

Facilitating Quality Improvement Projects

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- **What is Quality in Health?**
- **What is Quality Improvement?**
- **How can we support Trainees to undertake Quality Improvement Projects?**
- **What Quality Improvement methods can trainees use to undertake a Quality improvement projects?**

What is Quality In Health Care?

Quality is a complex notion and means different things to different people.

Our definition of quality is essentially very simple; we see it as “the degree of excellence’ in healthcare”.

Quality is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

The Dimensions of Quality in Health Care

- **Safe**
- **Effective**
- **Person-centred**
- **Timely**
- **Efficient**
- **Equitable**

What is Quality Improvement?

Quality Improvement (QI) is a commitment to continuously improving the quality of healthcare by focusing on the preferences and needs of the people who use the services.

It is an evidence-based approach that helps primary care free up time to deliver initiatives and embed new approaches more effectively and efficiently into practice. QI helps GPs to make the most of their systems, organisations, talents and expertise to deliver better outcomes for patients.

Choice of project

Identify a specific aspect of practice that bothers the trainee or Practice, where improvement would benefit patient care. This could be a clinical or a non-clinical area, within the practice, or between the practice and the community, the hospital, a particular patient group etc.

Choice of Project

should be relevant to primary care, aligned to local priorities.

❑ _should have the potential to make a difference to patient care

❑ _should involve the multi-disciplinary practice team

❑ _should be straightforward enough to be completed within the time period given

❑ _may be done on your own, or with other trainees, so long as your own contribution can be clearly identified and that you write this up individually, highlighting your own learning

Getting ideas

Encouraged the trainee to come up with your own idea but you could also work on an idea identified by a member of the practice team. The idea could also be aligned to the local NHS quality and safety agenda, be identified as a problem area in out-of-hours, be part of a collaborative project working with allied health professionals, or be linked to an area of academic general practice in a university.

Look around the practice-it shouldn't be too difficult to find areas where things could be done better!

Getting ideas

☐ Examples

- _ Could there be more efficient use of the appointments system?
- ☐ _ Are patients' results dealt with in the most efficient way?
- ☐ _ Are monitoring tests missed so the patient has to be re-called, or patient safety is compromised?
- ☐ _ Are patient's repeat prescriptions reviewed at the right frequency?
- ☐ _ How are recommendations such as a medication change actioned from a hospital letter?
- ☐ _ Are referrals dealt with in a timely way?
- ☐ _ Is the way that the practice works clearly signposted to all patient groups?
- ☐ _ Could IT be put to better use in the surgery?
- ☐ _ Are there areas of waste in the system that could be rectified?
- ☐ _ Could communication be improved between different members of the team?

Think SMART! Define clear and focused objectives

It is important to set clear aims and objectives for the QIP before embarking on the project and trying to collect data. Just as in qualitative research, a poorly defined research question can lead to inappropriate lines of enquiry and time-wasting collection of large quantities of irrelevant data. There needs to be a clear rationale for your QIP, based on evidence and aligned to local needs, so research your proposed topic carefully. You may wish to undertake a brief literature search, look at local activity data, or talk to “experts” in the field.

Make a plan

Decide on Methodology

Decide on How to measure Impact

Ask yourself:

- ❑ ?What does "better" look like?
- ❑ ?How will we recognise better when we see it?
- ❑ ?How do we know if a change is an improvement?

- Outcome measures
- Process Measures
- Balancing measures

Write up

- Introduction. The issues, the practice, and the wider context
- 2. Evidence-based approach. Literature search and critical appraisal of local evidence
- 3. Reason for choice of quality improvement project – what problem or improvement does the QIP attempt to address?
- 4. Methodology – a SMART strategic action plan, and a clear and concise description of the quality improvement carried out and how the work was done.
- 5. Results – an understandable presentation of the results and methods used.
- 6. Evaluation of the impact of the change/quality improvement.
Discussion of the outcome.

Write up

6. Evaluation of the impact of the change/quality improvement.
Discussion of the outcome.
7. Conclusions, and suggestions for further development.
8. Critical reflection; your personal learning.
9. Appendices – supply raw data, examples of protocols as appropriate.
10. References

In the report, summarise the developments and reflect both on the personal learning points from undertaking the QIP, and the learning for the organisation. The presentation should include reflection on the change management process, difficulties encountered, the impact of the quality and suggestions for further work. If there are documents and examples of best practice e.g. referral frameworks or clinical protocols, include these as appendices to the reports.

A template can be used when writing up the final project report .

How can we improve Quality?

EXTERNAL DRIVERS

**Professional requirements (GMC/ Appraisals), QOF, CQC
LES/ DES, CQUINS**

INTERNAL

**Organisations using various proven Models and
Methods such as:**

**Model for Improvement(PDSA), Experience-
based co-design, Statistical process control,
BPR, Lean, Six Sigma,**

Change Model framework



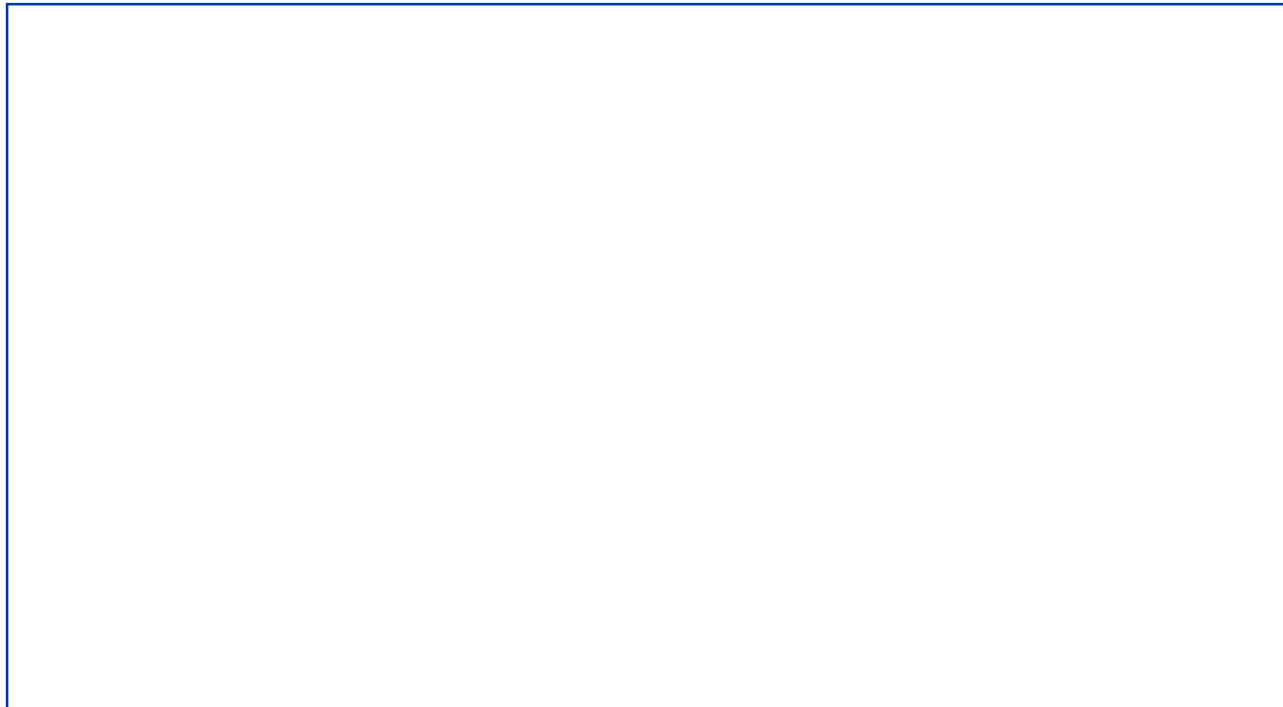
- An evidence-based improvement methodology ensures that our change will be delivered in a planned way that follows tried-and-tested methods for assuring success.

