



*Institute for Innovation
and Improvement*

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and
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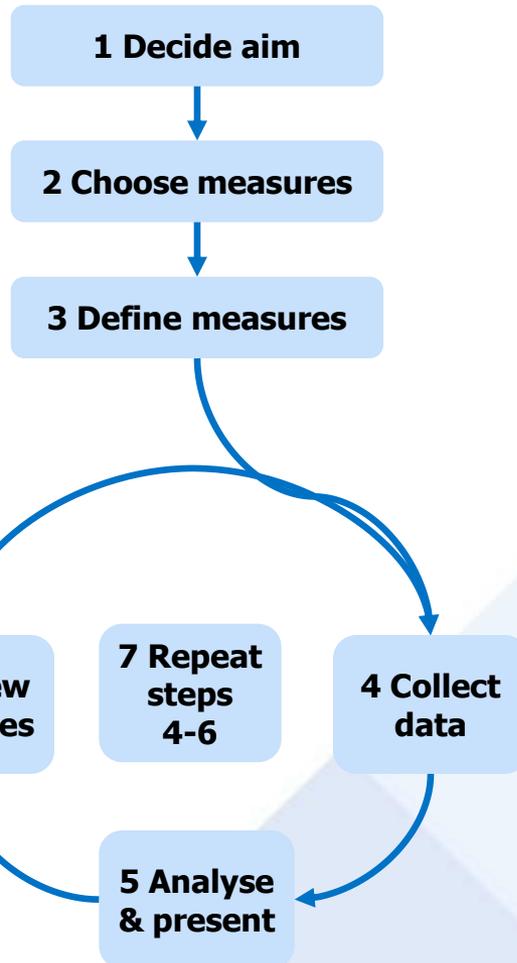
How to incorporate measurement to guide your safety improvement



Model for improvement



7 Steps to measurement



Step 1 Decide your aim: what do you want to improve?

Step 2 Choose measures that link to your aim

Step 3 Confirm how to collect and display your data

Step 4 Collect your data for the period

Step 5 Analyse and present your data

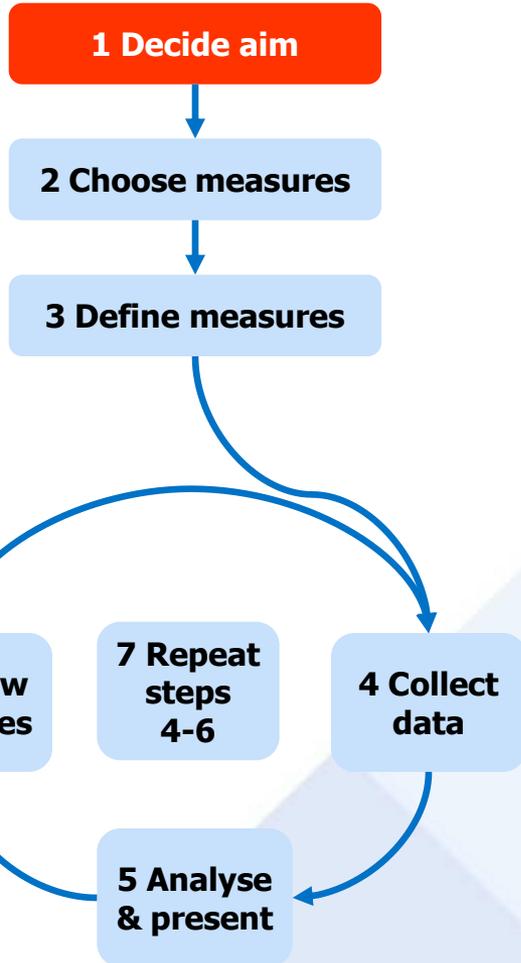
Step 6 Meet to decide what it is telling you

Step 7 Repeat steps 4 to 6 as frequently as you can.

The frequency will determine the pace of your project!

