Measurement for improvement

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Reasons to measure

- Measuring for judgement?
- Measuring for research?
- Measuring for improvement?

Characteristic	Measuring for improvement
Aim	Improvement of service
Testing strategy	Sequential tests
Sample size	“Just enough” data, small sequential samples
Type of hypothesis	Hypothesis flexible, changes as learning takes place
Variation (Bias)	Accept consistent variation
Determining if a change is an improvement	Run charts or Shewhart control charts

Source: Solberg et al 1997

Types of measurement

Process

- These measures ensure that the project is running smoothly and effectively
- These are usually developed 'in-house' and are rarely reported externally
- Example: Number of staff remembering to give mothers information on a particular topic area

Outcome

- These measures gauge the level of success
- These measures are often what organisations are required to report on nationally
- Example: Number of smoke free pregnancies

Balancing

- These measures are used to ensure that any changes made do not impact negatively on other parts of the system
- Example: Percentage of patients happy with a particular improvement

We often focus on outcome measures. However, by the very nature of patient care, a poor outcome can be identified months down the line. It is what happens within the process/s to reach the outcome that impacts on this.

Considering process and balancing measures alongside outcome measures can reduce the likelihood of numerous patients receiving a poor outcome/experience.

To understand the impacts of the changes you make it is necessary to collect baseline data. This is historical data from before any changes are made. Ideally a minimum of 10-20 data points are required.

Measurement can be through the collection of:

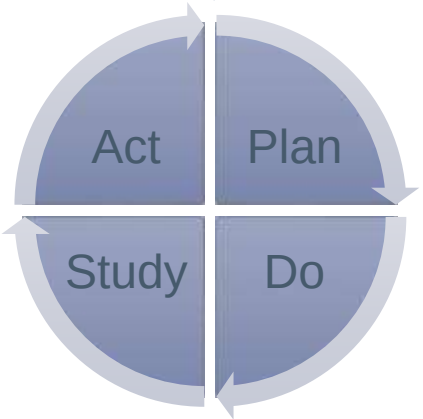
- Quantitative data – data than can be measured numerically (for example, the number of DNAs)
- Qualitative data – non numerical data (for example, free text in patient questionnaires)

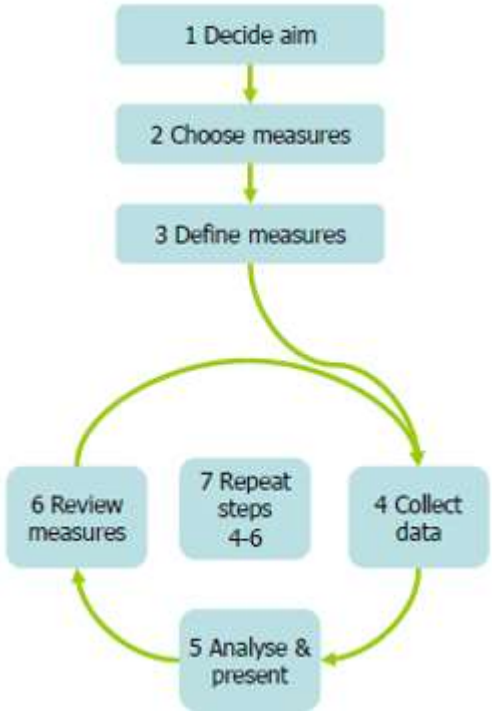
Measurement and The Model for Improvement

Aim:
What are we trying to accomplish?

Measures:
How will we know if a change is an improvement?

Change:
What changes can we make that will result in an improvement?





Source: Mike Davidge, Director – Measurement, NHS Elect

Measurement Simulation

Learning aims:

Understanding variation

Measuring to support rapid cycles of change

Draw out principles

Have fun!

North East and North Cumbria

Patient Safety Collaborative

We need eight - ten teams of 5 people per team

Each team member is numbered 1 to 5

Each team needs a set of flip chart paper

and a deck of playing cards

Anyone who isn't in a team will be an observer – it's your job to watch what happens and help us draw out the learning

We are caring for a queue of women who need a limited diagnostic resource. The scan department is represented by the flip chart on the floor. The queue of women are the playing cards. King, Queen, Jack cards do not need a scan.

No 1 is the manager. They will organise the team and are accountable for performance.

No 2 is the clinician sending the patients for a scan. The clinician stands over the flip chart and drops cards onto the flip chart. The card is held vertically and dropped from shoulder height

If the card lands fully inside the edges of the flip chart they have had their scan. If not, No 3 must retrieve the card and return it to the deck (No 2 may not move or drop the next card until this is done).

No 4 is the auditor and count the number of patients who get a scan, the number who don't and the number of 'inappropriate' (picture card) scans in the two minutes allowed.

No 5 is the improvement lead and will observe.