The Model for Improvement

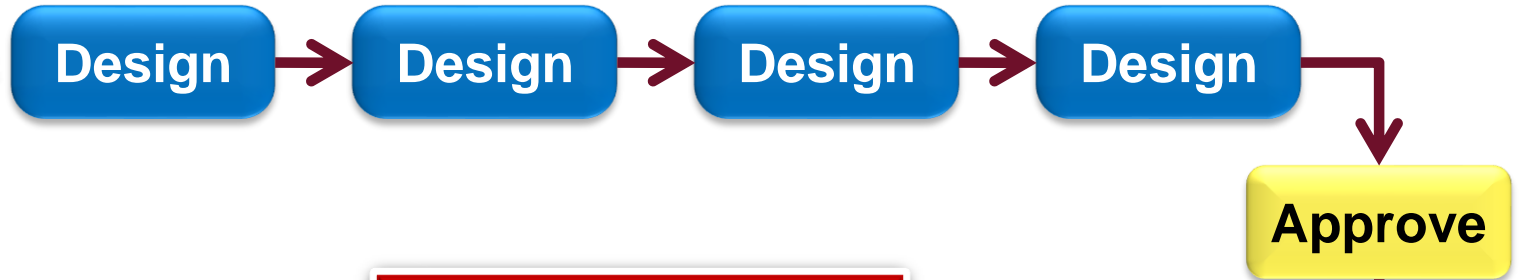
What are we trying to accomplish?

How will we know that change is an improvement?

What change can we make that will result in improvement?



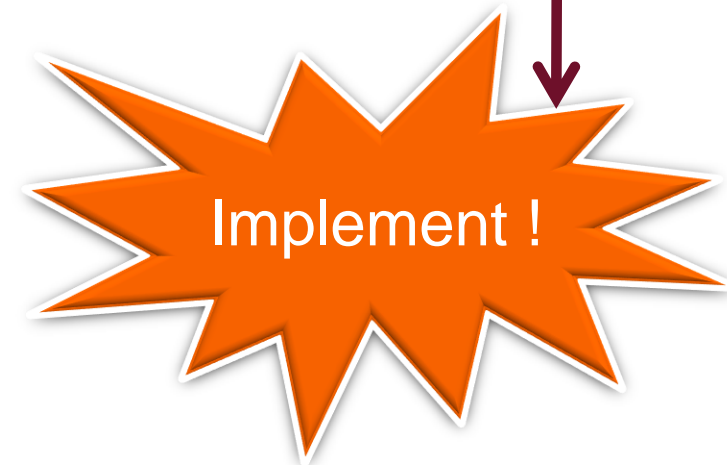
Meeting rooms



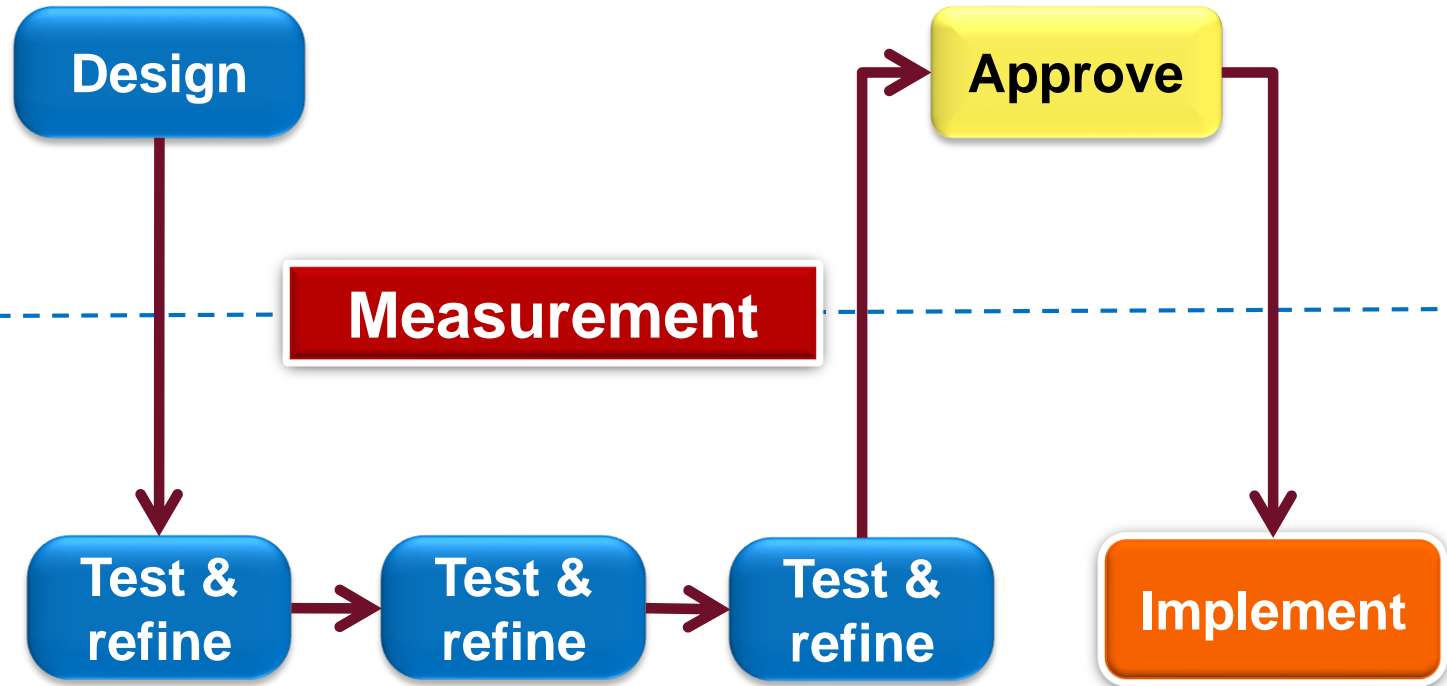
Opinion



Real world



Meeting rooms



Real world

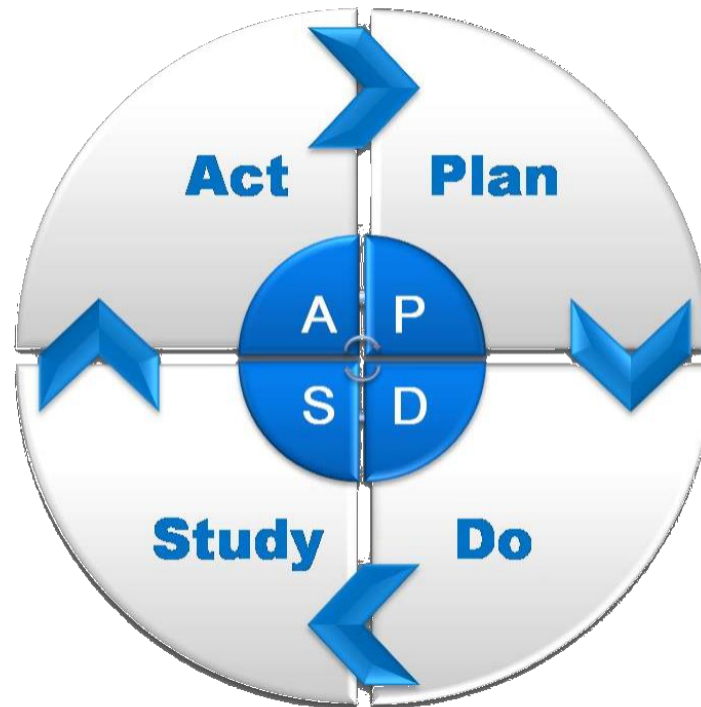
Change through small steps

Change ...
with a clear purpose
you can learn from (without fear of failure)
which is less exhausting
with fewer unintended consequences
which builds engagement and optimism

