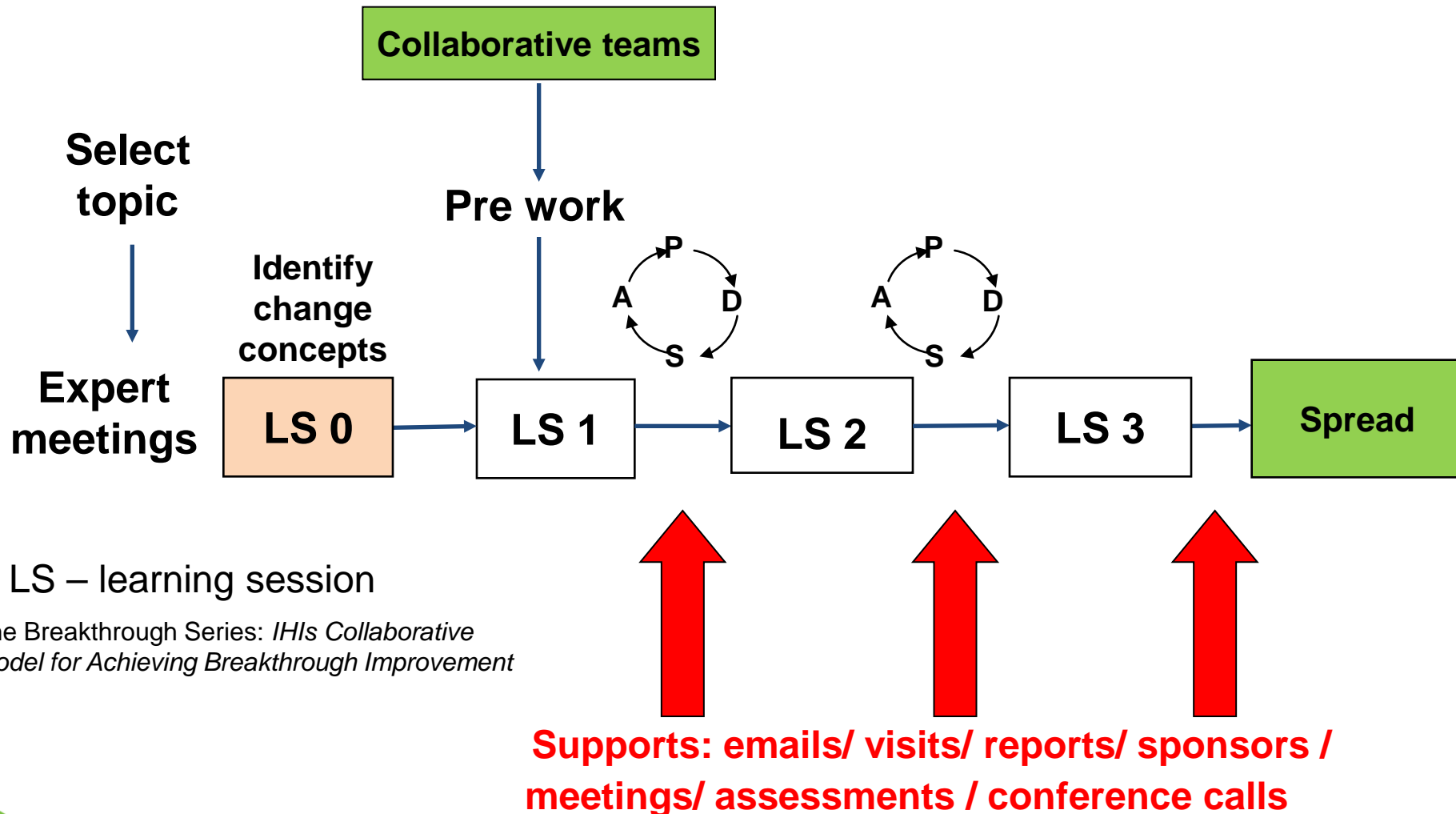


# Quality improvement methodology

