

The Model for Improvement

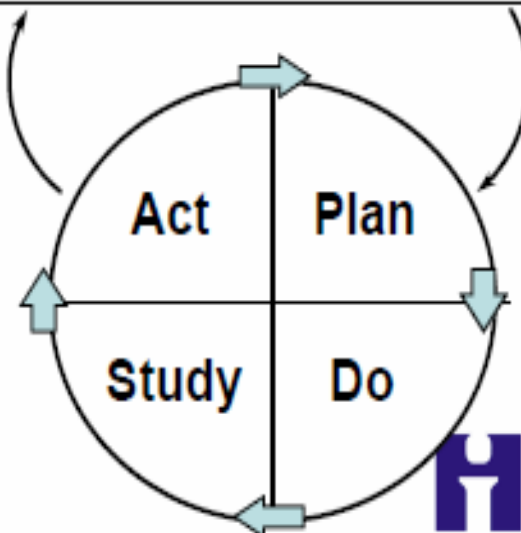
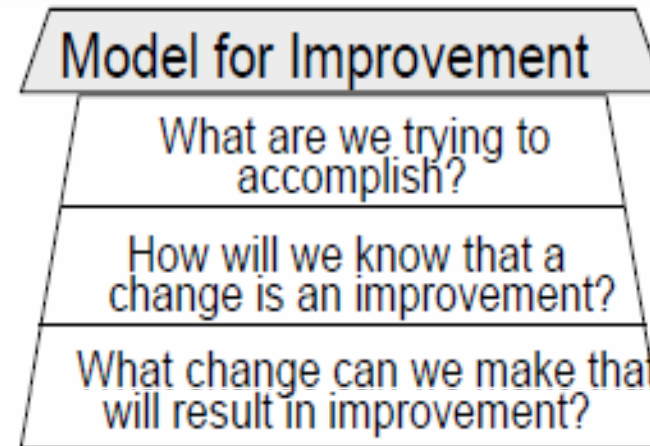
Learning Session One

These slides are based on the work presented by DR Robert Lloyd and Ms Joan Grebe from the Institute for Healthcare Improvement (I.H.I)

(Ko Awatea November 2011)

Model for Improvement

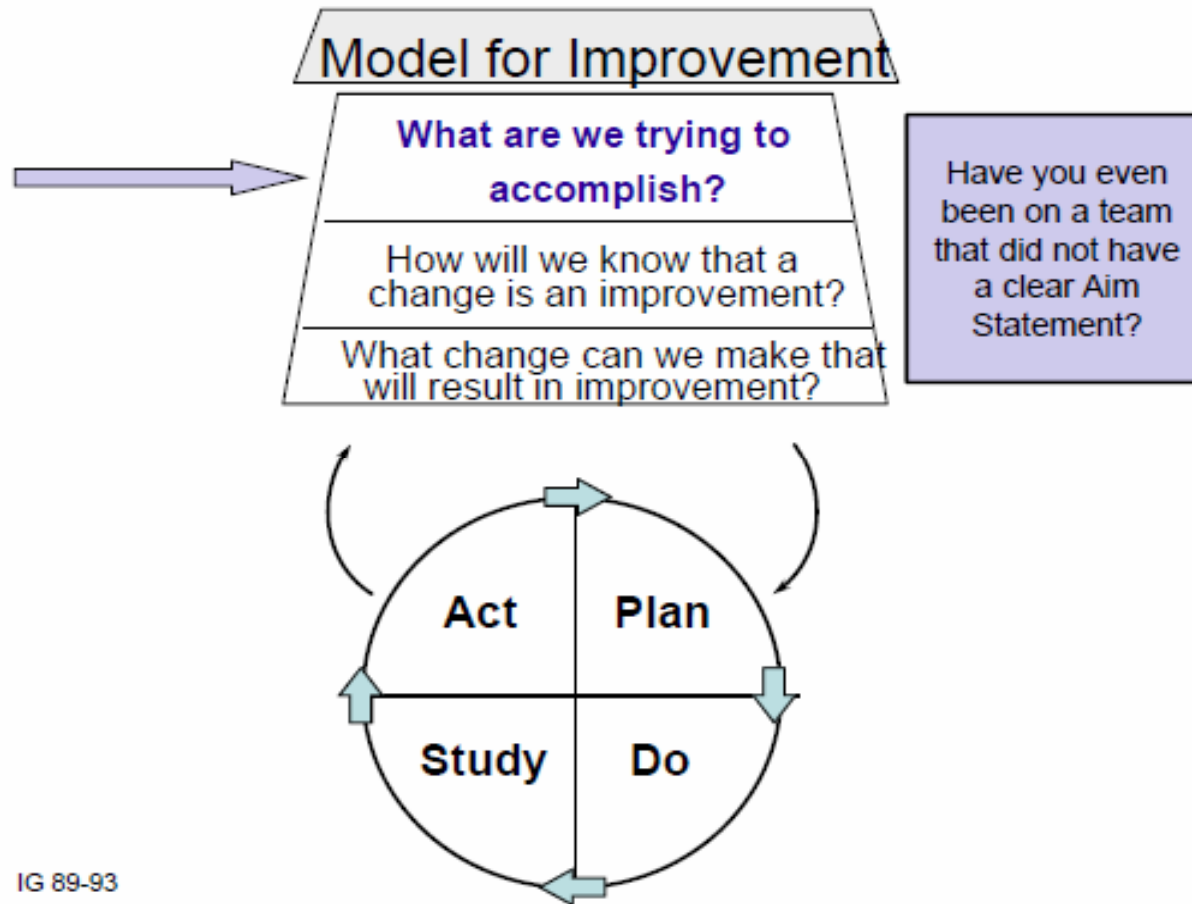
- 3 important questions
- Plan, Do, Study, Act cycles to test theories of change on a small scale