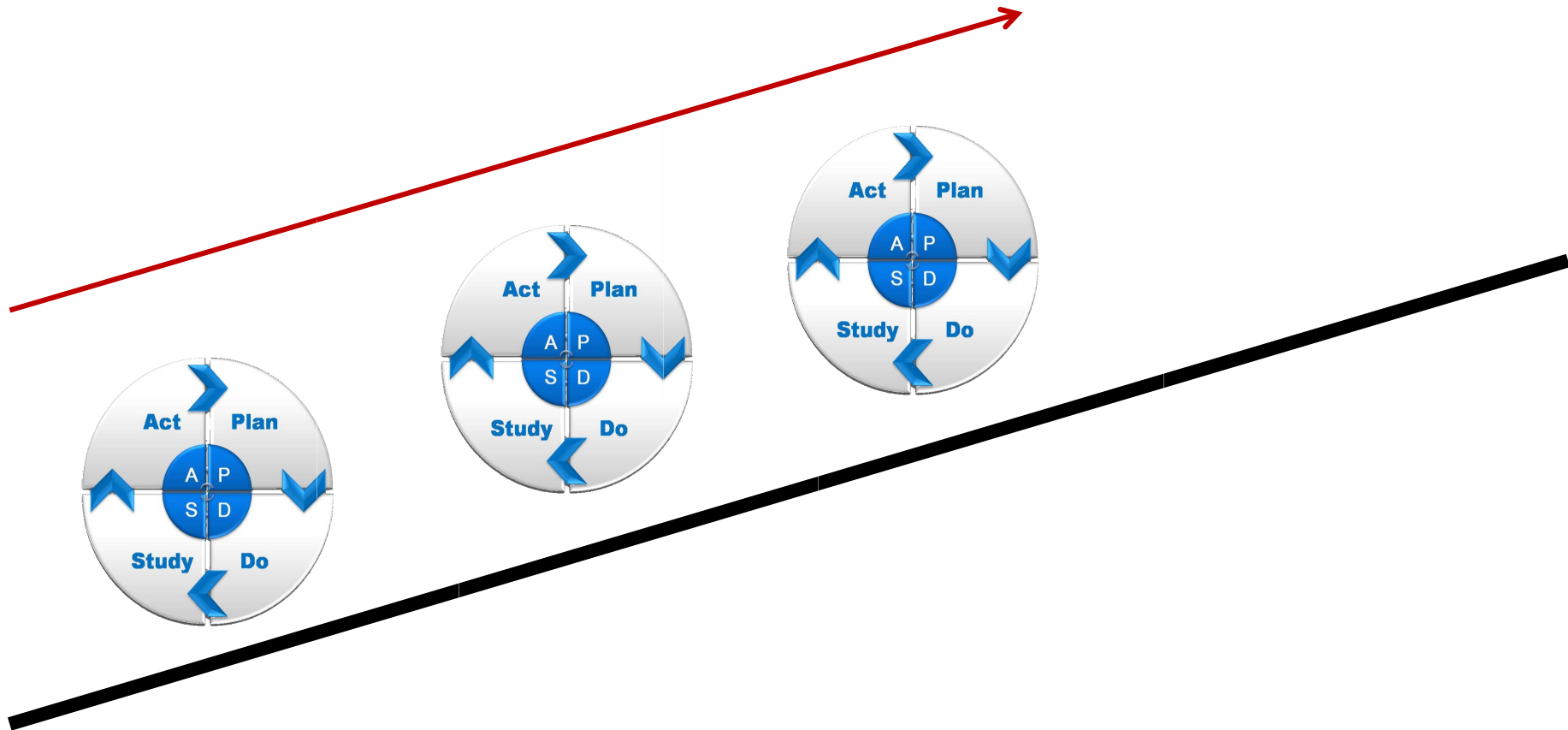


Plan-Do-Study-Act

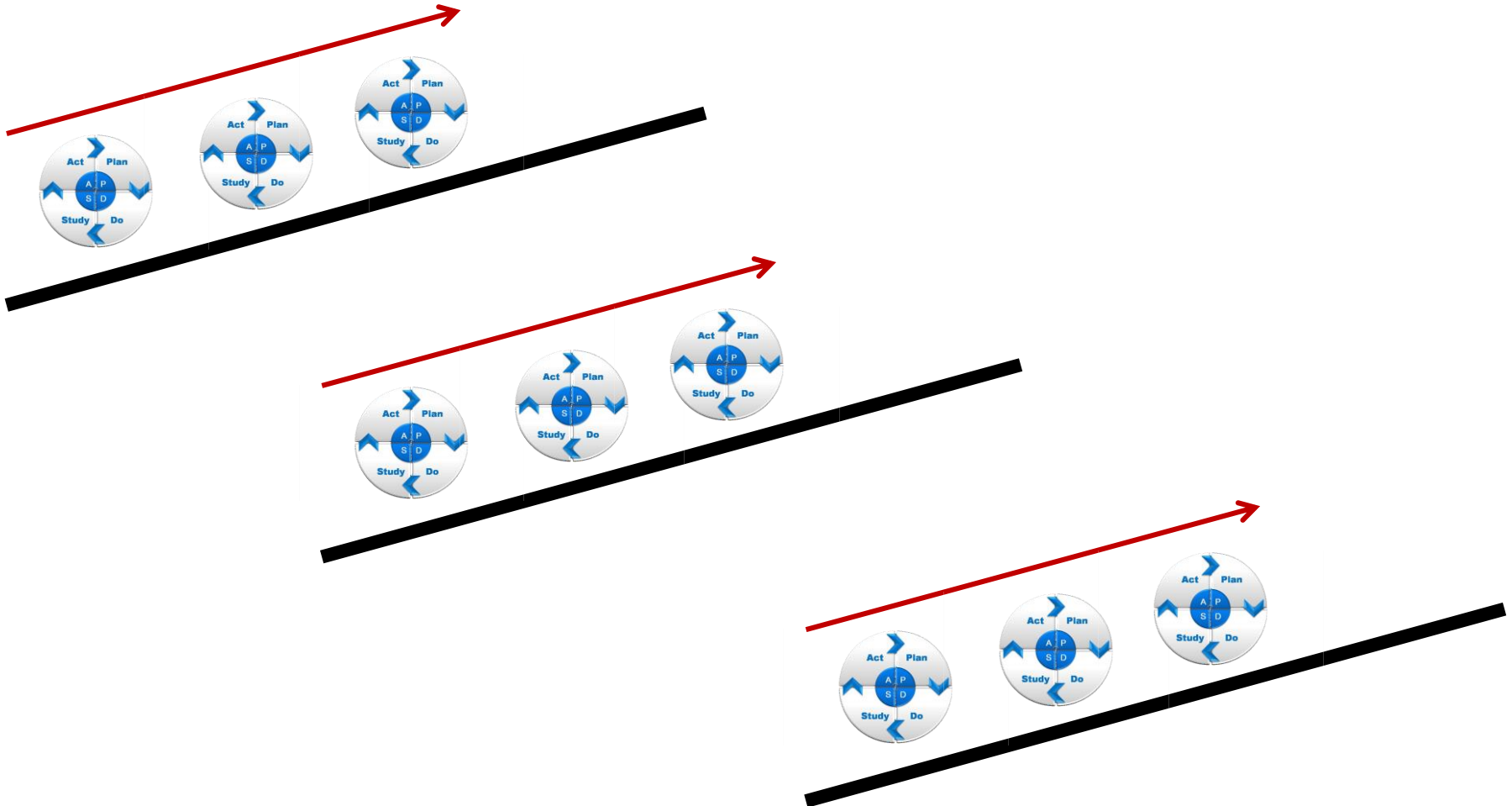
disciplined framework ensures every part is done every time
facilitates rapid prototyping and rolling out of new ideas



Plan-Do-Study-Act



Plan-Do-Study-Act



Why Test?

Increase belief that the change will result in improvement in your environment

Predict how much improvement can be expected from the change

Learn how to adapt the change to conditions in the local environment

Minimise resistance upon implementation

Benefits of this approach

easier to start

produces better solutions more quickly

engages people better

reduces waste

easier to continue

5127





Tips on Planning the Test

Scale down size of the test (# of patients, location)

Try segmentation

Don't try to get complete buy-in, consensus, etc.

Be innovative to make test feasible (e.g. simulate if necessary)

Collect useful data during each test

Making a Prediction

What is your hypothesis?

What do you think will happen?

Think ahead to future tests depending on the results you expect to get

What do people say?

It sounds like management jargon

It's too slow

Too rigid / disciplined

Small samples aren't representative

Empowering junior staff isn't safe

Big problems can't be improved by small scale change

We just need a complete re-design

What's the evidence it works?