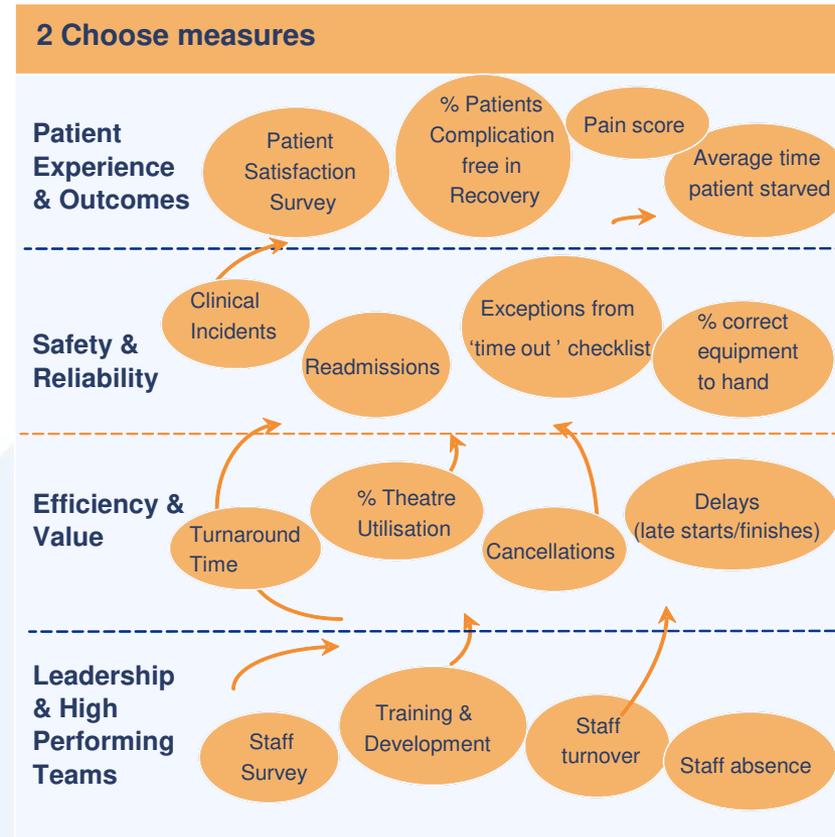
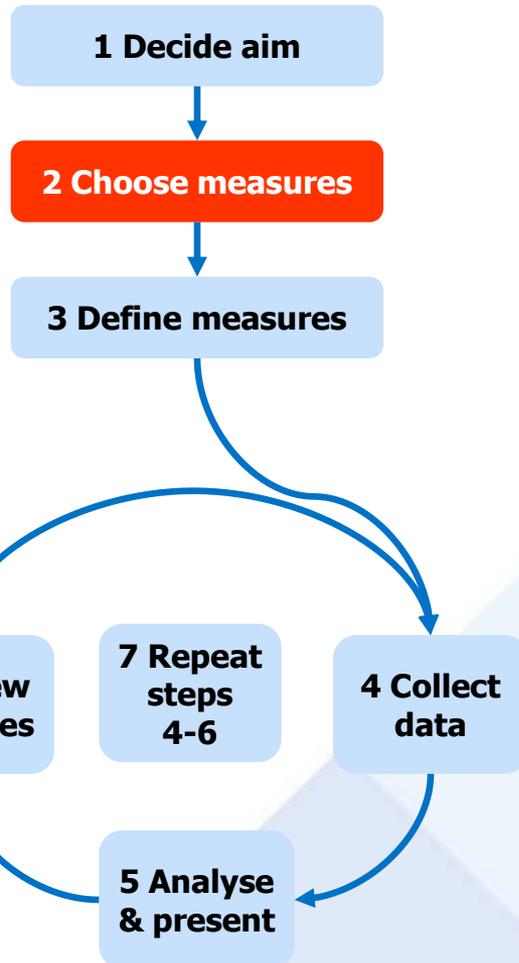
How long do you continue to move round the Collect-Analyse-Review loop? Forever or until the measure is no longer relevant