Source: Langley et al. *The Improvement Guide*, 1996

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011

Defining your aims



Source: Langley et al. *The Improvement Guide*, 1996

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011

Defining your aims

Important that:

- aims are clear and unambiguous
- they apply to something that the collaborative can make a difference to (e.g. decrease CLAB rates to $<1/1000$) rather than too broad (solving world hunger)
- They are specific

“Some is not a number, soon is not a time”



Recommended elements in an aim statement

- What is expected to happen
- The timeframe for accomplishing the aim
- The system to be improved
- The patient population that change process is going to be applied to
- How much/by when

Example of Aim statement

Aim: An organisational approach to care for the population of patients with asthma will be implemented so that there is a:

- 75% increase in symptom free days
- 70% reduction in exacerbations reported
- At least 90% of patients will have self-management goals in their medical records.

Has it met the qualities of a good aim?

- What is expected to happen
- The timeframe for accomplishing the aim
- The system to be improved
- The patient population that change process is going to be applied to
- How much/by when

Example of Aim statement

Aim:

We are a system of 16 clinics serving approximately 8200 people with asthma. We recognise that our treatment is not optimal. We will improve such that, over the next 13 months, our population of patients with asthma will experience a 40% increase in symptom-free days, a 50% reduction in the number of exacerbations, and a 20% reduction in the total number of hospital days

Has it met the qualities of a good aim?

- What is expected to happen
- The timeframe for accomplishing the aim
- The system to be improved
- The patient population that change process is going to be applied to
- How much/by when

Breakout

Aim Statement	Good	Bad	Ugly
We aim to reduce harm and improve patient safety for all of our internal and external customers.			
By April of 2012 we will reduce the incidence of pressure ulcers in the critical care unit by 50%.			
Our outpatient testing and therapy patient satisfaction scores are in the bottom 10% of the national comparative database we use. As directed by senior management, we need to get the score above the 50 th percentile by the end of the 1 st Q of 2012.			
We will reduce all types of hospital acquired infections.			
According to the consultant we hired to evaluate our home health services, we need to improve the effectiveness and reliability of home visit assessments and reduce rehospitalization rates. The board agrees, so we will work on these issues this year.			
Our most recent data reveal that on the average we only reconcile the medications of 35% of our discharged inpatients. We intend to increase this average to 50% by 4/1/12 and to 75% by 8/31/12.			

Reference: Institute for Healthcare Improvement/2011



Breakout – CLAB prevention Aim

Aim Statement Worksheet

Team name: _____

Aim statement

(What's the problem? Why is it important? What are we going to do about it?)

