Welcome to:
Introduction to Quality Improvement
Presenter: Gael Rolls

This is an interactive Session

Cameras on where possible

Microphones muted – unless speaking

Raise your hand when you'd like to speak

Comment, ask, share, react

Learning outcomes

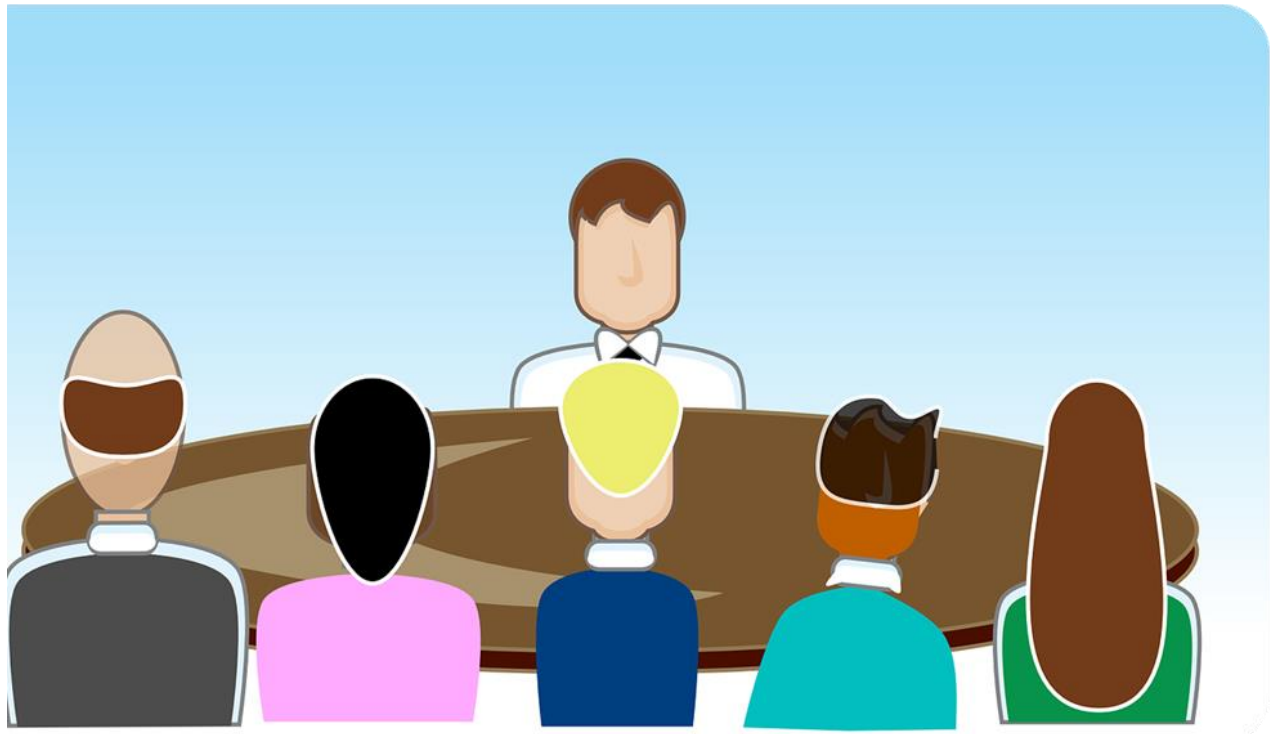
By the end of this session you will be able to.....

- Understand what QI is
- Understand why we use QI
- Understand the types of waste
- Recognise the need for change
- Recognise the QI journey
- Understand why we need data in QI

Introductions and Experience…….

Please use the chat box to :

- Explain your name, role and
- Your experience of Quality Improvement

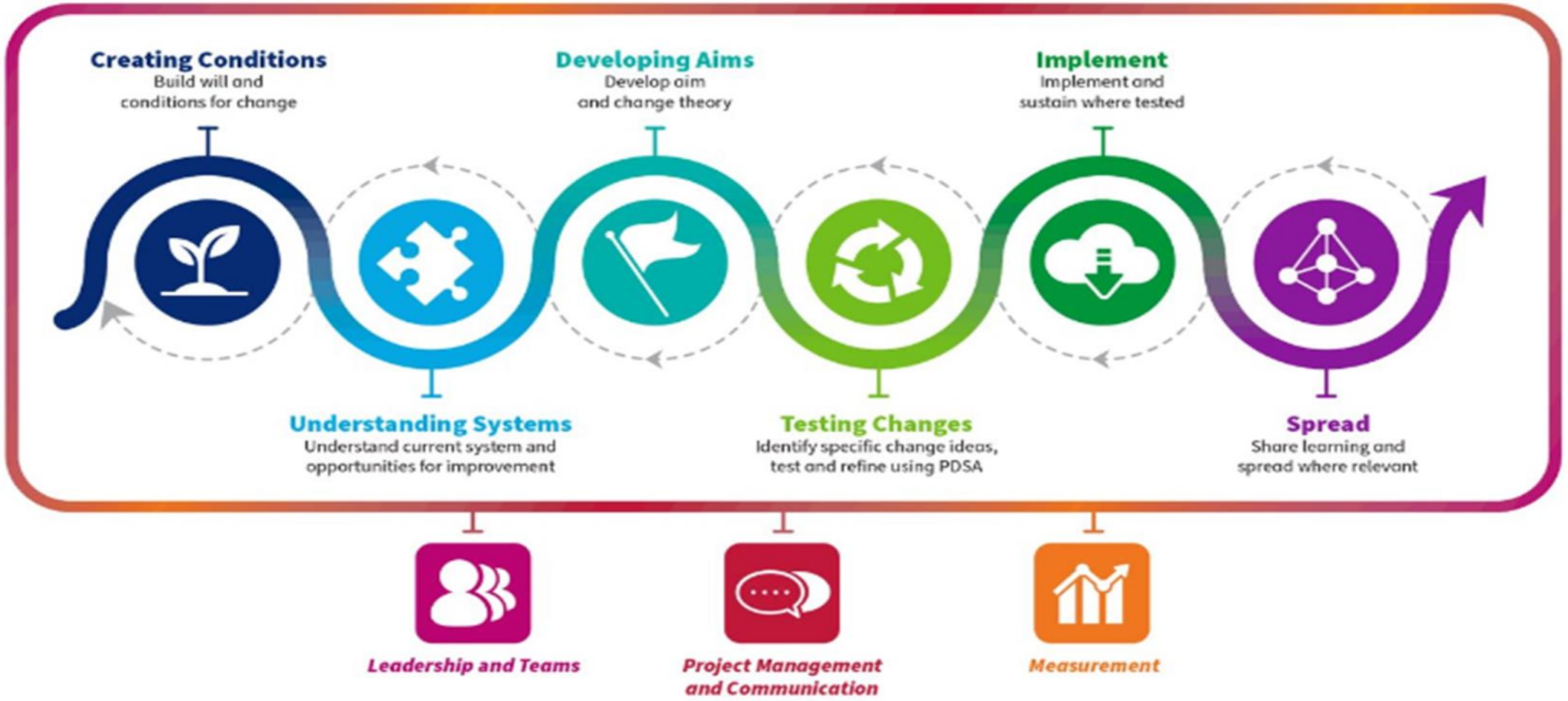


Quality Improvement is defined as

The application of a systematic approach that uses specific techniques to improve quality

