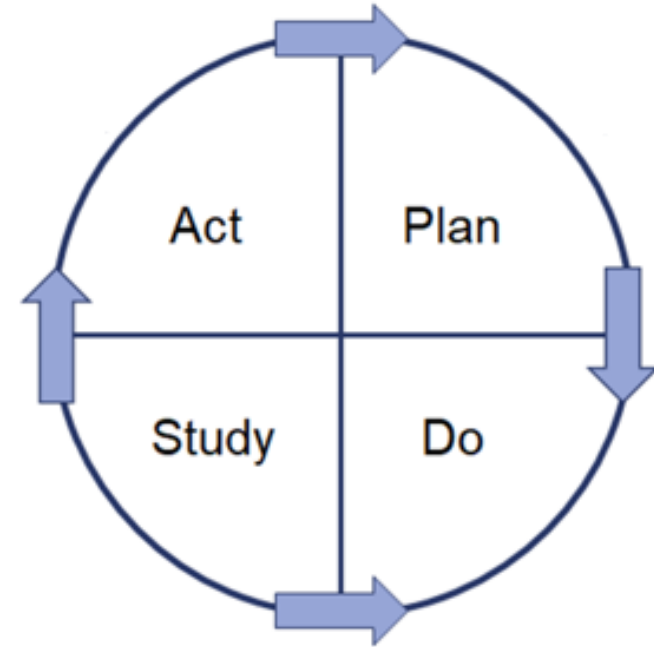
- Predicting is the most important part of any PDSA cycle.
- When predicting, ask yourself, ‘What do I expect to happen?’
- Making a prediction will help in anticipating what might come next and whether or not the cycle was a success.
- If the test of change didn’t work, it is important to take the time to understand why (study).



# Three options after test

Three options after reviewing results from PDSA test:

- X** abandon (glad we did a small test)
- ✓** adopt (as tested; test at larger scale?)
- @** adapt (and test again).





# Scale of test

## Staff Readiness to Make Change

Current Situation		Resistant	Indifferent	Ready
<b>Low Confidence</b> that change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Very Small Scale Test	Very Small Scale Test
	Cost of failure small	Very Small Scale Test	Very Small Scale Test	Small Scale Test
<b>High Confidence</b> that change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Small Scale Test	Large Scale Test
	Cost of failure small	Small Scale Test	Large Scale Test	Implement

# Tips for working with plan-do-study-act cycles

- No PDSA cycle is too small.
- Plan multiple cycles for a test of change, and think a couple of cycles ahead.
- PDSA cycles help you learn from your work.
- Just do it! – what can we do by next week?
- Keep it simple.
- Remember that you will learn as much from things that don't go well as those that do.



Thank you – reflections or questions

