PUTZ Falls Improvement Collaborative

Webinar 2: 30/10/2019

7 Steps towards Measurement for Improvement

Michael Carton

Instructions

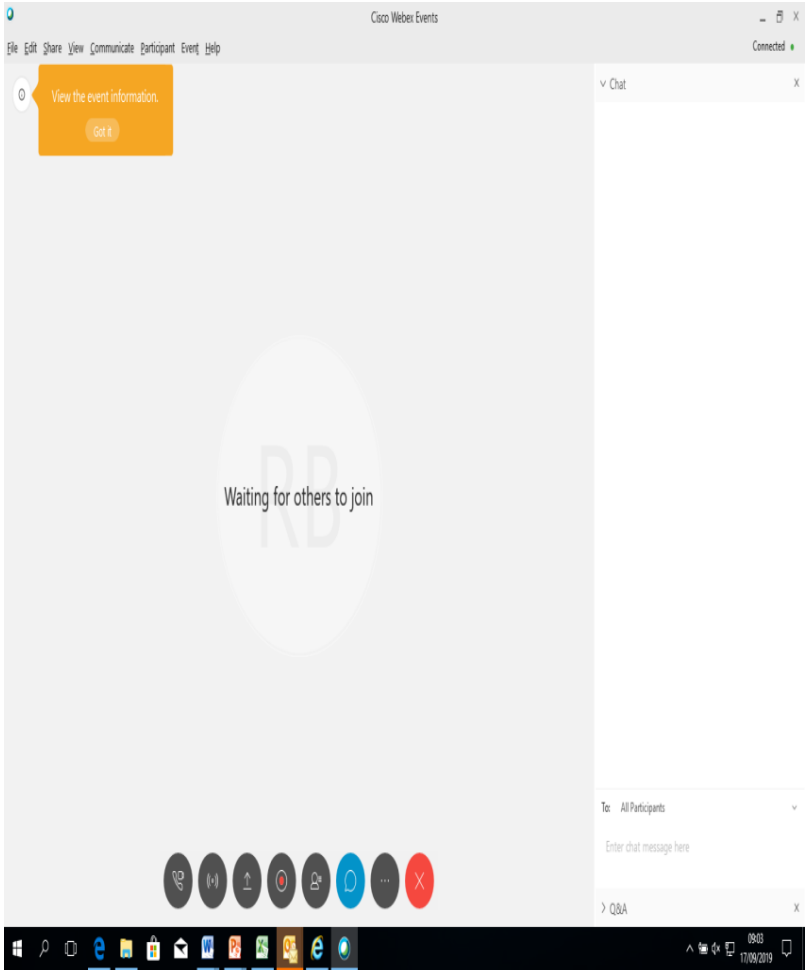
- Sound:

Computer or dial in:

Telephone no: 01-5260058

Event number: 164 507 898#

- Chat box function
  - Comments/Ideas
  - Keep the questions coming



7 Steps towards Measurement for Improvement?

What is Measurement for Improvement?

Measurement for Improvement is the analysis and presentation of qualitative and quantitative data in a format that allows us to:

- Identify opportunities for improvement

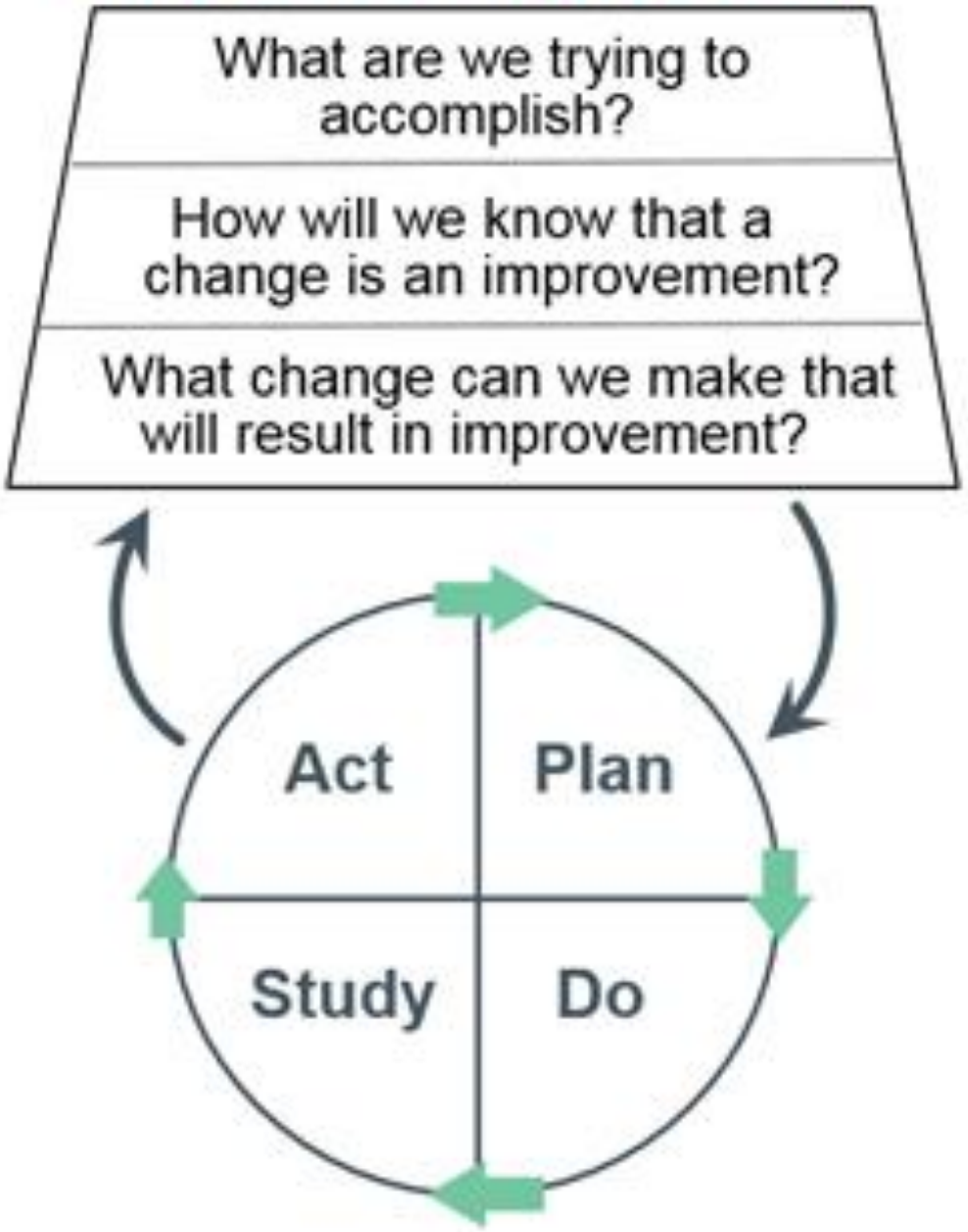
And

- Demonstrate when a change has resulted in an improvement

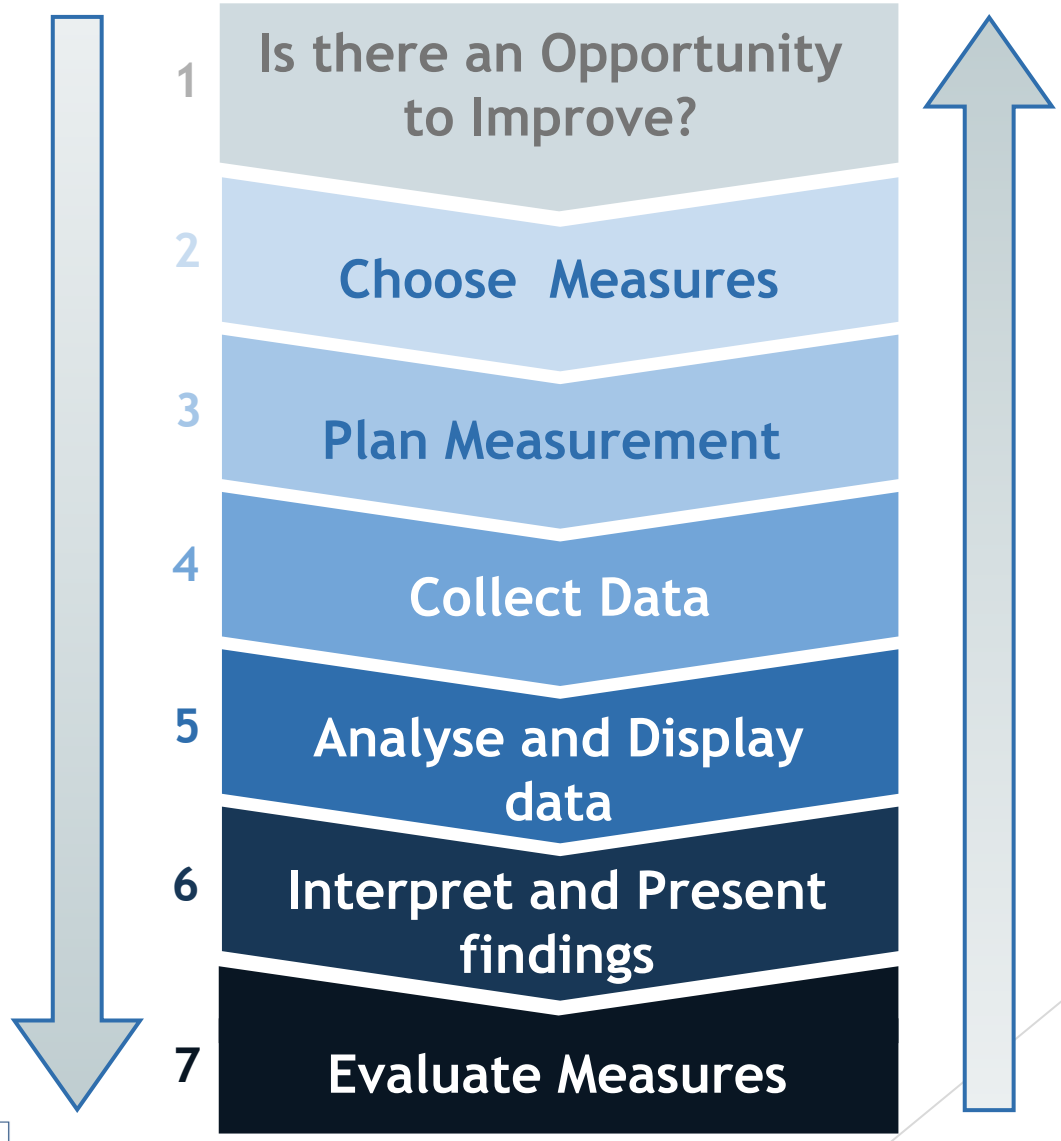
Measurement for Improvement can be used to:

- Drive **better decision making**
- Implement **sustainable improvements** in quality of care

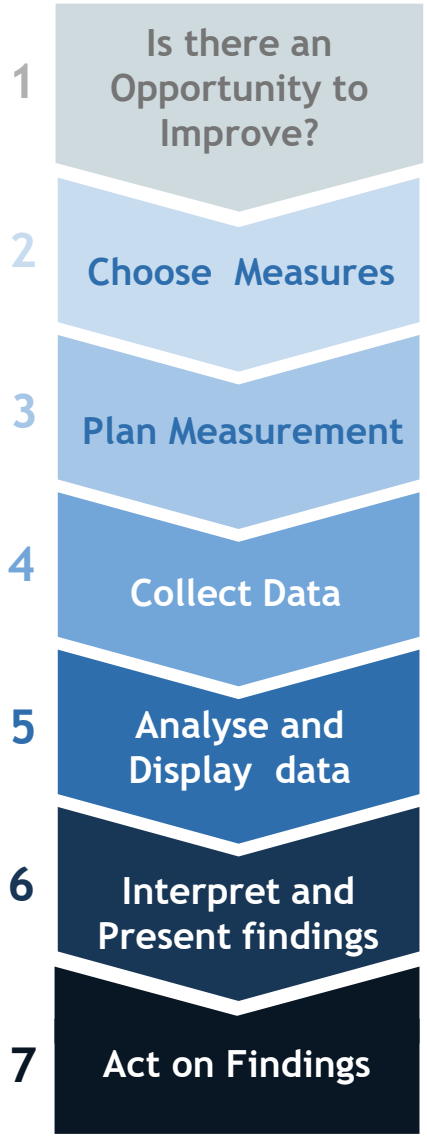
Model for Improvement



7 Steps to Effective Measurement for Improvement

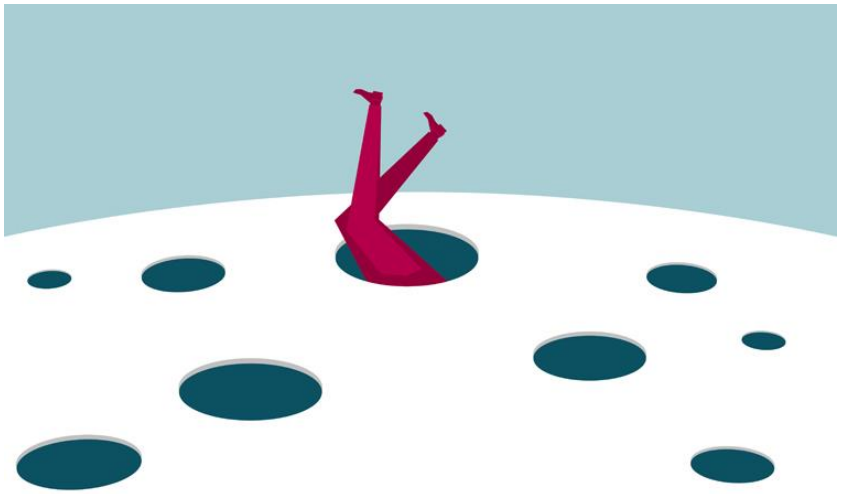


Measurement for Improvement Team
Quality Improvement Division



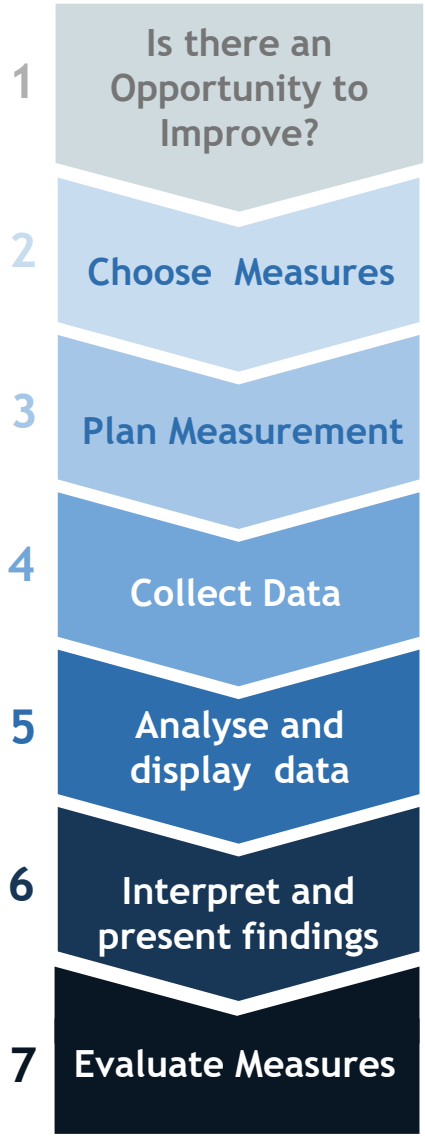
Is there an Opportunity to Improve?