It's just a fashion

Using a driver diagram

A method or tool or process for use by individuals or teams to generate and organise strategy

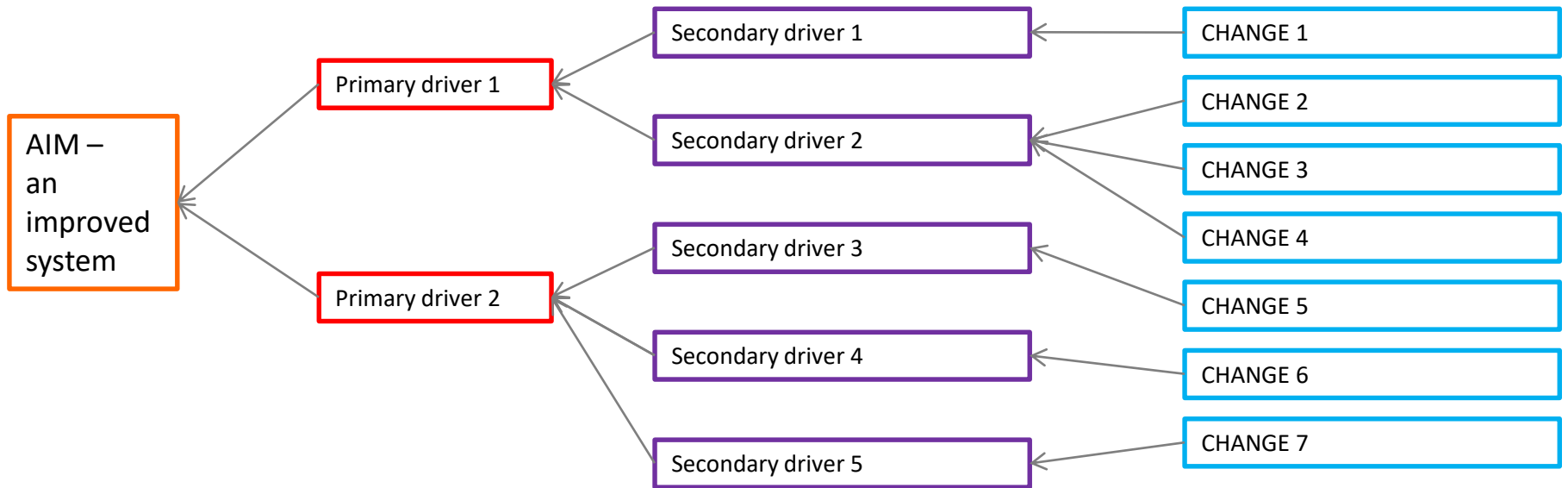
Driver Diagrams

AIM

PRIMARY
DRIVERS

SECONDARY
DRIVERS

CHANGES TO TEST



Drives

Effect

Cause

A simple tool



...but multifunctional



Photo: Jim Pennucci



Overwhelming?





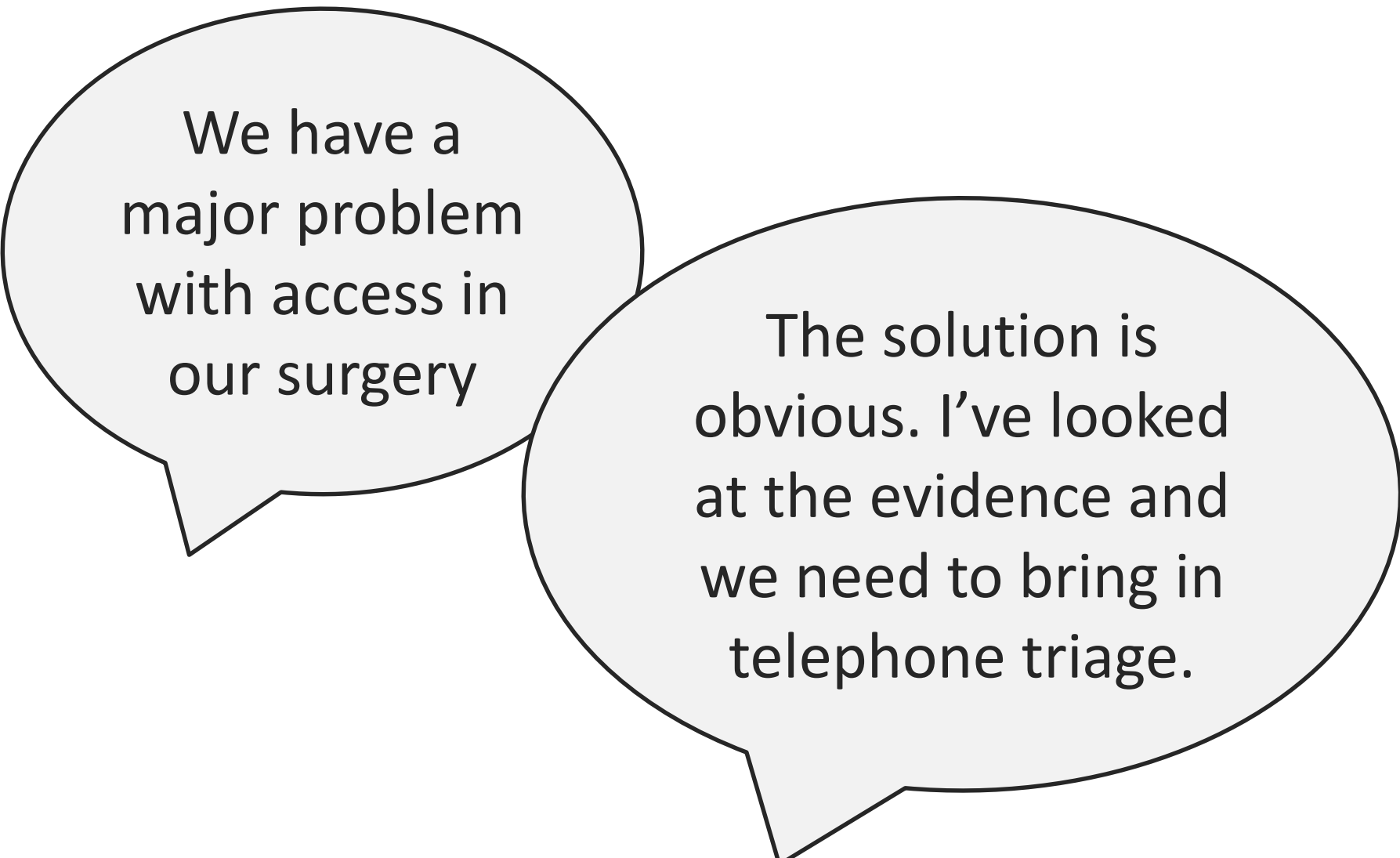
A black and white fisheye photograph taken through a convex mirror, likely a vehicle's side-view mirror. The mirror's curved surface distorts the view of a city street. In the foreground, three pedestrians are walking on the sidewalk. The background shows a multi-lane road with cars and a large building with a grid-like facade. The text "Avoid blind spots" is superimposed in a large, bold, black font across the center of the image.

Avoid blind spots



Avoid silver bullet thinking

Avoid silver bullet thinking



We have a
major problem
with access in
our surgery

The solution is
obvious. I've looked
at the evidence and
we need to bring in
telephone triage.