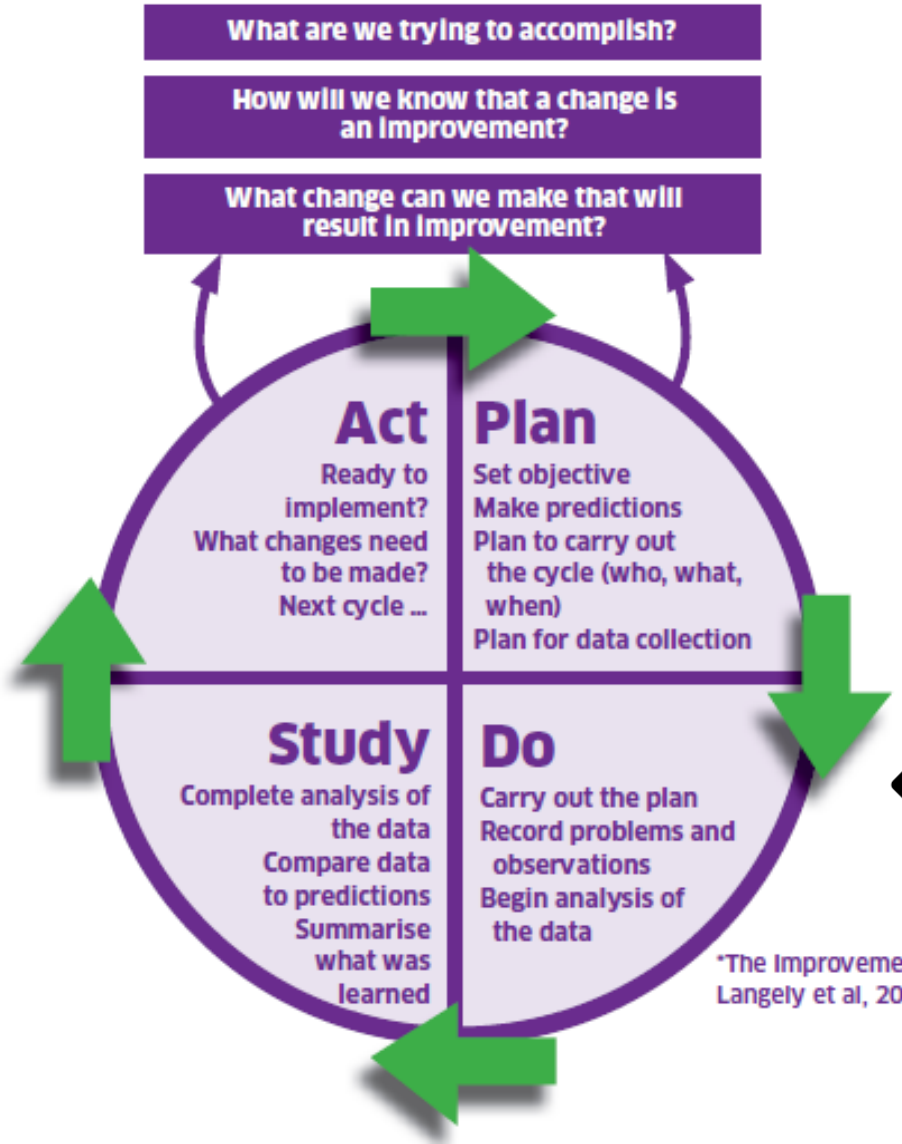
Health Foundation 2014

Quality Improvement Journey



Content Updated August 2021

Model for Improvement



*The Improvement Guide, Langely et al, 2009, 2nd edition.

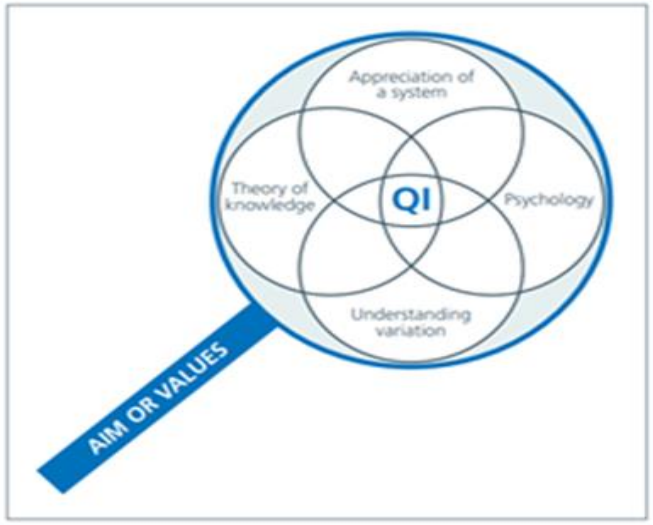
← The thinking part!

← The doing part!

Adopt
Adapt
Abandon

System of Profound Knowledge

What is the System of Profound Knowledge?



