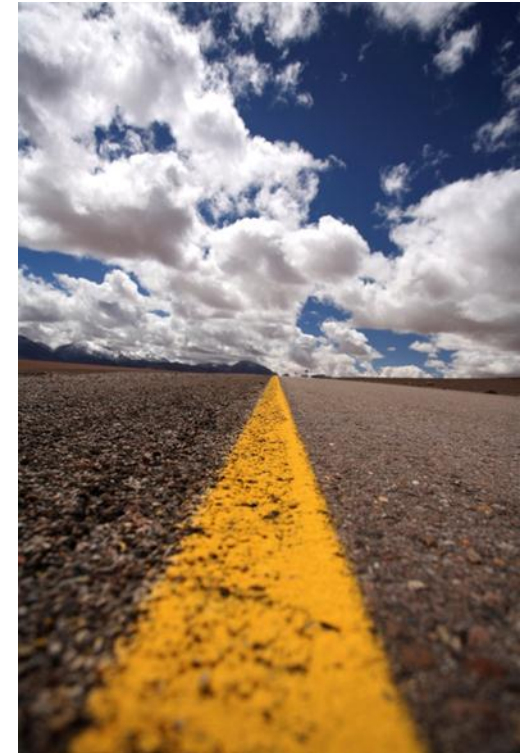


The Journey towards zero avoidable pressure ulcers...



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Health Foundation/Institute for Healthcare Improvement Quality Improvement Fellow

It's time...



- *A little less conversation a little more action*

Transformation

Metanoia:

- Reorientation of one's way of life
(*The New Economics*. Deming, p. 95, 1993)
- Begins with individuals
- More than a change
- Develop new habits of mind



Getting to Goal

- Will
- Ideas
- Execution



Core Principles

- Transformational Leadership
- Safety and Reliability
- Patient and Family centred care
- Teamwork and Vitality
- Value-added Care





Fundamental safety principles

- **Prevention**
- **Detection**
- **Mitigation**

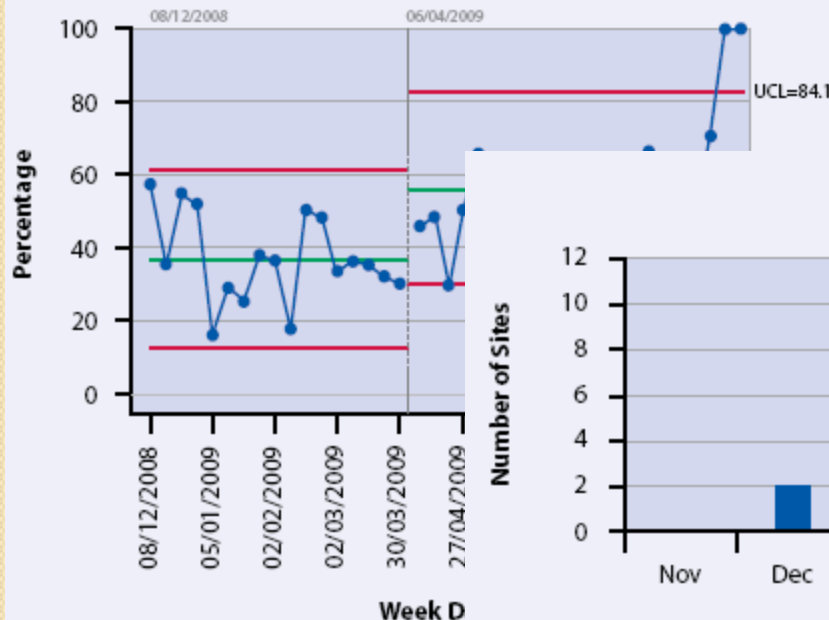
Methods and Tools

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?

% patients who have swallow assessment within 24 hours of admission in Wales from Dec 2008 to Aug 2009

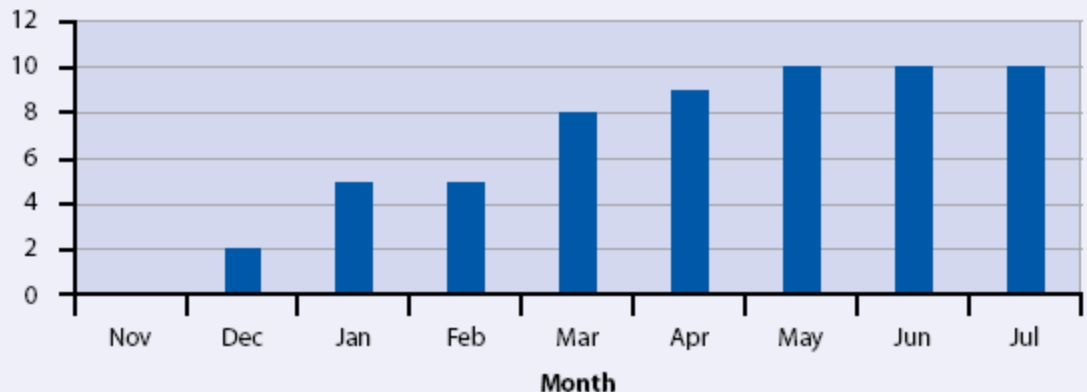
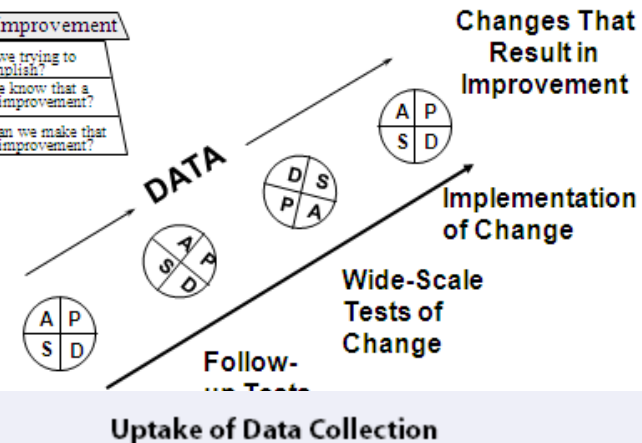


Repeated Use of the PDSA Cycle

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?

can we make that improvement?





QUALITY IMPROVEMENT METHODOLOGY



A Fact....

All improvement will require change,
but not all change will result in
improvement

Therefore we need to 'test' change

Change vs. Improvement



Of all changes I've observed, about **5%** were improvements, the rest, at best, were illusions of progress.



W. Edwards Deming

- We must become masters of improvement
- We must learn how to improve rapidly
- We must learn to discern the difference between improvement and illusions of progress

$S+P=0$

- S=Structure
- The environment in which health care is provided
- P=Process
- The method by which health care is provided
- O=Outcome
- The consequence of the health care provided
- *Avedis Donabedian Physician*