7 Steps to measurement

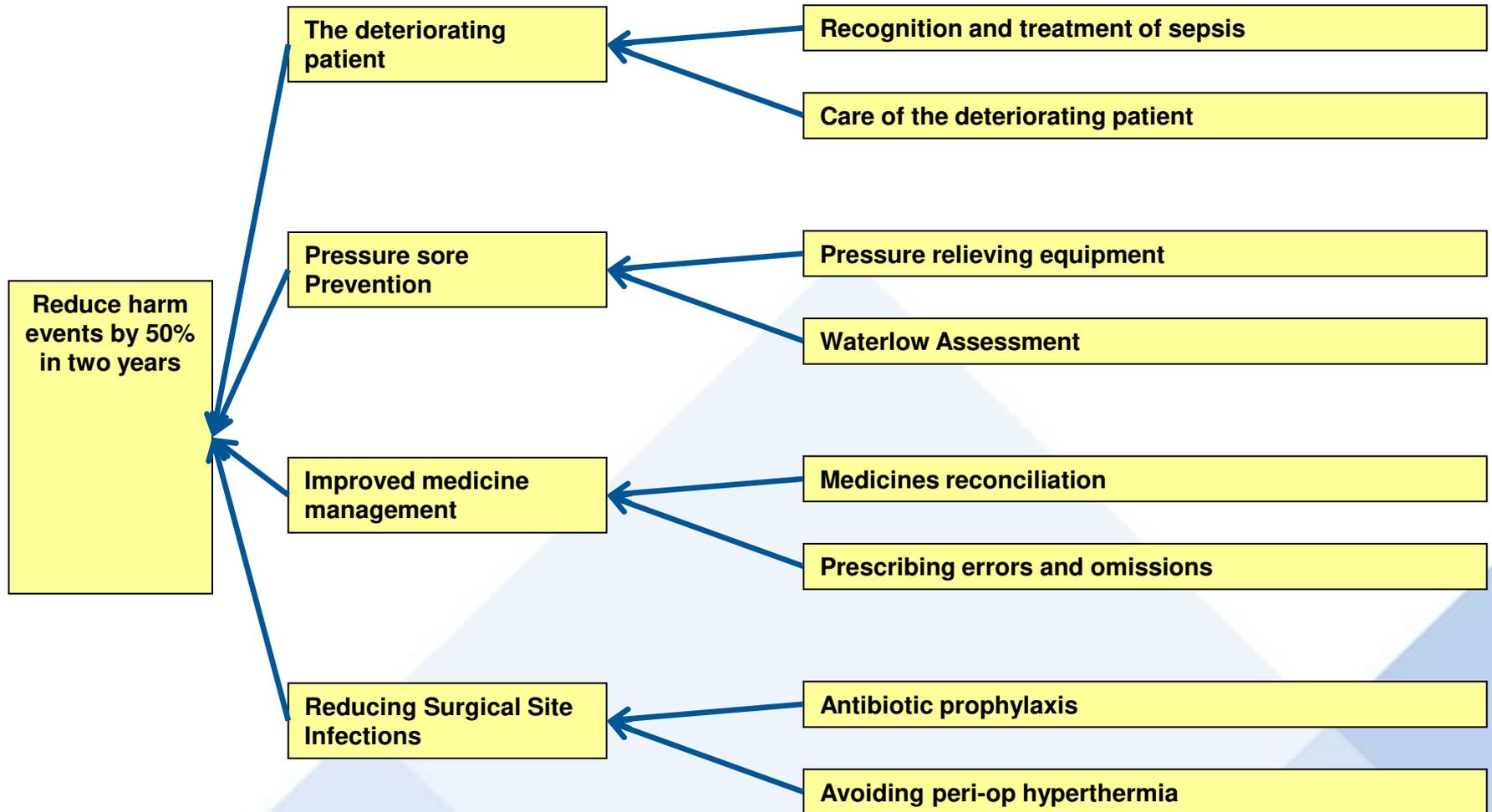


Would you be able to describe your aim in a couple of sentences?

