

# core *data set*

## Improving and reporting

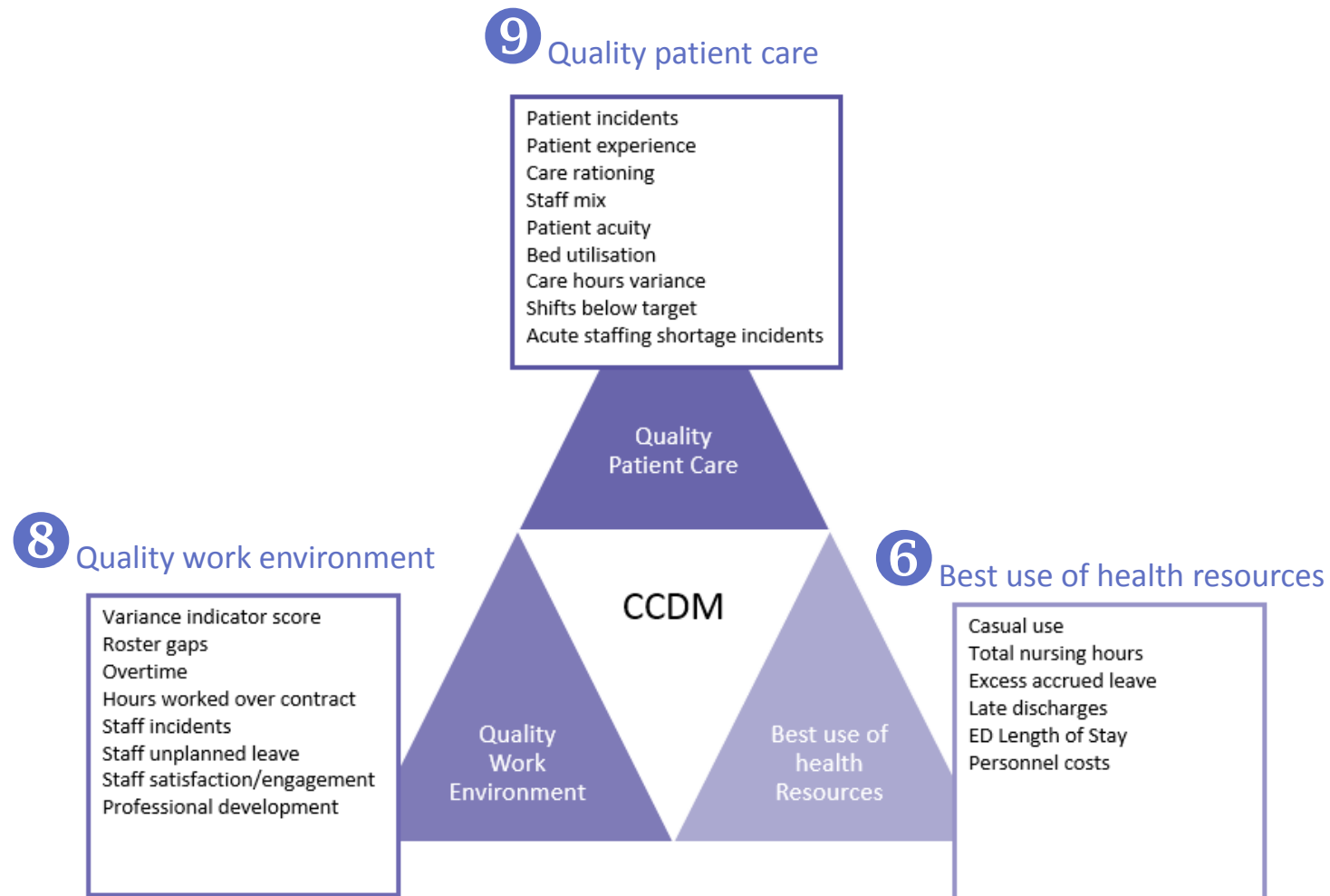
Safe Staffing & Healthy Workplaces Unit  
April 2018

# Session outline

- What is the core data set and why do we need one?
- What is continuous quality improvement?
- The 6 steps of continuous quality improvement
  1. How do you get started?
  2. What is your aim or goal?
  3. How will you know you have improved?
  4. What changes can you make?
  5. Test plan-do-study-act cycles
  6. How will you sustain improvements?