Improvement requires a clear aim



Measurement



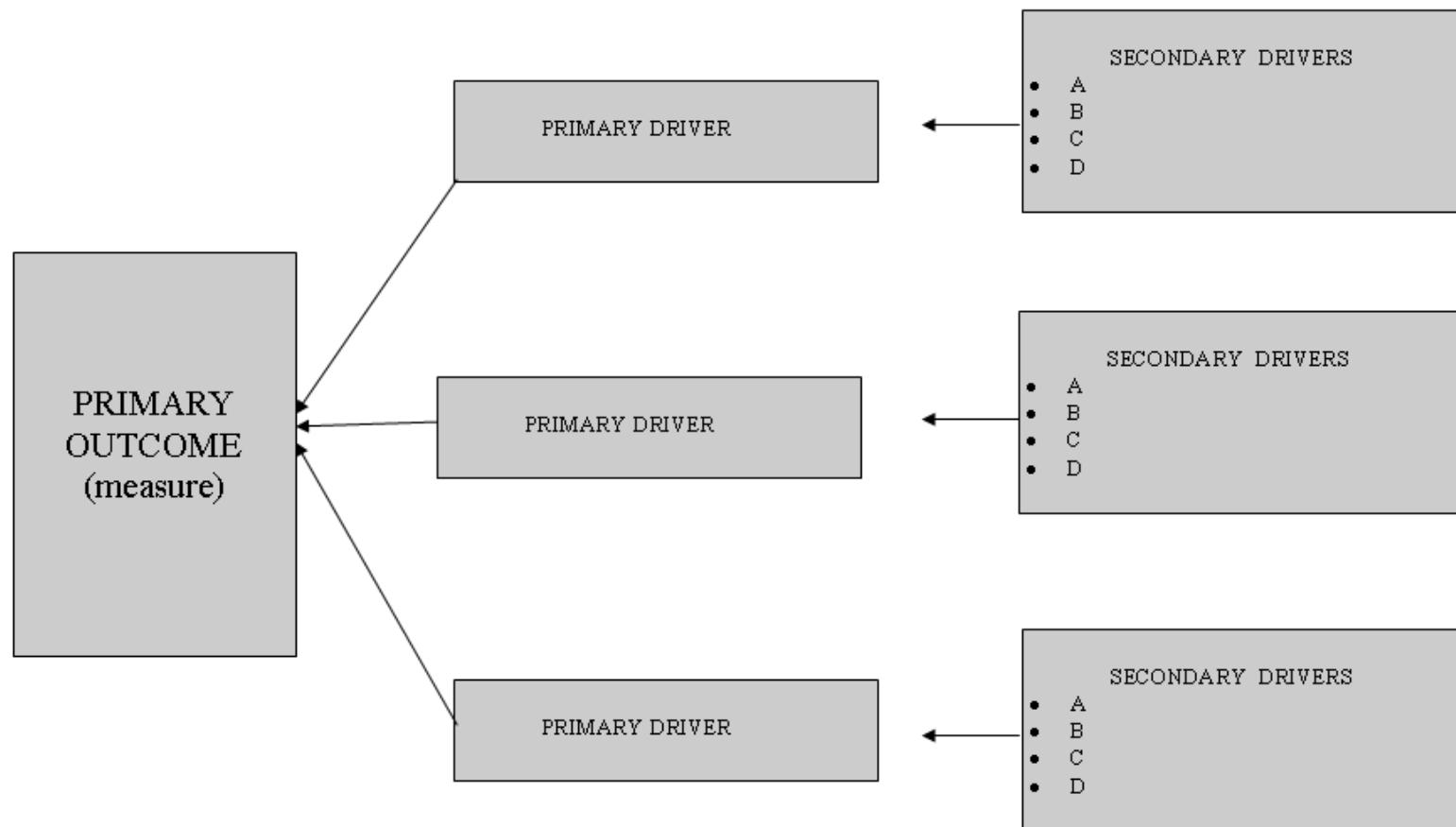
&

Action



Driver diagram template

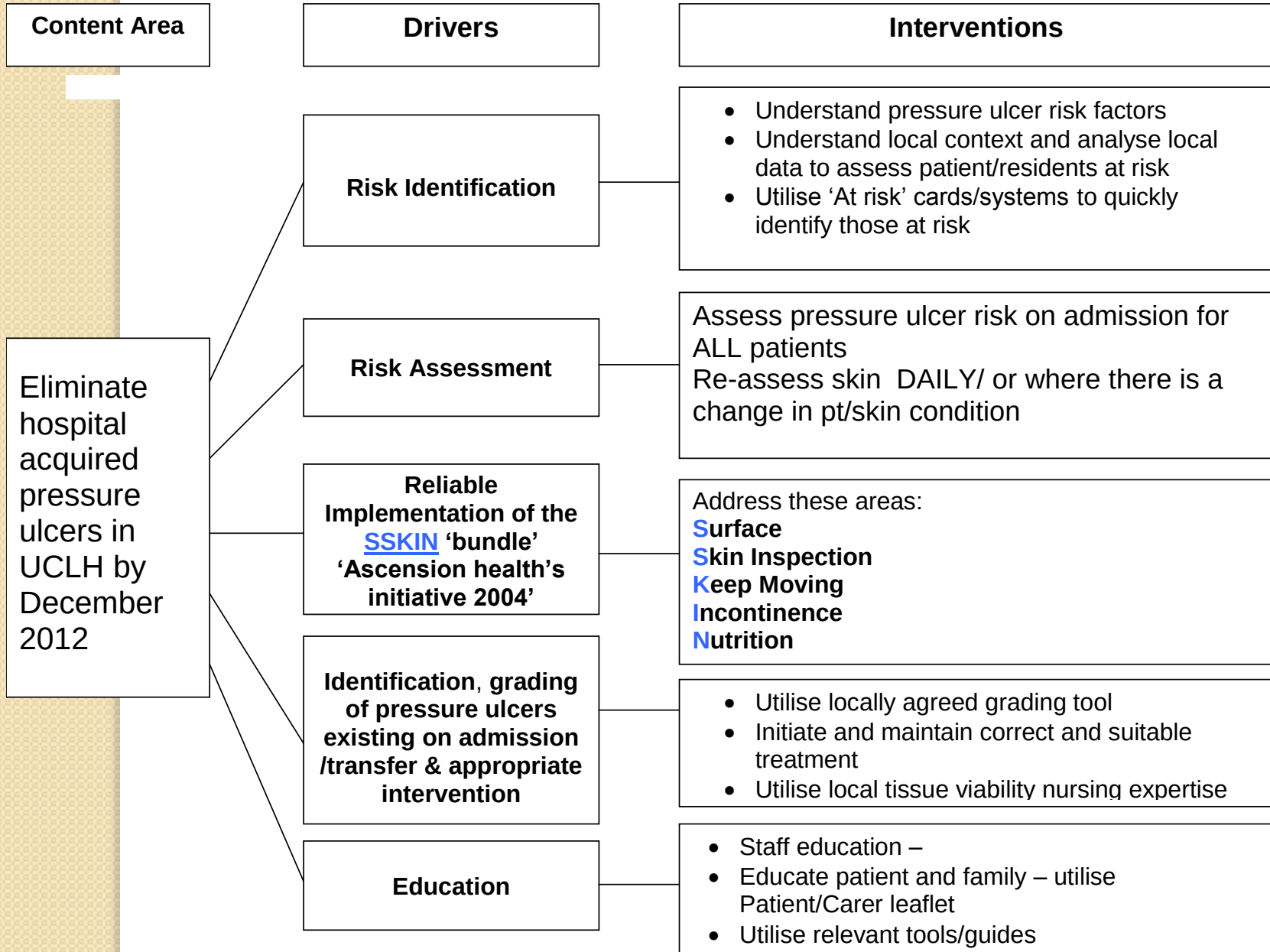
Definition: A driver diagram is used to conceptualize an issue and determine its system components which will then create a pathway to get to the goal



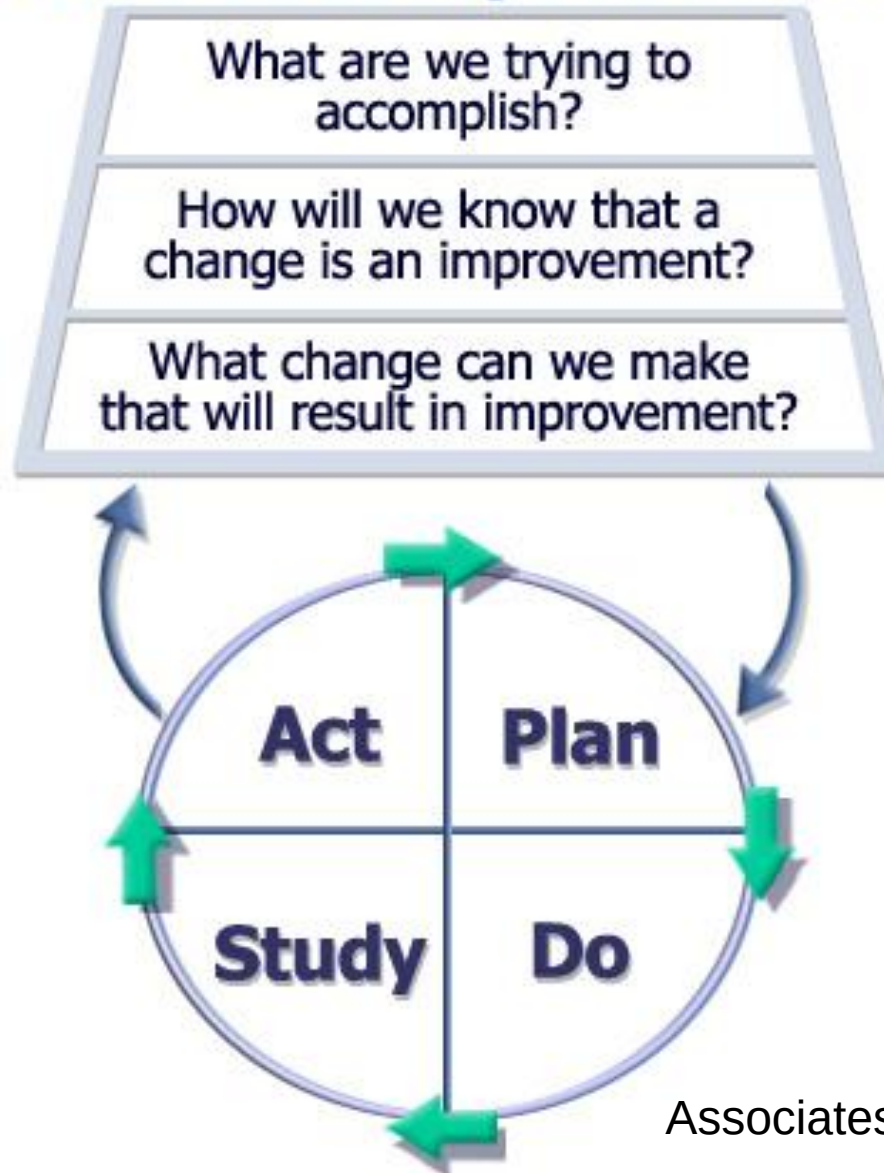
Primary drivers are system components which will contribute to moving the primary outcome

Secondary drivers are elements of the associated primary driver. They can be used to create projects or change packages that will affect the primary driver.





Model for Improvement



Associates in Process Improvement

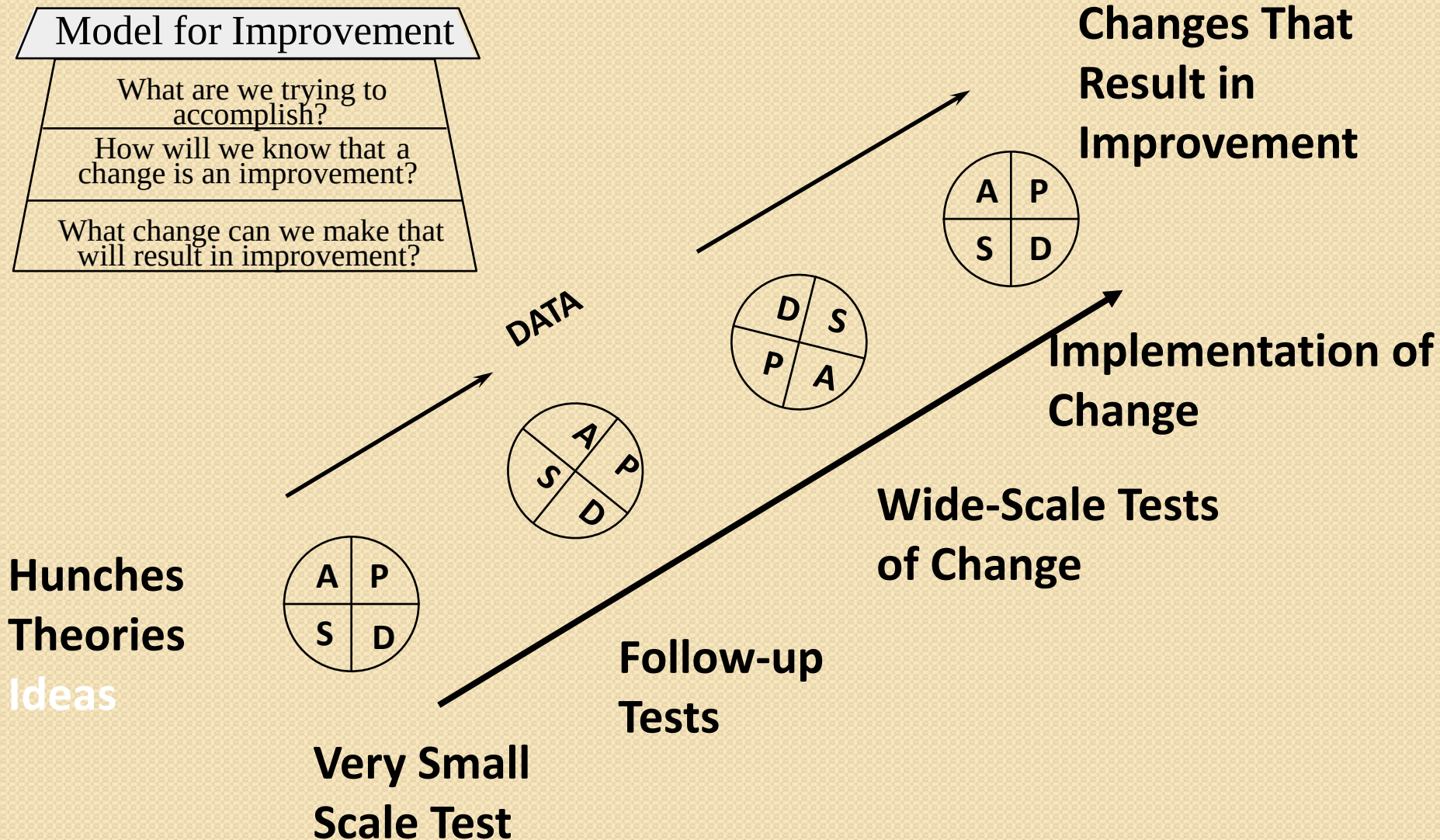
What are you trying to accomplish?