Theory of management and leadership

Appreciation of a system

Psychology

Theory of knowledge

Understanding Variation

4 Components – focus on thinking together, learning together, working together & improving together

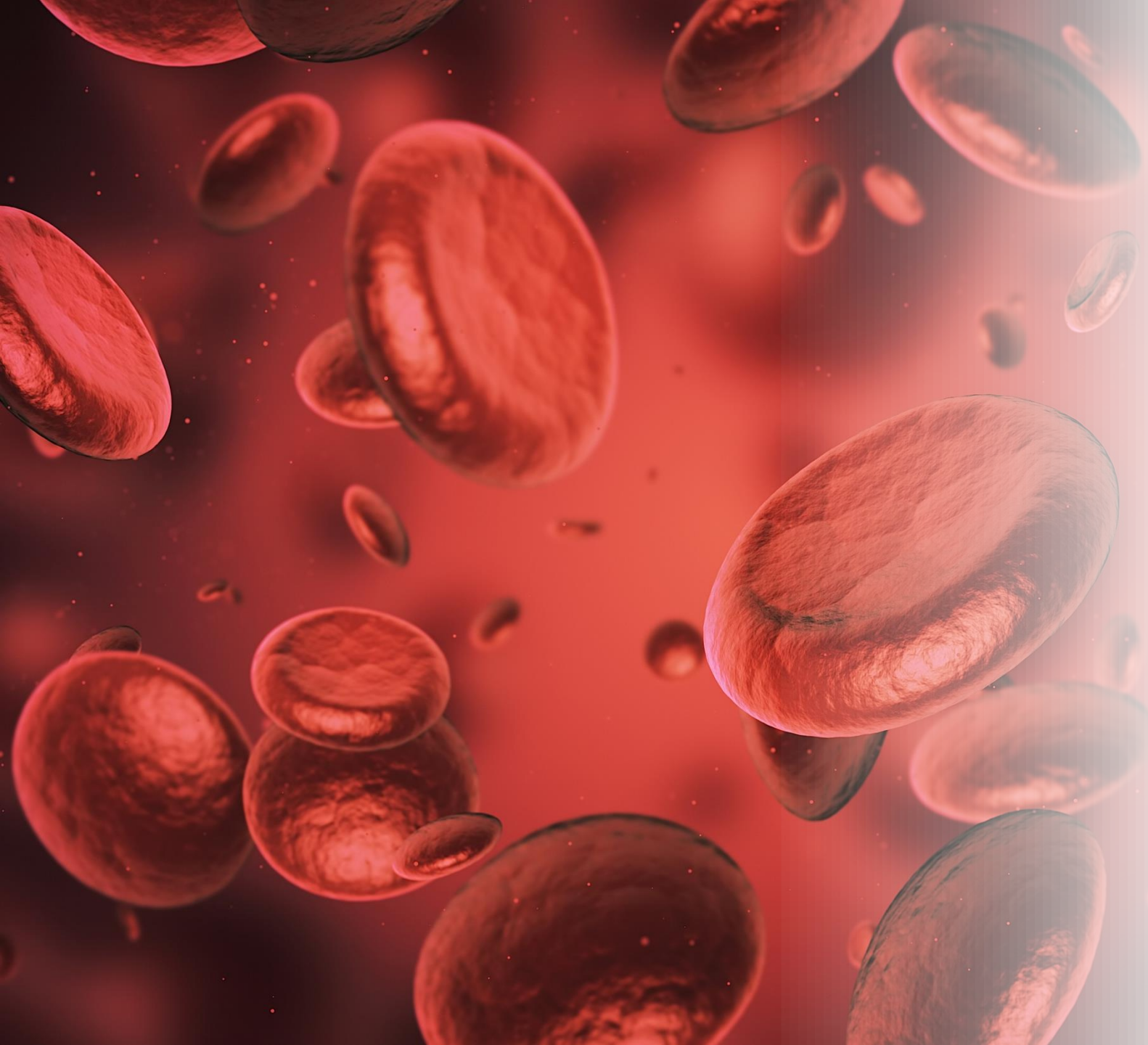
Deming states that each system must have an AIM

Through understanding how parts work together, outcomes can be improved

Why Use Quality Improvement?

Patient W

Inpatient gets a panel of tests done.
At shift change, the PCs are busy so the new staff can't easily see that the tests have been done, or if the results are there. Just in case, more samples are taken from the patient.



Patient Z

Patient Z needs routine blood transfusions. The patient is complex, to find compatible blood the ward is regularly reminded by the lab to get the sample the day before the transfusion is needed. The patient arrives for transfusion at 9am with no valid sample having been sent to the lab the day before.

Sample taken and sent to lab. Testing is complex so takes 4 hours to find compatible blood and blood is needed to be ordered and sent to Ninewells from Edinburgh. The patient’s transfusion is delayed and moves into non-core hours (evening)

