Planning for testing
Plan-do-study-act (PDSA) cycles

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Co-design approach

The co-design approach includes the following stages:

- project start-up: aim, scope, plan

- engage: consumers, families and whānau, staff and stakeholders

- capture: consumer, family and whānau and staff experiences using a range of methods

- understand: emotions and 'touch points' along the journey of care

- improve: work together to identify and prioritise what to improve

- measure: check to see if experience is improving
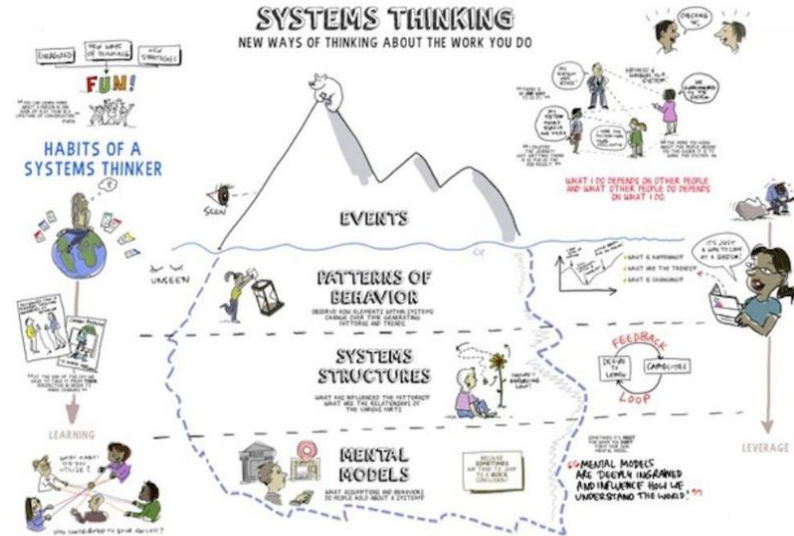
Improvement journey

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
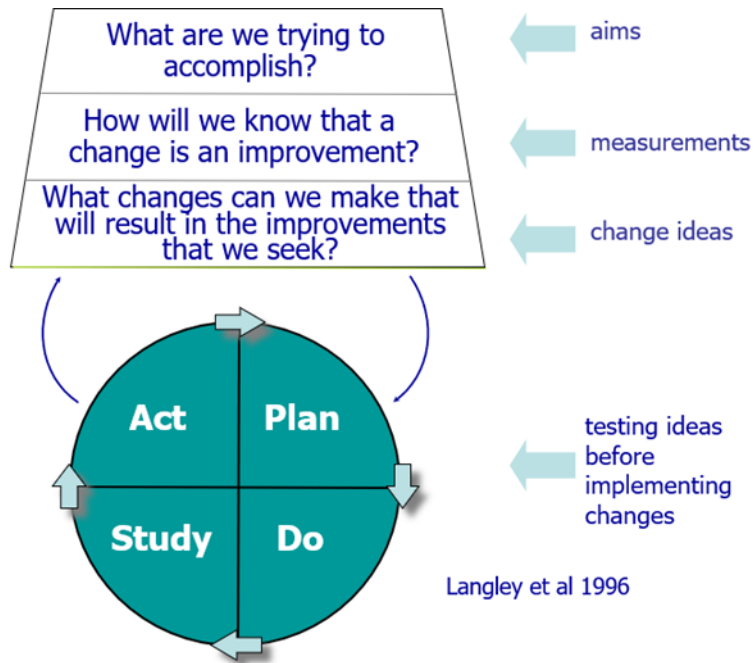
Testing your theory

- Need a method to learn whether your change ideas deliver in practice
- How will you know?

Who are our people?
What unites us (our shared purpose?)

What are we trying to accomplish? ← aims

How will we know that a change is an improvement? ← measurements

What changes can we make that will result in the improvements that we seek? ← change ideas

Act | Plan
Study | Do

← testing ideas before implementing changes

Langley et al 1996

Engaging the team

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.

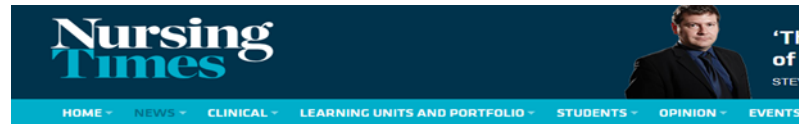'I have some key performance indicators for the next 12 months'

or

'I have a dream'

Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

all right?
healthy Christchurch

IT'S ALL RIGHT TO TAKE A BREATHER.
ALL RIGHT?