- Reduce Pressure Ulcers by 30%, 50%, or get to zero? How much... ? By when...?
- Increase the number of days between a hospital acquired pressure ulcer?
- Preventing pressure ulcers isn't difficult!
- It just requires attention to the details and re-establishing good habits.
- Our Premise- use bundles/rounding to implement new habits and ways of thinking can and will ultimately impact outcomes.

What are we trying to accomplish?

- Well designed targets help to provide focus
- A clear statement of aim with numerical goals
- How much ...? By when...?
- Unambiguous
- *To reduce Avoidable Pressure Ulcers by ...% by April 2011*
- The difference between data for performance / improvement

Repeated Use of the PDCA Cycle



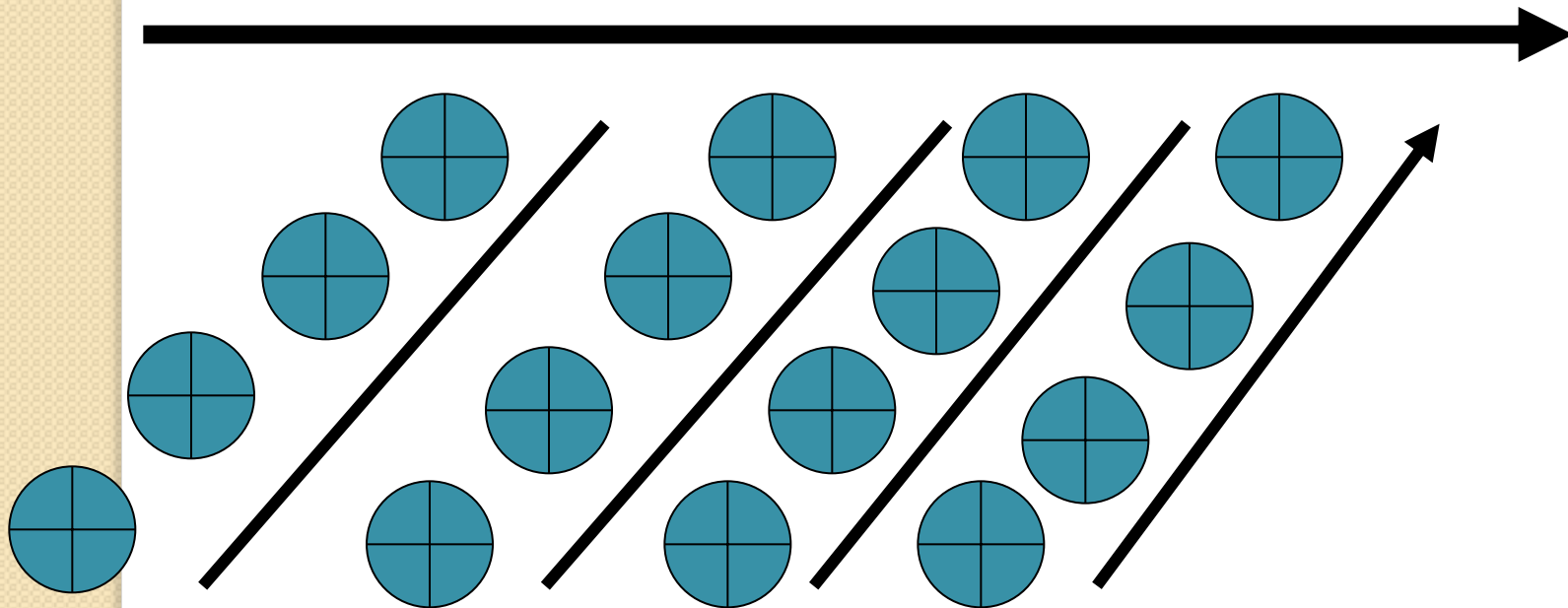


Small Scale Tests of Change on:

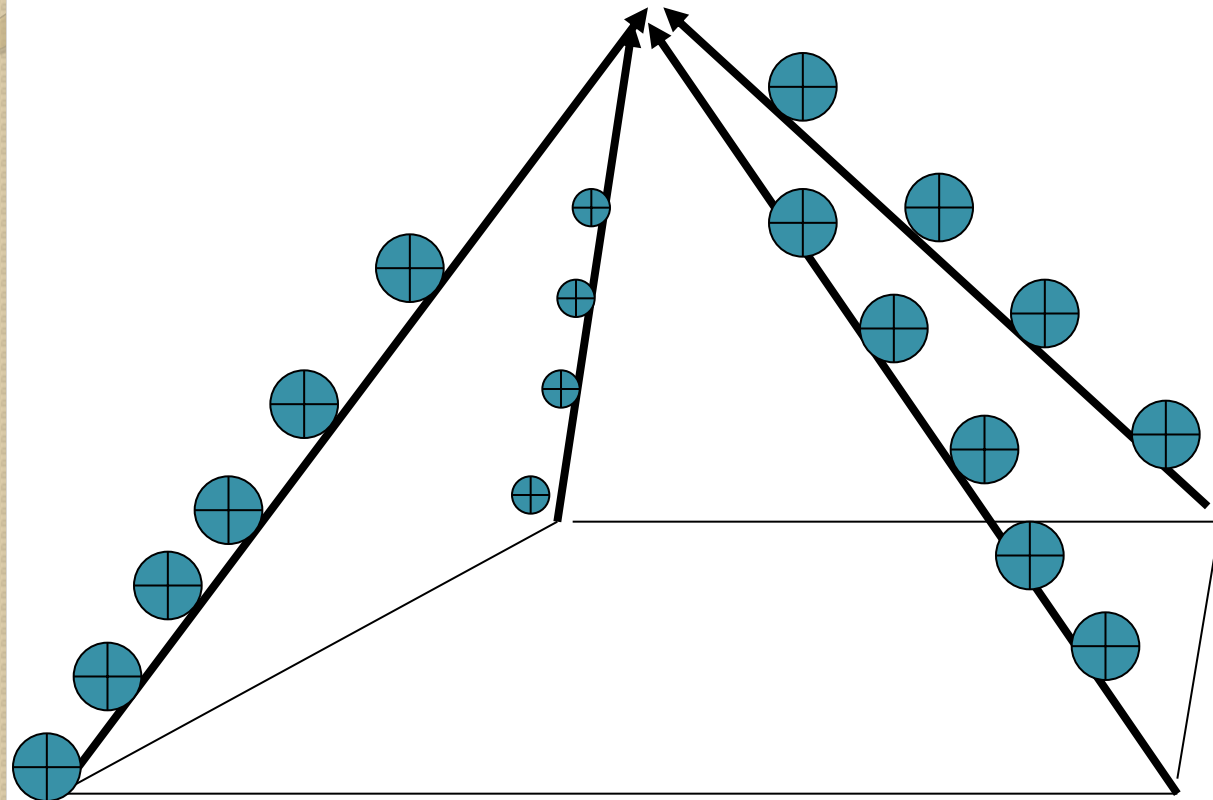
- One nurse
- One patient
- One day / shift

Multiple PDSA Ramps

Overall Aim –To reduce pressure ulcers by 80%



AIM



Change concepts, Theories , Ideas

Whose job is it?

- This is a story about 4 people named everybody, somebody, anybody and nobody. There was an important job to be done and Everybody was asked to do it. Everybody was sure somebody would do it. Anybody could have done it but nobody did it. Somebody got angry about that because it was Everybody's job. Everybody thought anybody could do it, but nobody realized that everybody wouldn't do it. It ends up that everybody blames somebody when nobody did what anybody could have done

**“Reliability is failure free operation
over time.”**

**David Garvin
Harvard Business School**

**Getting it right, for every patient, every
time...!**

Framework for Reliable Design

Reliability occurs by design not by accident



The Truth is we all make mistakes !