Waste

Transportation

Inventory

Movement

Unused

Waiting

Overproduction

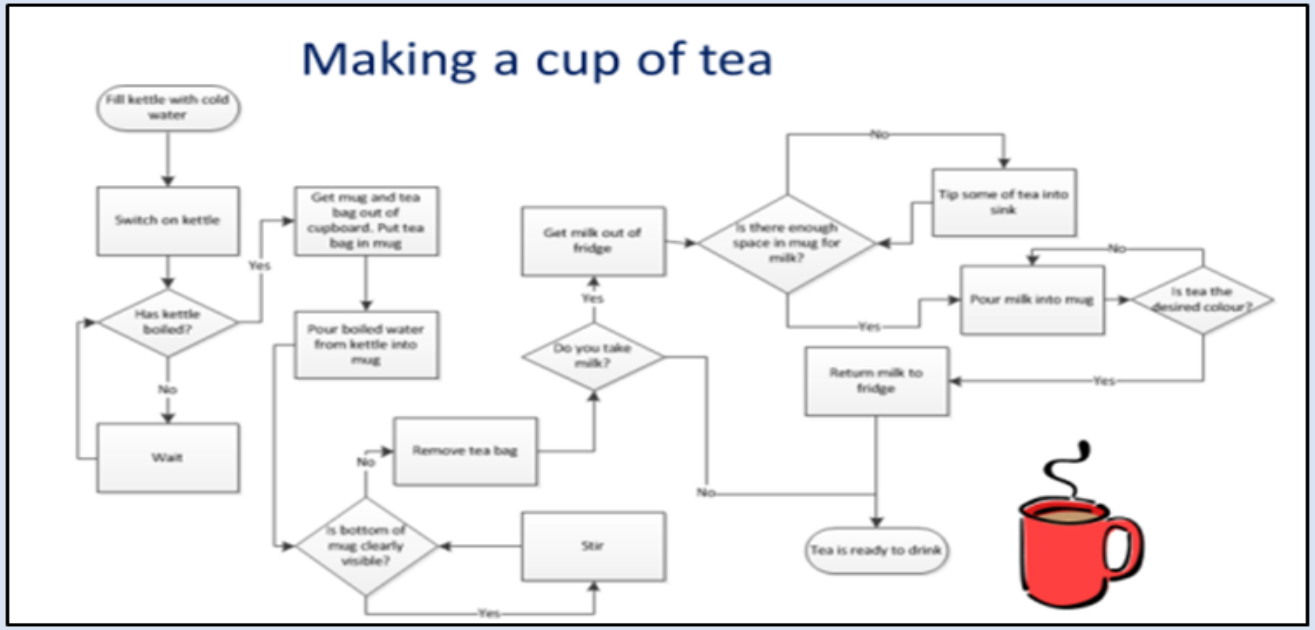
Over Processing

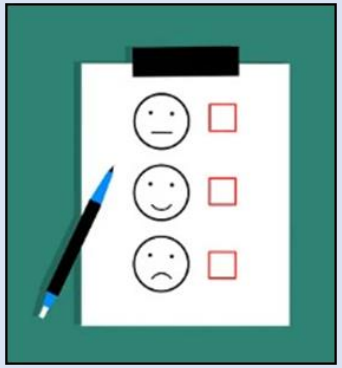
Defects

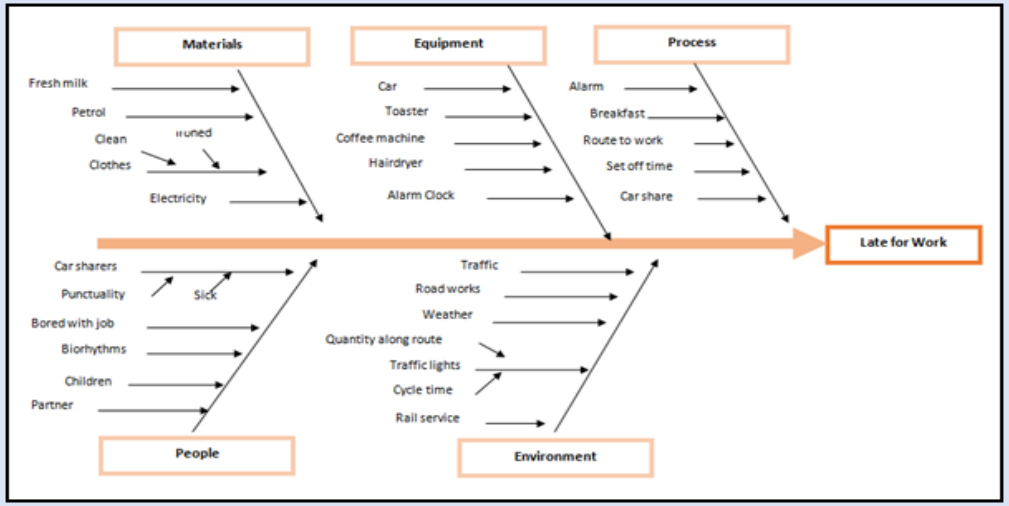
THE 8 WASTES – TIM U WOOD	
T ransport	Moving patients / samples / records between facilities
I nventory	Excess stock, patients awaiting discharge, work in process
M otion	Stores away from wards, theatre layout, ward rounds
U nused	Products, staff potential and ideas
W aiting	For patients, to be seen, for results, for discharge, for information
O ver-processing	Requesting unnecessary tests, unnecessary return appointments
O ver-production	Batching, referrals, results
D efects / reworks	Duplication of information, injuries, errors, DNAs

