Quality Improvement or Learning to Make a Difference

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eahsn.org | @TheEAHSN

Overview of session

Introduction
- A bit about me

Learning to Make a Difference
- Introducing QI
- Introducing QI to core medical training

Eastern AHSN Improvement programmes
- The Patient Safety Collaborative
- Eastern Improvement Academy

Stages in my career:

- NHS Clinician

- NHS Manager

- Department of Health Policy lead

- Quality Improvement Fellowship

- NHS Improvement lead

- Improvement Consultant

The beginning…..

What is Quality ?

Within healthcare, there is no universally accepted definition of 'quality'. However, the following definition, from the US Institute of Medicine (IoM), is often used.

The IoM has identified six dimensions through which quality is expressed. They are:

– safety

– effectiveness

– patient centeredness

– timeliness

– efficiency

– equity.

What is quality Improvement?

This most widely accepted definition of quality improvement is that provided by Dr John Øvretveit, a leading expert on quality in healthcare, in his report *Does improving quality save money?,* which states:

> The conception of improvement finally reached as a result of the review , was to define improvement as better patient experience and outcomes achieved through changing provide behaviour and organisation through using a systematic change method and strategies

The key elements in this definition are the combination of a 'change' (improvement) combined with a 'method' (an approach or specific tools) to attain a superior outcome.
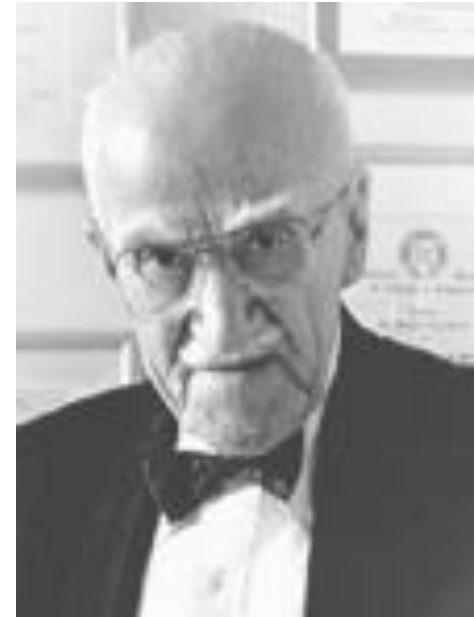
Pioneers of Organisational Approaches

Walter Shewhart

(1891 – 1967)

W. Edwards Deming

(1900 - 1993)

Joseph Juran
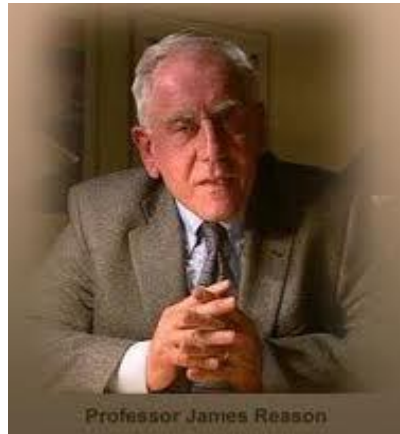
(1904 - 2008)

