

**NHS**  
Gloucestershire Hospitals  
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**Gloucestershire Safety & Quality Improvement Academy**

**Measures – Outcome / Process / Balancing**

Click forwards on the mouse or keyboard to move through the slides

Welcome to this measures session, part of the GSQIA measurement module

## Session Contents

The Model for Improvement

The importance of clear measures for QI

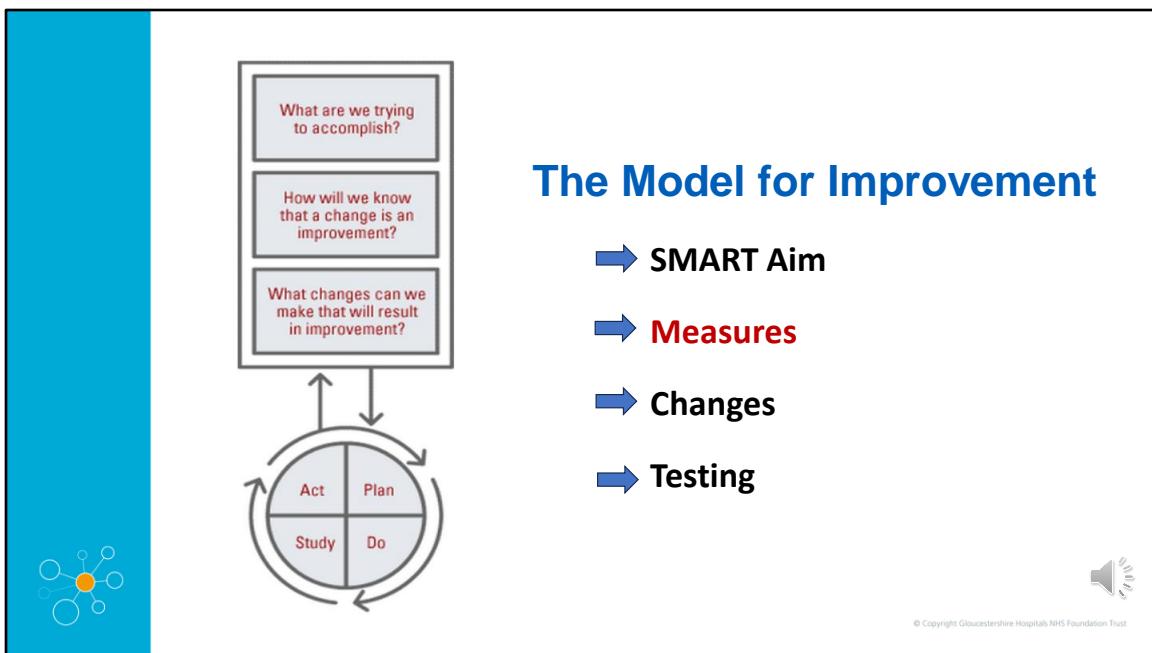
The different types of measures:

- Outcome
- Process
- Balancing



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This session will describe how measures fits into the Model for Improvement and the reason why having clear measures are so important for Quality Improvement. The different types of measures, Outcome, Process and Balancing will be explained and examples of these will be provided.



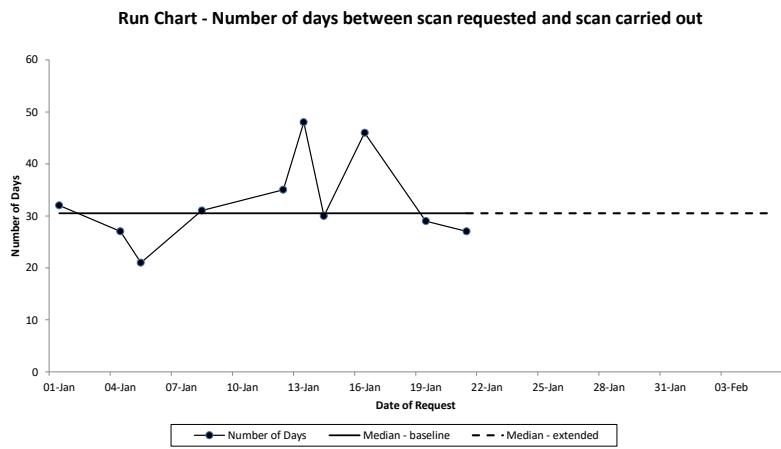
The Model for Improvement is a structure for all Quality Improvement Projects to follow.

Initially we need to understand exactly what it is we are trying to accomplish from the project. This can be achieved by creating a SMART aim.

Next we need to know how we will be able to demonstrate that our project has actually achieved what it set out to do. We also need to be able to demonstrate that the results have been achieved by the project team and the changes that have been implemented, rather than any external factors influencing the result.

We do this by keeping track of measures throughout the change process.

