



HEALTH QUALITY & SAFETY  
COMMISSION NEW ZEALAND

*Kupu Taurangi Hauora o Aotearoa*

# Planning for testing

## Plan-do-study-act (PDSA) cycles

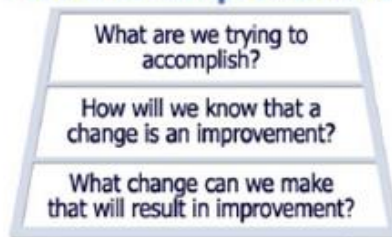
Jacqueline Ryan  
MHA QIP Project Manager

# A model for learning and change

When you  
combine  
the 3  
questions  
with the...

PDSA cycle,  
you get...

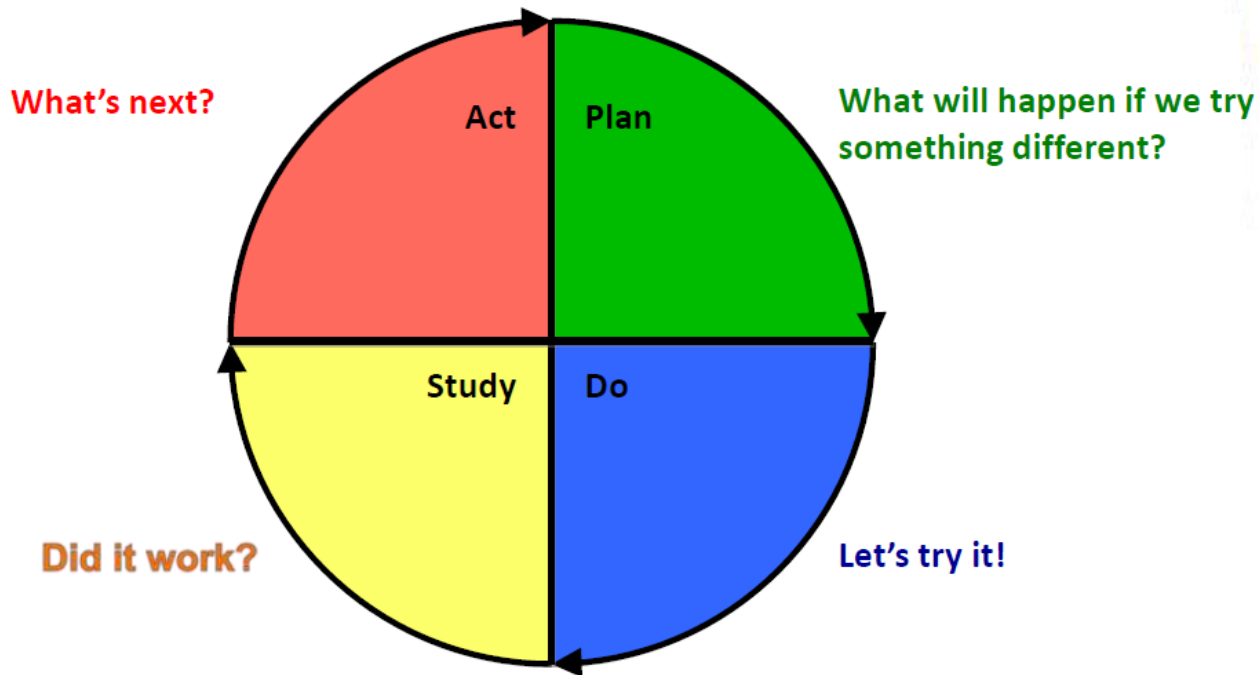
## Model for Improvement



...the Model  
for  
Improvement.