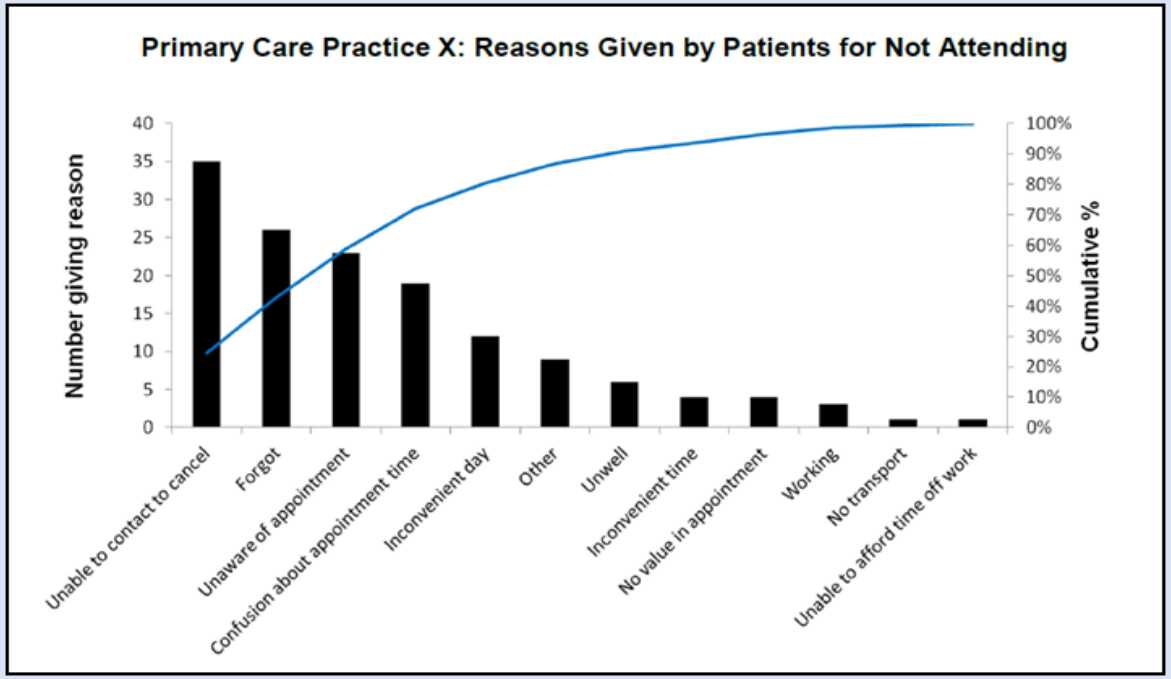
QI Tools

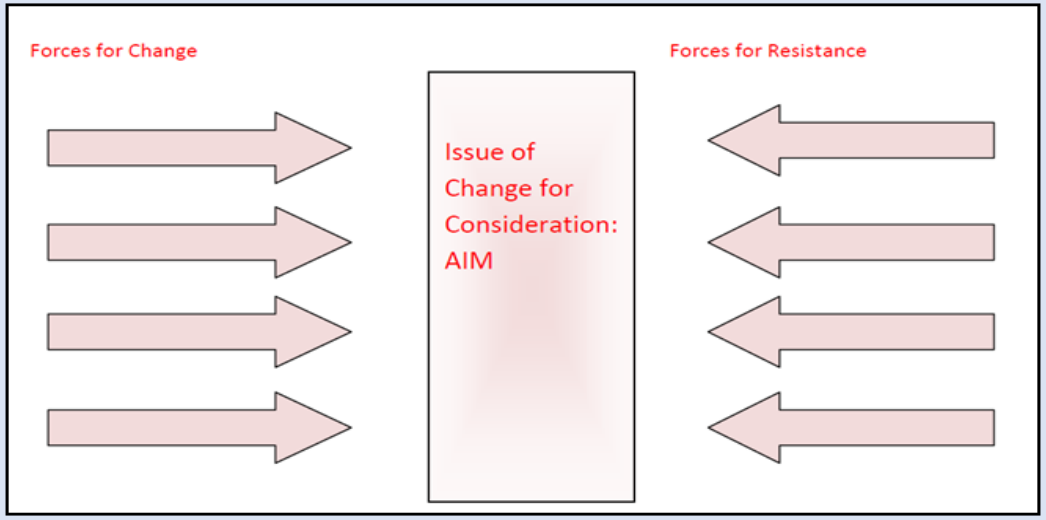
Service User Feedback
Pareto Charts
Fishbone Diagram
Process Mapping
CORE IMPROVEMENT TOOLS


Making a cup of tea
Fill kettle with cold water
Switch on kettle
Has kettle boiled?
Yes
No
Wait
Get mug and tea bag out of cupboard. Put tea bag in mug
Pour boiled water from kettle into mug
Is bottom of mug clearly visible?
No
Yes
Remove tea bag
Stir
Do you take milk?
Yes
No
Get milk out of fridge
Is there enough space in mug for milk?
No
Yes
Tip some of tea into sink
Pour milk into mug
Is tea the desired colour?
No
Yes
Return milk to fridge
Tea is ready to drink

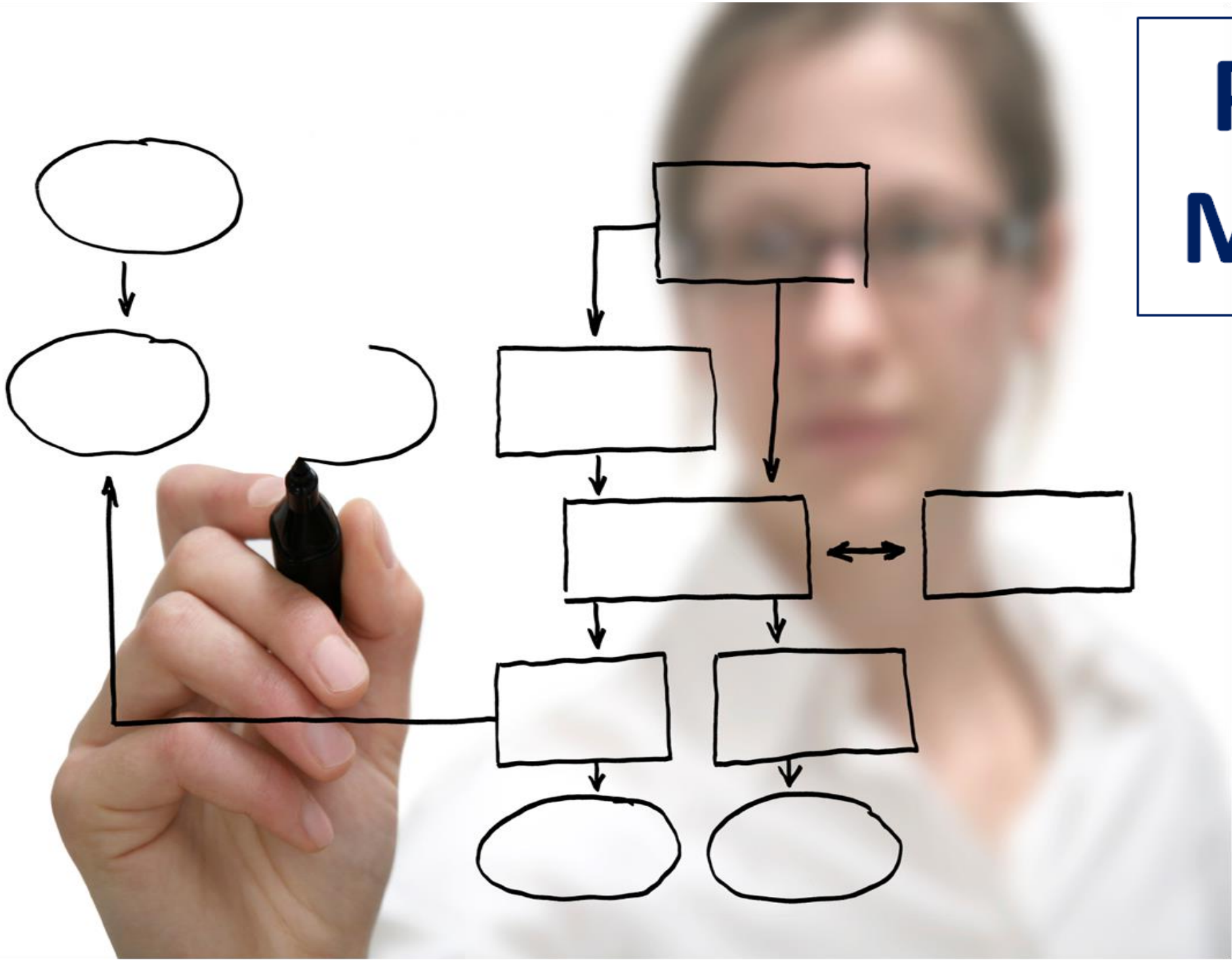



Materials
Equipment
Process
Fresh milk
Petrol
Clean
Ironed
Clothes
Electricity
Car
Toaster
Coffee machine
Hairdryer
Alarm Clock
Alarm
Breakfast
Route to work
Set off time
Car share
Late for Work
Car sharers
Punctuality
Sick
Bored with job
Biorhythms
Children
Partner
Traffic
Road works
Weather
Quantity along route
Traffic lights
Cycle time
Rail service
People
Environment


Primary Care Practice X: Reasons Given by Patients for Not Attending
Number giving reason
Cumulative %
0
5
10
15
20
25
30
35
40
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Unable to contact to cancel
Forgot
Unaware of appointment
Confusion about appointment time
Inconvenient day
Other
Unwell
Inconvenient time
No value in appointment
Working
No transport
Unable to afford time off work