More recent pioneers

James Reason
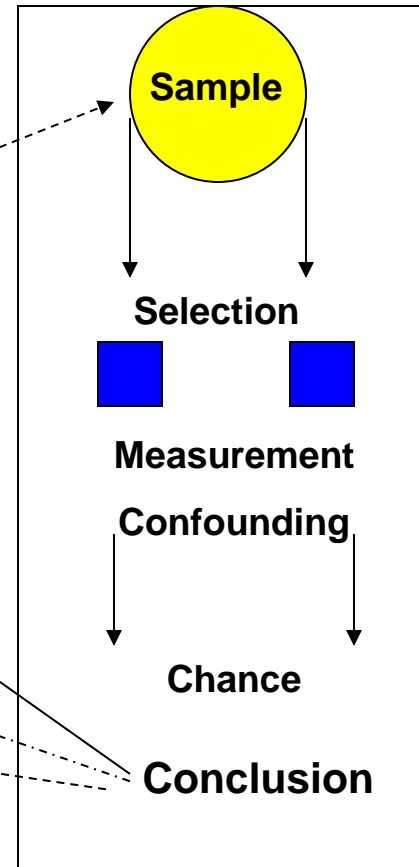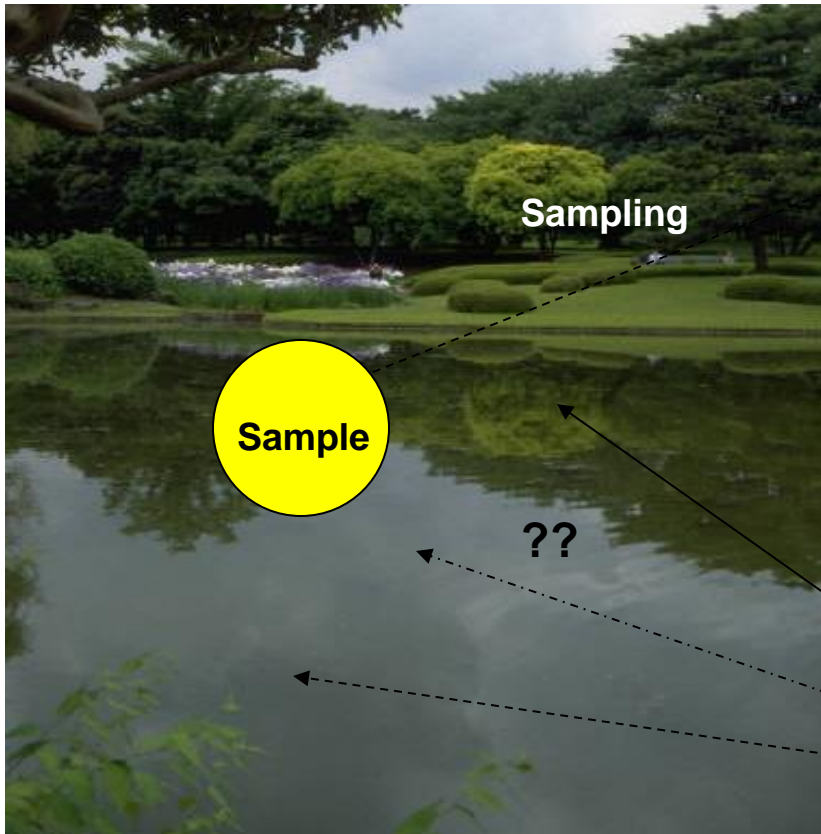
Donald Berwick

Armand V Feigenbaum

Kaoru Ishikawa

What is the Science of Improvement ?

- Applied science not pure science
- Application plus strong formal science
- Real time, time series data not snapshots
- Real world, not controlled
- Prospective not retrospective
- Small tests of change not whole scale change
- Predictions not hypotheses

Enumerative Study
(Randomised Control Trial)

Sampling

Sample

Sample

??

External Validity (generalisability)