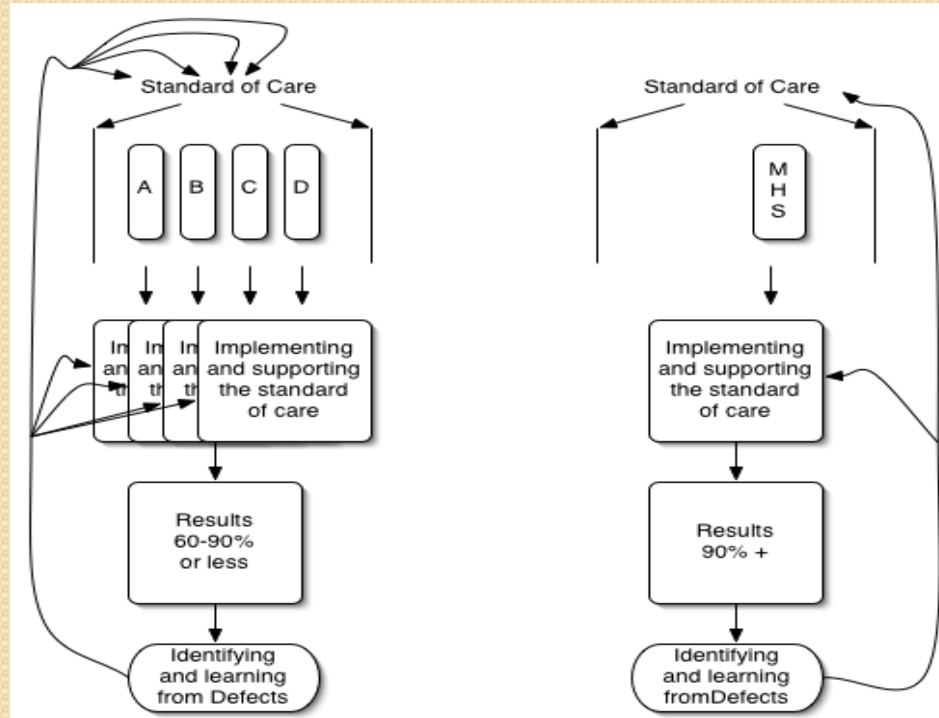


- System design
- System failures
- Communication failures/styles
- Inherent human limitations
 - Limited short term memory
 - Negative effects of stress
 - Fatigue
 - Multitasking, interruptions, distractions

Health Care Processes

Current -

Variable, lots of autonomy not owned, poor if any feedback for improvement, constantly altered by individual changes, performance stable at low levels



Desired - variation based on clinical criteria, no individual autonomy to change the process, process owned from start to finish, can learn from defects before harm occurs, constantly improved by collective wisdom - variation

Variations Occur...

- There is little variation when there is a clear consensus about the best way to prevent, treat or manage a condition.
- Variations occur where there is not a clear consensus about the best way to prevent, treat or manage a disease
 - 17 year lag between the discovery of proven effective treatment and incorporation into routine care

WOULD YOU BE SATISFIED IF:

Your car started
70% of the time?

You received a paycheck
80% of the time?

The light-switch worked
90% of the time?

clean.



Hand Hygiene...

What Are You Satisfied With?

Improvement Concepts Associated with < 95% Performance

(intent, vigilance, and hard work)

- Common equipment, multiple choice protocols, and written policies/procedures
- Personal check lists
- Feedback of information on compliance
- Suggestions of working harder next time
- Awareness and training

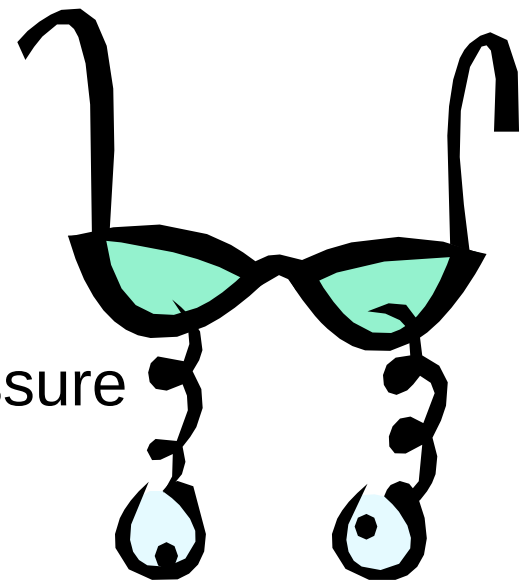
Improvement Concepts Associated with 95% or Better Performance

(Uses human factors and reliability science to design sophisticated failure prevention, failure identification, and mitigation)

- Decision aids and reminders built into the system
- Habits and patterns known and taken advantage of in the design
- **Standardisation** of process

Process Eyes

- Make the process for preventing Pressure Ulcers **visible** to **ALL**
- Measure it -so we can 'see' if it is adhered to and whether it is effective
- Make it easy for others to do the right thing (simple checklists, reminders)
- The right process with high percentage compliance **WILL** influence outcomes



Developing a systems-based approach to the prevention of adverse events

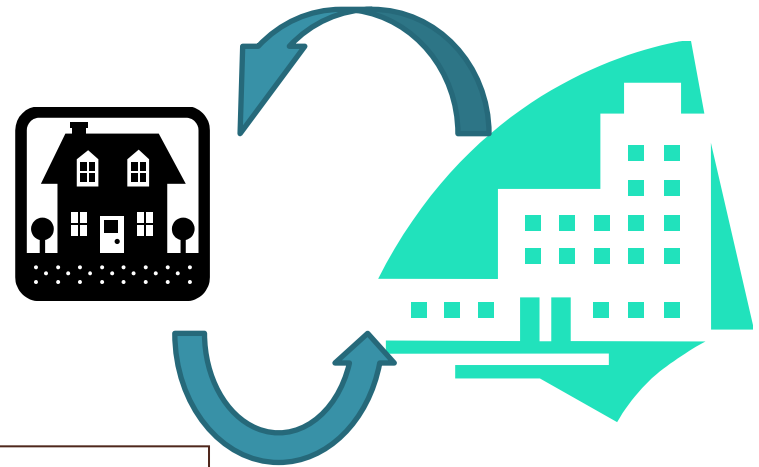
Risk Identification

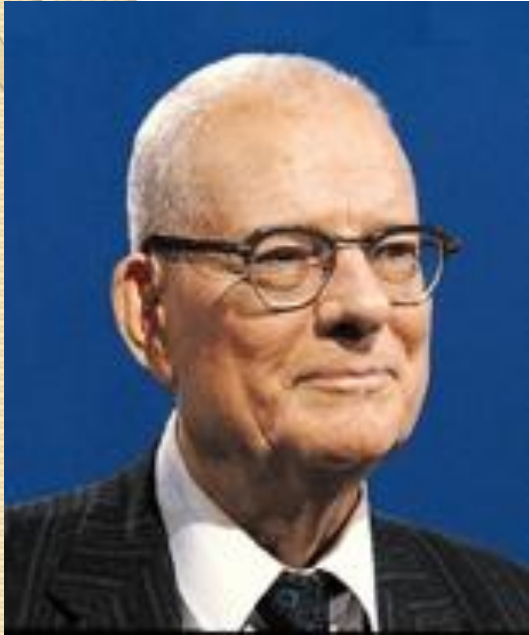
Risk Assessment

**Communication of
Risk status**

**Appropriate preventative
strategy implemented**

Evaluation of outcome

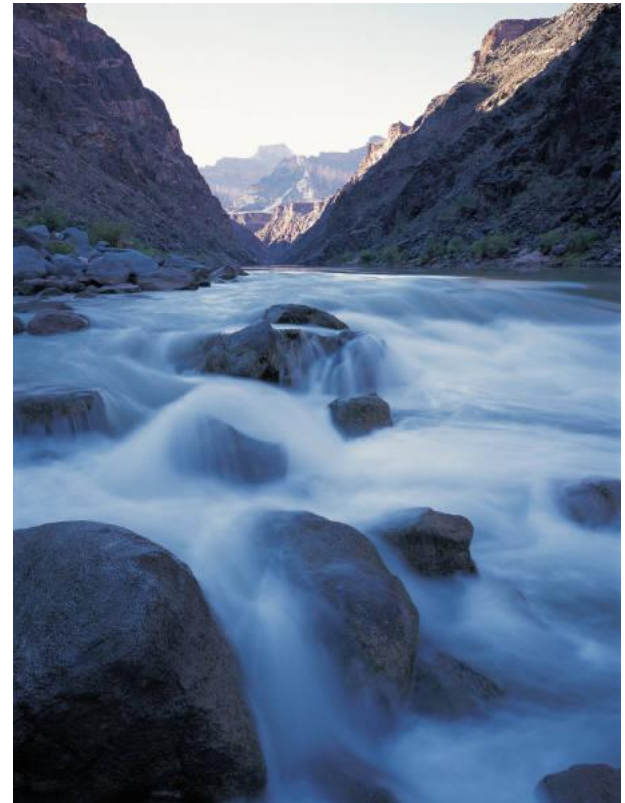




***“In God we trust.
All others bring data.”***

W. E. Deming

Research vs Measurement for Improvement



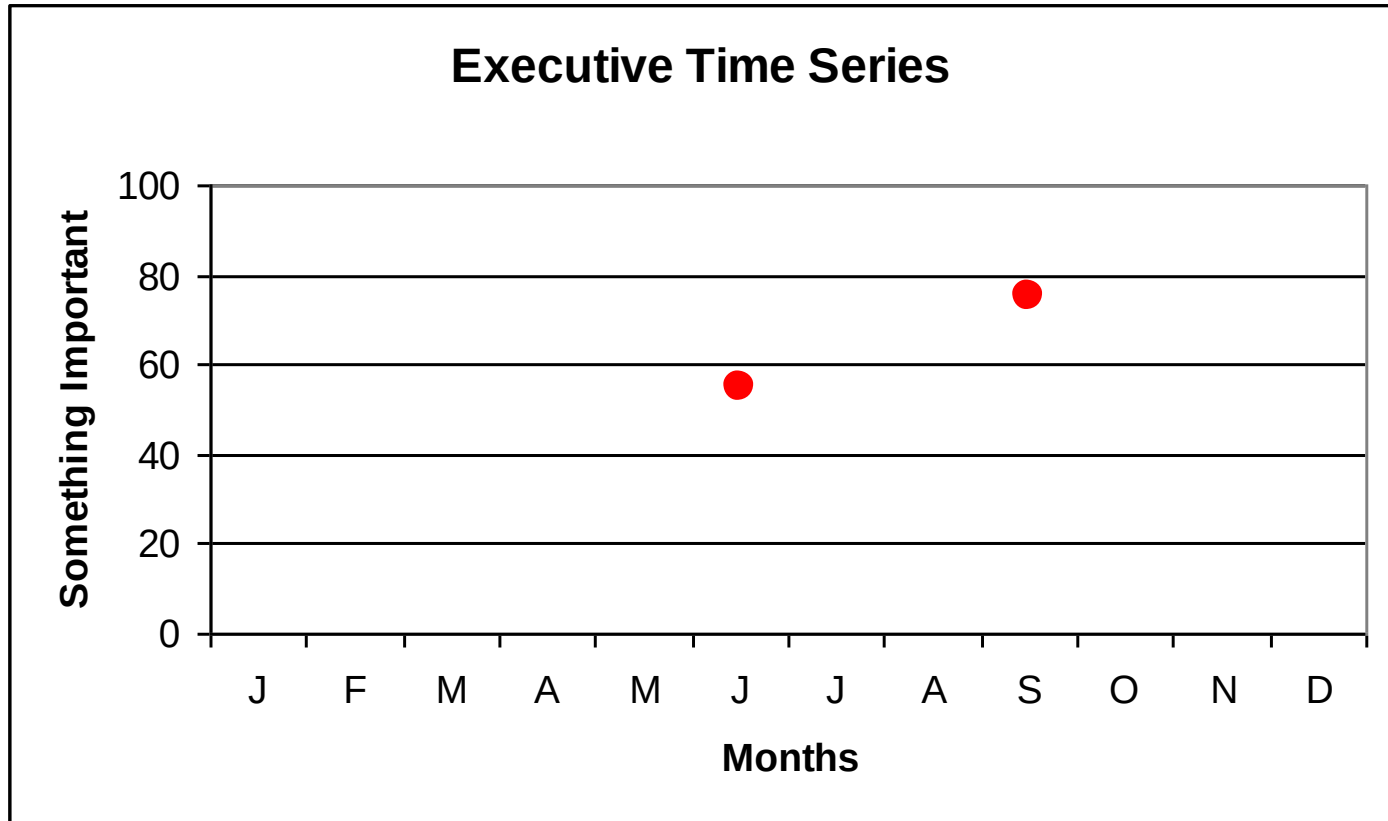
Three Types of Measures

Outcome Measures: Voice of the customer or patient. How is the system performing? What is the result?