Nursing Times

HOME · NEWS · CLINICAL · LEARNING UNITS AND PORTFOLIO · STUDENTS · OPINION · EVENTS

HOSPITAL

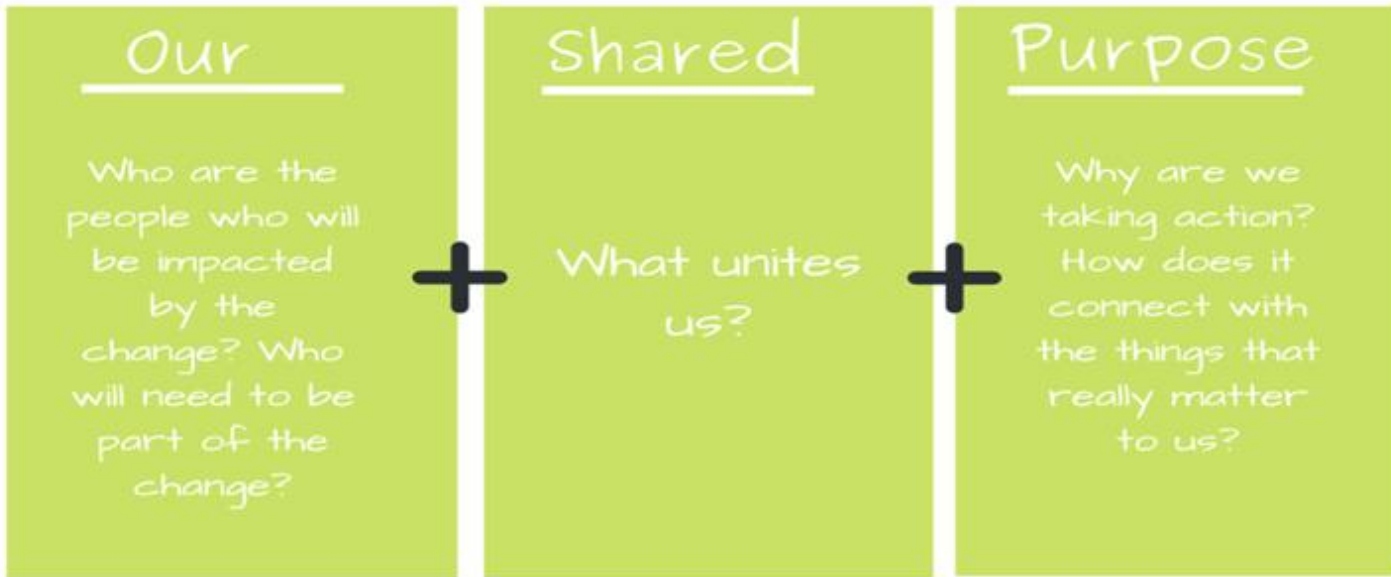Campaign to 'end PJ paralysis' saved 710,000 hospital days

21 AUGUST, 2018 | BY JO STEPHENSON

A national campaign to end "pyjama paralysis" has helped reduce falls and pressure ulcers and cut the length of time people spent in hospital, according to an evaluation.
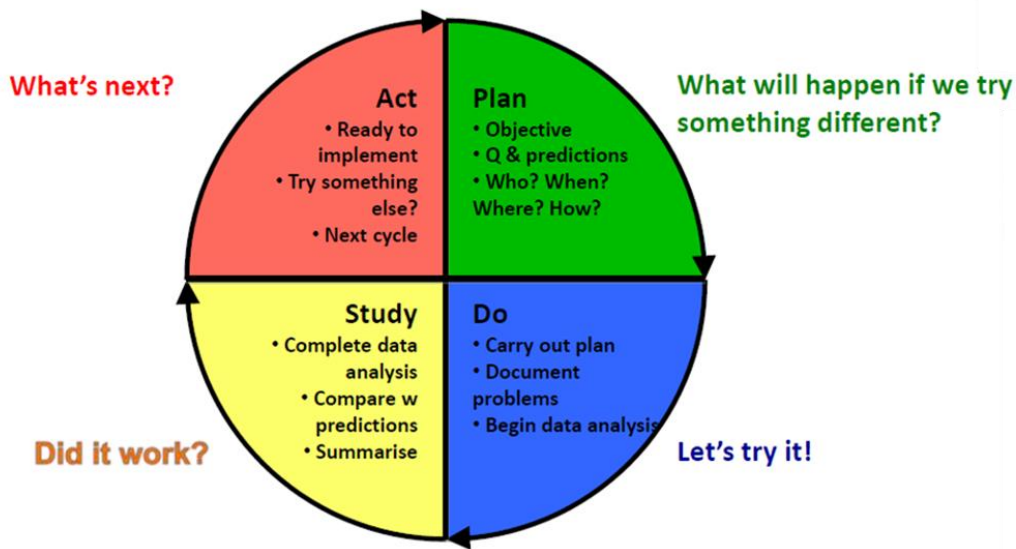
ME TOO

Our shared purpose

Our — Who are the people who will be impacted by the change? Who will need to be part of the change?