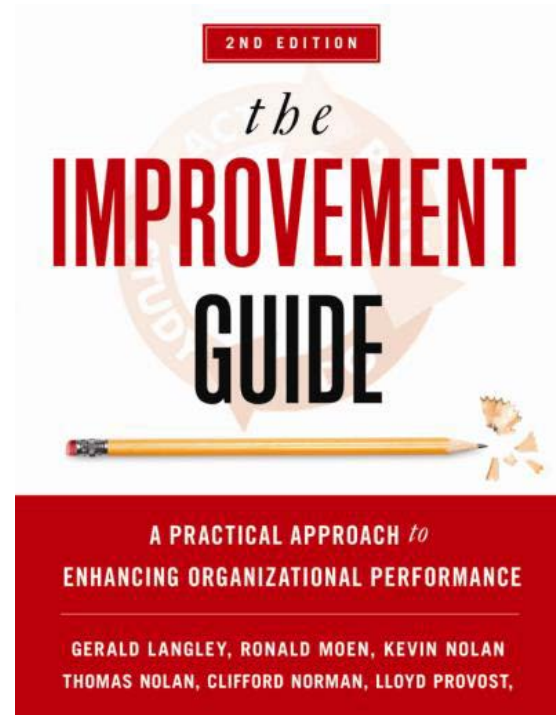
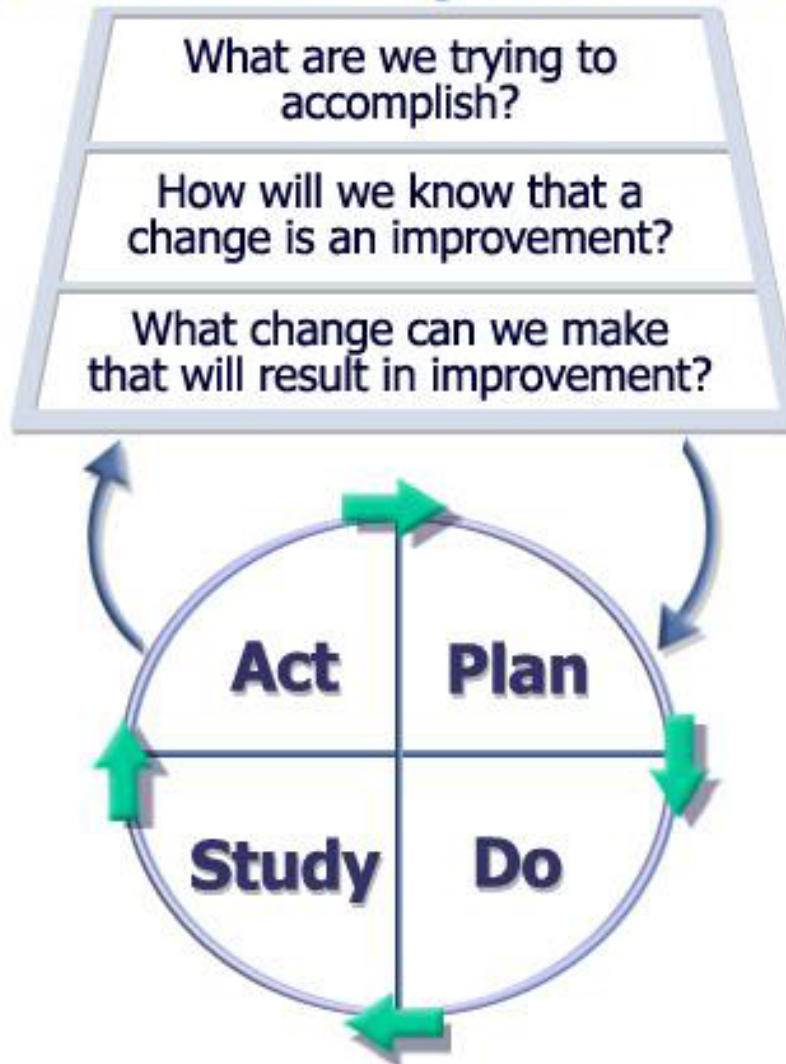
## Model for Improvement