Process Measures: Voice of the workings of the system. Are the parts/steps in the system performing as planned?

Balancing Measures: Looking at a system from different directions/dimensions. What happened to the system as we improved the outcome and process measures? (e.g. unanticipated consequences, other factors influencing outcome)

We have 2 quarterly data points - is this an improvement?



Higher is
better

Data over time

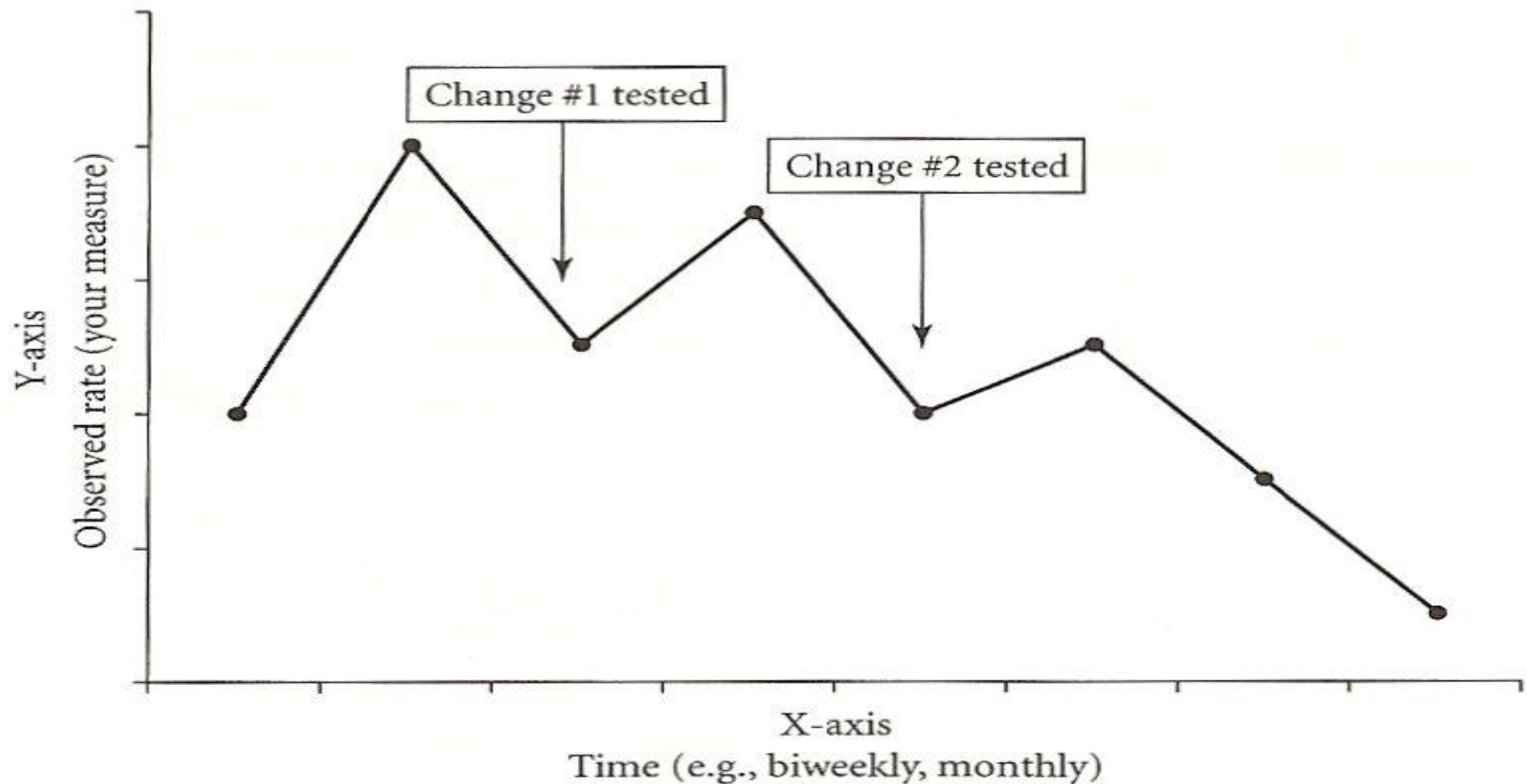


FIGURE 2.1 Annotated time series chart. Note the changes directly on your graph. This will help you identify the changes that made the greatest difference.

Measures

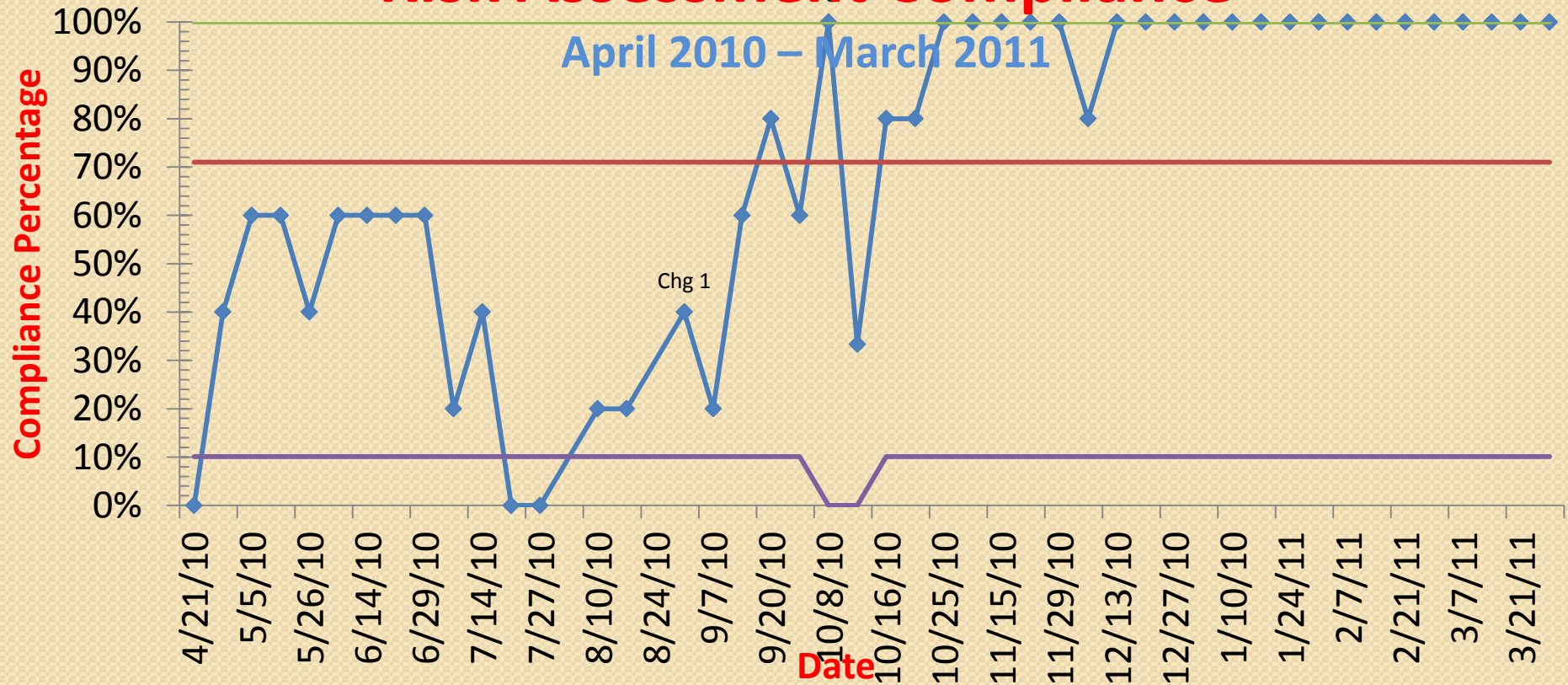
- Safety Cross
 - Raises awareness at the frontline & is easy to use
- Time between events-
 - Time between chart & safety cross
 - Aim to increase the number of days between events
- Outcome measures
 - Pressure Ulcer rate (per 1000 days)
 - Enables comparison between sites
 - Pressure Ulcer count
 - More meaningful as it relates to people!
 - Aim to reduce the incidence by....?