Forces for Change
Forces for Resistance
Issue of Change for Consideration: AIM

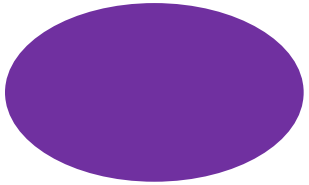
Process Mapping



Safety, Skills & Improvement: Process Mapping

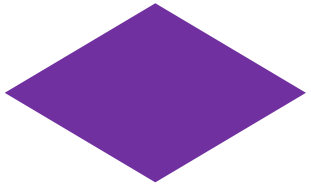
Use the symbols below to create your process map

- Start and end of process



- Tasks

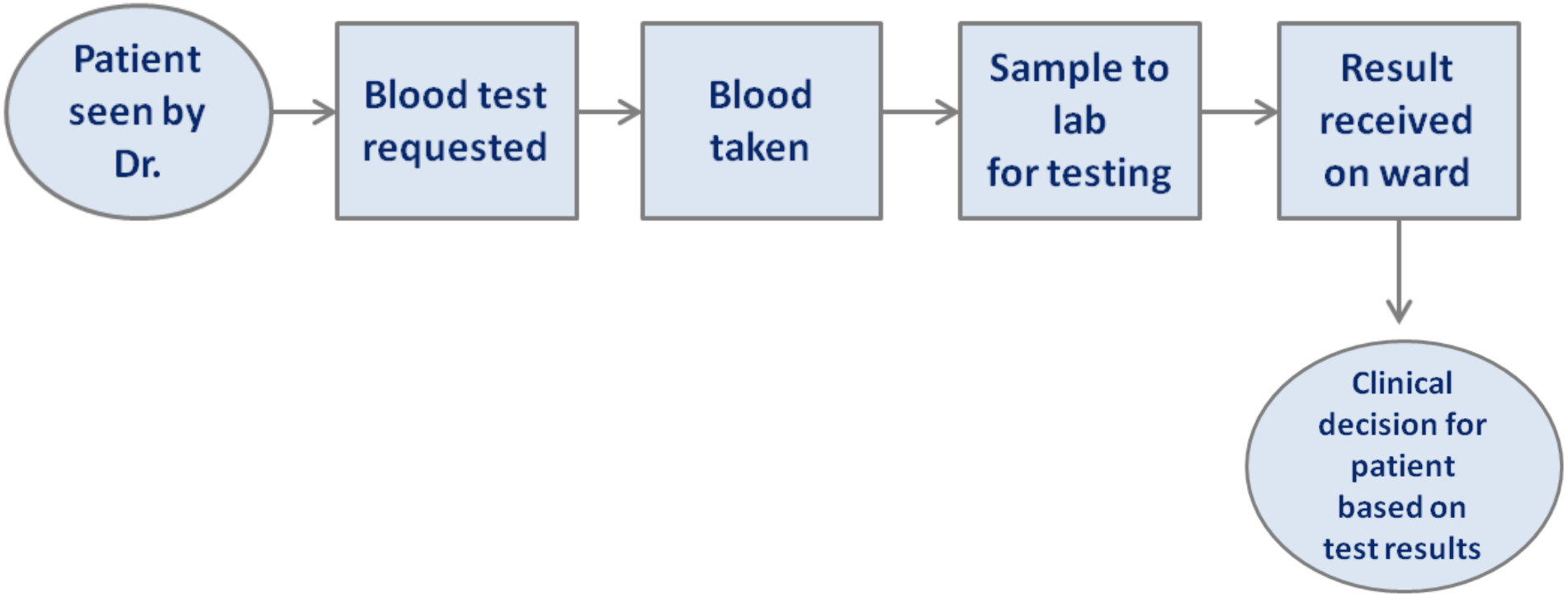
- Decision points



- Connectors

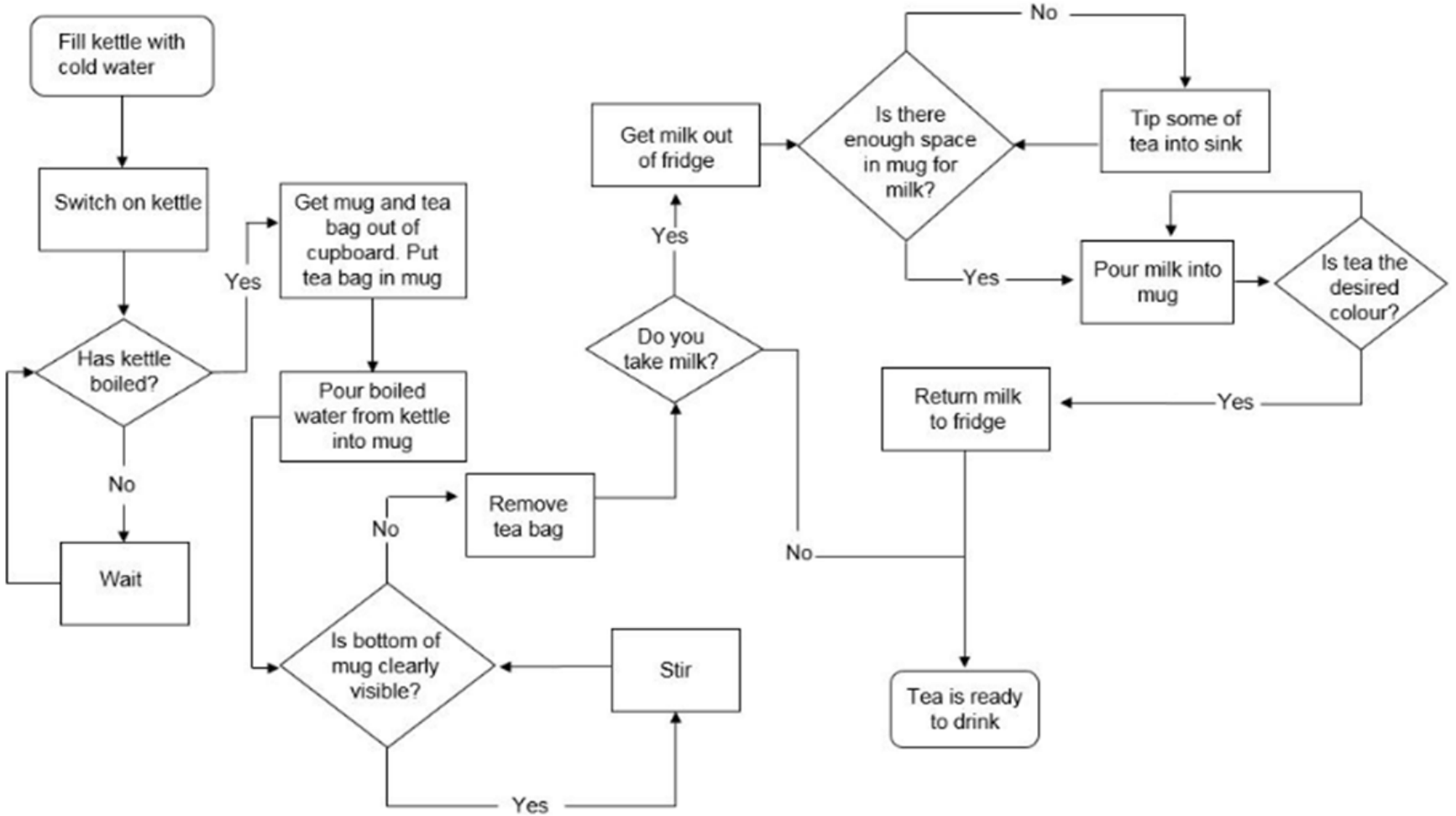
Taken from: QI Zone. QI Tools. Process Mapping:
https://learn.nes.nhs.scot/2272/quality-improvement-zone/qi-tools/process-mapping