Prem Kumar

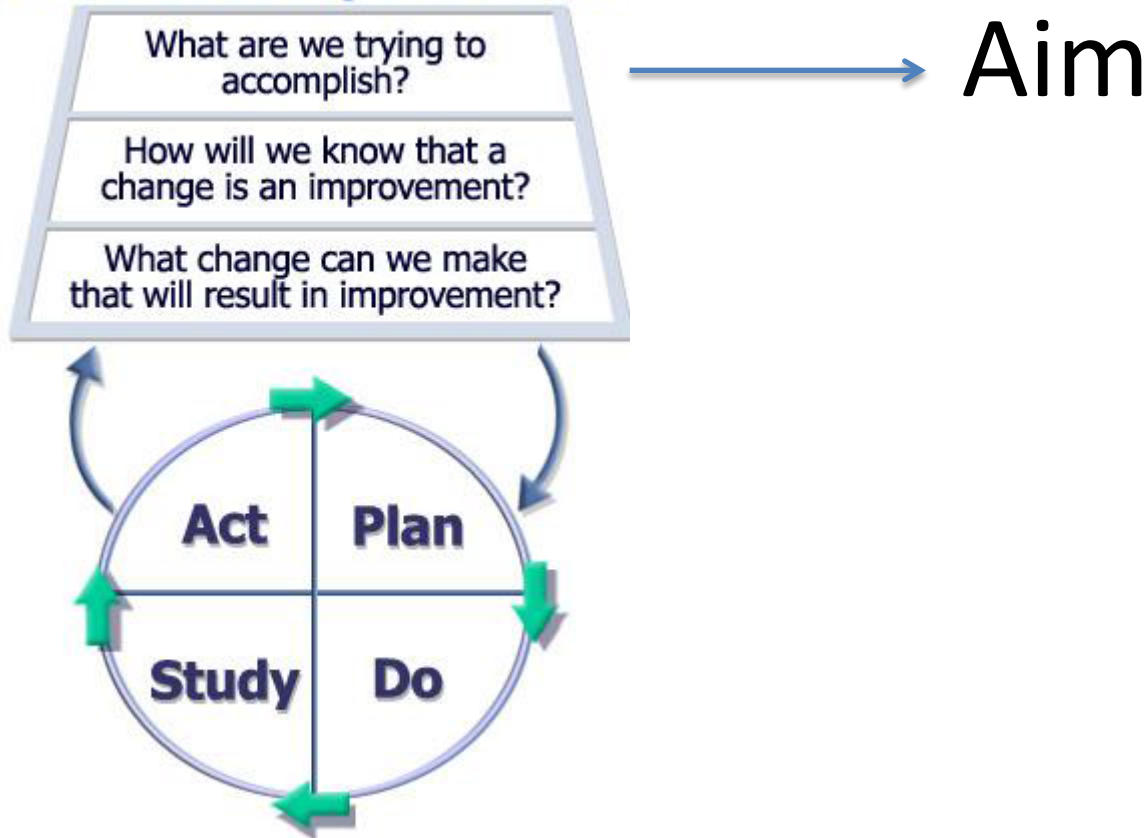
# Collaborative methodology



## Model for Improvement

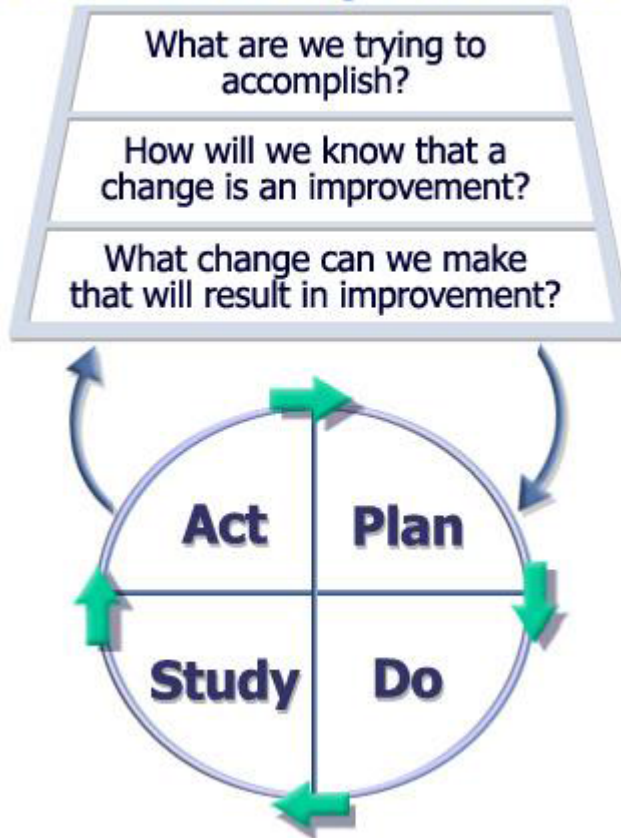


## Model for Improvement



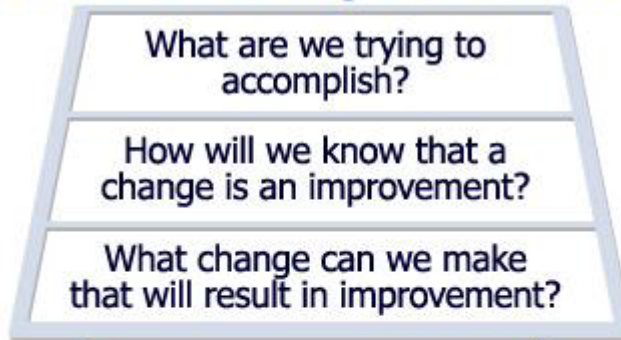
Associates in Process Improvement, 2009

## Model for Improvement



→ **Measurement**

## Model for Improvement



Change Ideas

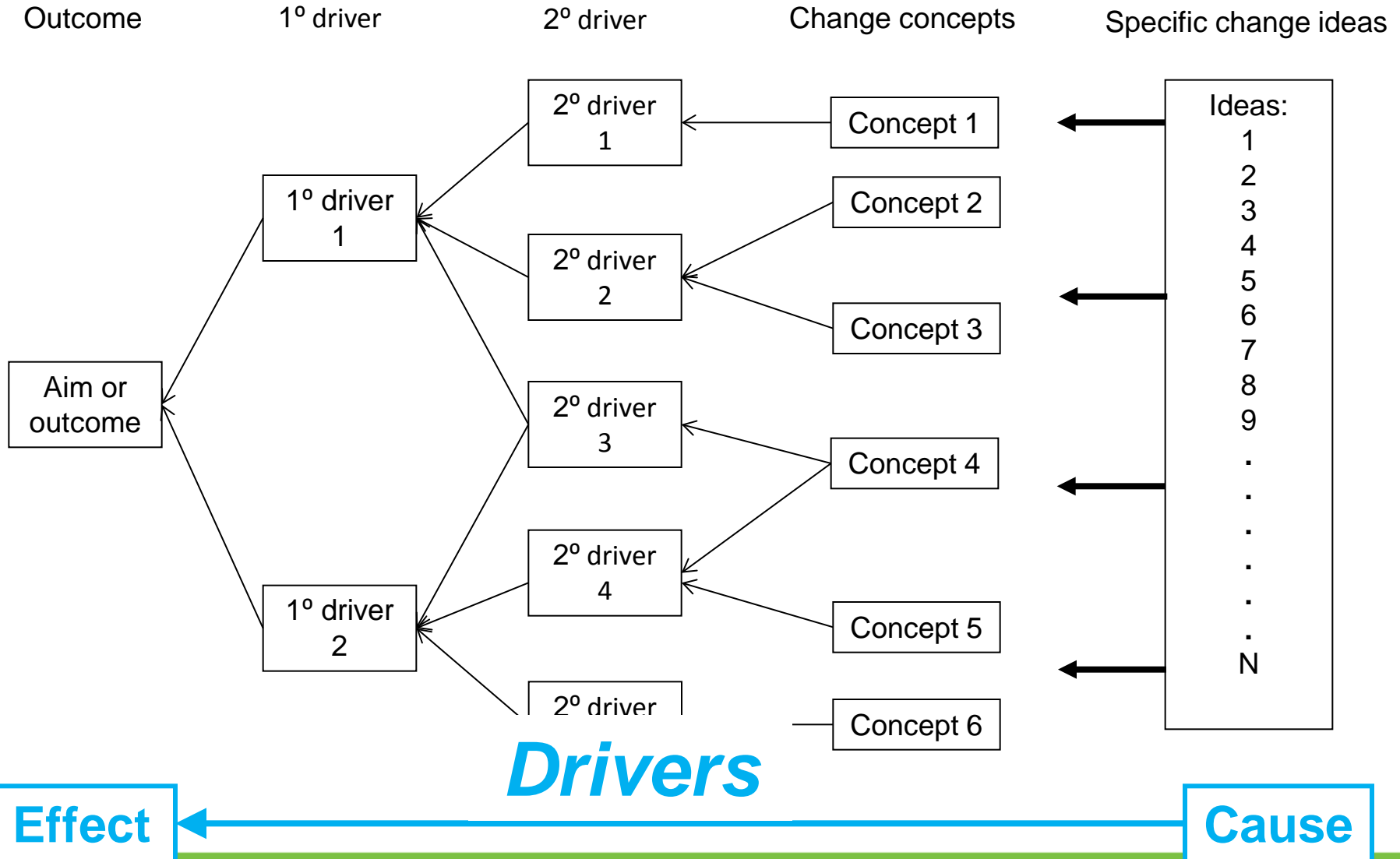


Associates in Process Improvement, 2009

All improvement requires change, but  
not all changes result in  
improvement.

How do we develop fundamental change  
that will result in improvement?

# Conceptual driver diagram







# Malawi – Maternal Mortality

## Secondary Drivers

## Primary Drivers

## Outcome

Goal: 50%  
Reduction in  
Maternal and  
Neonatal Deaths

Family Friendly  
Care

Effective  
Support  
Systems

Clinically  
Excellent Care  
for Women

Clinically  
Excellent Care  
for Newborns

Information  
Driven Decision  
Making

Individualized patient focused care

Respect and dignity of women maintained  
throughout care

Proactive interpersonal communication

Floor Stocks Available

Blood Availability

Motivated staff

Prompt ID of Obstructed Labour

Prompt ID of need for CEOC

Control infection through protocols

Timely treatment of bleeding

Active management of 3rd stage

Prompt recognition and treatment of asphyxia

Routine classification to identify and track risk

Prevention, prompt recognition, and treatment  
of infections/sepsis

Safe care to avoid hypothermia & promote b.f.