Avoid silver bullet thinking

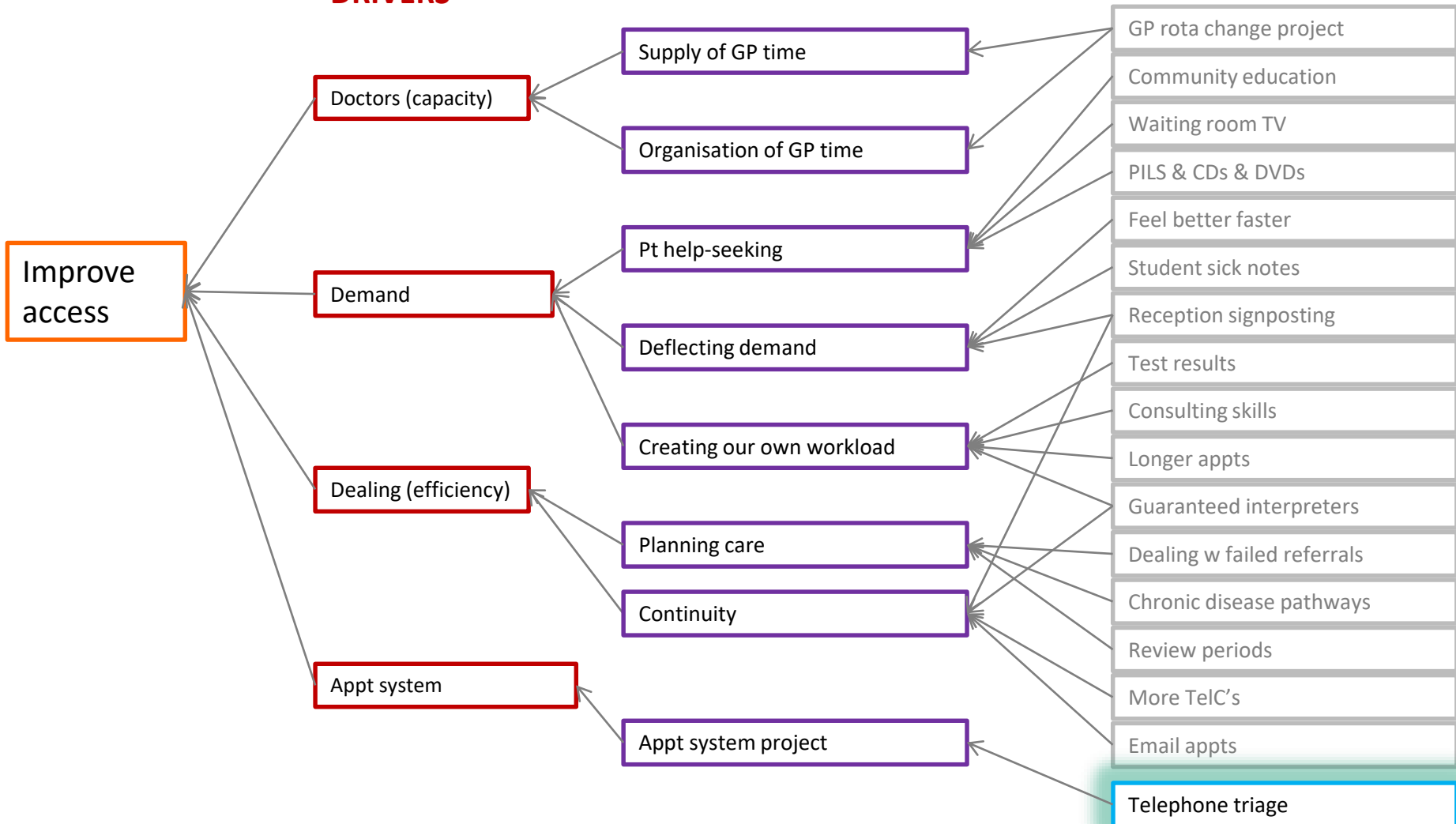
– The multiple drivers of GP access

AIM

PRIMARY DRIVERS

SECONDARY DRIVERS

CHANGE TO TEST



Driver Diagrams

Weight loss example

A photograph of a person's midsection, showing their hands resting on their hips/waist. The person is wearing a white t-shirt and blue jeans with a black belt. The image is used to illustrate weight loss.