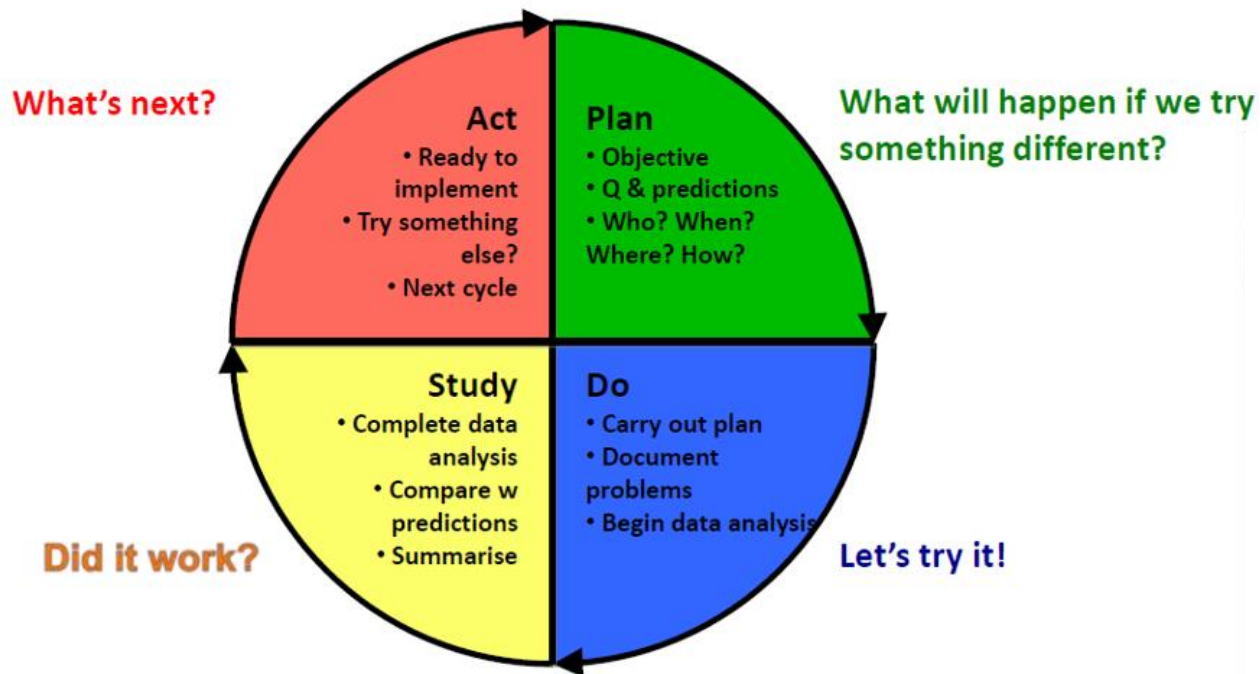
Langley, et al, *The Improvement Guide*, 2009

# Introducing plan-do-study-act



A cycle for learning and improvement

# Introducing plan-do-study-act



A cycle for learning and improvement

# Hints for planning useful PDSA cycles

- Think a couple of cycles ahead of the initial test (future tests, implementation).
- Scale down the size and decrease the time required for the initial test.
- Do not require buy-in or consensus as a prerequisite for the test (for instance, recruit volunteers, or run tests to evaluate conflicting ideas).
- Use temporary supports to facilitate the change during the test.

# What does that mean practically?

- Very Small Scale = a simulation, a test with 1 patient, for 1 hour, for 1 shift, in 1 ward
- Small Scale = A test with 10 patients, for a whole week, across different shifts
- Large Scale = A test with half of the eligible patients, across several wards, in different localities, etc.
- Implement = to make the status quo or default way of acting for all patients, everyday, in every appropriate setting, across all staff – replaces what was

**Disclaimer: Scale of a test should be determined against the degree of belief in an idea by the team and their subject matter expertise – balance is needed**

# Three options after test

Three options after review results from PDSA test:

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



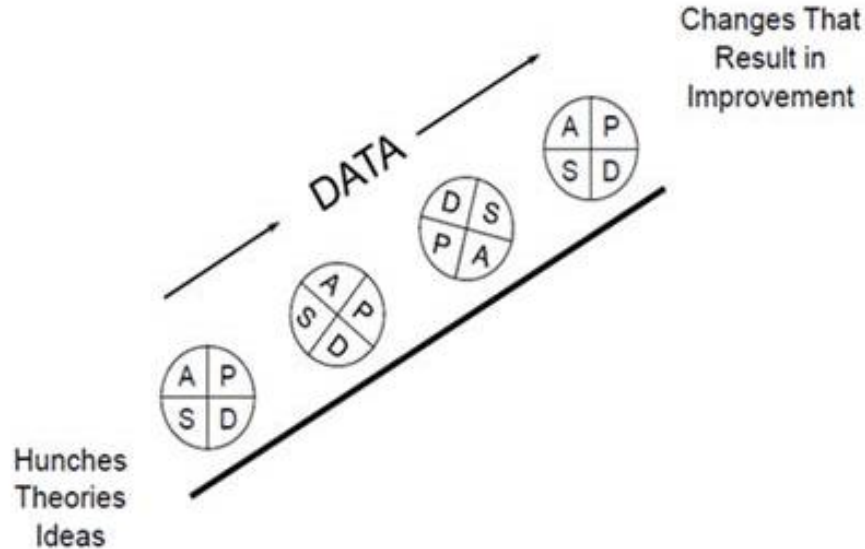
# Why test? Why not just implement and spread?