# What is the core data set?

This diagram shows how the 23 measures are balanced around the CCDM triangle.



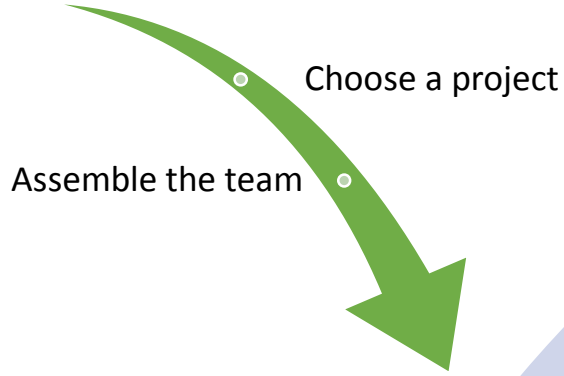
# Why do you need a core data set?



What you don't measure,  
you don't know.  
If you don't know, you  
can't improve.  
Without measurement  
there is no improvement  
(except by chance).

# What is the continuous improvement model?

## 1. Get started



## 2. Aim

- What are you trying to achieve?

## 3. Measures

- How will you know that you have improved?

## 4. Ideas

- What changes can you make that will result in improvement?

## 5. Test

- Plan-do-study-act cycles for learning and improvement

## 6. Sustain & spread

- Change ideas that are successful

# How do you get started?

Choose a project that

- Addresses a clear problem
- Staff and patients think needs improvement
- Can be done small scale
- Is measured by the core data set
- Can show results in 3 months
- You are confident will be successful
- Initially will have low resistance

# How do you get started?

Assemble a core team of

- 4-8 people (the local data council or part of)
- Diverse and multidisciplinary people
- Members who can serve as
  - Project sponsor
  - Team leader/coordinator
  - Quality improvement expert
  - Local experts
  - Outside perspective



# What is your aim?

## Clearly define

- What are you trying to achieve?
- Why is it important?
- Who is the specific target group?
- When will this be completed?
- How will this be carried out?
- What is the measurable goal? (SMART)

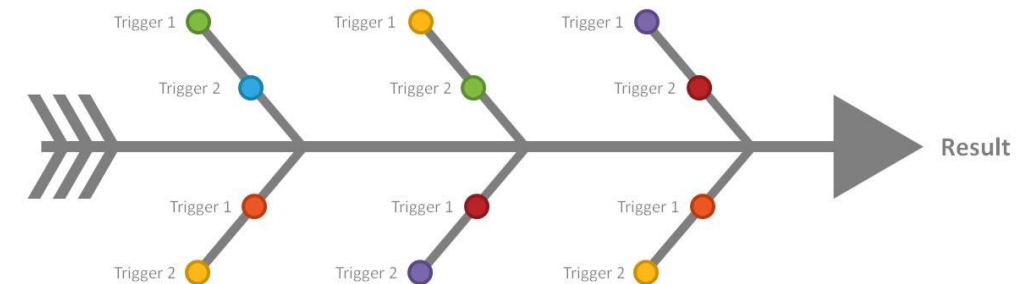


# What changes can you make?

Understand what is happening now

- Identify the root cause
  - What is causing the problem?
  - What is the root cause of the problem/s?
  - What root causes do you want to focus on?
- Some useful tools
  - Fishbone
  - If this, then check
  - 5 why's
  - Process or value stream mapping
  - Driver diagrams

## Fishbone Diagram



# Example 5 why's

Problem	5 why's
Significant negative hours variance	Why?
Not enough staff	Why?
High patient acuity	Why?
Patients needing watches More patients than expected	Why?
Patient demographics Poor forecasting	Why?

## Tips:

- Look for the cause step by step. Don't jump to conclusions.
- Try to make answers precise.
- Focus on process, not people.
- Distinguish causes from symptoms.
- Pay attention to the logic of cause-and-effect.
- Check the logic by reversing the order using "and therefore".