- If you are going to practice measurement for improvement, you **need to know that there is an opportunity for improvement**
- In some cases, **data is available** which suggests there is a need to improve
- In others, **Subject Matter Experts** have a hunch there is a problem or have an idea for improvement



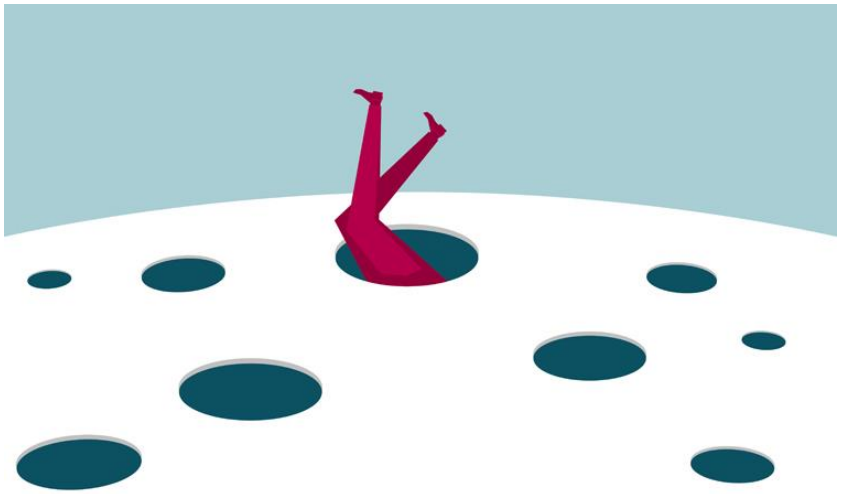
Pitfall 1: Trying to improve something that **doesn't need to be improved** or which you have **no control over** improving

Pitfall 2: Not involving **Subject Matter Experts** (both data and clinical) from the start and throughout any improvement project

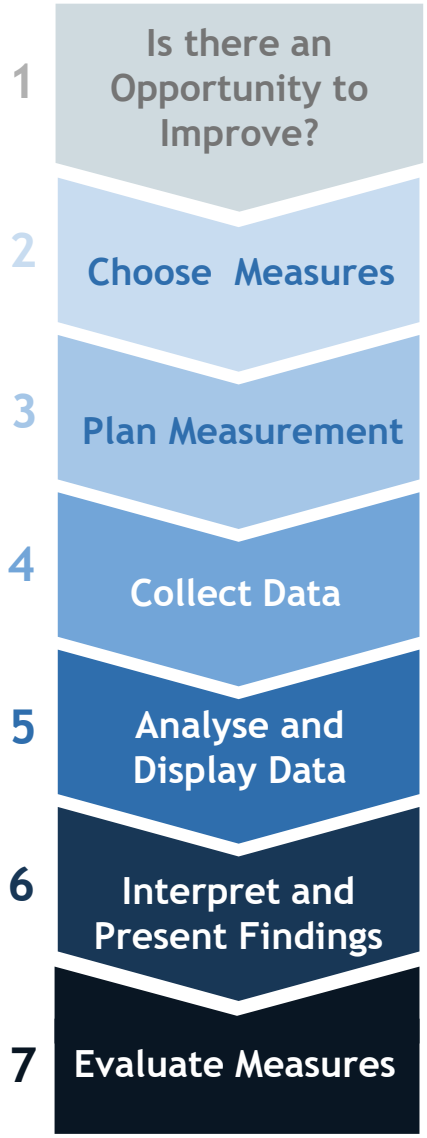


Choose Measures

- Measure the **Vital Few!**
- **Ensure the measures you choose are measuring what you intend** and that the data will answer your question
  - PDSA level – did change result in improvement
  - Project level – did you achieve your aim



Pitfall: Choosing measures that **don't specifically answer what you want to know**, e.g. if you're achieving your aim



Plan Measurement

- This step is about defining very specifically **WHAT** you are measuring and describing the process of **HOW** to measure it
- Remember that not everything can be measured using numbers – don't overlook the opportunity that **Qualitative** measures provide

Measurement Plan Template (.xls)

https://www.hse.ie/eng/about/Who/qualityandpatientsafety/MeasuringandLearning/InformationandAnalysisTeam/MIT-Resources.html#plan

Measurement Plan Template

A Measurement Plan is a tool that describes the rationale behind choosing a measure, the type of measure, the relevant definitions and how to collect and present the measure. In bringing all the relevant information together, it helps ensure that all members of a Quality Improvement Team have clarity on all aspects of measurement being carried out. Click here for more information from the NHS Scotland Quality Improvement Hub on using a Measurement plan.