+

Shared — What unites us?

+

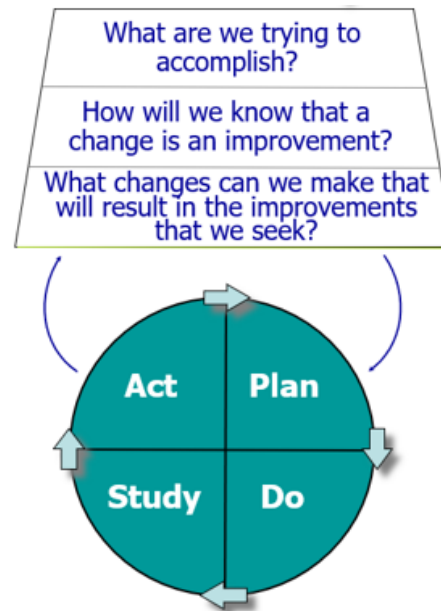**Purpose** — Why are we taking action? How does it connect with the things that really matter to us?

Introducing plan-do-study-act cycle

Why test?

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

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 the cycle was a success or not

- If the test of change didn't work, it is important to take the time to understand why (study)

PDSA cycles

Classic View of Ramp of PDSA Cycles

Revised View of Use of PDSA Cycle
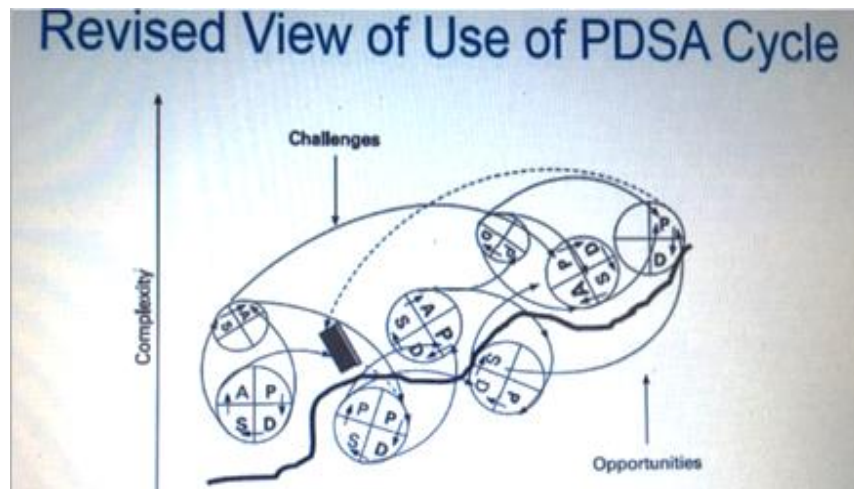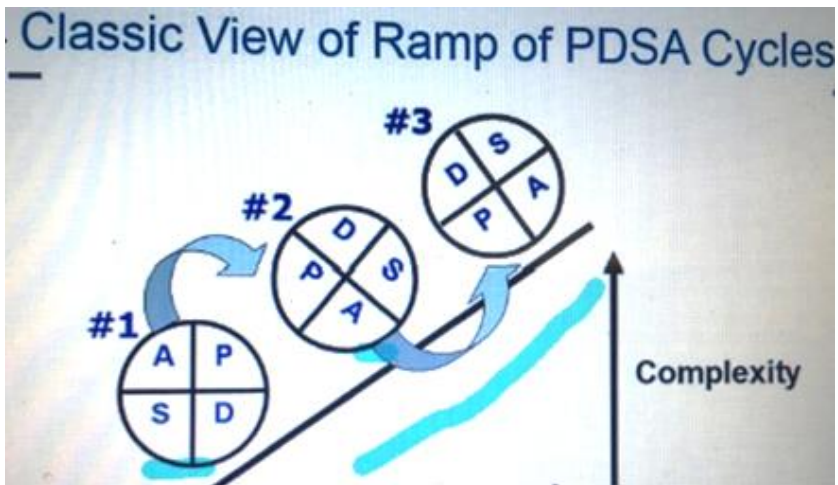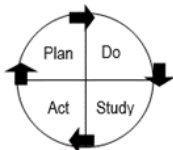
Three options after test

Three options after reviewing results from PDSA test:

- abandon (glad did a small test)

- adopt (as tested; test at larger scale?)