# What changes can you make?

- Identify possible solutions
- Brainstorm
- Outside the box
- Evidence based
- Feedback from staff and patients

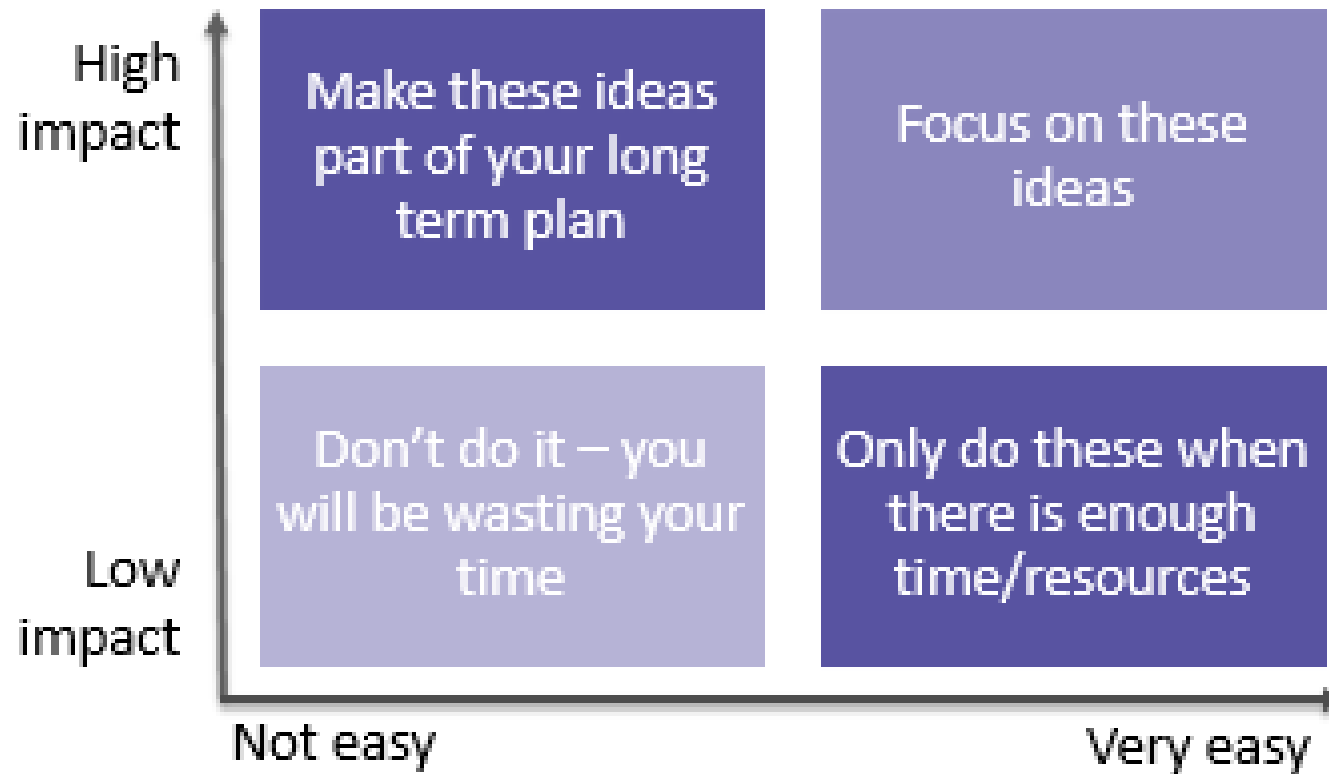


# Example 5 why's plus change ideas

Problem	Change ideas
Significant negative hours variance	<ul style="list-style-type: none"> <li>Close beds</li> <li>Don't accept admissions</li> <li>Optimise discharges</li> <li>Order casual staff</li> <li>Ask staff to work extra shifts/work longer hours</li> </ul>
Not enough staff	<ul style="list-style-type: none"> <li>Book casual</li> <li>Ask staff to work extra shifts</li> <li>Employ more staff</li> <li>Stop rostering leave/ professional development</li> <li>Complete FTE calculation</li> </ul>
High patient acuity	<ul style="list-style-type: none"> <li>Accurately use TC to reflect need</li> <li>More staff to cover acuity</li> <li>Use VRM processes</li> <li>Optimise discharges</li> <li>Repatriate patients</li> <li>Increase budgeted FTE</li> </ul>
Patients needing watches More patients than expected	<ul style="list-style-type: none"> <li>Effective patient management e.g. electrolytes, poly pharmacy</li> <li>Cohort patient watches</li> <li>Mobilise MDT</li> <li>Improve forecasting</li> </ul>