Excel Click here to link to download the Measurement Plan template in MS Excel.

Driver Diagram Templates

A Driver Diagram is a commonly used tool to plan Quality Improvement Projects. It allows users to identify the specific improvement activities (Primary and Secondary Drivers) that will help to achieve the Quality Improvement Project aim. Click here to access the NHS Scotland Quality Improvement Hub web page for more information on using Driver Diagrams. We have provided two Microsoft Word examples of Driver Diagrams below which may also be used as templates for other projects.

Word Sample Driver Diagram: National Quality Profile: this example is taken from the National Quality Profile project.

Word Sample Driver Diagram: improve your golf: this example is taken from a personal improvement project.

Do's and Don'ts of Measurement

There are a number of common problems that people encounter when describing aspeacts of measurement. This Powerpoint Presentation includes examples of some of the common mistakes people make inadvertently when dealing with measurement.

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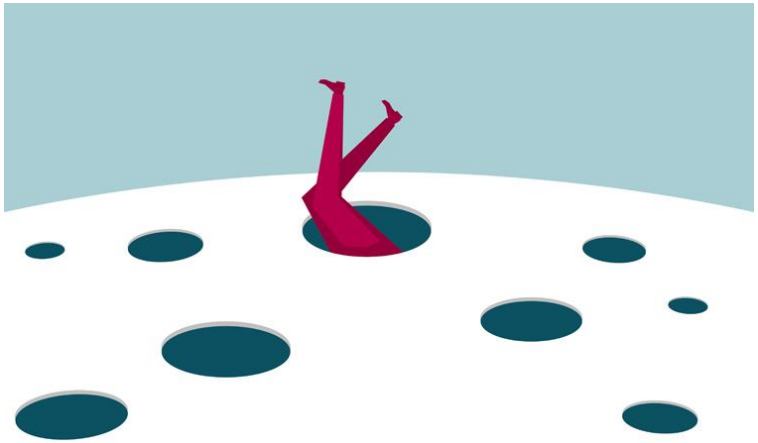

Pitfall: Badly (designed or collected) measures can at best be a waste of time, but at worst can be misleading and may lead to harm

1. Is there an Opportunity to Improve?
2. Choose Measures
3. Plan Measurement
4. Collect Data
5. Analyse and Display Data
6. Interpret and Present Findings
7. Evaluate Measures

Collect Data

- The key message is **consistency** of data collection
- Use baseline data when available

Top Tip: you should **test your data collection plan** and give time to collectors to discuss and check they know what to do - everyone needs to be familiar with the measurement plan

Collect Data

- Make use of **data collection systems that are already in place**
  - provided they collect the data you need
- What do you do if you have no data collection system?
  - Sometimes it is as **simple** as Tick and Tally or a Safety Cross

	TALLY	FREQUENCY
Monday	𝍸 I	8
Tuesday	𝍸 II	9
Wednesday	𝍸 𝍸 II	17
Thursday	𝍸 𝍸 I	16
Friday	𝍸 I	9
Saturday	𝍸 𝍸 II	19
Sunday	𝍸 I	11

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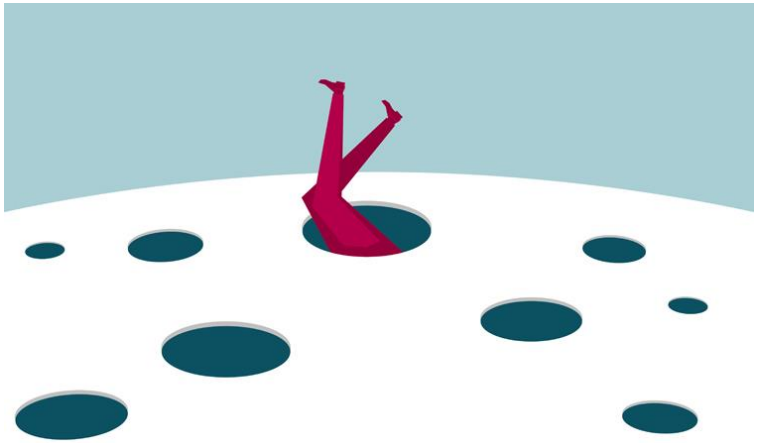

Pitfall 1: Assuming everyone will **collect the data the same way**

Pitfall 2: **Delaying** a project to get a **baseline**

1 Is there an Opportunity to Improve?

2 Choose Measures

3 Plan Measurement

4 Collect Data

5 Analyse and Display Data

6 Interpret and Present findings

7 Evaluate Measures

Analyse and Display Data

- Analyse both **quantitative and qualitative** data
- There are lots of ways to analyse and present data- it is important to remember to consider carefully which method of display you choose
- Use the right tool for the right job, and use it in the right way…

- Lets take the example of a large hospital with an Emergency Department

- Management are concerned about the low compliance rate with a target:
  - that no patient should wait more than 4 hours in the Emergency Department before being seen