The AHSN Network

NHS Improvement

		Tally			Number				
Day	Date	Scanned	Not scanned	Wrongly scanned	Scanned	Not scanned	Wrongly scanned	Correctly scanned	Total women
EXAMPLE		𝍸 𝍸 𝍸 |||	||||	|||	18	4	3	14	25
Mon	03 September 2018								
Tue	04 September 2018								
Wed	05 September 2018								
Thu	06 September 2018								
Fri	07 September 2018								
Mon	10 September 2018								
Tue	11 September 2018								
Wed	12 September 2018								
Thu	13 September 2018								
Fri	14 September 2018								
Mon	15 September 2018								
Tue	16 September 2018								
Wed	17 September 2018								
Thu	18 September 2018								
Fri	19 September 2018								
Mon	20 September 2018								
Tue	21 September 2018								
Wed	22 September 2018								
Thu	23 September 2018								
Fri	24 September 2018								

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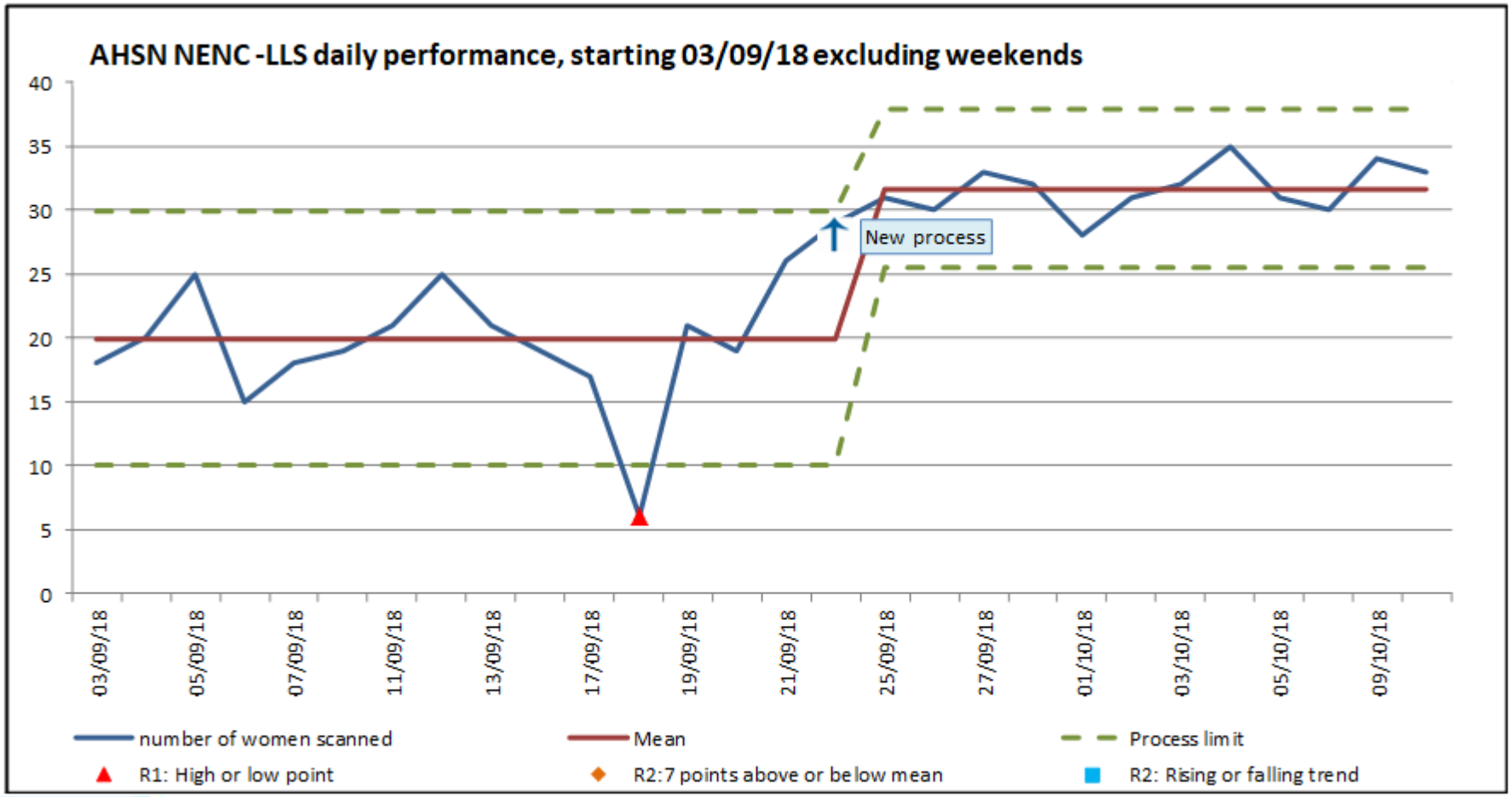

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