How good? _____

By when? _____



Reference: Institute for Healthcare Improvement/2011



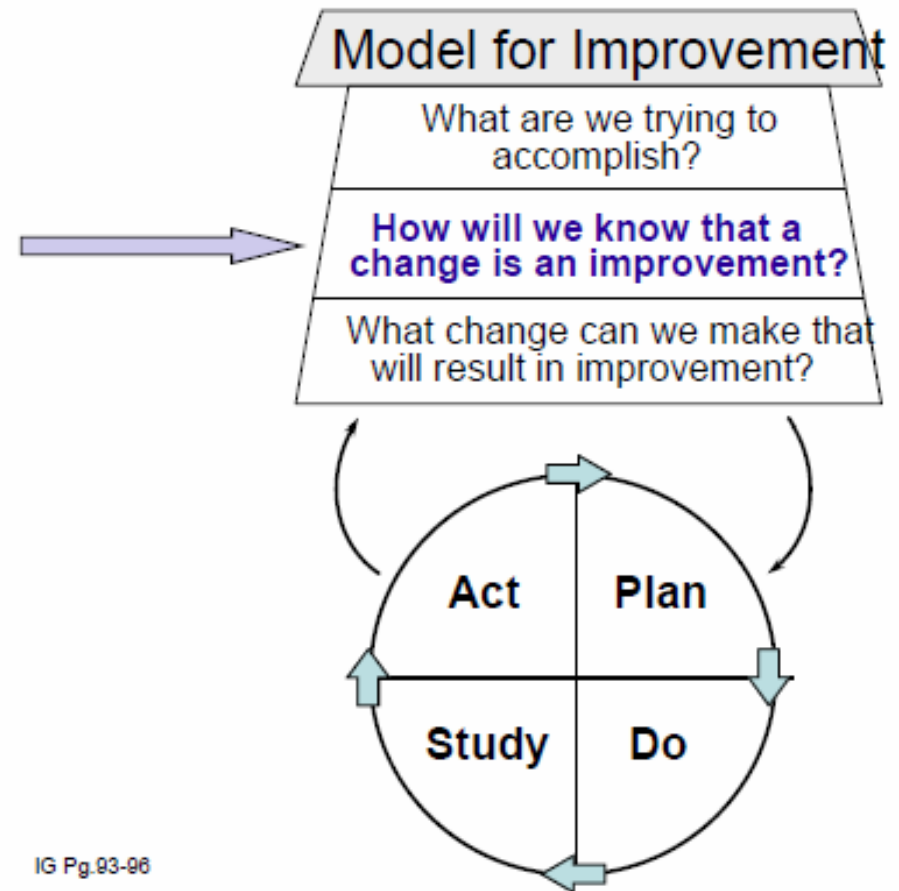
CLAB prevention aim statement

Aim.

- To run a national collaborative series to encourage implementation of best practice bundles of care for Central Line insertion and maintenance in adult ICU patients in 20 DHBs, to decrease CLAB rates to <1/1000 line days within 12 months.

Measurement

- The Breakthrough method is about making changes to systems, not measurement. But measurement plays an important role:
- To know whether the changes we introduce produce an improvement
- “all improvement requires change, but not all changes produces improvement”



Source: Langley et al. *The Improvement Guide*, 1996
Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011

"Weighing myself ten times a day won't reduce my weight. No matter how sophisticated our measurements are, they're only indicators. What the indicators say are much less important than what's being done with the information. Measurements that don't lead to meaningful action aren't just useless; they are wasteful."

Jim Clemmer

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



“Crude measures of the right things are better than precise measures of the wrong things.”

“Improvement strategy: More frequent samples (over time) of ‘good enough’ measures”

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



Roles of measurement

- Key measures are required to assess team's progress against the aim
- Balancing measures are required to ensure that improvement in one part of the system does not cause damage in another area
- Data (including from patients and staff) can be used to focus improvement and refine changes
- Specific measures can be used doing PDSA cycles to inform future cycles

- Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



Methods of Measurement

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

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



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 structure, process and outcome measures (be careful about overdoing process measures)
4. Plot the data in a time series