- Management decide to introduce a Medical Assessment Unit

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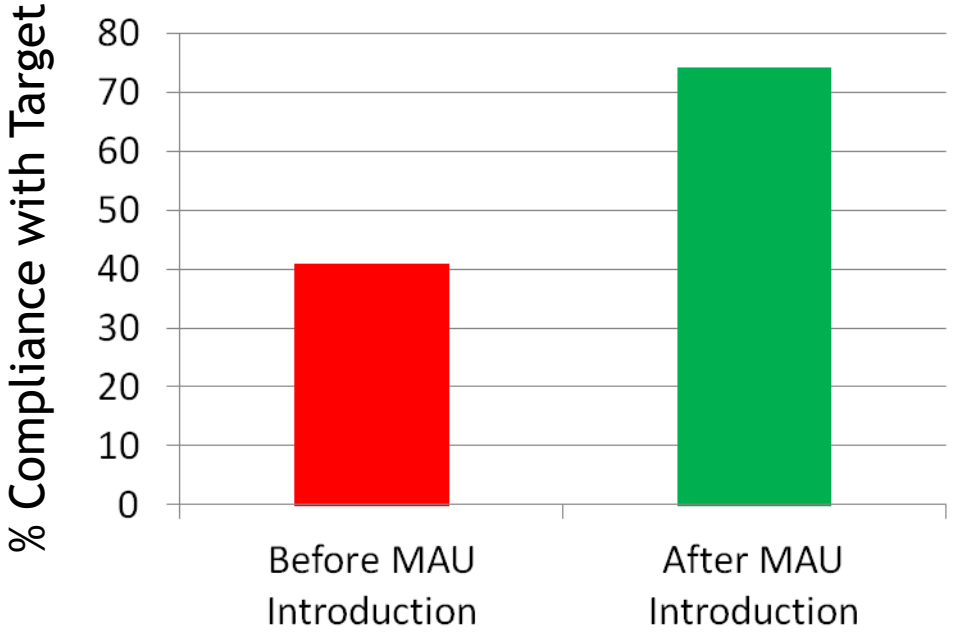
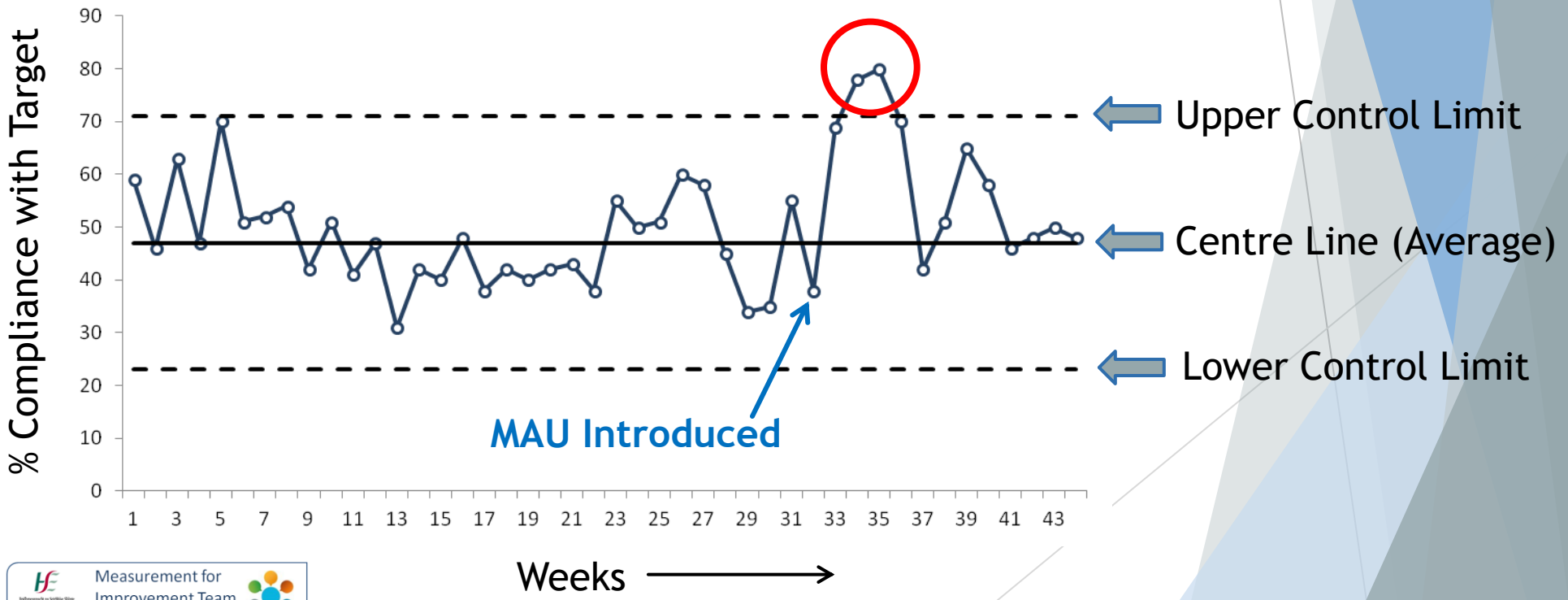
- So staff gather data on % Compliance with the target from before and after the introduction of the MAU