Process Measures

- Percentage compliance with risk assessment (aim>95%)
- Percentage compliance with ALL elements of the Pressure Ulcers bundle components
(ALL or None Composite measure)
- Percentage compliance with 2hourly care rounds

Ward 11

NHS Borders Scotland Risk Assessment Compliance

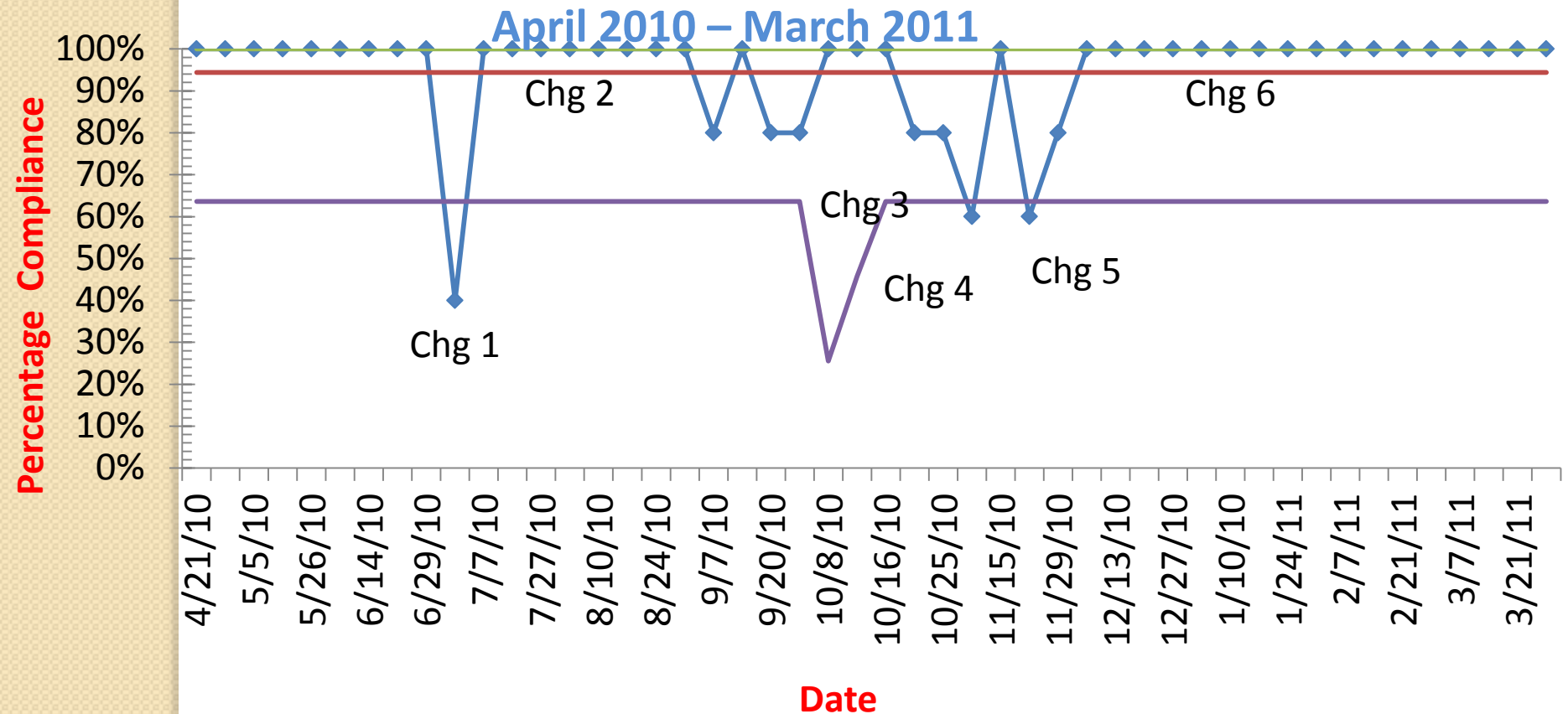


Change 1: Real Time Education

Change 2: PURA & SSKIN in Admission Forms

Spread to SCOTLAND

SSKIN Compliance



Change 1: Real Time Education

Change 2: PURA & SSKIN in Admission Forms

Change 3: Visual Cues

Change 4: Real Time Education (1 element being missed)

Change 5: Real Time Education (1 element being missed)

Change 6: Visual Cues

Real Time Data for improvement – Process

RISK ASSESSMENT AND SKIN CARE BUNDLE COMPLIANCE

Compliance		Non-compliance	
------------	---	----------------	---

WARD:1 DATE: 01.1.11 TIME: 14.00

	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Total %
Risk Assessment	√	√	√	√	X	80%

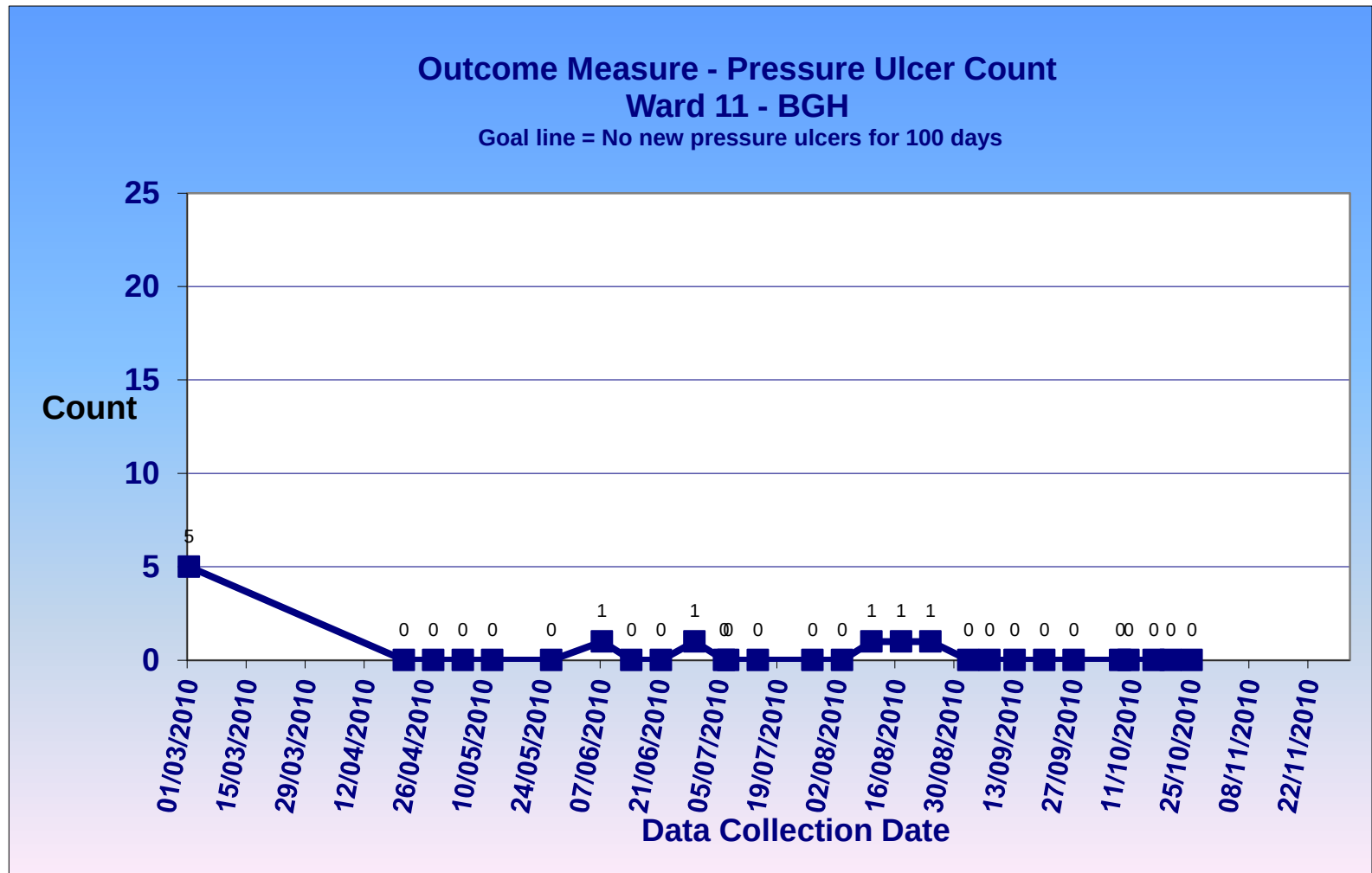
	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Total %
Surface	√	√	√	√	X	80%
Skin Inspection	√	√	√	√	X	80%
Keep Moving	√	√	√	√	X	80%
Incontinence	√	√	√	√	X	80%
Nutrition	√	X	X	√	X	40%
Compliance / Non- Compliance						
Total %	100%	0%	0%	100%	0%	40%

Baseline Assessments

- Hospital: Pressure ulcer Incidence- 13%
- Anglesey Ward: spot audit March '08
Incidence rate - 4.5%
- Anglesey Ward: spot audit March '08
Nutritional assessment – 50%
Pressure risk assessment - 80%