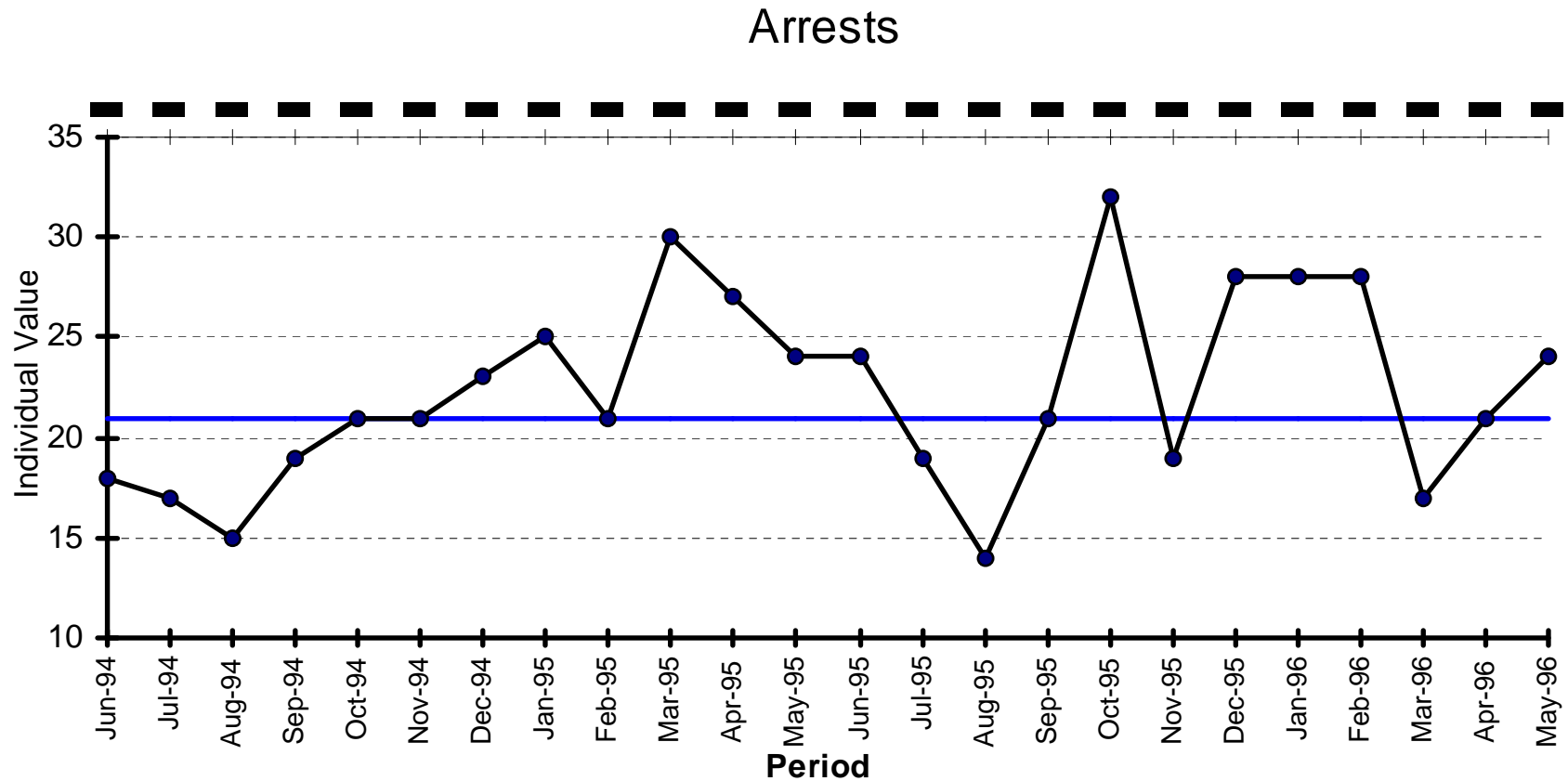
The Twice Yearly QA Report Meeting

<u>Month</u>	<u>First 12 months</u>			<u>Second 12 months</u>		
	<u>Arrests</u>	<u>Vfib</u>	<u>Percent</u>	<u>Arrests</u>	<u>Vfib</u>	<u>Percent</u>
Jun	18	6	33.33	24	9	37.50
Jul	17	8	47.06	19	2	10.53
Aug	15	6	40.00	14	2	14.29
Sep	19	6	31.58	21	7	33.33
Oct	21	6	28.57	32	5	15.63
Nov	21	8	38.10	19	4	21.05
Dec	23	7	30.43	28	9	32.14
Jan	25	7	28.00	28	10	35.71
Feb	21	1	4.76	28	8	28.57
Mar	30	9	30.00	17	5	29.41
Apr	27	8	29.63	21	7	33.33
May	24	8	37.50	24	7	12.50
May	24	9	31.03	24	3	25.82
Total	261	81		275	71	

Note: Vfib is a term for ventricular fibrillation



Plot the dots!



Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



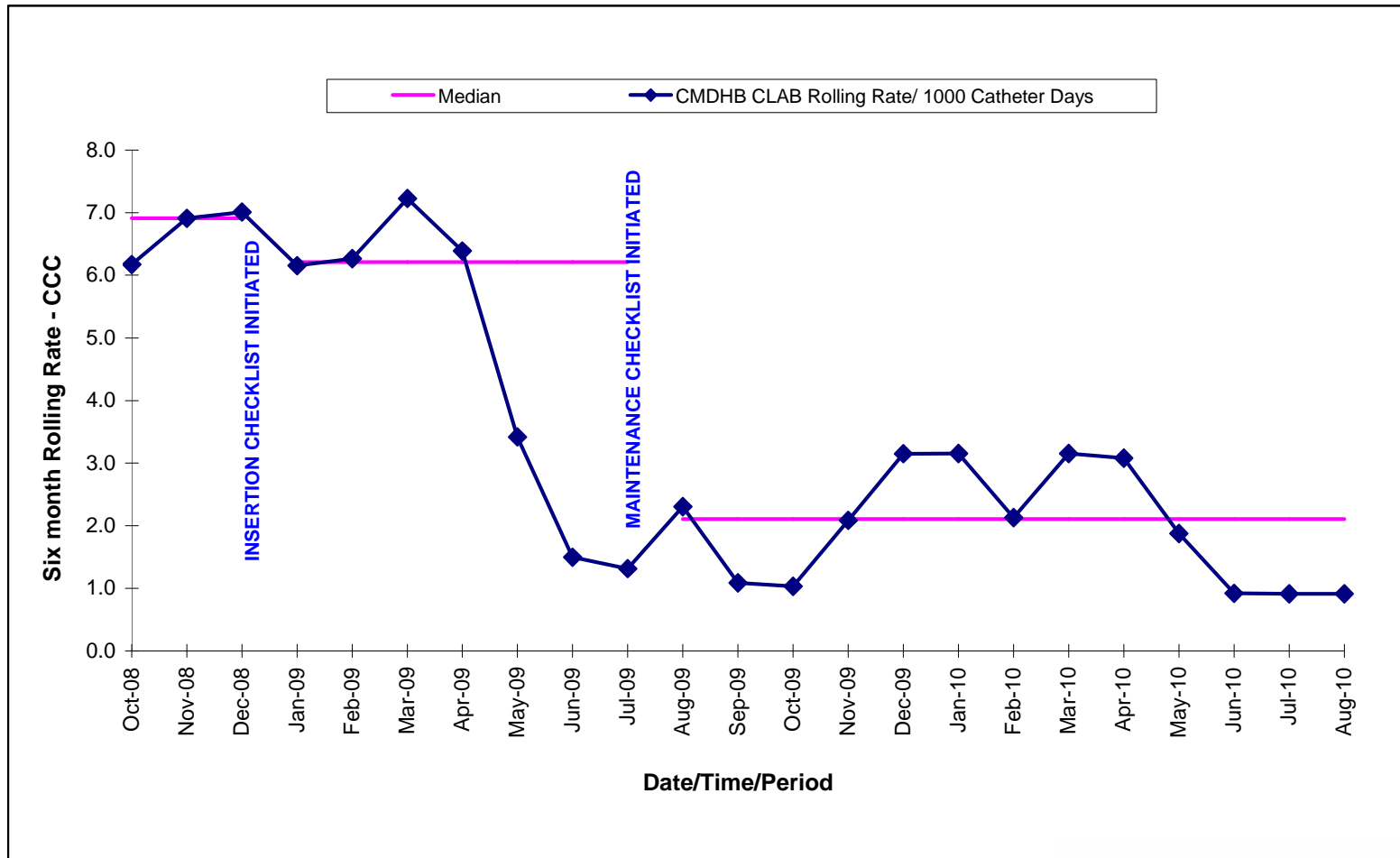
Plot the dots

- Time series data gives more useful information
- Stops people seeing trends when there are none
- Allows us to determine whether common or special cause variation is present (see day 2)
- Can provide evidence of improvement

Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011



Plot the dots - CLAB



Reference: Institute for Healthcare Improvement/Dr Robert Lloyd; 2011