2 stone weight
loss in 12 months

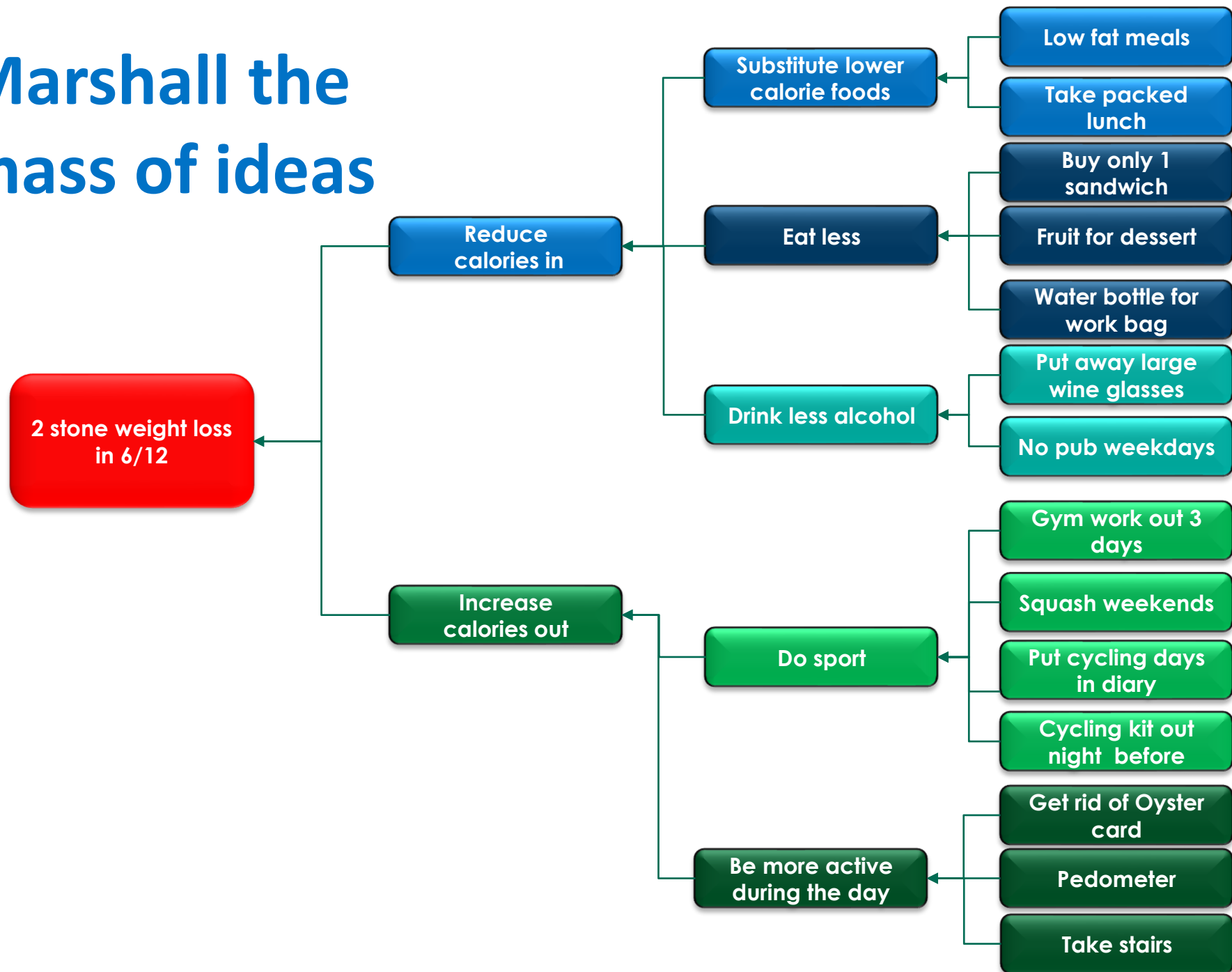
Look for patterns



Marshall the mass of ideas



Marshall the mass of ideas



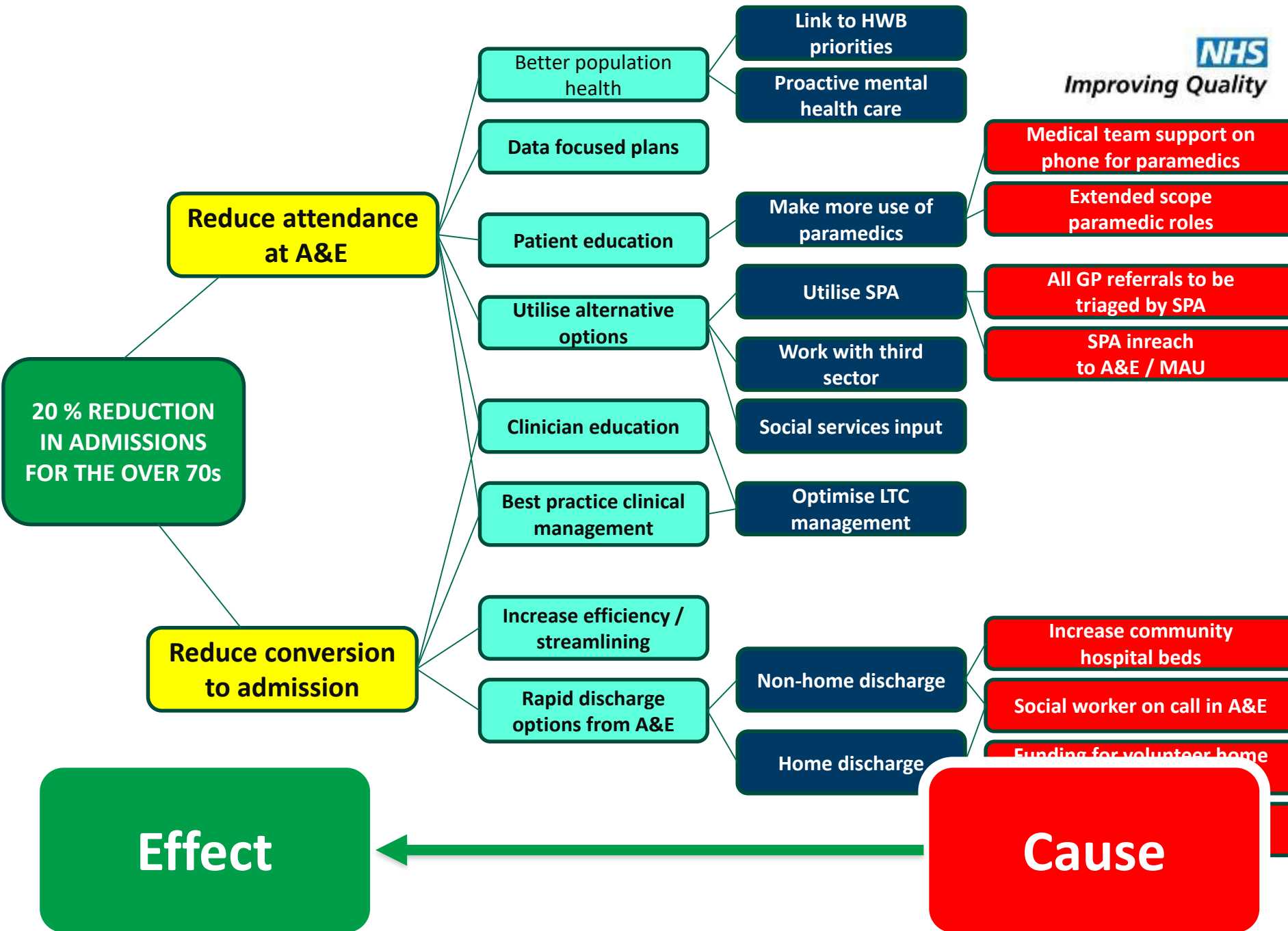
Driver Diagrams

Benefits ...

- build complex strategy
- immediate
- visual
- avoid “silver bullet” thinking
- highlight overlooked ideas

Different scenarios ...

1. Share learning
2. Help generate change ideas
3. Marshall a mass of change ideas
4. Survive failure / the unexpected



Reduce attendance at A&E

20 % REDUCTION IN ADMISSIONS FOR THE OVER 70s

Reduce conversion to admission

Effect

Cause

Better population health

Data focused plans

Patient education

Utilise alternative options

Clinician education

Best practice clinical management

Increase efficiency / streamlining

Rapid discharge options from A&E

Link to HWB priorities

Proactive mental health care

Make more use of paramedics

Utilise SPA

Work with third sector

Social services input

Optimise LTC management

Non-home discharge

Home discharge

Medical team support on phone for paramedics

Extended scope paramedic roles

All GP referrals to be triaged by SPA

SPA inreach to A&E / MAU

Increase community hospital beds

Social worker on call in A&E

Funding for volunteer home



The traditions of measurement

Research

- e.g. A-B comparison, average, huge dataset

Judgement

- e.g. one-to-many benchmarking comparison, average, large dataset

Improvement

- e.g. continual analysis of single changing process over time

Mind sets

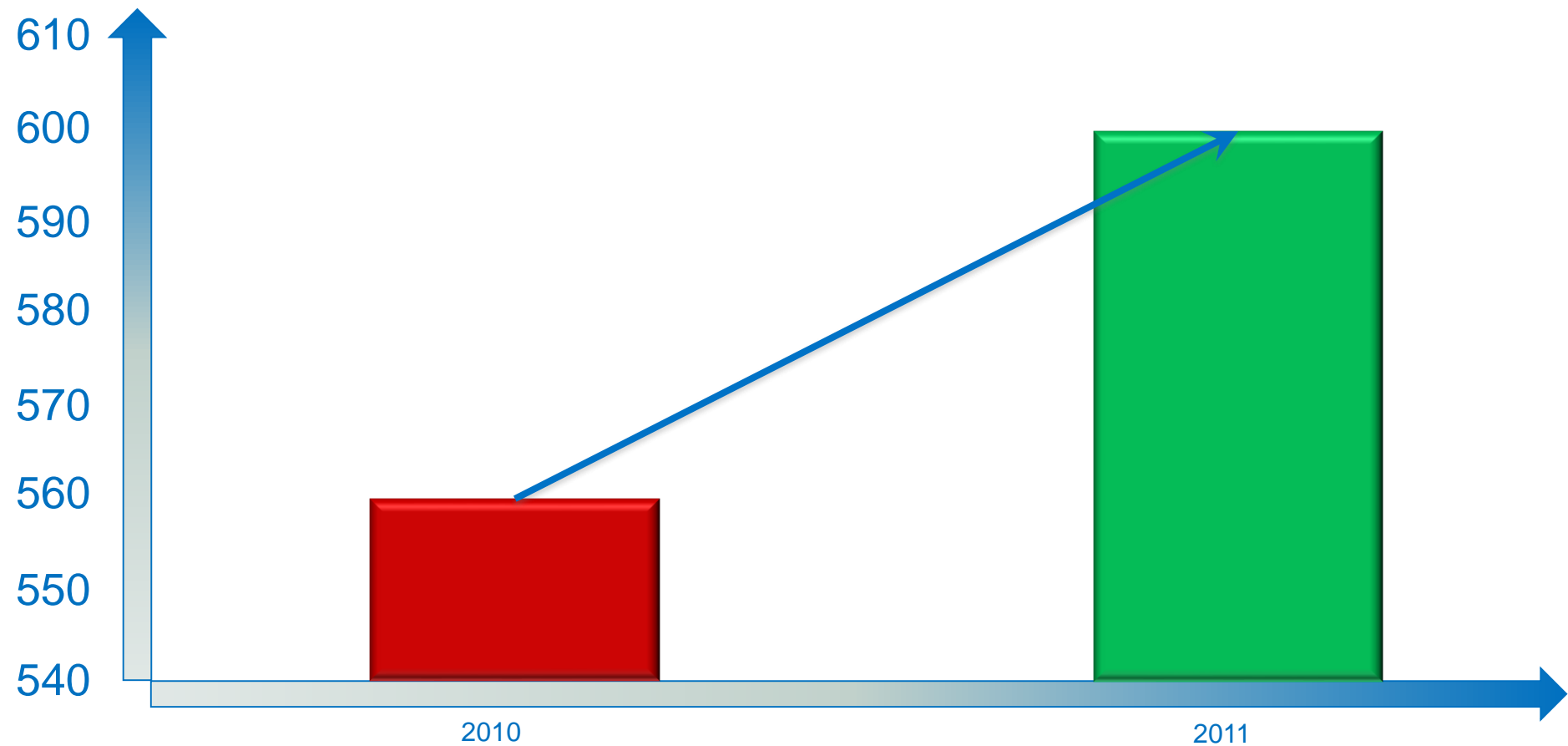


Measurement mindsets

	Research	Judgement	Improvement
Goal	New knowledge (not its applicability)	Comparison Reward / punishment Spur for change	Process understanding Evaluating a change
Hypothesis	Fixed	None	Multiple and flexible
Measures	Many	Very few	Few
Time period	Long, past	Long/medium, past	Short, current
Sample	Large	Large	Small
Risks in improvement settings	Ignores time based variation Over-engineers data collection	Ignores time based variation Over-reaction to natural variation	Incorrectly perceived as 'inferior statistics'

What does this data tell us?