High Level Process Map



Process Mapping

What does this tool look like?



Process to make a cup of tea.

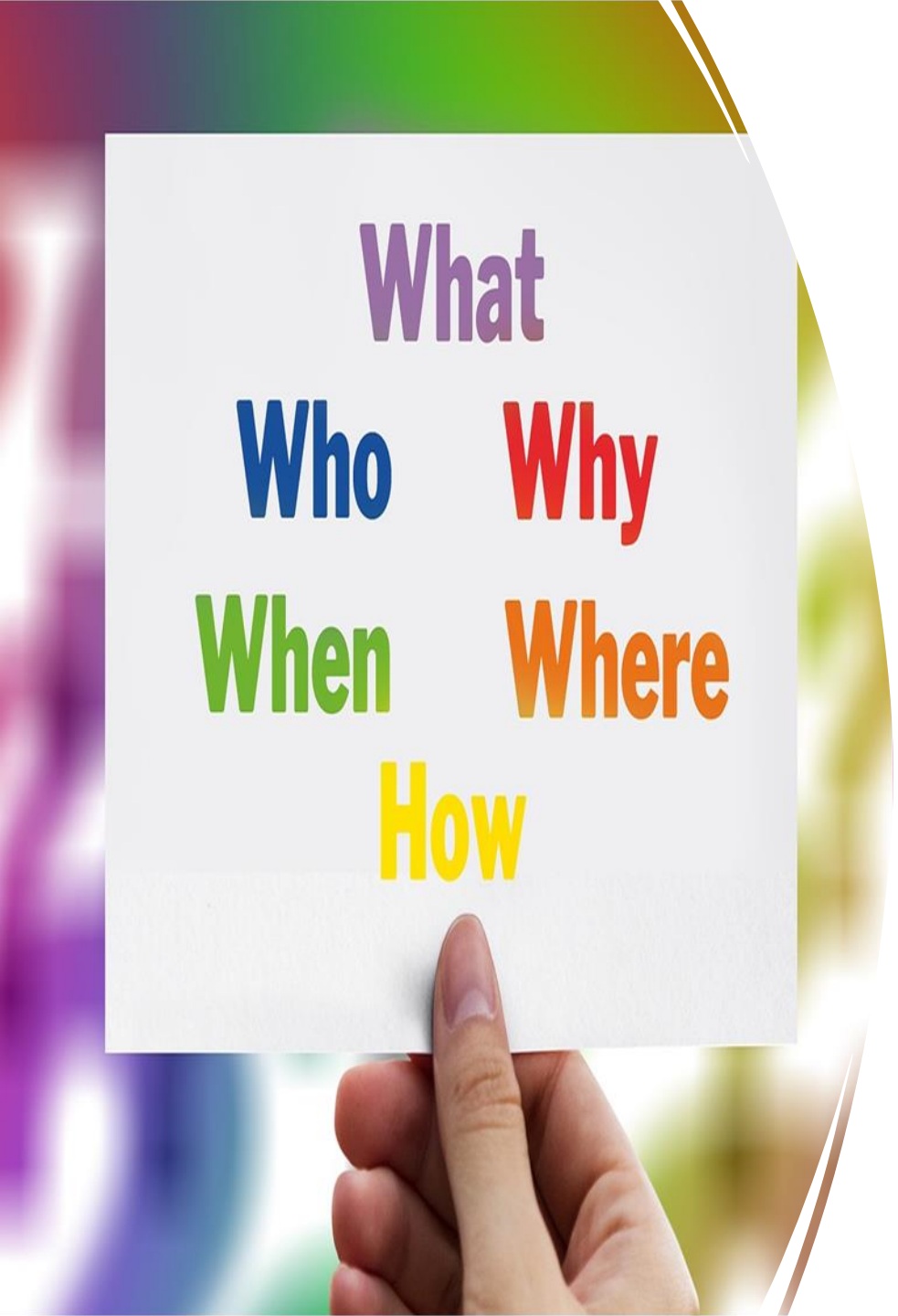
Taken from: QI Zone. QI Tools. Process Mapping:
https://learn.nes.nhs.scot/2272/quality-improvement-zone/qi-tools/process-mapping

Value Adding

Do service user experience it?

Do they want it to happen?

Would they care if you changed it?

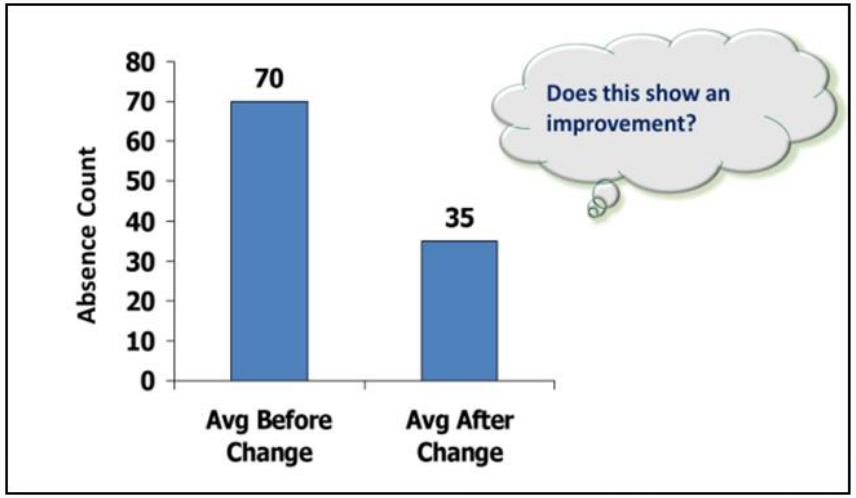


What is the purpose of your data?