- They display the data using a **Bar Chart**
- Many claim the introduction of the MAU to be a resounding success

The same data on an SPC Chart

- Within a couple of weeks of introducing the MAU, two data **points above the Upper Control Limit** are observed (circled in red)
- Following this, the data reverts back to a level similar to that before the introduction of the MAU



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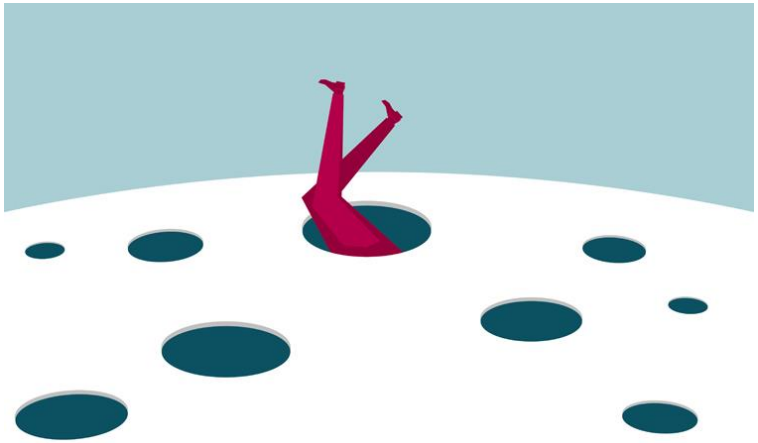

Pitfall 1: Not analysing **qualitative** data

Pitfall 2: Two data points (the before and after approach) are **not enough to identify a trend** – avoid falling into this trap

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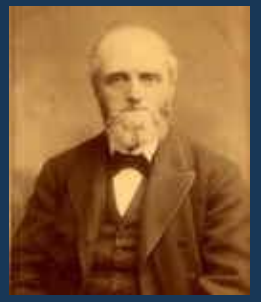
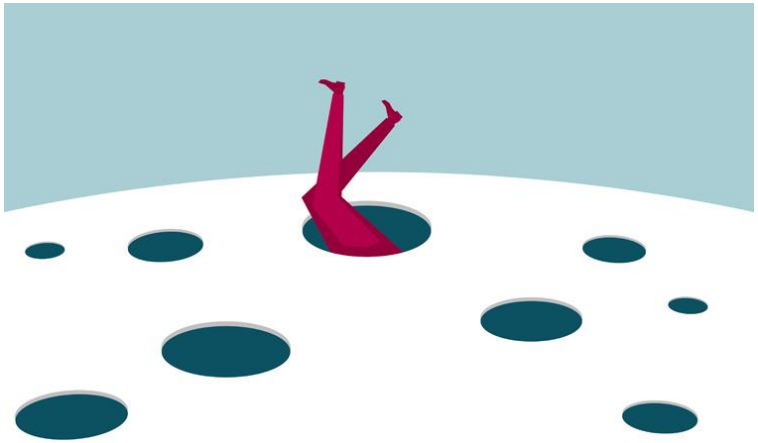
Interpret and Present Data

- It is not enough to have good data, analyse and display it appropriately!
- It has to get to the right audience
- They have to be ready to receive it

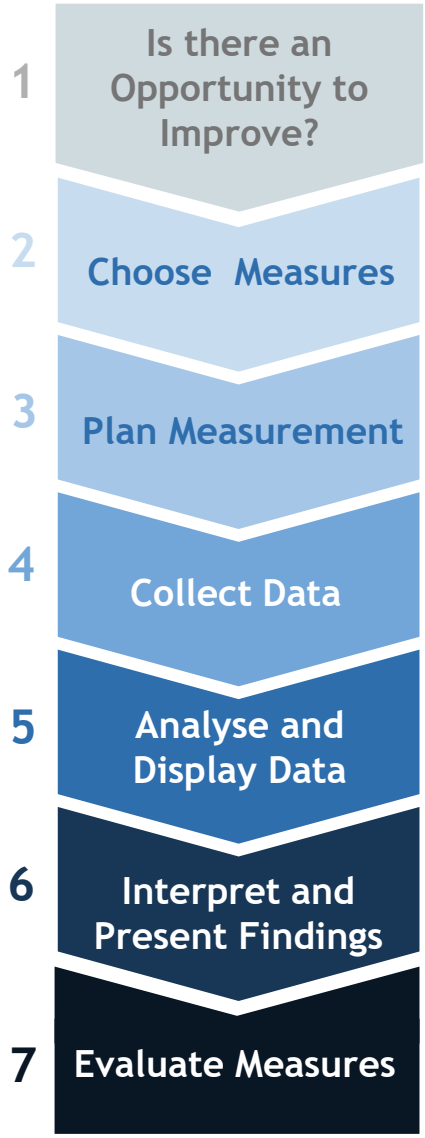
"Information is a source of learning. But unless it is organised, processed, and available to the right people in a format for decision making, it is a burden, not a benefit"