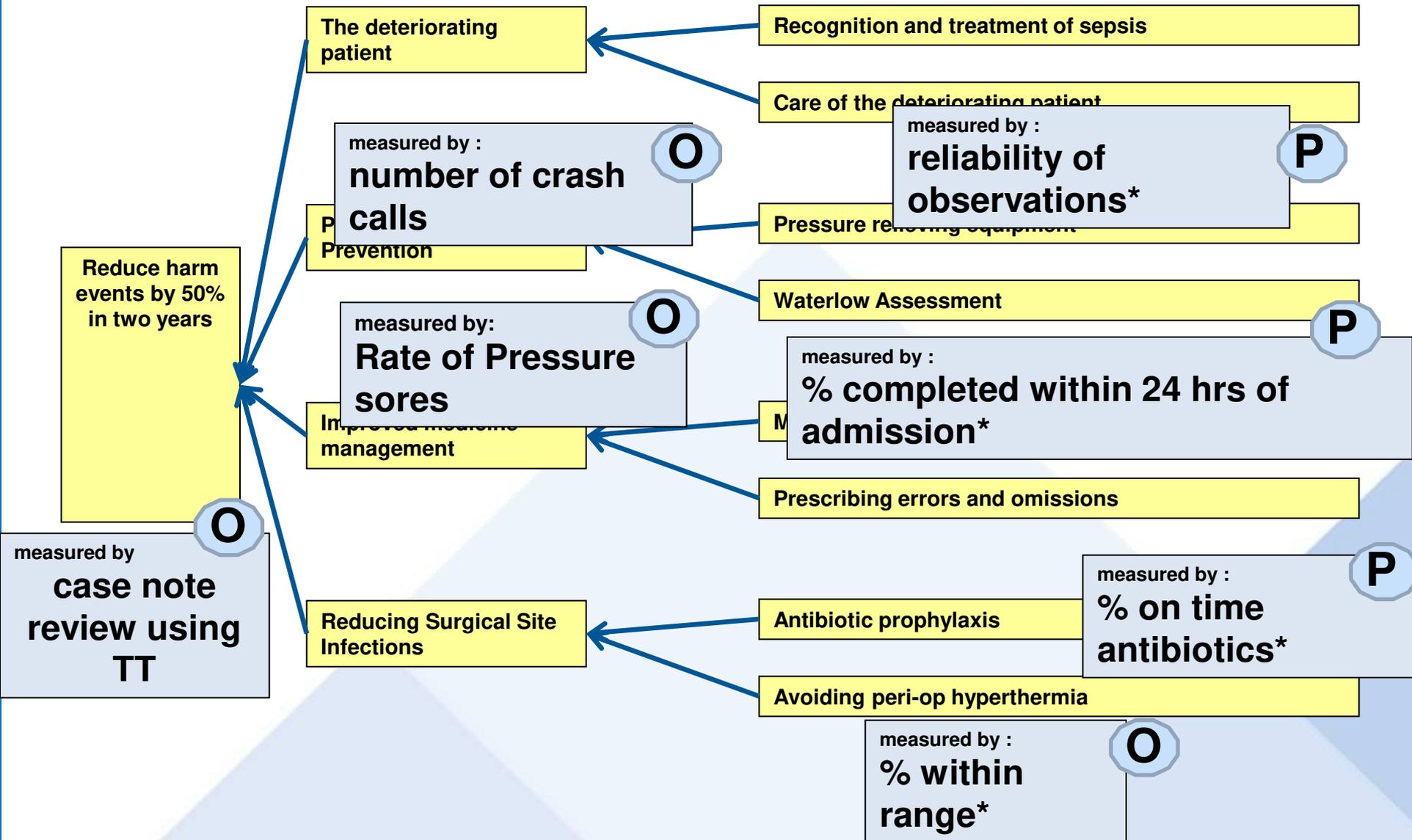
7 Steps to measurement



Example Driver Diagram



Example Driver Diagram



* as measured by weekly review of all patients

Types of measure

■ Outcome measures

- *Reflect the impact on the patient*
- *For example the rate of MRSA or the number of surgical site infection cases.*