Patients treated in April

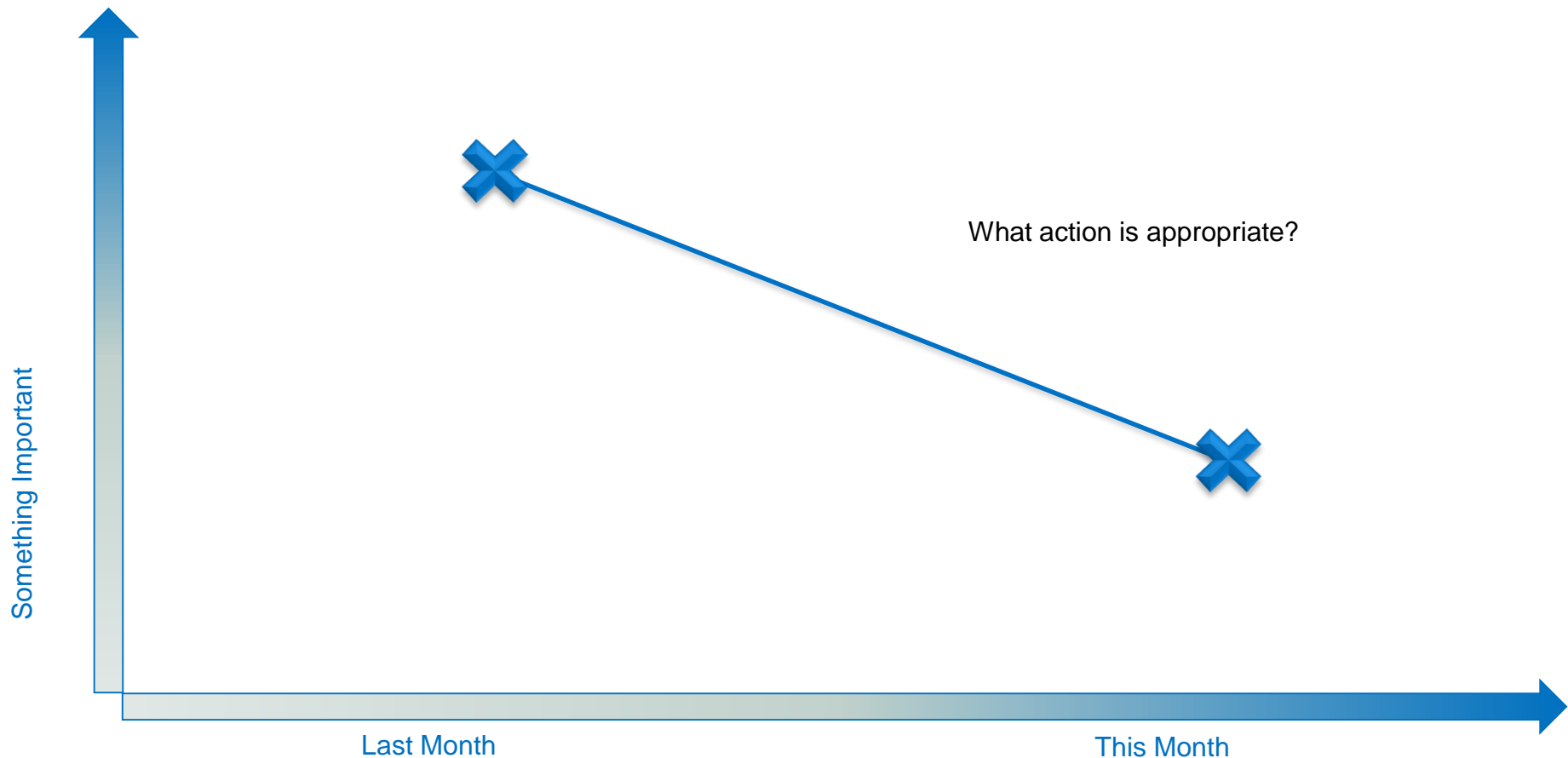


What does this data tell us?

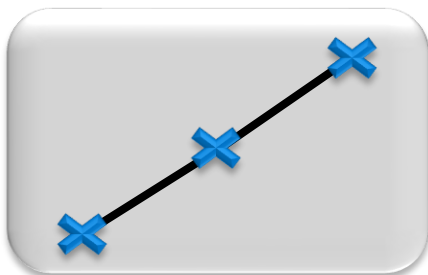


What does this data tell us?

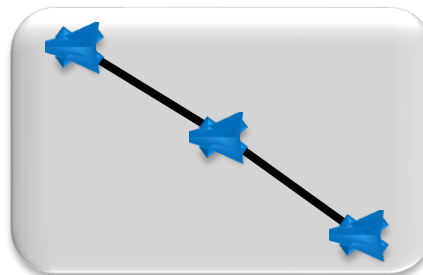
Given two different numbers, one will *always* be bigger than the other!



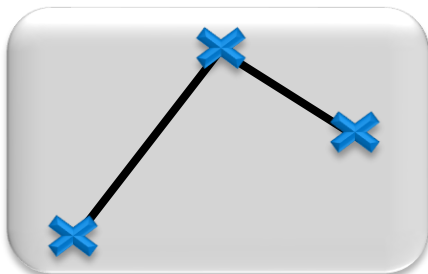
The Myth of Trends



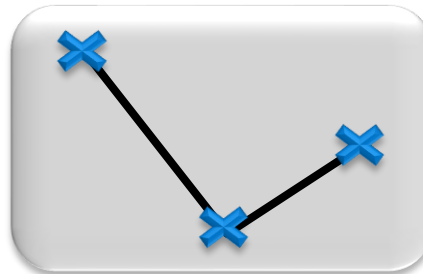
Upward trend ?



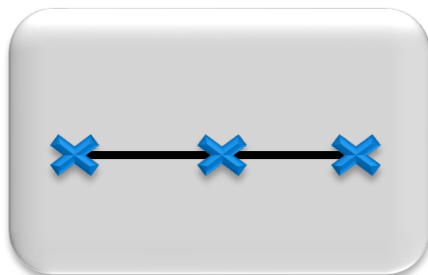
Downward trend ?



Downturn ?
Setback ?

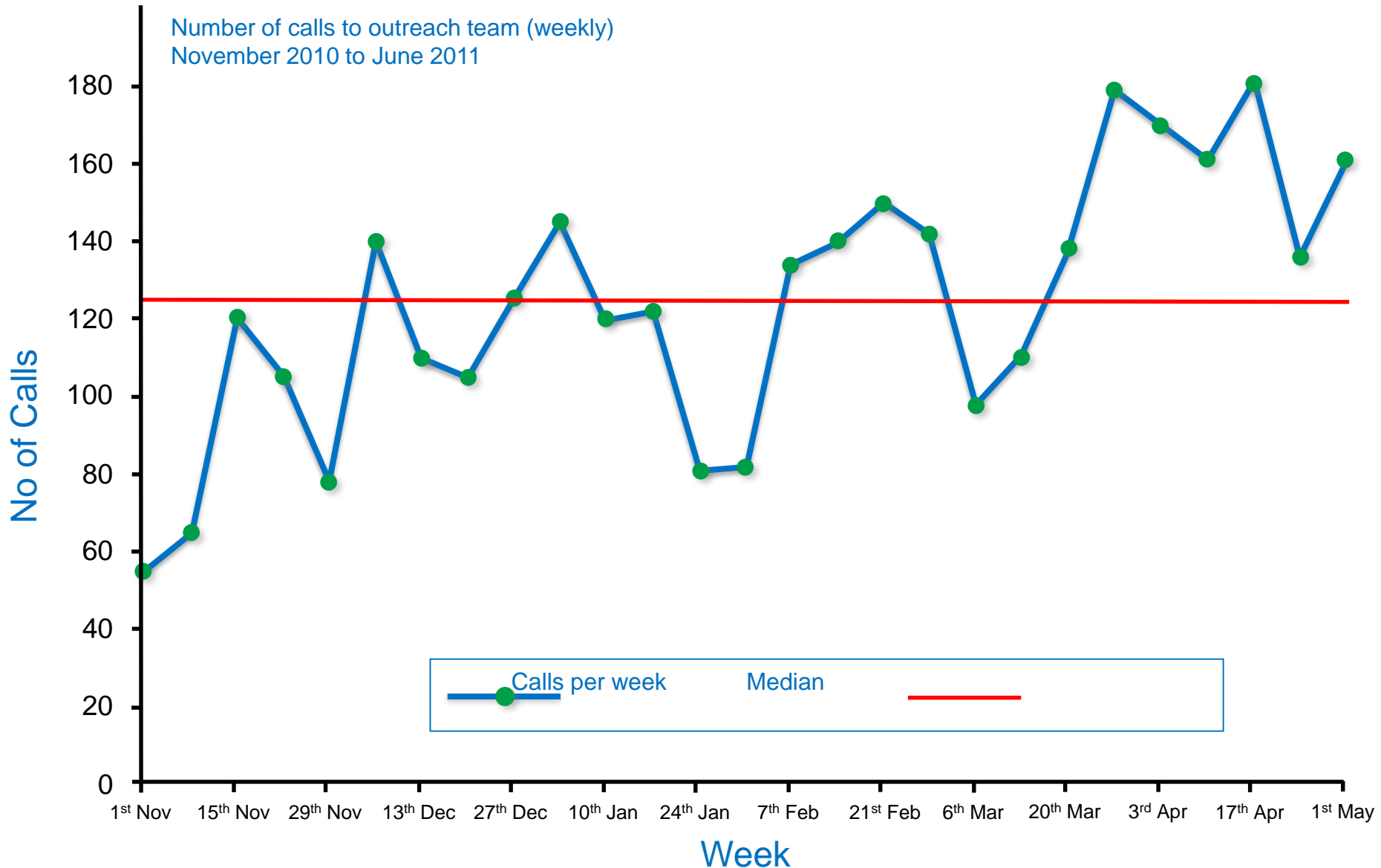


Turnaround ?
Rebound?

