To measure or whnot?

Aim

At the end of this session, you will be able to:

1. Recognise the difference between measuring for improvement versus research
2. Know the difference between surrogate and direct measure of harm
3. Formulate a plan for NMC measuring

Resources required

Every table:

- Flip charts and pens
- Scribe, Timekeeper and Reporter
- Draft copies of the NMC audit user guide

Measuring for improvement

	Measurement for Research	Measurement for Improvement
Purpose	To discover new knowledge	To bring new knowledge into daily practice
Tests	One large "blind" test	Many sequential, observable tests
Biases	Control for as many biases as possible	Stabilise the biases from test to test
Data	Gather as much data as possible, "just in case"	Gather "just enough" data to learn and complete another cycle
Duration	Can take long periods of time to obtain results	"Small tests of significant changes" accelerates the rate of improvement

Figure 2 – IHI methodology

Key points to consider

- What you are measuring
  - NMC design
  - NMC use e.g. compliance with safe prescribing/admin
  - Patient harm
- Methodology (local vs national)
  - Audit
  - Focus groups
  - Observation
  - Incident reports
- Resource required (tools, time, staff, cost)

Surrogate measures

- A **surrogate measure** is a taken with the intent to gain insight into a variable that is either impractical, or in principle, impossible to measure directly.
- They should have a well-established relationship (i.e. correlation) with the relevant clinical end point.
- It should also be possible to use the effect of the treatment on the surrogate to estimate the amount of clinical benefit a patient will experience.

Good Example

- % of patients who were prescribed and administered a medicine to which the patient has a documented allergy or ADR **does not** actually indicate that the patient was harmed.
- However there is a high probability a patient that is prescribed and administered a medicine they have allergy to will result in harm.

Not so Good Example

- Documentation of a weight on the medication chart does not mean that the patient will be harmed from over- or under-dosing. However, having the weight documented when making prescribing decisions for some medicines like heparin is vital to prevent harm.

Considerations

- Bed in the change first
- Data doesn’t always tell full story
- Variability (data integrity)
- Resource intensive

Not the end of the story

- Evaluation review commissioned
- High level looking at all medication safety programmes
- Reduction in ADEs (direct measure of patient harm)

Group Work

Design the national NMC audit

- Decide what are the key things to measure
- A draft audit tool is available as a guide
- Can list new features to be measured (but describe what the measure is including details on the numerator & denominator)

Group Work

In your group, answer the following questions

- What would we measure?
- Why would we measure it e.g. reason?
- How would we measure it i.e. method?
- How often would we measure i.e. frequency?
- Who would measure i.e. ideal staff groups?
- Is it direct or surrogate measure of harm?
- Assign whether it should be a local or national measure (or both)

Group Work Template Example

What	Why	How/ Freq	Who	Surrogate or Direct	Level		
					Local	National	Both
% of verbal orders (numerator = no. of verbal orders and denominator = total no. of medicine orders prescribed)	Local policy is to have no verbal orders	Audit 3 /12 PA	Quality Team	Surrogate	✓