Outcome data

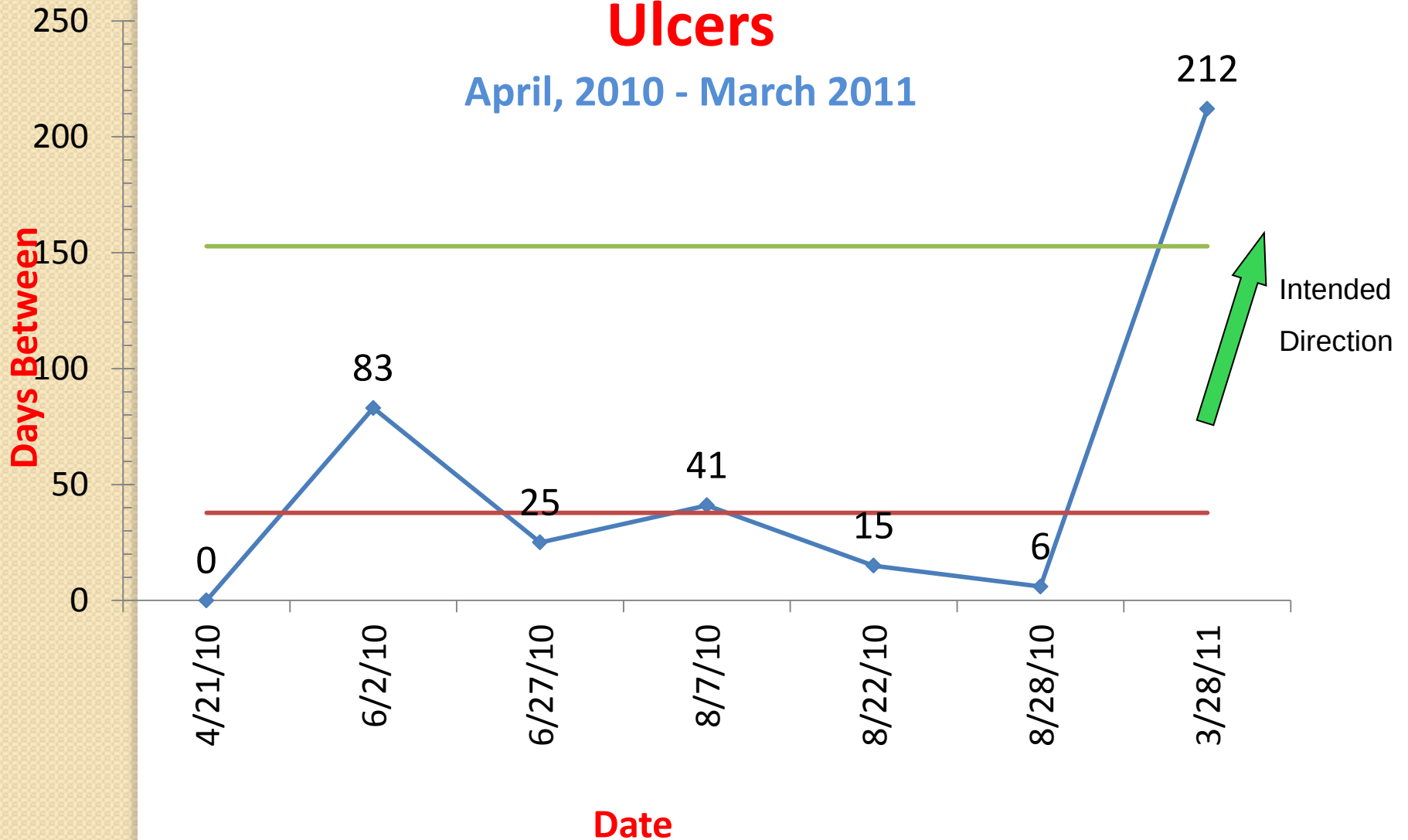
380 days
without a
pressure
ulcer



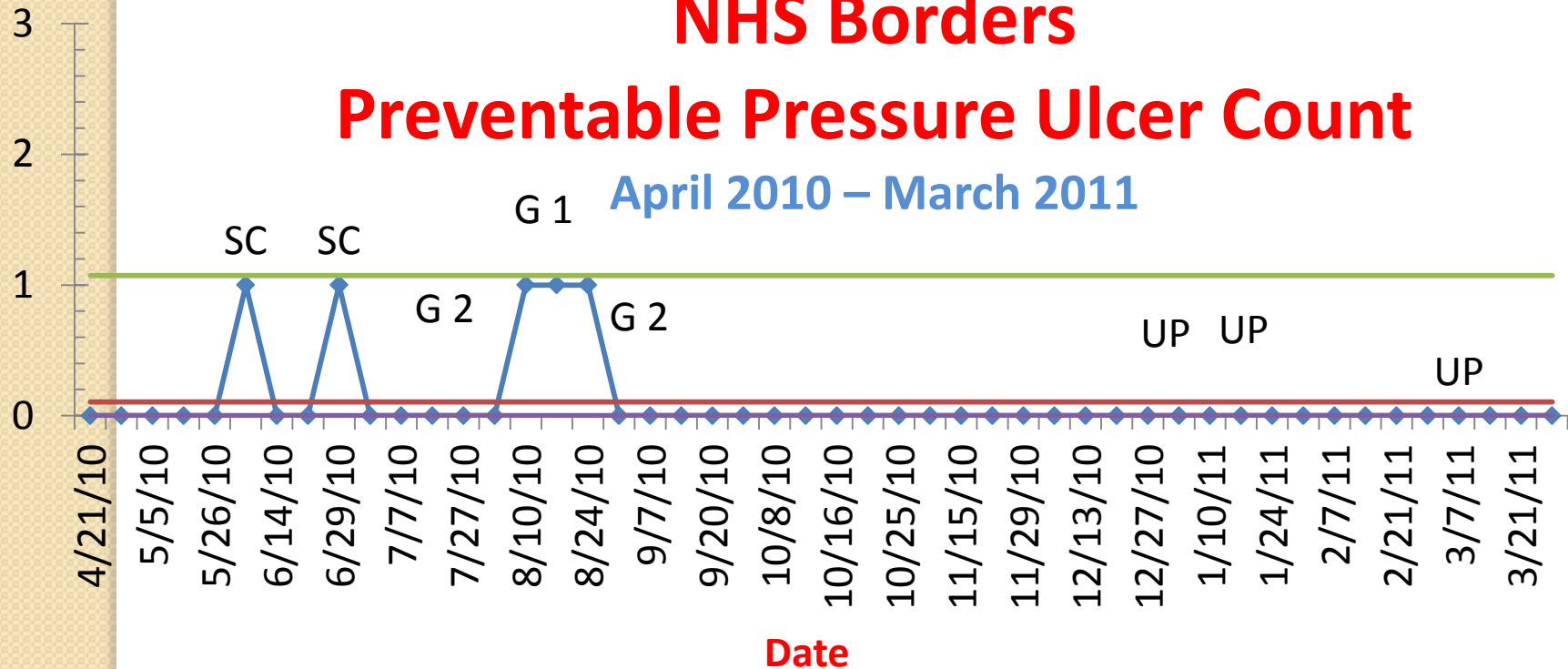
NHS Borders

Days Between Preventable Pressure Ulcers

April, 2010 - March 2011



Quality Improvement Scotland NHS Borders Preventable Pressure Ulcer Count



Date

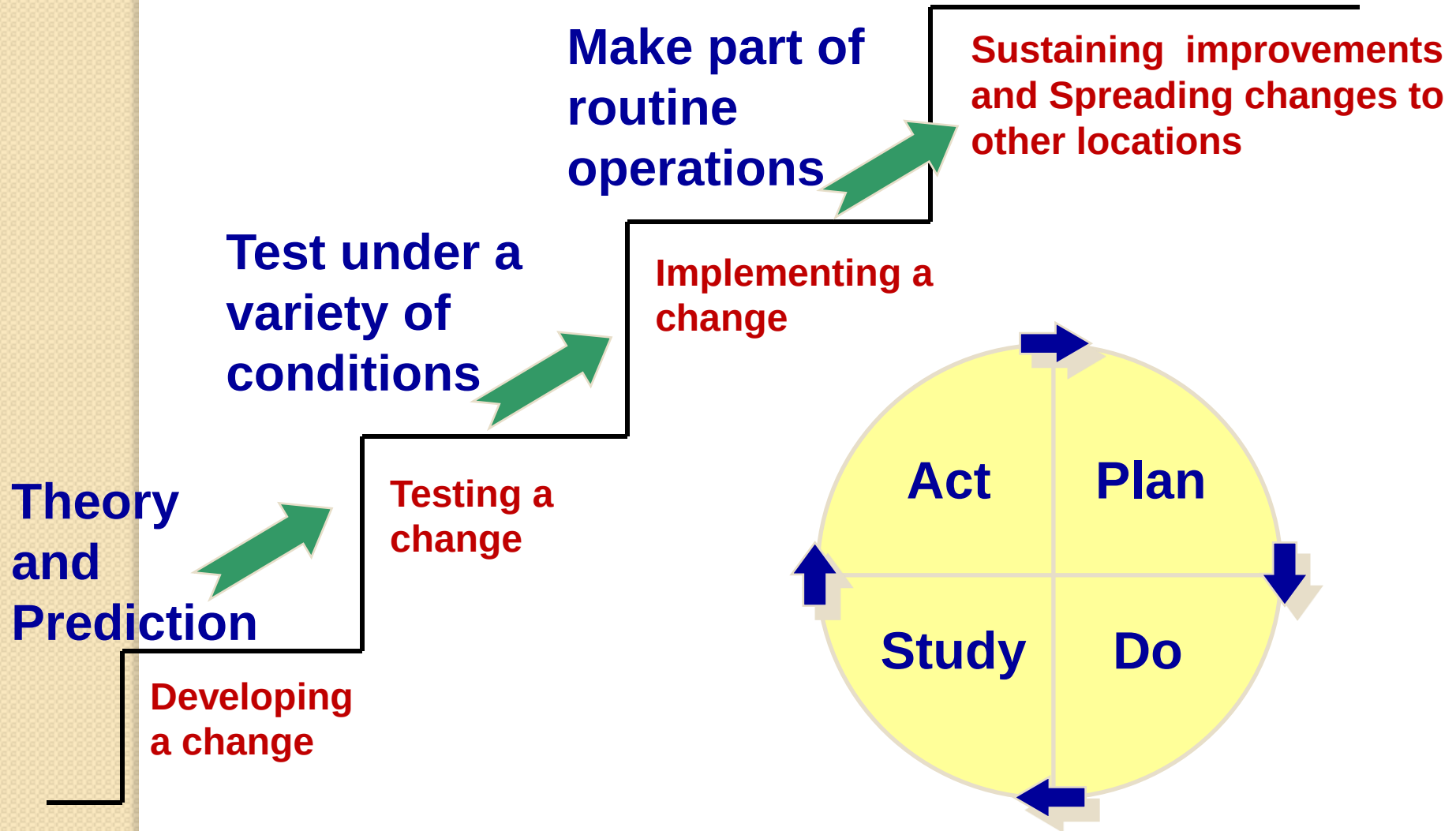
- Recorded on Safety Cross – no evidence in notes
- Recorded on safety Cross – no evidence in notes
- Patient on Care Pathway for the Dying (PC) G2
- Patient refusing to turn – (PC) G1
- Patient not receiving optimal nutritional support (S) G2
 - Reviewed Operational Definition**

The PDSA Model

Components

- **Plan** an activity or improvement test
- **Do** the activity (implement the improvement plan)
- **Study** the Impact of the improvement plan (what was learned)
- **Act** determine what changes are to be made in light of what you have learned.

The Sequence for Improvement



The approach

- Apply all core themes
- Sole focus on prevention
- Frontline engagement
- Quality Improvement methodology
- Testing of interventions used elsewhere
- Understanding the science of reliability

Key Take Homes

- We need to think more broadly than the parameters of tissue viability-remove silo mentality
- Quality Improvement skills are skills for life not just for pressure ulcer prevention
- Never “assume” safe care “assure” it!
- See the person in the patient
- SKIN Bundles and intentional rounding will get results ...but don't let fundamental care delivery be about ticking a box...!