# Prioritising the change ideas

- Use the impact vs effort matrix to prioritise ideas

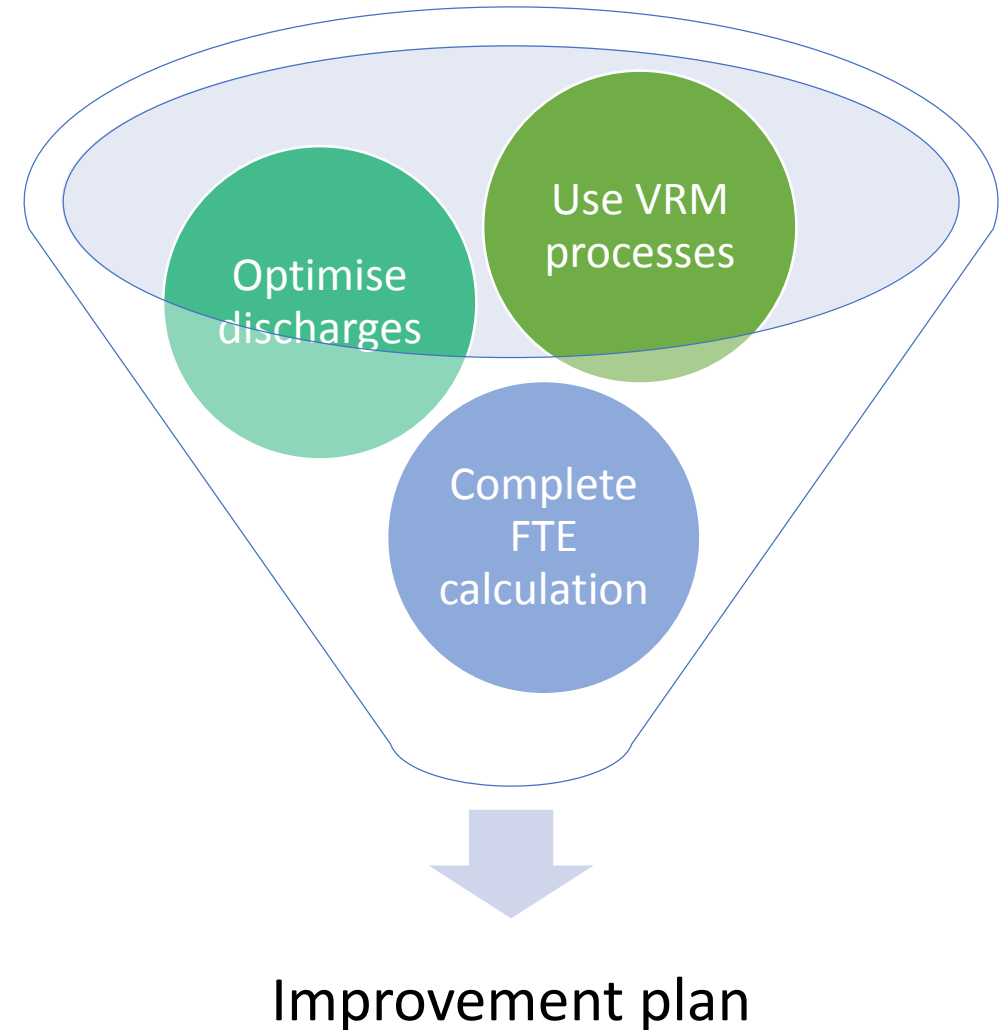


# Example of prioritising the change ideas

Problem	Change ideas	Impact vs. effort
Significant negative hours variance – why?	<ul style="list-style-type: none"> <li>Close beds</li> <li>Don't accept admissions</li> <li>Optimise discharges</li> <li>Order casual staff</li> <li>Ask staff to work extra shifts/work longer hours</li> </ul>	<ul style="list-style-type: none"> <li>High – difficult</li> <li>High – difficult</li> <li>High – moderate</li> <li>High – difficult</li> <li>High – easy (consequence)</li> </ul>
Not enough staff – why?	<ul style="list-style-type: none"> <li>Book casual</li> <li>Ask staff to work extra shifts</li> <li>Employ more staff</li> <li>Stop rostering leave/ professional development</li> <li>Complete FTE calculation</li> </ul>	<ul style="list-style-type: none"> <li>High – difficult</li> <li>High – easy (consequence)</li> <li>High – difficult</li> <li>High – easy (consequence)</li> <li>High – moderate</li> </ul>
High patient acuity – why?	<ul style="list-style-type: none"> <li>Accurately use TC to reflect need</li> <li>More staff to cover acuity</li> <li>Use VRM processes</li> <li>Optimise discharges</li> <li>Repatriate patients</li> <li>Increase budgeted FTE</li> </ul>	<ul style="list-style-type: none"> <li>Moderate – easy</li> <li>High – difficult</li> <li>Moderate – easy</li> <li>High – moderate</li> <li>Moderate – moderate</li> <li>High – difficult</li> </ul>