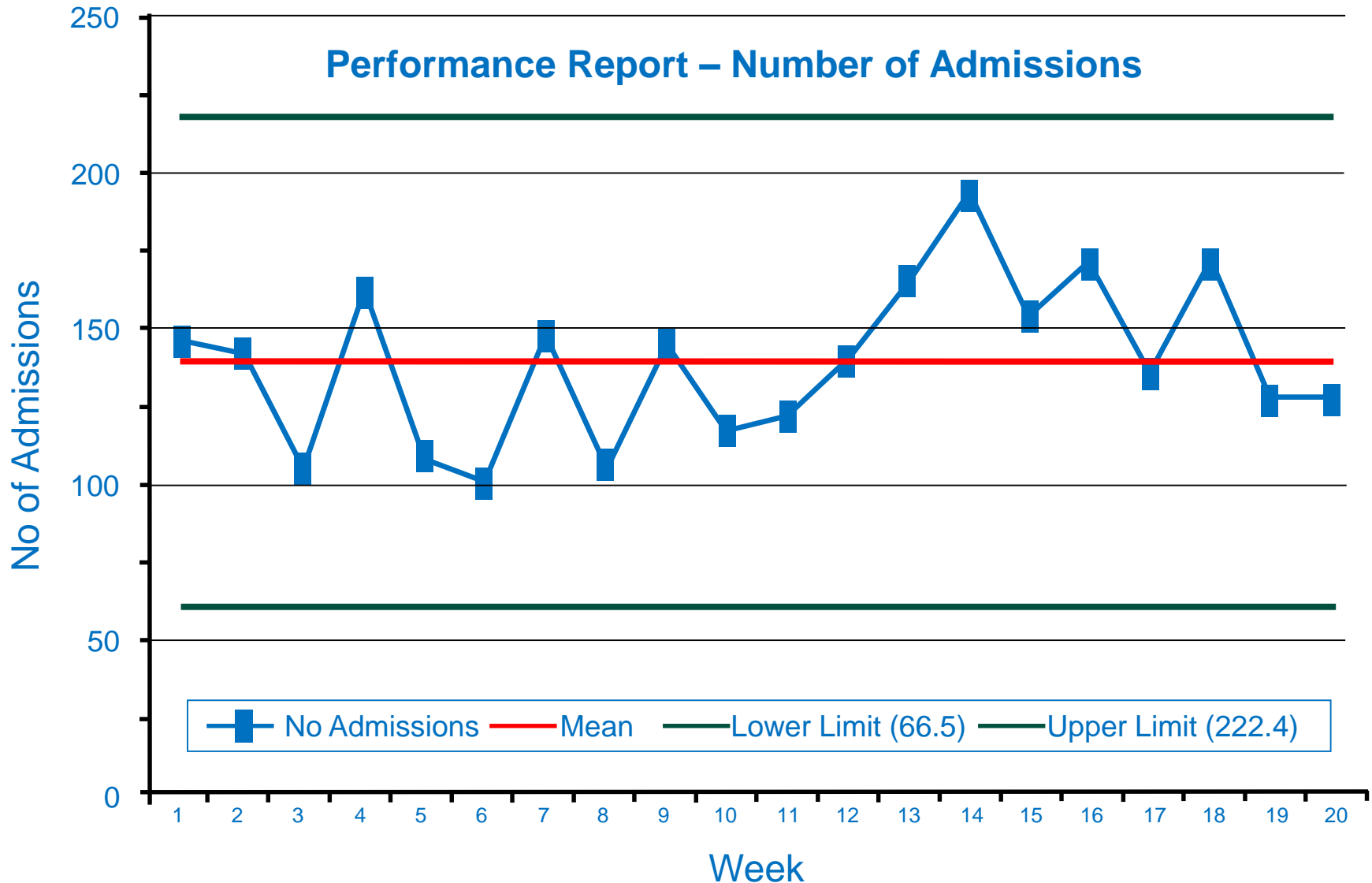


Static ?
Flatline ?

Plotting the dots - example Run Chart

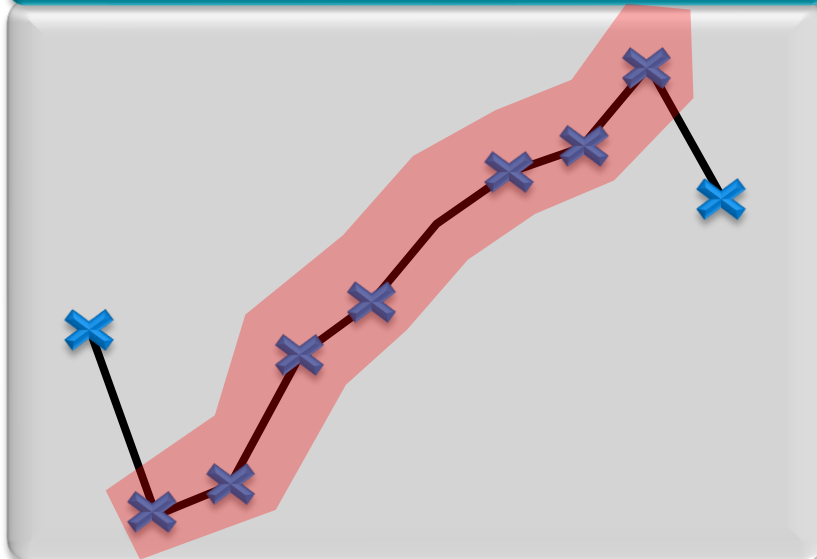


Statistical Process Control (SPC) Charts:



Looking for a statistically significant trend

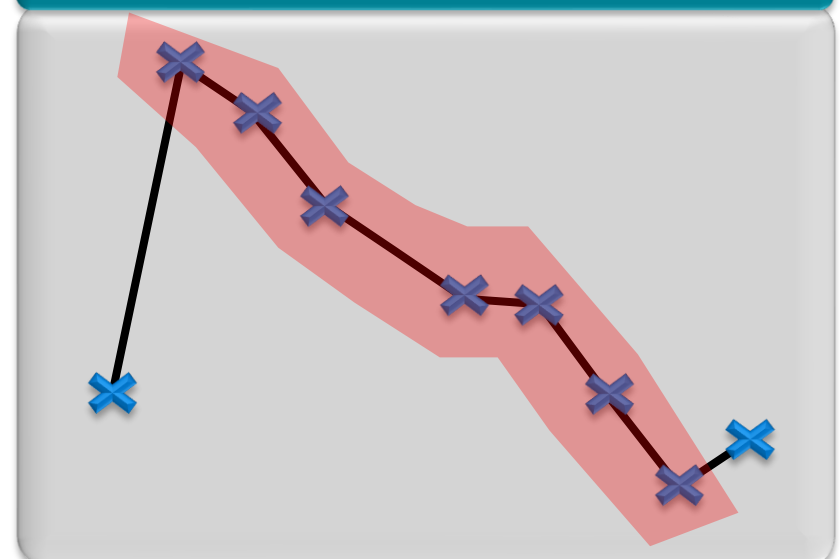
Upward trend



Time →

7 points all in
upward direction

Downward trend



Time →

7 points all in
downward direction

PROCESS MAPPING