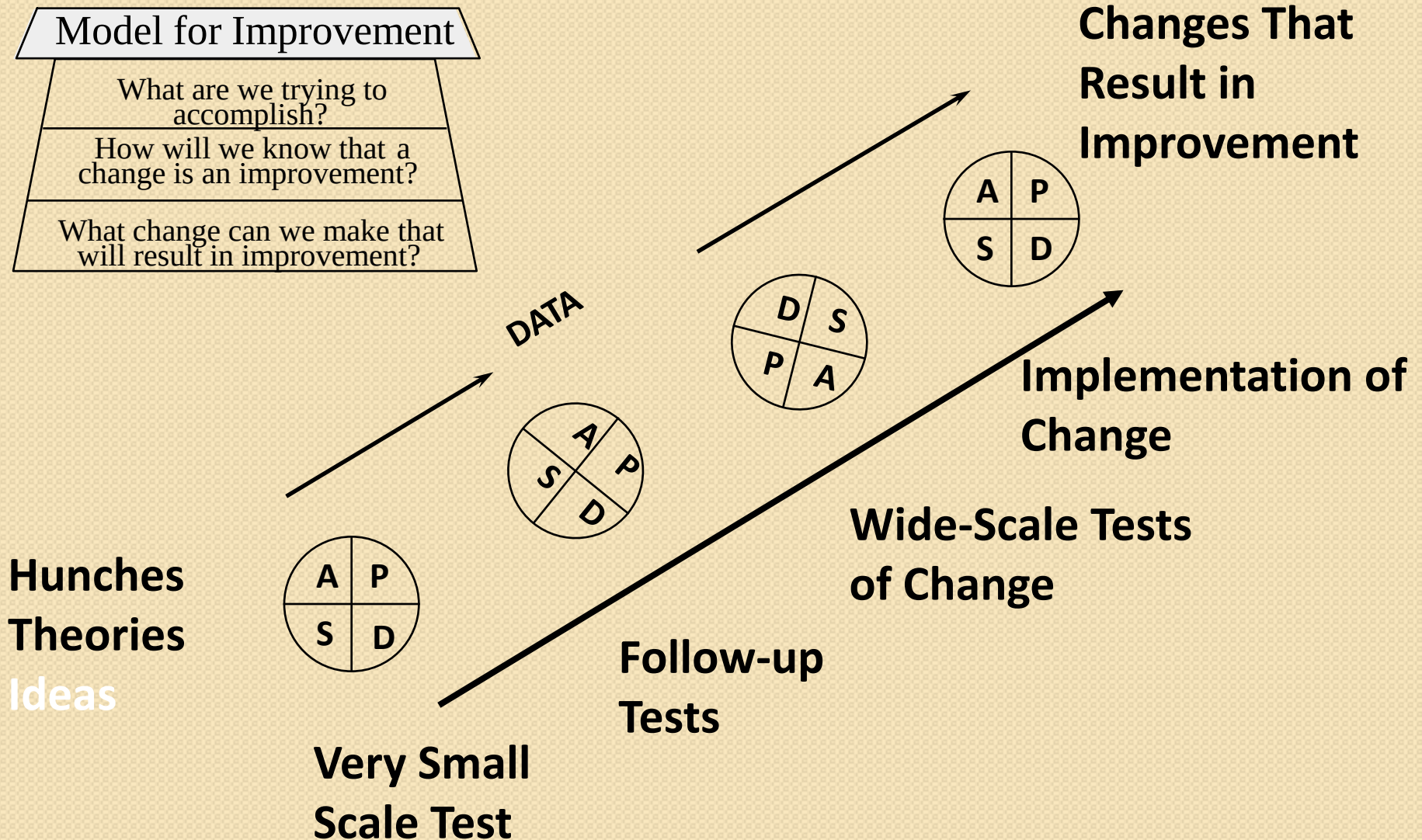


Team Action Planning

What could you do by next Tuesday?

- Think of some changes you believe might enable you to get the results
- Think of 1 change
- Plan your first PDSA

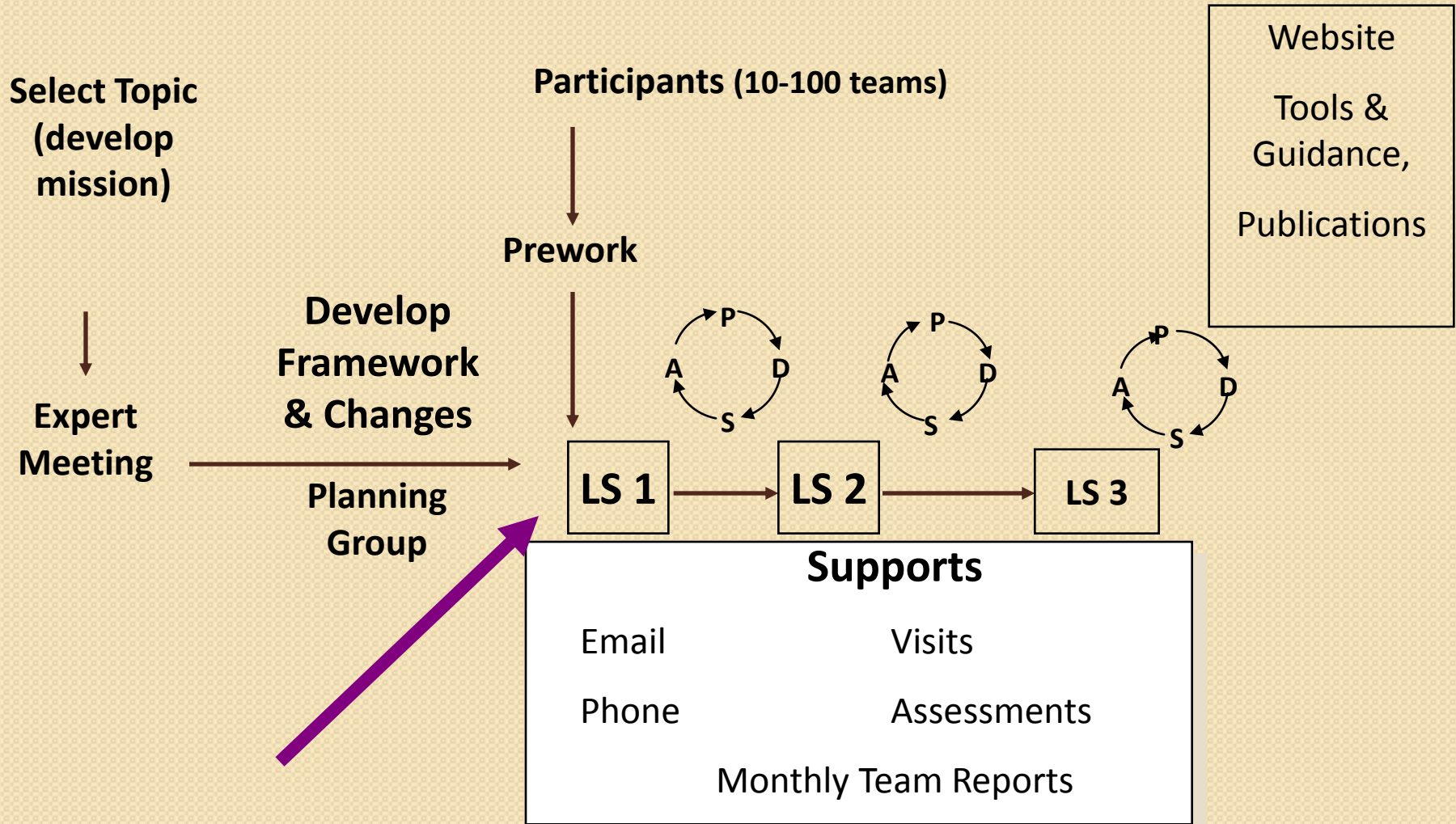
The PDSA Cycle





Report Out

The IHI Collaborative Model



Patients as partners

- “ If quality is to be at the heart of everything we do, it must be understood from the perspective of



It is the nature of systems that smaller systems are embedded in bigger systems



You are this Hospital

You are what people see when they arrive here.

Yours are the eyes they look into when they're frightened and lonely.

Yours are the voices people hear when they are in the lifts and when they try to sleep and when they try to forget their problems. You are what they hear on their way to appointments that could affect their destinies and what they hear after they leave those appointments.

Yours are the comments people hear when you think they can't.

Yours is the intelligence and caring that people hope they'll find here. If you're noisy, so is the hospital. If you're rude, so is the hospital. And if you're wonderful – so is the hospital.

No visitors, no patients can ever know the real you, the you that you know is there — unless you let them see it. All they can know is what they see and hear and experience.

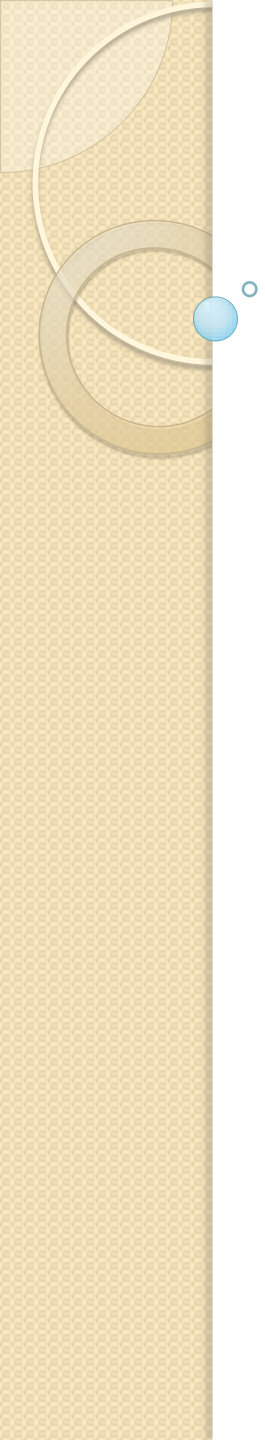
And so I have a stake in your attitude and in the collective attitudes of everyone who works at Cooley Dickinson Hospital. We are judged by your performance. It is judged by the care you give, the attention you pay and the courtesies you extend.



To conclude

- *“Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around”*
- Leo Buscaglia





Thank You!

Questions?

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