What kinds of data do you look at?

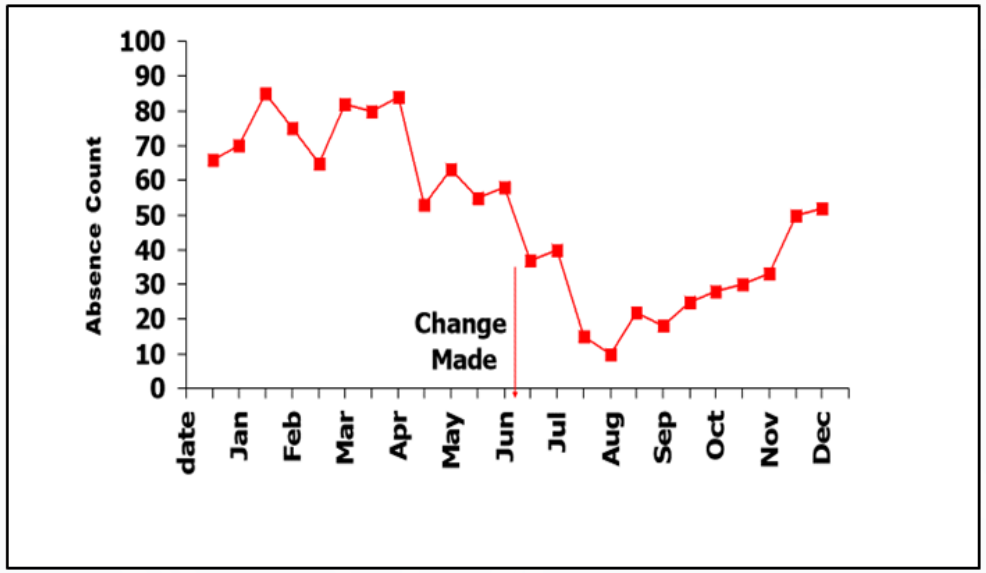
Why do we need data for improvement?

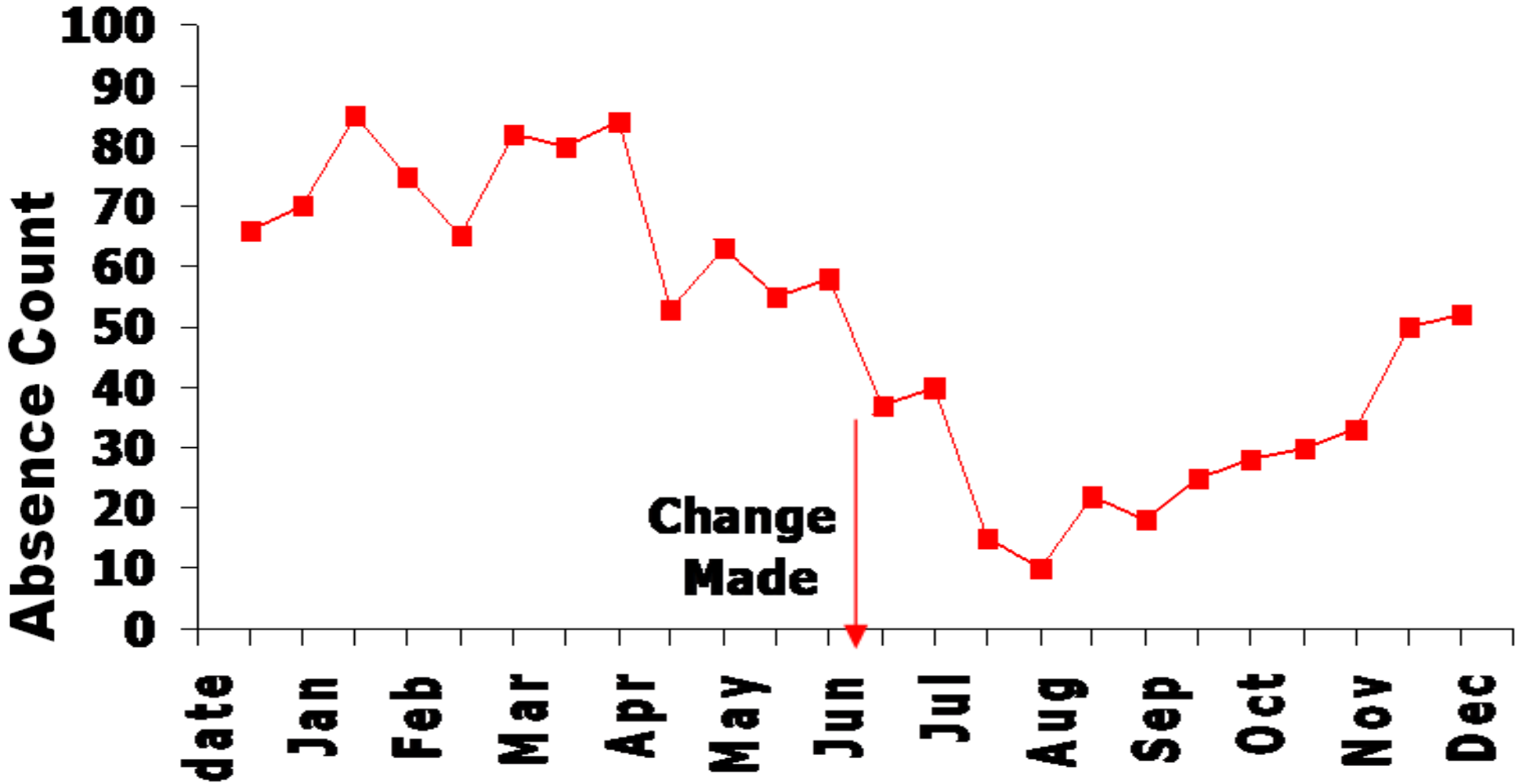
QI Data



Bar Chart – Aggregated Data

Line Chart – Dynamic Data




Absence Count
100
90
80
70
60
50
40
30
20
10
0
Change
Made
date
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Questions

Review of Learning outcomes

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