Sample
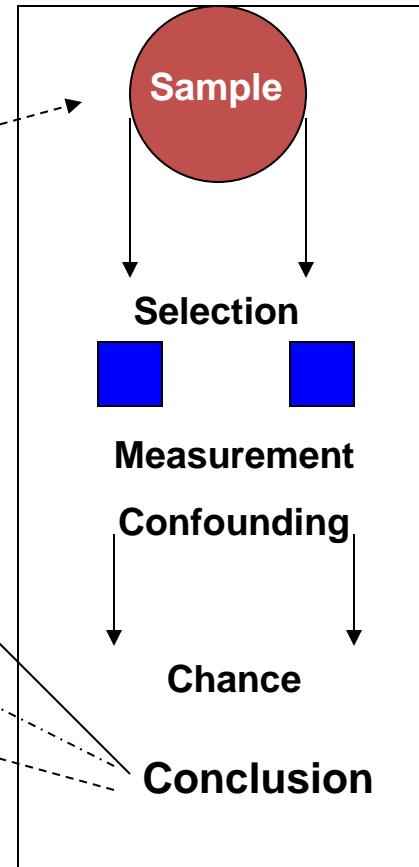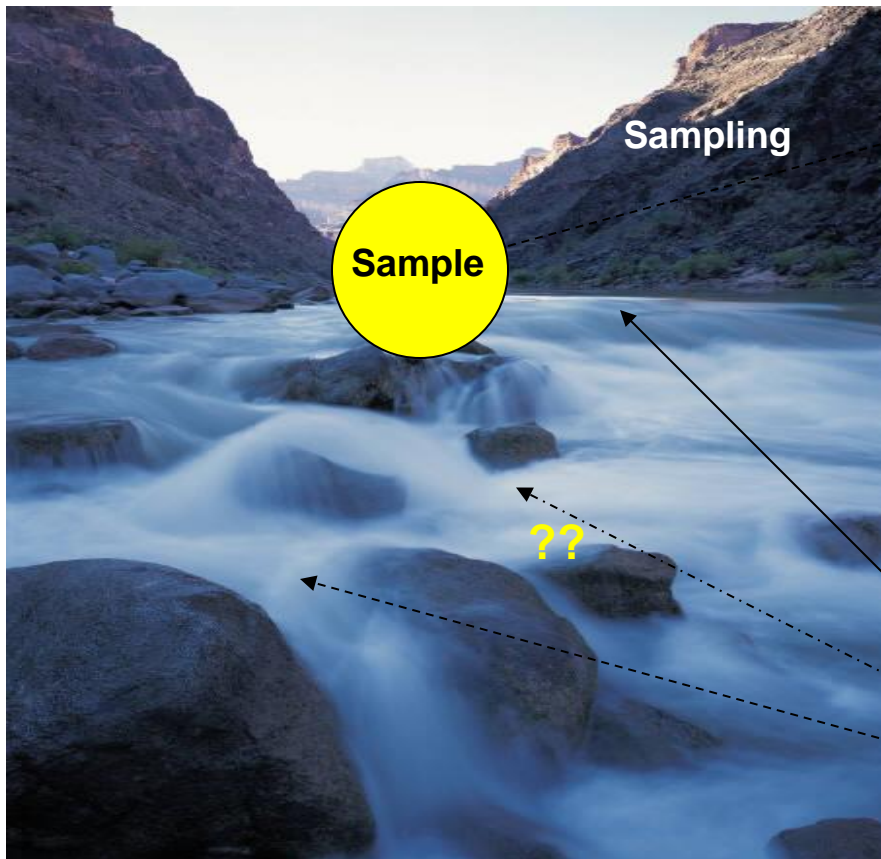
Internal Validity

Selection

Measurement

Confounding

Chance

Conclusion

Source: Clinical Epidemiology

Fletcher, Fletcher, Wagner

RCT. If the aim = knowledge

- Test blinded
- Eliminate bias
- Collect everything – just in case
- Fixed hypotheses
- One large test

PDSA. If the aim = improvement

- Test observable
- Stable bias
- Just enough data
- Adaption of changes and interventions
- Sequential tests

The most common approaches to quality improvement

Business process re-engineering

Fundamental rethinking of how processes are designed, with change driven from the top by a visionary leader, and organisations set up around key processes rather than specialist functions.

Lean

A quality management system developed by the Japanese car manufacturer Toyota, focusing on value, flow and waste reduction.

Model for Improvement

An approach to continuous improvement where changes are tested in small cycles.

Six Sigma

A process or product improvement approach that focuses on reducing what customers would define as 'defects'.

Statistical process control

Examines the difference between natural variation (common cause) and special cause variation, and enables data to be collected over time to show whether a process is within control limits.

Total quality management (TQM)

Also known as continuous quality improvement. Emphasises the need for leadership and management involvement to understand work processes.

Clinical audit cycle

'Learning To Make a Difference' for our patients

Susan Went

JRCPTB
Joint Royal Colleges of Physicians Training Board

Royal College of Physicians

Learning to Make a Difference was supported by The Health Foundation

Setting higher standards

What is
Learning to Make a Difference ?

Learning to Make a Difference was a 12 month pilot in five UK deaneries to :

- Test the feasibility and acceptability of introducing a quality improvement project as part of core medical training;

- Assess the value of the change to the trainee, their organisation and their patients;

- Identify the framework and infrastructure needed for successful implementation of change.