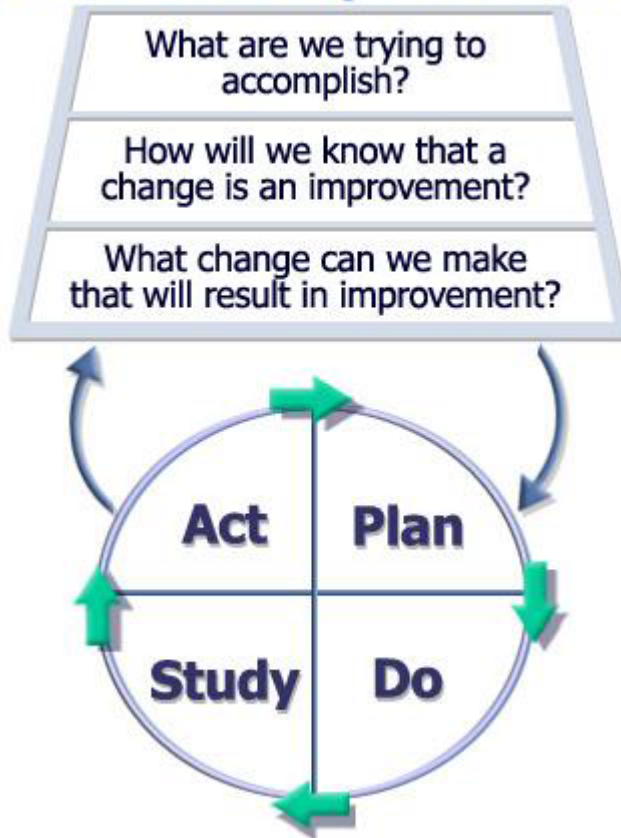
Maternal death and near miss audits

Measure patient, guardian, staff satisfaction

Regular collection/analysis of key data

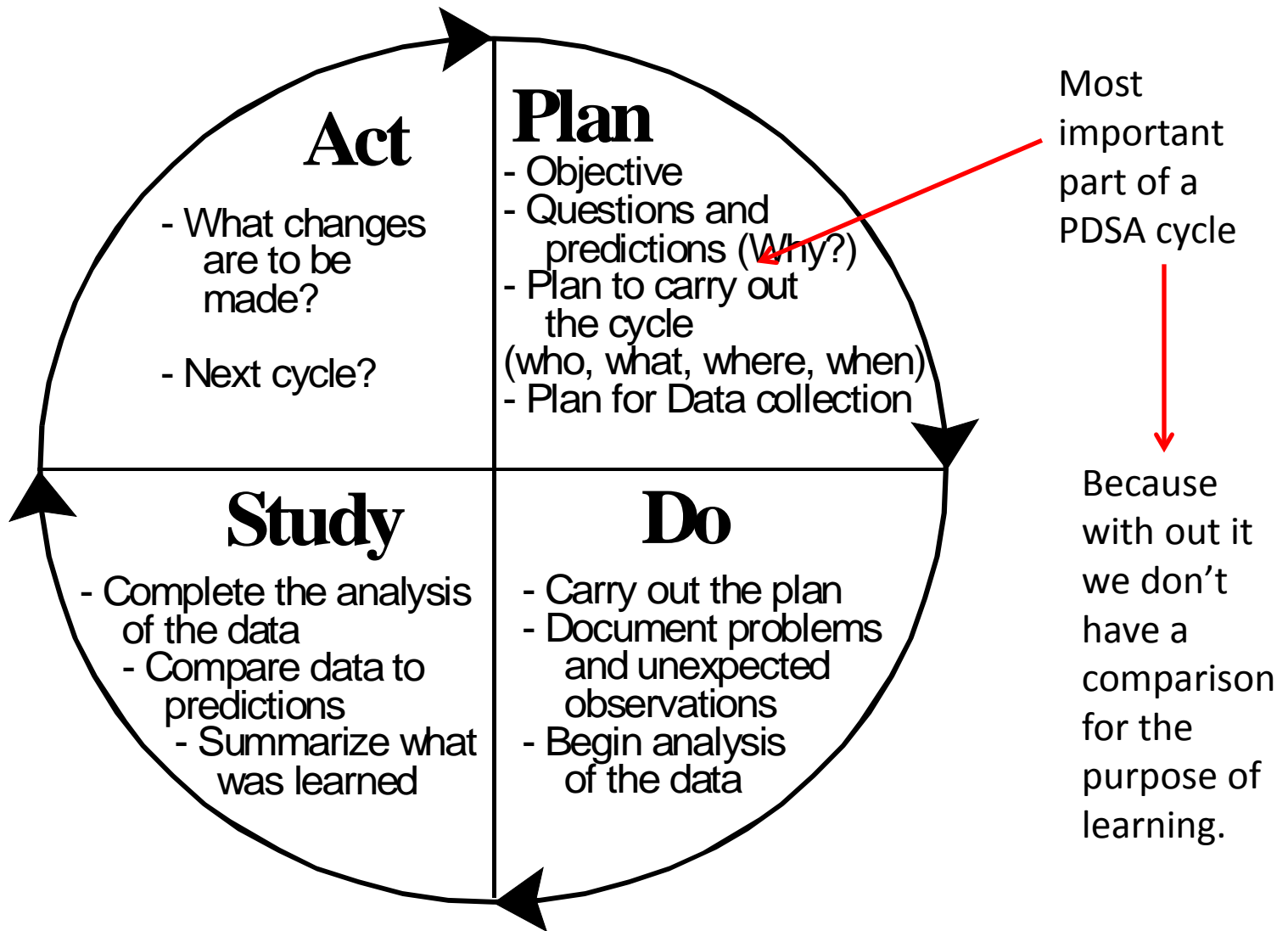
Accurate and complete patient records

## Model for Improvement

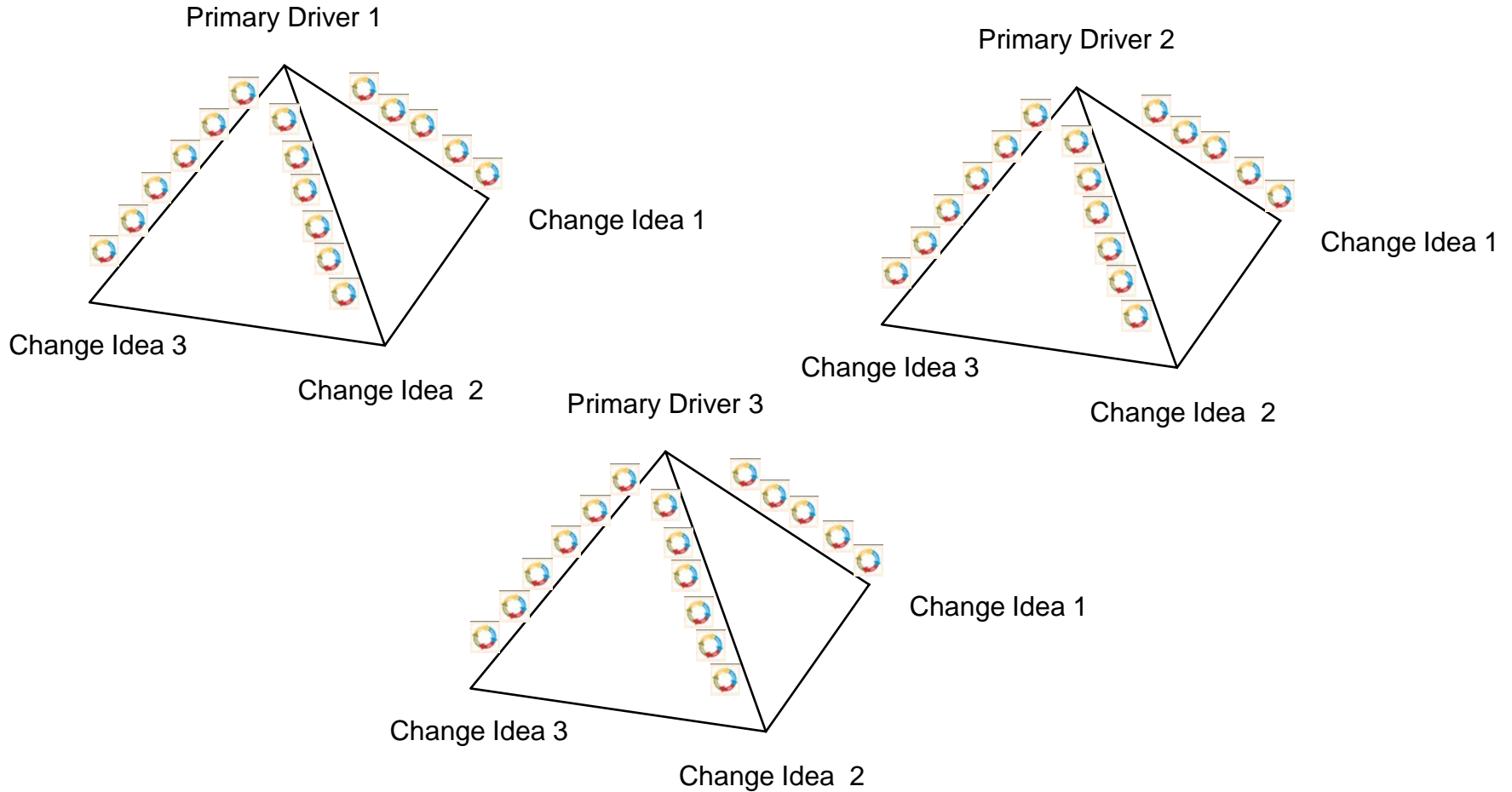


PDCA cycle  
learning cycle

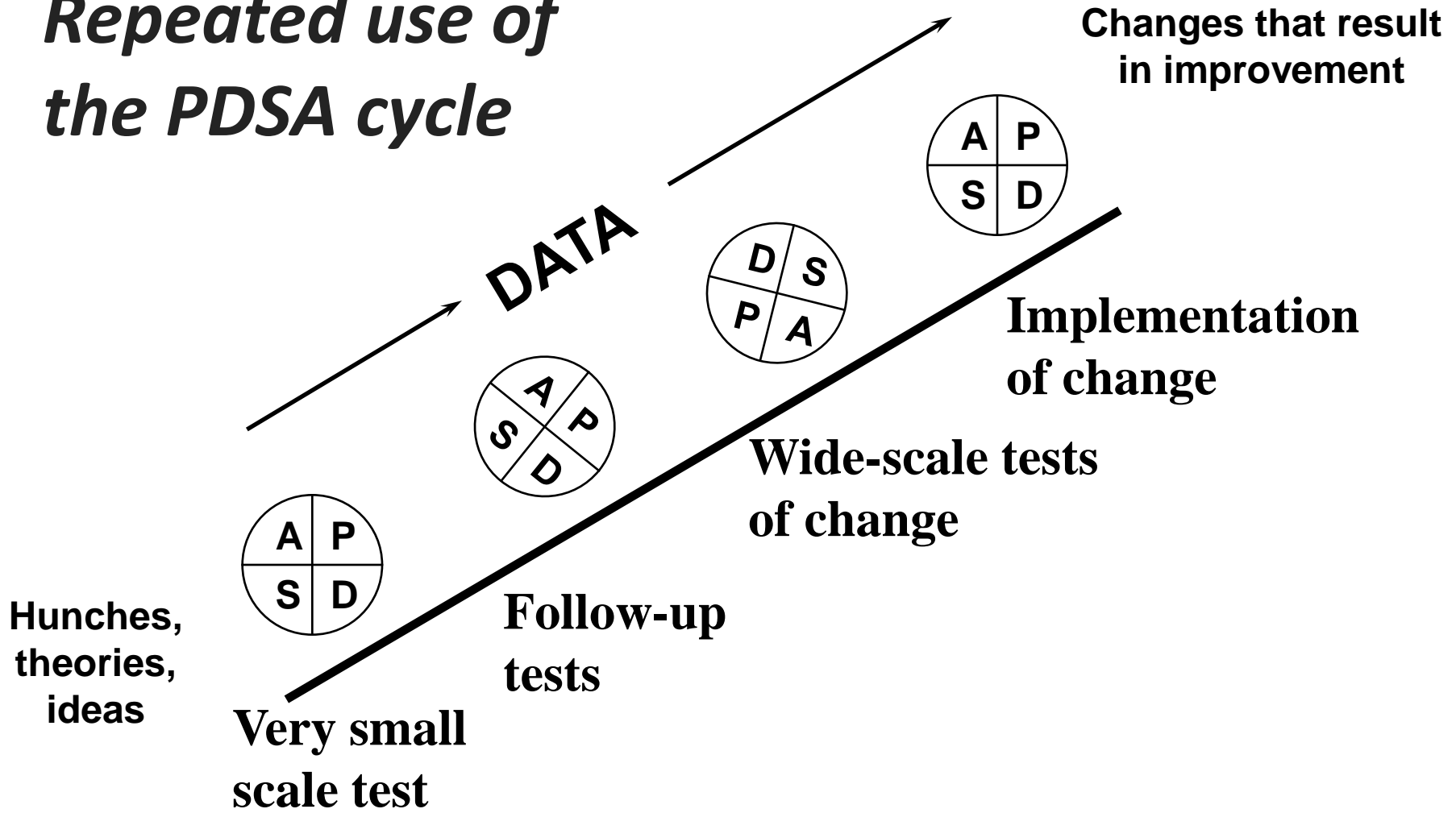
# The Plan-Do-Study-Act cycle



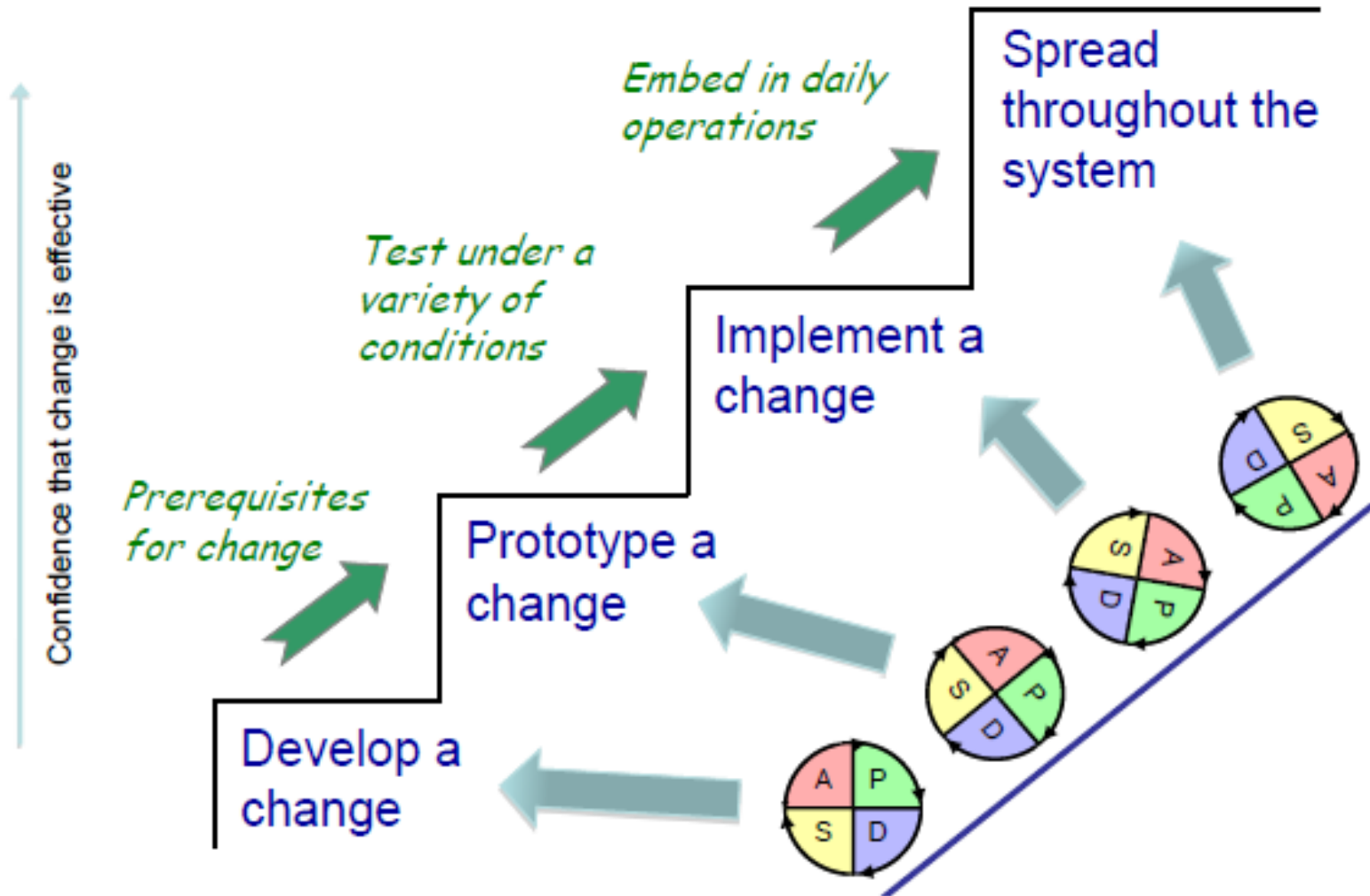
# The work of improvement



# Repeated use of the PDSA cycle



# The steps to change





SAFETY  