- adapt (and test)

Tools

Plan | Do
Act | Study

PDSA WORKSHEET

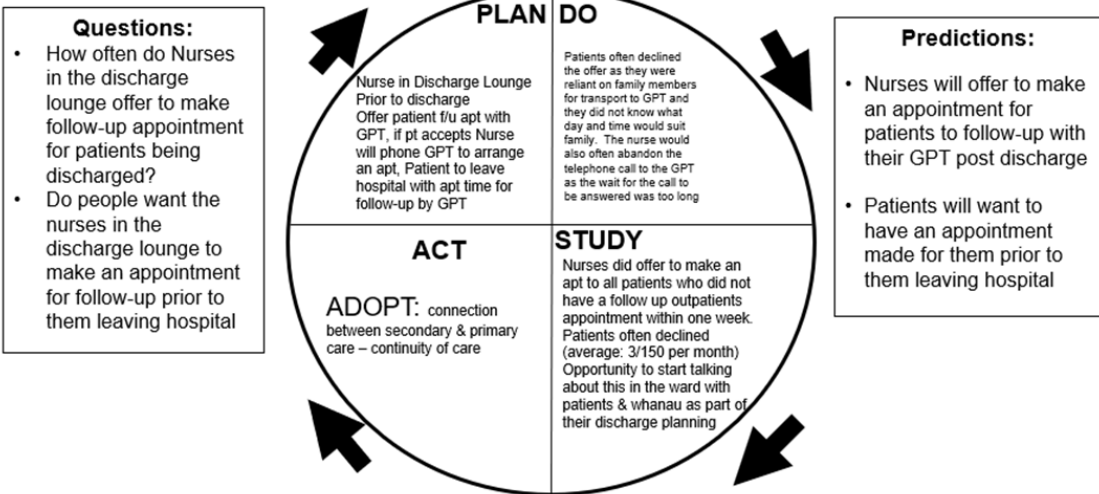| Team Name:	Date of test:	Test Completion Date:
Overall team/project aim:		
What is the objective of the test?		

PLAN:

Briefly describe the test:

How will you know that the change is an improvement?

What driver does the change impact?

What do you predict will happen?

PLAN

List the tasks necessary to complete this test (what)	Person responsible (who)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

Plan for collection of data:

DO: Test the changes.

Was the cycle carried out as planned? ☐ Yes ☐ No

Record data and observations.

What did you observe that was not part of our plan?

STUDY:

Did the results match your predictions? ☐ Yes ☐ No

Compare the result of your test to your previous performance:

What did you learn?

ACT: Decide to Adopt, Adapt, or Abandon.

☐ Adapt: Improve the change and continue testing plan. Plans/changes for next test:

☐ Adopt: Select changes to implement on a larger scale and develop an implementation plan and plan for sustainability

☐ Abandon: Discard this change idea and try a different one

Tools

PDSA Tracker Worksheet: Use with each change you are testing

Testing and adaptation

Change 1   Change 2   Change 3   Change 4

Title of PDSA:

Aim statement:

PDSA Cycle No.	PLAN				DO		STUDY	ACT
	What *change* are you testing?	What have you *learned* from previous PDSAs?	What do you *predict* will happen?	What *data* will you collect to know how it's working?	Date(s) of test	What did you *do*?	What did you *learn*?	What will you *do next*? (ex. forget it, more testing, ready to implement, ready to teach others)
1								

PDSA# 1   **PDSA Title: Discharge Lounge**   **PDSA Date: Aug-Nov 2018**   **Owner:**

Objective of this PDSA: To have patients leave hospital with a follow-up appointment time with their General Practice Team (GPT)

Change Idea: Nurses in the Discharge Lounge will offer to make an appointment with the patients GPT prior to them leaving the hospital

Questions:
- How often do Nurses in the discharge lounge offer to make follow-up appointment for patients being discharged?
- Do people want the nurses in the discharge lounge to make an appointment for follow-up prior to them leaving hospital

PLAN

Nurse in Discharge Lounge Prior to discharge Offer patient f/u apt with GPT, if pt accepts Nurse will phone GPT to arrange an apt, Patient to leave hospital with apt time for follow-up by GPT