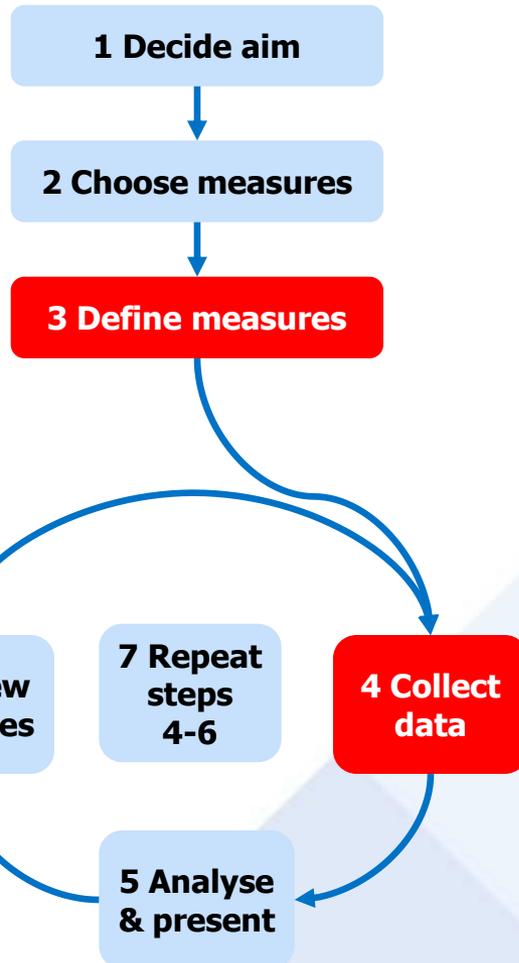
■ Process measures

- *Reflect the way your systems and processes work*
- *For example % compliance with hand washing or the % of patients who received on time prophylactic antibiotics.*

■ Balancing measures

- *Reflect what may be happening elsewhere in the system as a result of the change. This impact may be positive or negative*
- *For example if you have implemented changes to reduce your post operative length of stay, you also want to know what is happening to your post operative readmission rate. If this has increased then you might want to question whether, on balance, you are right to continue with the changes or not.*

Don't ignore the detail ...



Define

- An **operational definition** is a description, in quantifiable terms, of what to measure and the steps to follow to measure it consistently

Collect

- Who, what, how, when, where?
- You need a plan!
- Baseline

In the real world, everything varies....

How long
does it take
you to get
to work?

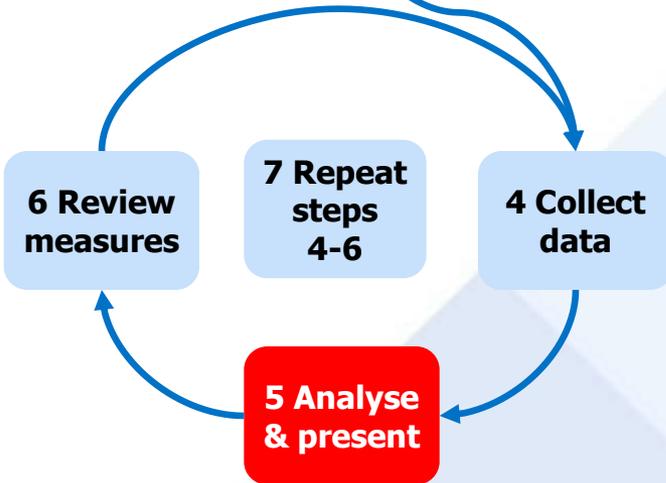
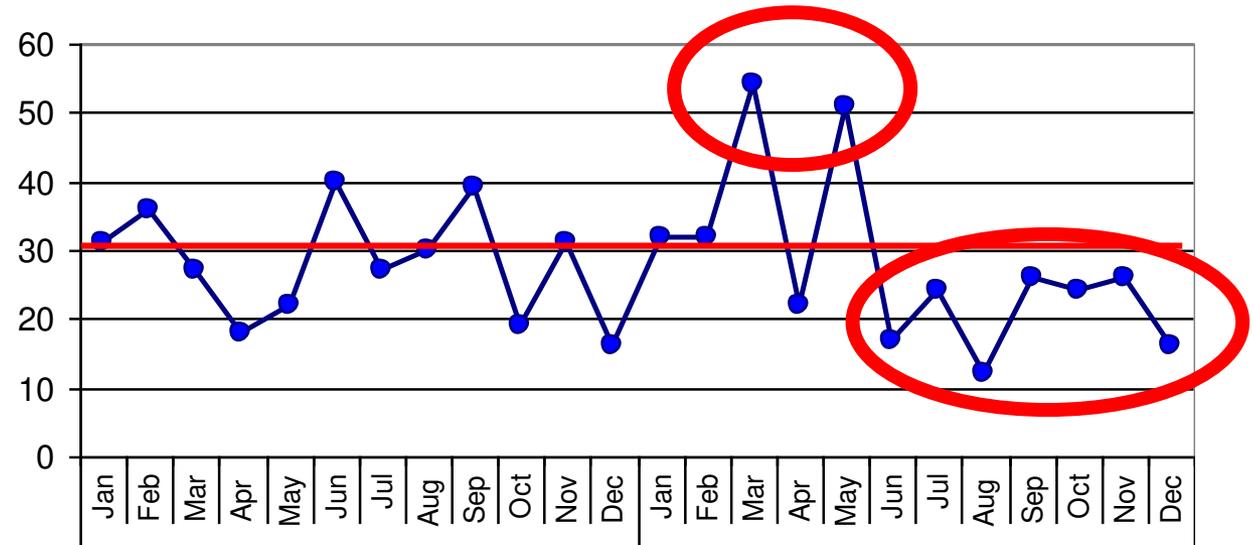
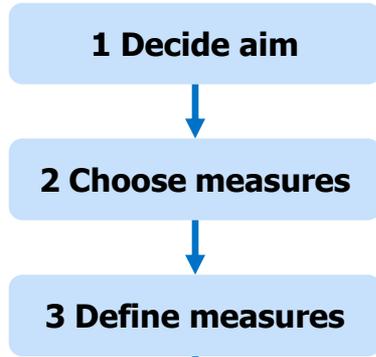