Patients sicker needing watches More patients than expected	<ul style="list-style-type: none"> <li>Effective patient management e.g. electrolytes, poly pharmacy</li> <li>Cohort patient watches</li> <li>Improve forecasting</li> <li>Activate MDT</li> </ul>	<ul style="list-style-type: none"> <li>Moderate – moderate</li> <li>Moderate – moderate</li> <li>High – high</li> <li>Moderate – high</li> </ul>

# Example of prioritising the change ideas

- Choose change ideas that are
  - High impact & easy
  - Fix the problem
  - Limit unintended consequences
  - Compatible with organisational & local culture





# Write your improvement plan

## Core data set improvement plan

Project lead (name): Jennifer Jones Date: 17-Apr-18 Executive sponsor: Heather Bamford

Problem statement: Significant negative nursing hours variance. This is occurring on all three shifts - AM, PM and N.

Aim: Reduce the negative variance on all three shifts.

Objectives (SMART):  
 80% discharges occur before 1100 within 6 months  
 Zero VIS in red within 6 months  
 Variance is less than -ve 8% on all shifts within 6 months

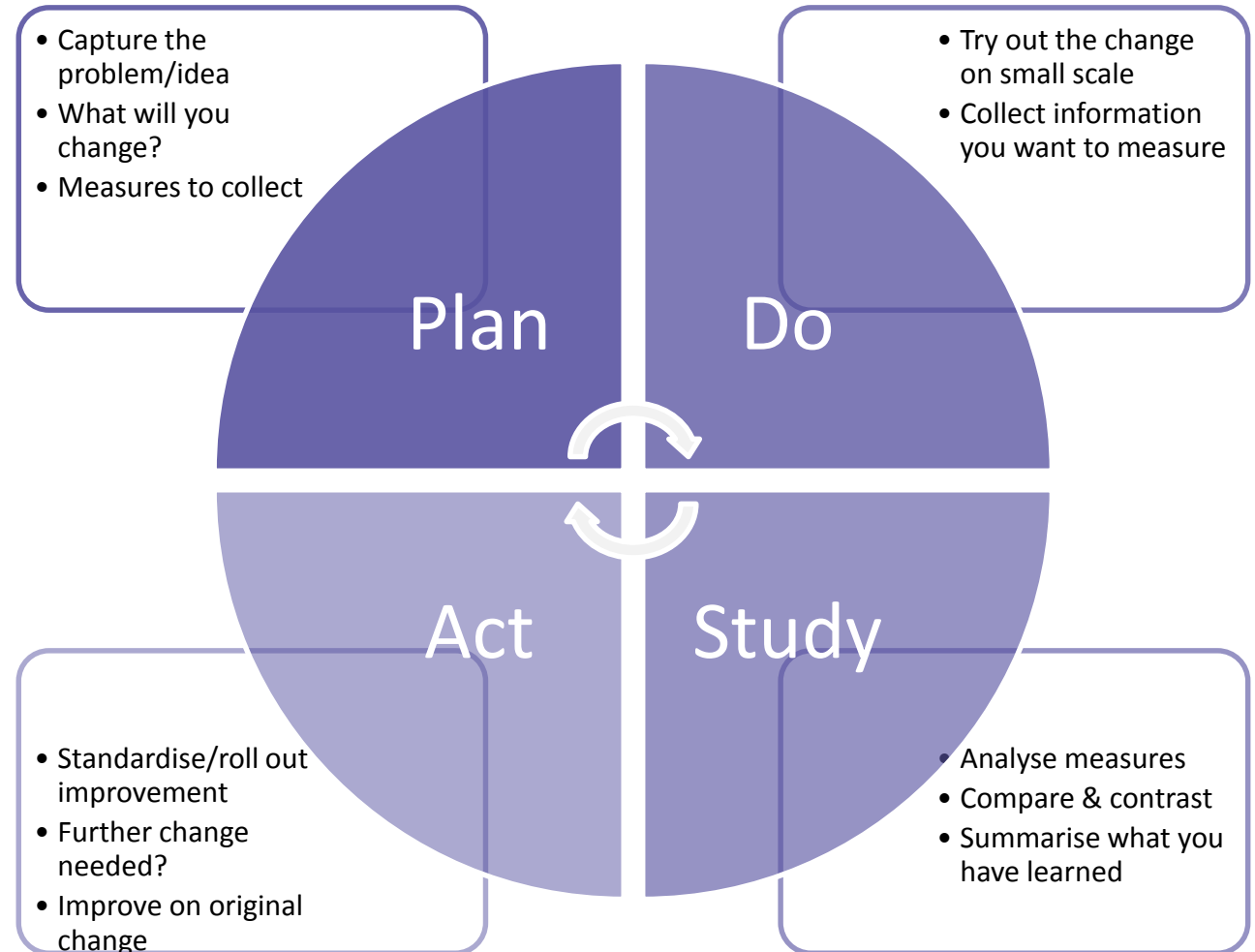
Measure/s:  
 Nursing hours variance  
 Late discharges  
 Variance indicator