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What is the evidence for the change?

Empiric evidence and feedback: Completion of a full cycle audit (data collection, intervention, repeat data collection) within their 4-6 month post is a challenge.

Emma Stanton 2009 Audit of Audits (8% response rate n=890)

•Majority of trainees (64%) received no training or support in

how their audit could be used to improve quality of care
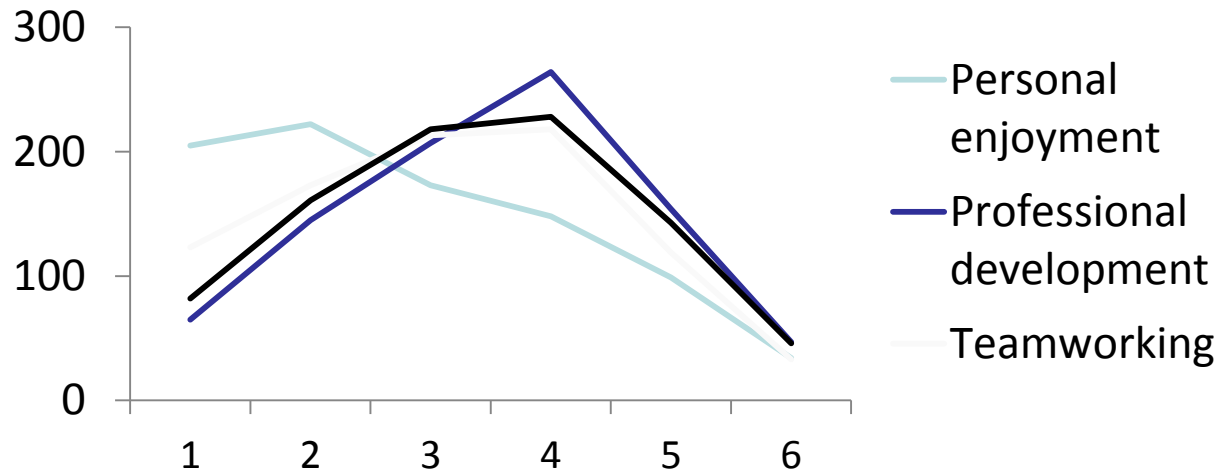
- Nearly half of audits (46%) were not repeated
- Lack of enjoyment amongst trainees (23% no enjoyment at all)

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What are we trying to accomplish

Our Purpose:

- To develop and *embed new skills,* learn some simple and practical QI techniques …to take forward in their clinical practice and apply to future projects

- *To enable* the trainee to be able to see the valuable and meaningful role a junior doctor can play in quality improvement

- To emphasise *learning and development*

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How will we know that a change is an improvement ?

What are we trying to accomplish

How will we know that a change is an improvement

- Junior doctors are started on a pathway for life long evaluation and quality improvement of the service they deliver

- Continuous service development is seen as an important part of medical professionalism

- At Trust level : QI becomes an integral part of clinical audit and their quality agenda

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What change can we make which will result in improvement ?

What are we trying to accomplish

How will we know that a change is an improvement

What changes can we make that will result in improvement

- Offer trainees the option of undertaking a QI project as an alternative to an audit

- Trainee – led *small scale change can make a difference* to the quality of their practice, their team work and their patients

- *Learning by doing can make a difference* to trainee's understanding of how to make change happen and their confidence to deliver improvements in practice

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What will it involve?

- Each Deanery had 10-20 CMT trainees each doing a LMDP in place of audit
- Each trainee had a supervisor
- Each Deanery had a QI mentor
- Ideally trainee-led idea
- Decide on the project and then follow the guidelines outlined in the 'tool kit'
- Improvement Project to take 4-6 months from identifying problem, agreeing measures and changes, completing at least one PDSA and report.
- Started August 2010; complete March 2011

Executing the plan

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Building the infrastructure for delivery:

Learning to make a difference

Pilot 2010

Information for Trainees

- LTMD web site
- LTMD Newsletters
- LTMD trainee film

https://sites.google.com/site/lmdproject2010

- QI Tool kits for trainees, supervisors and deanery leads
- QI mentors
- Worked examples and templates
- Prizes for projects/trainees