## Baseline Data



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Having baseline data which demonstrates the problem that is being experienced is the first step towards deciding on your project aim which will then allow you to consider your measures.

In this example , baseline data has been collected which shows a delay between scan request and scan completion. A SMART aim can be created based on this data, for example, it could be: 'To reduce the time between scan request to scan being carried out by 30% in 6 months'

## Outcome Measure

Aim: To reduce the time between scan request to scan being carried out by 30% in 6 months



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The outcome measure depends entirely on the Aim of the project.

Using the same example of reducing delays to scanning, the aim (or outcome) of the project is to reduce the delay. In order to know whether we have achieved our target of reducing this delay by 30% we need to continue collecting data on the number of days between a scan being requested and the scan being carried out.

## Process Measure(s)

- How well are each of the steps of the process performing?
- A measure of the things that have an impact on achieving the outcome.
- Process measures could be time between:
  - Scan request sent and scan request received by booking office.
  - Scan request received by booking office and patient contacted.



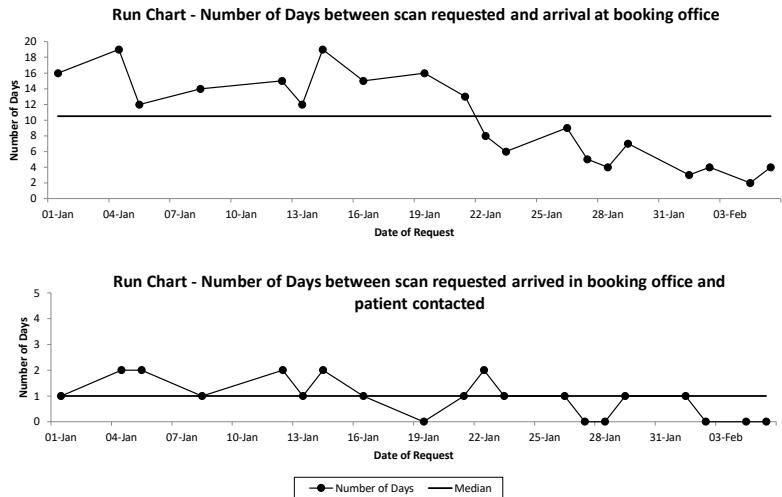
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An outcome is usually the product of multiple steps in a process. A Process measure demonstrates how well each of these steps are performing. A process measure can be anything that has an impact on achieving an outcome.

In our example the steps between a scan being requested and a scan being completed will create our process measures. Examples of these steps could be: the time between a request being made and the request arriving with the booking office or the time between a request arriving with the booking office and a patient being contacted.

By collecting separate data sets around these process steps we are able to identify which bits of the process are working well and which bits could be improved. This data can help to drive change ideas towards the areas requiring most improvement.

## Process measure(s)



These run charts display data for both process measures. In this instance they show that the booking office has a good process for actioning requests once they arrive, but there is a delay in the request getting to the booking office in the first place.

Therefore the focus of the project can be towards speeding up the delivery of requests to the booking office.



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## Balancing Measure(s)

- A system wide check to see if there are any unintended impacts elsewhere in the system.
- A check to see if any external influences are impacting on your data.
- Balancing measures could be:
  - The total number of scan referrals that are requested.
  - Time/cost implications of speeding up referrals.



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A balancing measure is a system wide view of whether the changes you've implemented in your project have had an impact on any other part of the system. These can be both positive and negative.

It is also a way of checking what external influences may be impacting on your results to ensure correct conclusions can be drawn from the outcome data that is provided.

For example, if the number of scan referrals increases there are more moving through the system and therefore more delays are likely to occur. Or, if a new system is tested to speed up getting referrals to the booking office, what is there a resulting cost or increase in workload? and on balance is it a good use of resources?

## Recap

- **Outcome measure**
  - Directly linked to the aim you are hoping to achieve. A continuation of your baseline data.
- **Process measure(s)**
  - How well are each of the steps of the process which lead to your outcome performing?
- **Balancing measure(s)**
  - System wide check to see if your changes are having an impact elsewhere
  - What external influences may be impacting on your results?



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Outcome measures are directly linked to the aim that you are hoping to achieve. They are a continuation of the baseline data which showed that performance, compliance or experience were not as good as they should be.

Process measures provide information on how well each of the steps of the process which leads to our outcome are performing.

And balancing measures check to see what impact changes are having on the wider system, and also ensure that the results you are seeing are reflective of the changes that are being tested and implemented, rather than an external influence which is causing this difference in the results to occur.



- Your facilitator / Gold coach and GSQIA are here to support – please get in touch [ghn-tr.gsqia@nhs.net](mailto:ghn-tr.gsqia@nhs.net)
- Additional resources that are available around data and measurement:
  - Step by step creation of a run chart in Excel
  - Run charts
  - SPC and templates
  - Data and Data Collection

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