**Key:** P IP C <30 30-60 >60 BAU  
 Planned In progress Completed Less than 30 days behind 30-60 days behind >60 days behind Business as usual

Actions	By Whom	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Review 'CDS if this, then check' to determine possible reasons	CNM	IP	C									
Complete 5 why's	LDC		IP	C								
Brain storm & prioritise possible solutions	LDC		IP	C								
Review reasons for late discharges from TrendCare	LDC			C								
Identify where can improve d/c times	LDC			C								
Discuss discharges with MDT	CNM			IP	P							
Develop criteria based discharges				IP	P							
Monitor late discharges measure				IP	P	P	BAU					
Review variance indicator measure					P							
Complete VIS every shift & when there is a change				IP	P							
Complete recalculated variance for every shift					P	<30 days						

# Test the ideas

- Use plan-do-study-act
- Small scale
- Different circumstances

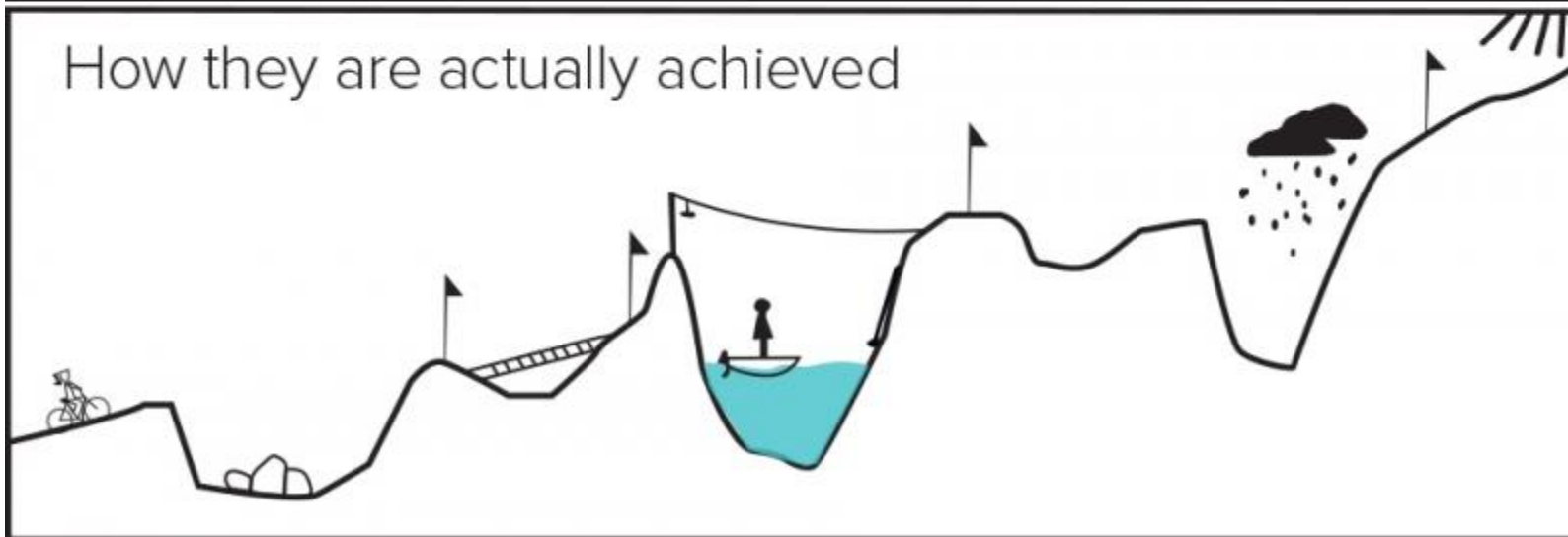


# Managing change

How you think your Goals are achieved

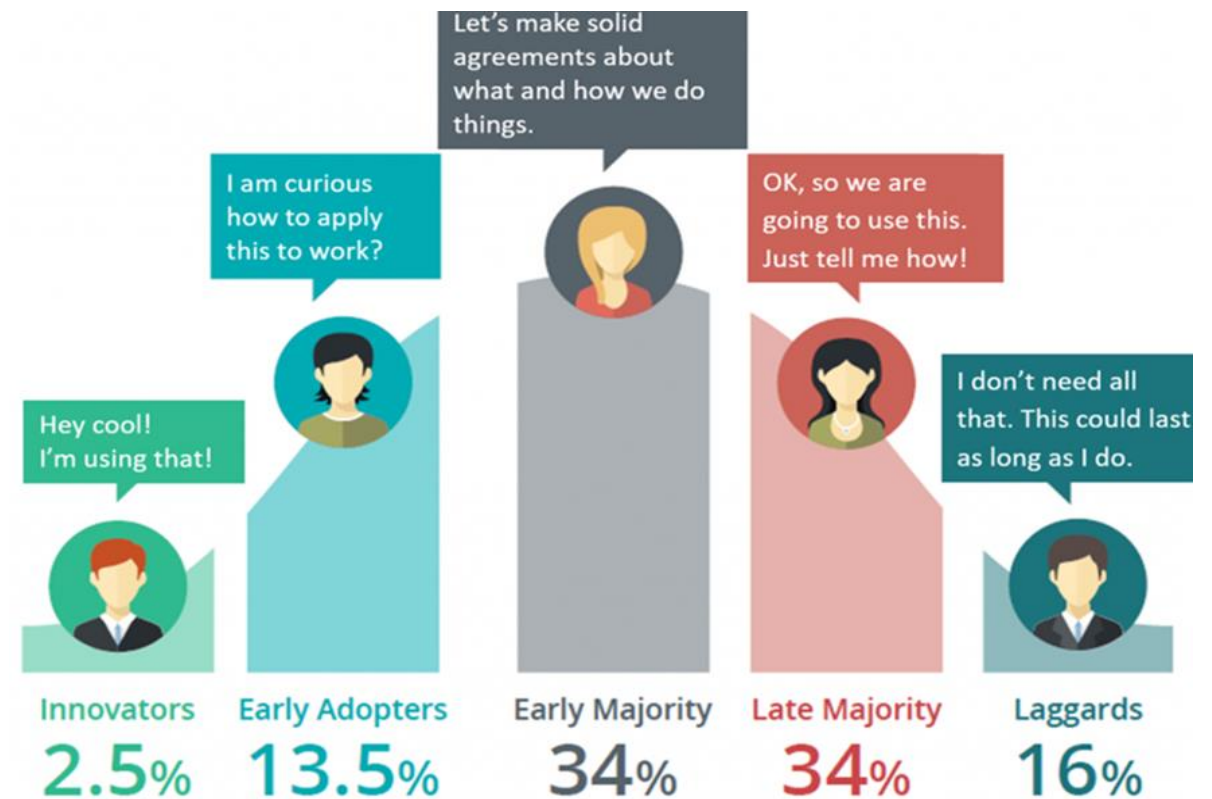


How they are actually achieved

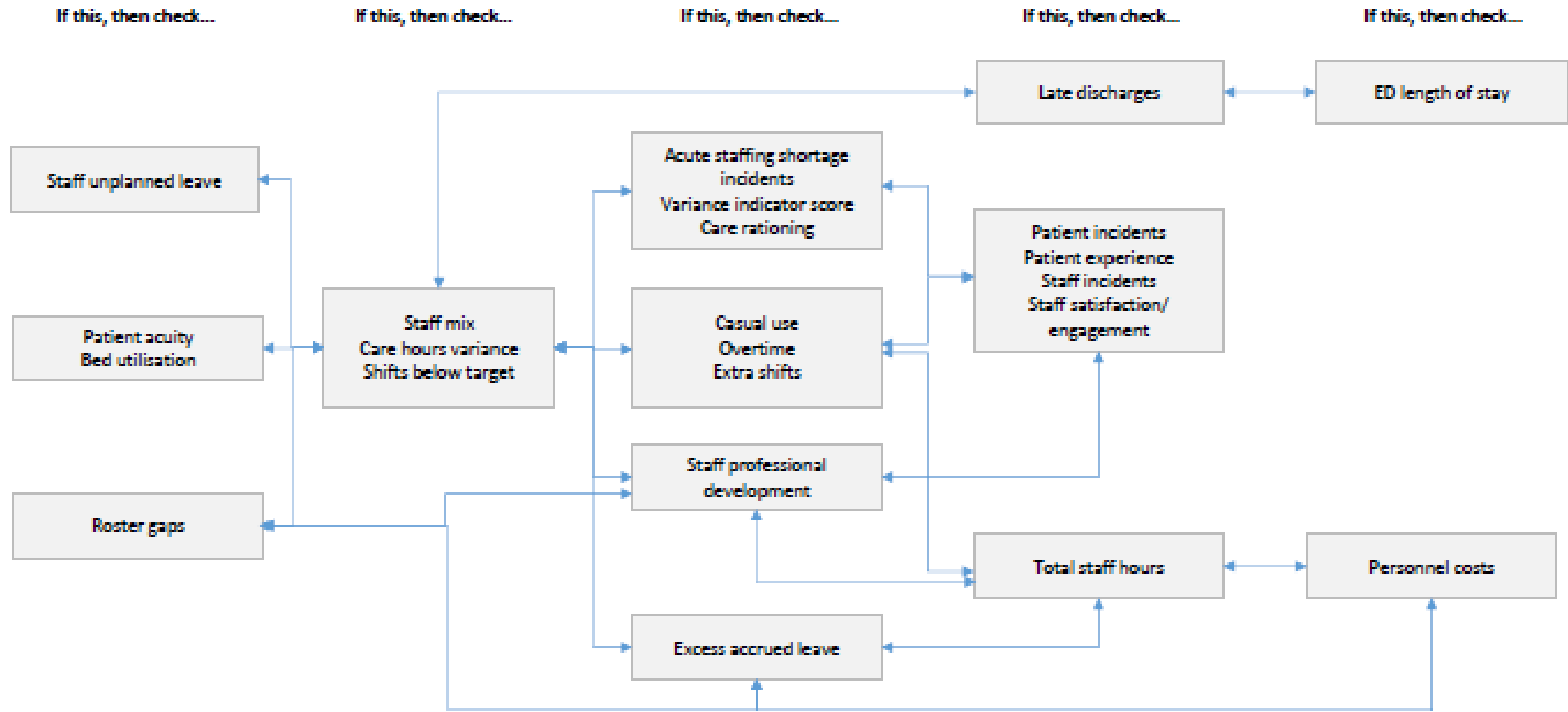


# How will you know you have improved?

- Has the change been implemented?
- What was the outcome?
- Did the process work?
- Did you achieve balance?



# How will you know you have improved?



May be caused by

Likely impact



# How will you sustain improvements?

- Involve senior leaders/managers
- Assign ownership
- Hardwire improvements
- Communicate
- Continuously measure





# Need more information?

Health Quality Safety Commission New Zealand

[www.hqsc.govt.nz](http://www.hqsc.govt.nz)

NHS Institute for Innovation and Improvement

<http://www.miltonkeynesccg.nhs.uk/resources/uploads/files/NHS%20III%20Handbook%20serviceimprove.pdf>