- Increases degree of belief
- Document expectations
- Build common understanding
- Evaluate costs and side-effects
- Explore theories and predictions
- Test ideas under different conditions
- Learn and adapt

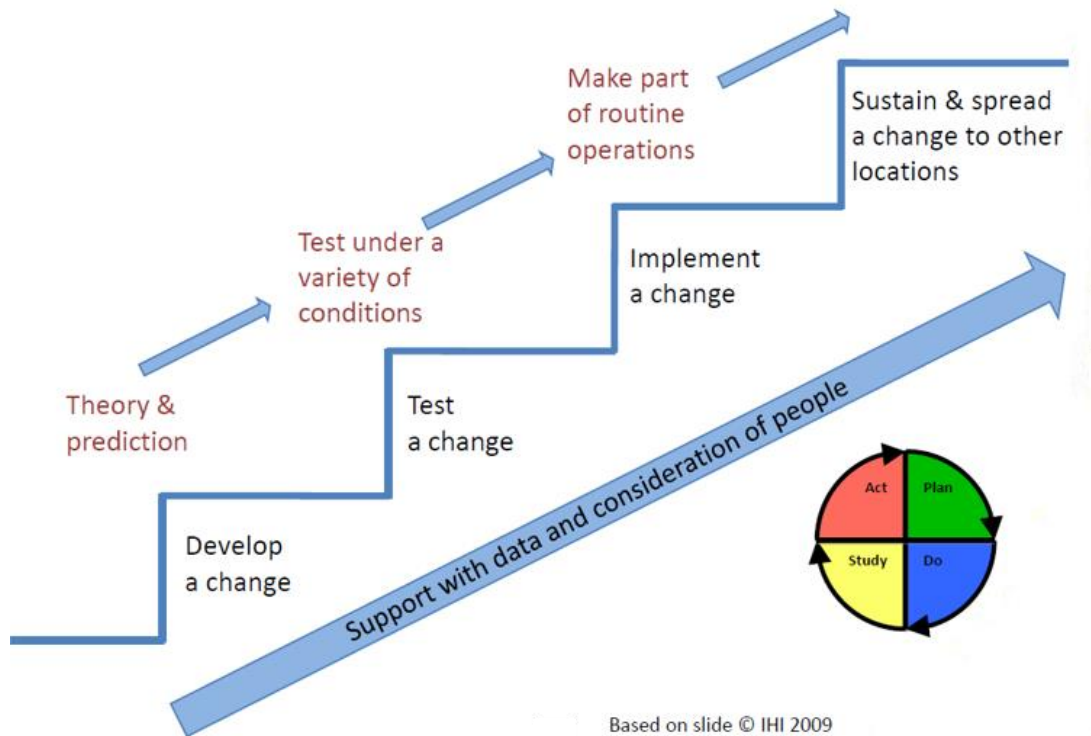




# Repeated use of the PDSA cycle

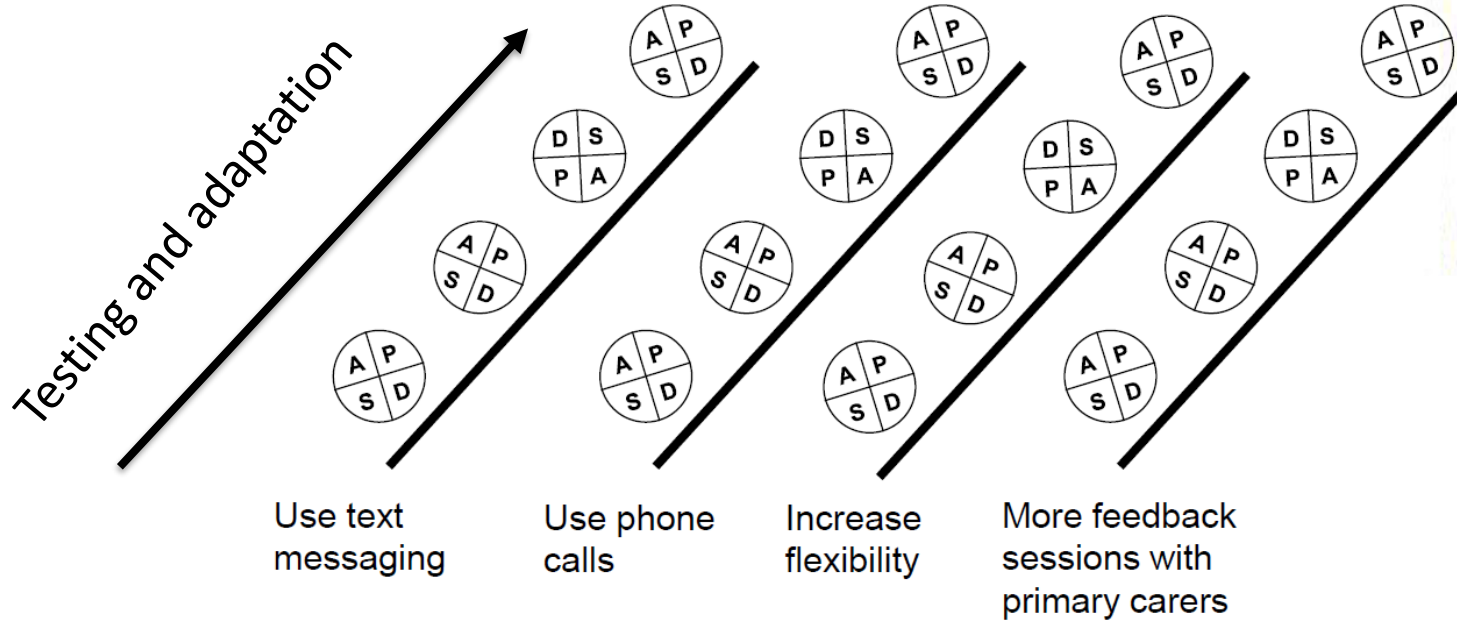


# Sequence for improvement





# Example of testing multiple changes



**Aim:** Increase attendance at follow-up appointments

# PDSA worksheet

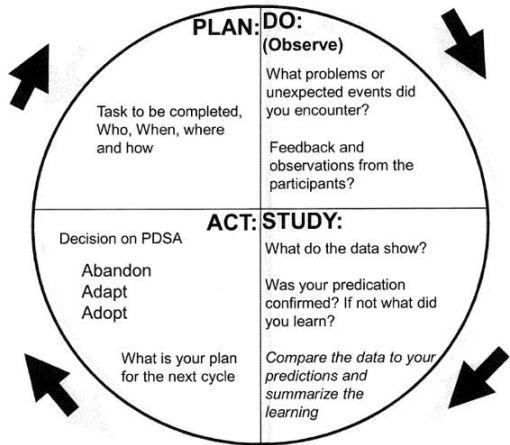
PDSA #	PDSA Title	PDSA Date:
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Objective of this PDSA:

**Change:** Briefly Describe the specific change you plan to test

**Questions**

What question(s) do we want to answer on this PDSA cycle?



**Predictions**

What do you think will happen?

Prediction on Change:

Prediction on Question(s)

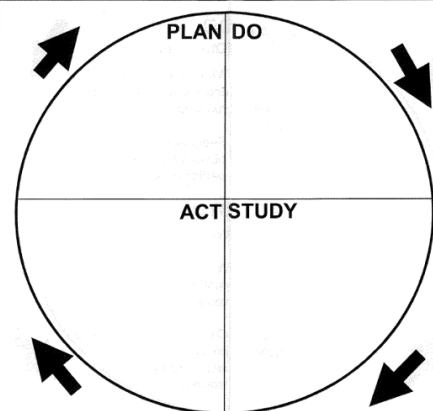
**Measurements:** What data will you need to test your prediction(s)? How will you collect it.

Test#	PDSA Title:	PDSA Date:	Owner:
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Objective of this PDSA

Change Idea:

**Questions:**



**Predictions:**

Measurements



# PDSA in action



# The value of ‘failed’ tests

*“I did not fail one thousand times; I found one thousand ways how not to make a light bulb.”*

*Thomas Edison*