NEW ZEALAND

## Plan for Improvement

What are we trying to accomplish?

My aim is to reduce the time baby cries at night

How will we know that a change is an improvement?

Total crying time  
Healthy baby

What change can we make that will result in improvement?



Aim

Movement

Rocking motion

Distraction

Bright lights  
Moving lights

Technology

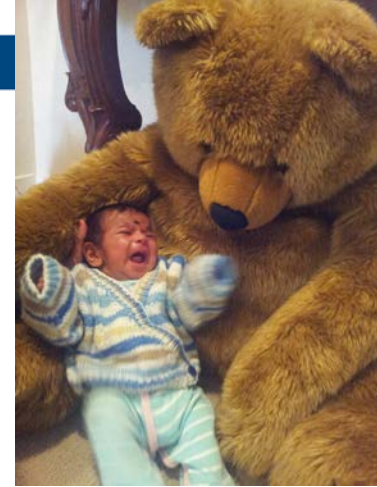
Soft music  
Rock music  
Lullaby

Hunger

Provide food

Others

Give it to someone





# Project charter

Aim

What are we trying  
to accomplish?

Project scope

Areas of testing (ward, division, hospital)  
What is included?  
What is excluded?

Area(s) of focus for  
Opioids collaborative  
(Harm):

Type of harm

Team:

Project lead:  
Clinical lead:

Project team:

Patient:

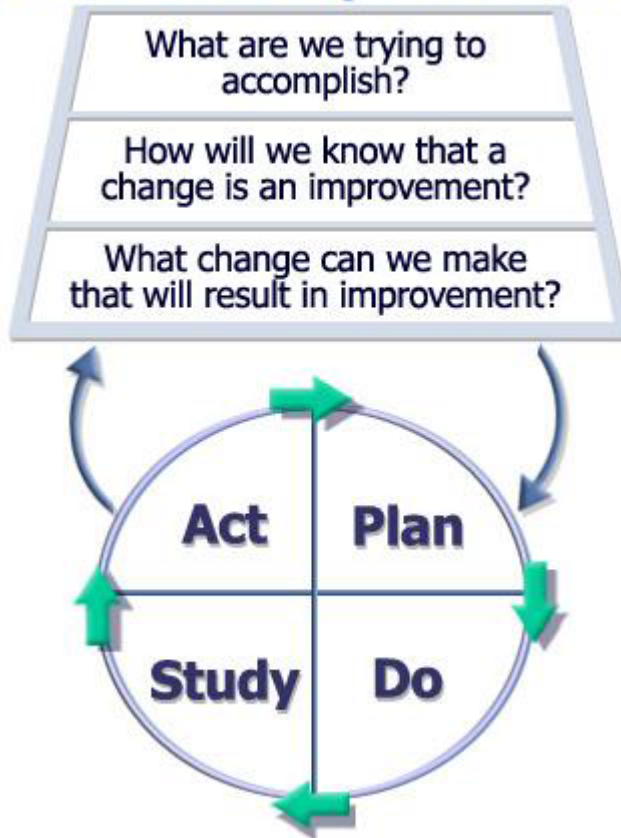
Identify the teams

# Measures & data



*'And this is the period when the cat was away.'*

## Model for Improvement



Measurement  
& data

Why do we need  
measures?

# Three types of measures

Outcome measures

Process measures

Balancing measure

# Measurement guidelines

To answer: “*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.
2. Integrate measurement into the daily routine.
3. Think about balancing, process and outcome measures (be careful about overdoing process measures).
4. Plot the data in a time series.

# Methods of measurement

- Chart review
- Observation of behaviour
- Surveys
- Questionnaires
- Coding data
- Checklists

## Outcome measures

## Process measures

## Balancing measure

**Baseline**

Any existing reports  
source of data  
collection method