- Data contains both **signal** and **noise**.
- To be able to extract information, one must separate the **signal** from the **noise** within the data.

Walter Shewhart

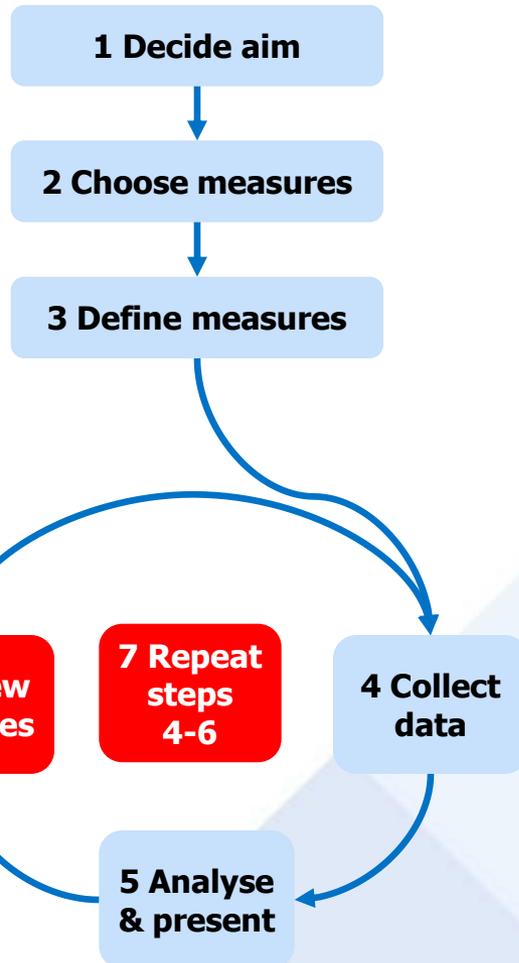


Use run charts to present your data



- Plot data in time order
- Calculate and display median as a line
- Analyse chart by studying how values fall around median
- Run of 7 above or below
- Look for 'odd' data points

Review measures



It is a waste of time collecting and analysing your data if you don't take action on the results

Repeat steps 4 to 6 as frequently as you can. The frequency will determine the pace of your project!

7 steps video

http://www.institute.nhs.uk/productive_general_practice/general/knowning_how_we_are_doing.html

short link

<http://bit.ly/rQKKGA>

Take a Measures checklist handout as you go out