William Pollard (1828-1893)



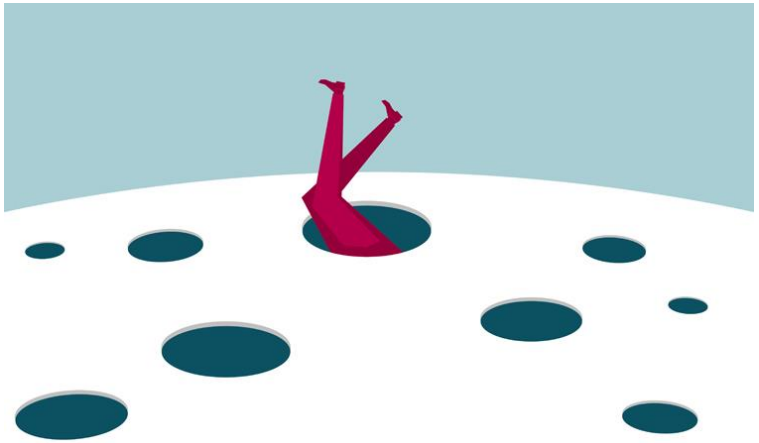
Pitfall: Not consulting a **Subject Matter Expert** when interpreting your results



Evaluate Measures

- There are 2 aspects here
  - Is the measure robust and does it consistently measure what it was designed to measure?
  - Is the measure necessary? Is there still an opportunity to improve?

Top Tip: don't keep adding new measures to a system without evaluating which ones are no longer required



Pitfall: Not doing this step!

Recap: 7 Steps of Effective Measurement for Improvement

- To confirm you have a problem. Data to back up a hunch
- To know if your changes have resulted in improvement
- To differentiate chance/normal/random variation in data from changes that are non random
- To avoid over reacting to random variation and support appropriate and timely reaction to real changes

But...

- Seek usefulness, not perfection. Measurement is not the goal, improvement is the goal.

Quality Improvement Toolkit
Tool 10: Measurement plan

Project Name:
Project Lead:

1. What?

A measurement plan is a document that describes relevant details of the measures to be collected and reported as part of a Quality Improvement (QI) project. It prompts project teams to discuss and agree exactly how data will be collected and reported throughout the project and after the project has been completed.

2. Why?

It is helpful for project teams to consider all the implications of collecting data for new measures from the outset. This is to make sure that:

- the measure is always tied in to the aim and purpose of the project, and
- that everyone is aware of the impact of measuring on staff time among competing demands.

3. How?

Take some time to fill out the questions below.

Measure title
What name will be used by everyone to identify this measure?
Measure type
Is this an outcome, process or balancing measure?
Rational for inclusion
Why is this measure needed?

Operational definition

What operational definition will everyone use to ensure the same thing is measured and understood throughout the project?

Format

What format is the data in? (for example number, percentage, rate per 1,000 bed days)

Stratification

Are there known divisions in the data and how it is reported? (for example day vs night shift, by diagnostic group, new vs imported cases etc.)

Data source

What is the original source of the data (for example safety cross, specific ICT system, manual entry on log book

etc.)

Data collection

How is the data collected and reported? (includes sampling method, frequency, requirement for denominator data etc.)

Display and feedback

How is the data fed back to relevant staff and service users? (for example included on a meeting agenda, monthly

Display and feedback

How is the data fed back to relevant staff and service users? (for example included on a meeting agenda, monthly performance report, posted on a notice board etc.)

Availability of baseline data

Is baseline data available for this measure? (do you have data from before the beginning of the project that you can use to demonstrate improvement)

Targets or goals

Is there a local project specific or national target/goal set for this measure? (include the time frame here e.g. 50% reduction by June 2020)

Data quality

Are there any known issues with the quality of data for this measure? (for example for data from incident reporting systems, there is a background level of under-reporting)

Sustainability

Will the measure continue to be collected after the completion of the project? (include steps taken to make part of day-to-day work)

Reproducibility

If different staff members retrieved data from the source, would they all get the same result? (e.g. if the data collection system was audited)

4. Measurement Plan Template

An Excel template for completing a measurement plan is available on the NQI Team Evidence for Improvement resources page

https://www.hse.ie/eng/about/who/qid/measurementquality/measurementimprovement/mit-resources.html#plan

Safety Cross and Safety stick

Recap: Pre learning session 2

- Try completing:

Tool 1: Project on a page

Tool 2: Stakeholder map

Tool 3: Aim statement/Driver diagram

Tool 4: Project Charter

Tool 10: Measurement Plan

Tool 12: PDSA template

Tool 6: Effective meetings

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Webinar 1: Friday 25th Oct 12.30-1.15 - National QI Team QI methods Toolkit –Roisin Breen

Webinar 2: Wednesday 30th 12.30-1.15 - 7 Steps of Measurement – Michael Carton

Webinar 3: Clinical topics:
For Falls Teams: Monday 11th Nov –details to be confirmed
For PUTZ Teams: Thursday 14th November –details to be confirmed.

Any questions/ queries:

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