DO

Patients often declined the offer as they were reliant on family members for transport to GPT and they did not know what day and time would suit family. The nurse would also often abandon the telephone call to the GPT as the wait for the call to be answered was too long

ACT

ADOPT: connection between secondary & primary care – continuity of care

STUDY

Nurses did offer to make an apt to all patients who did not have a follow up outpatients appointment within one week. Patients often declined (average: 3/150 per month) Opportunity to start talking about this in the ward with patients & whanau as part of their discharge planning

Predictions:
- Nurses will offer to make an appointment for patients to follow-up with their GPT post discharge
- Patients will want to have an appointment made for them prior to them leaving hospital

Measurement: Discharge lounge will collect numbers for patients offered a follow-up appointment & how many accepted the offer (Average of 150 patients per month were offered to have an apt made for them with their GPT, only 3 accepted and made) NB: all patients, not just Central Medical

PDSA in action: M&Ms challenge

- Open M&Ms, 14 per person and a card
- One for each number on the card
- Occupy every number on card with a M&M, one will be blank.
- Jump over the blank number
- Only jump one number at a time, any direction, up or down
- Stop when you can't move any more
- One round
- Bit like drafts

PDSA in action: M&Ms challenge

- Aim: to be left with one M&M at the end, or as few as possible

- Measure: number of M&Ms left

- Operational definition:
  - don't eat the M&Ms
  - one blank number to start
  - jump over one at a time and remove it
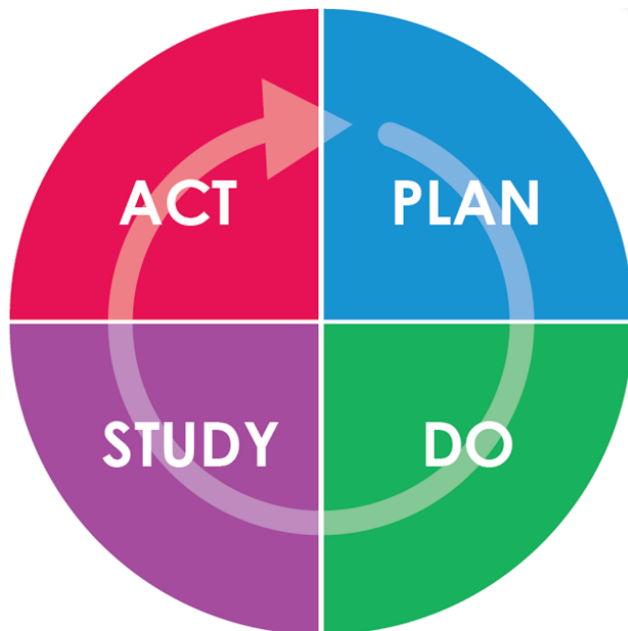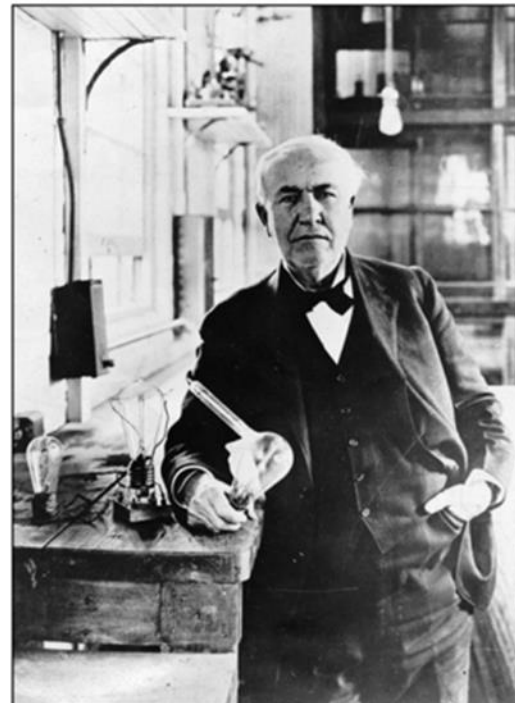 - round lasts two minutes

PDSA one

PDSA two

The value of failed tests

'I did not fail 1,000 times; I found 1,000 ways how to not make a light bulb.' – Thomas Edison

What's next?

- Identify a change idea from your co-design process and start to develop a testing plan

- Plan should include:
  - the outcome you are after
  - the change idea
  - what is your prediction
  - when you will do this (next week)
  - complete the PDSA sheet
  - provide feedback on what you will do

Repeated use of the PDSA cycle