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Findings. Completed QI Projects
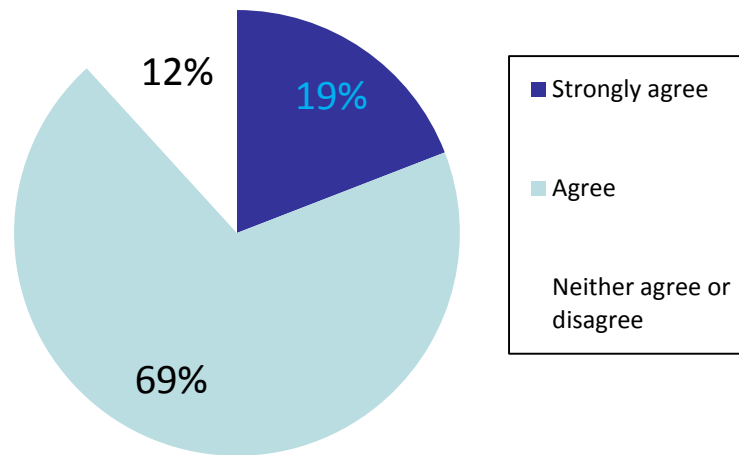
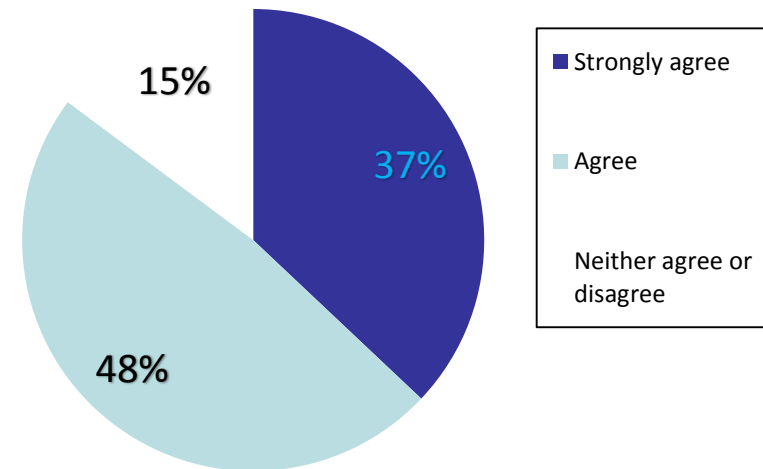| Deanery	Number of projects	Number of trainees
Kent, Surrey and Sussex	8	10
North Western	8	11
Oxford	24	29
SE Scotland	3	7
Yorkshire and Humber	3	4
Total	**46**	**61**

Findings. Understanding of QI

STATEMENT: I understand the process of quality improvement

Pre- project (n=68)

Post project (n=27)

Pre-project pie chart:
- Strongly agree: 19%
- Agree: 69%
- Neither agree or disagree: 12%

Post-project pie chart:
- Strongly agree: 37%
- Agree: 48%
- Neither agree or disagree: 15%
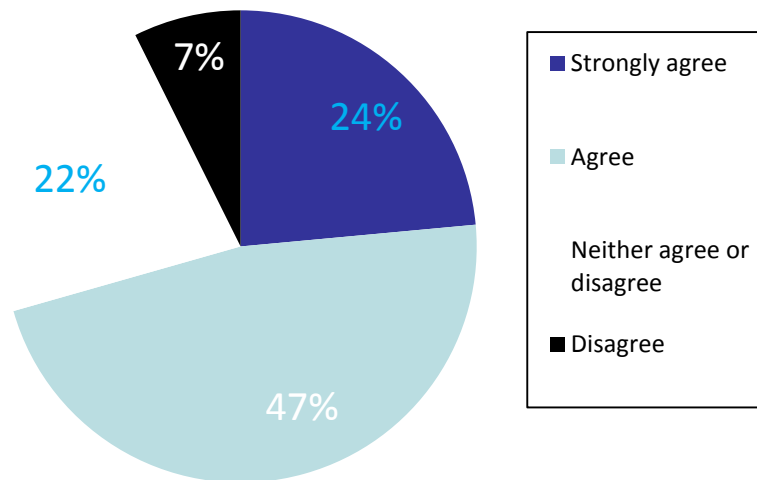
Findings. Relevance & acceptability

STATEMENT: A trainee led idea for a small scale change as part of a quality improvement project is a more realistic project to be completed than a clinical audit project.

