



HEALTH QUALITY & SAFETY  
COMMISSION NEW ZEALAND

Kaitiaki Takekōwhiri Pūwhiriwhiri



*Collaborative to Prevent Central Line Associated Bacteraemia*

# Measures for quality improvement

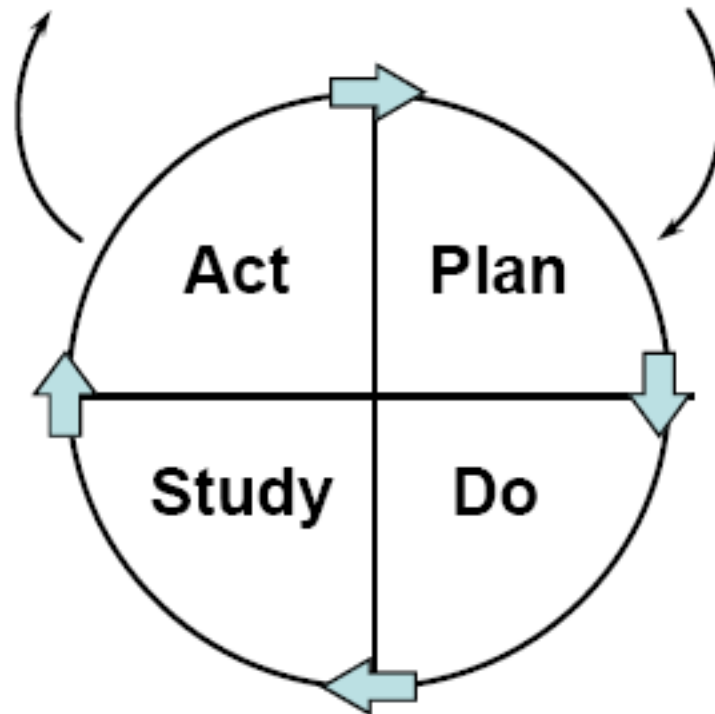
## Learning Session One

# Model for Improvement

What are we trying to accomplish?

**How will we know that a change is an improvement?**

What change can we make that will result in improvement?



# How Do We Know That a Change is an Improvement?

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The Breakthrough Series is about making changes to systems, not measurement. But measurement plays an important role:

- Key measures are required to assess progress on team's aim
- Balancing measures are needed to assess whether the system as a whole is being improved
- Data from the system (including from patients and staff) can be used to focus improvement and refine changes
- Specific measures can be used for learning during PDSA cycles
- **Limit time spent on measurement**

# Methods of Measurement

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- Clinical measures of patients health
- Documentation of behaviors
- Questionnaires
- Assessments
- Summary of databases
- Observations
- Chart audits

# Measurement Guidelines

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***The question - How will we know that a change is an improvement? - usually requires more than one measure***

1. A balanced set of a few (3-8) key measures that clarify a team's aim and make it tangible should be reported each month
2. Make use of the patient population data base for measurement
3. Integrate measurement into the daily routine
4. Plot data (graph) on the key measures each month during the Collaborative
5. Be careful about over-doing process measures
6. Balancing measures are needed to assess whether the system as a whole is being improved

# Outcome, Process, & Balancing Measures

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**Outcome** = Voice of the customer/patient. Direct link to AIM:

- How is the system performing?
- What is the **result**?
- How is the health of the patient affected?

--% of Patients who Fall  
--Rate of harmful falls

**Process** = Voice of the workings of the system. What we work on to get to aim:

- Are the parts/steps in the system performing as planned?
- Are **key changes being implemented** in the system?

--% with risk assessment

**Balancing** = Looking at a system from different directions or dimensions.

- What happened to the system as we improved the outcome and process measures?
- **Unanticipated consequences**
- **Competing explanations** for success

--rate of restraint use  
--total patient days per month

# Process metrics positives

- Require short timeframes (O can be rare)
- Need smaller sample sizes
- Under greater clinical control
- Supported by evidence (aspirin)
- Can act as a surrogate of unmeasured items
- Provide data that is actable upon
- Require little adjustment for severity.
- Little or no follow up

# Process metrics negatives

- The reverse of above
- Not understandable to patients
- Needs strong P-O relationship
- Not encompassing (therapy change vs family meeting documentation)



# Outcome metrics

- The money!
- Understood by patients/relatives/funders
- Global, generic and comparable
- Difficult benchmarking

# Balancing metrics

- Contextual
- Need different perspectives
- Six hour rule !

## Exercise: Evaluate Potential Set of Measures for the ED Service Improvement

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Topic: Improve waiting time and patient satisfaction  
in the Emergency Department

### Potential Measure

### Perspective (O, P, B)

- ◆ % patient receiving discharge materials
- ◆ Patient volume
- ◆ Total Length of Stay (LOS=wait time)
- ◆ Time to registration
- ◆ Staff satisfaction
- ◆ Patient Satisfaction Scores
- ◆ “Left without being seen” (LWBS)
- ◆ Financials

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