Pre-project (n=68)

Post-project (n=25)

Pre-project pie chart:
- Strongly agree: 24%
- Agree: 47%
- Neither agree or disagree: 22%
- Disagree: 7%

Post-project pie chart:
- Strongly agree: 22%
- Agree: 56%
- Neither agree or disagree: 15%
- Disagree: 7%

Legend:
- Strongly agree
- Agree
- Neither agree or disagree
- Disagree

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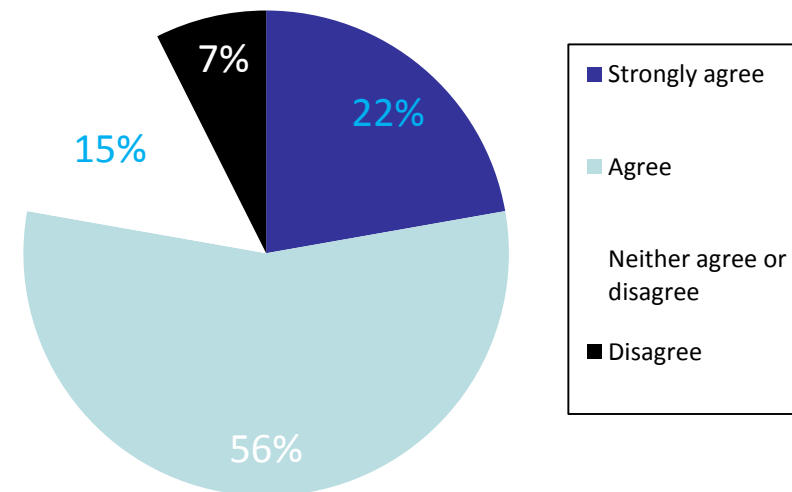
Findings.
Trainees post-project impact questionnaires

Trainee responses n=13

Response	The objectives of my quality improvement project were met	My project has had a significant impact on improving clinical practice	The project was a valuable practical learning exercise for me to undertake	I have developed new skills as a result of undertaking the quality improvement project
Strongly agree	46%	54%	69%	69%
Agree	46%	38%	31%	23%
Disagree	8%	0%	0%	8%
Strongly disagree	0%	8%	0%	0%

Response	I plan to do another quality improvement project in the future	I found the trainee information pack contained all the information I needed	I feel I have made a difference to patient care	I found the evaluation questionnaires straightforward and easy to complete
Strongly agree	69%	31%	38%	62%
Agree	31%	69%	54%	38%
Disagree	0%	0%	0%	0%
Strongly disagree	0%	0%	8%	0%

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Findings.
Supervisors post-project impact questionnaires

Supervisors responses n=9

Response	The objectives of the quality improvement project were met	The project has had a significant impact on improving working practice	The project was a valuable practical learning exercise for the trainee to undertake	I would supervise another trainee led quality improvement project
Strongly agree	56%	44%	78%	67%
Agree	44%	44%	22%	33%
Disagree	0%	11%	0%	0%

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Findings. Overall approach

- The principle of allowing trainee's to do QI projects is a good one.
- Audit has been about data collection
- Not replacing clinical audit in many areas – as clinical audit not being done.
- Need to ensure not replacing one poorly functioning system with another.
- QI seen to influence day to day practice is more likely to produce practical outputs
- QI outcomes are better matched to Trust profiles.

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Success criteria

- Need…enthusiasm, commitment, engagement *and* knowledge from a local lead
- Clinically-led, organisational relevance
- Face to face personalised approach
- Trainee ideas with MDT involvement

- Aligned with trust objectives
- Resource supported: tool kit, web site, project examples, films, RCP/PTB lead
- Formal presentation of QI projects – make it matter

Learning to make a Difference

https://sites.google.com/site/lmdproject2010

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"Action on Frailty"
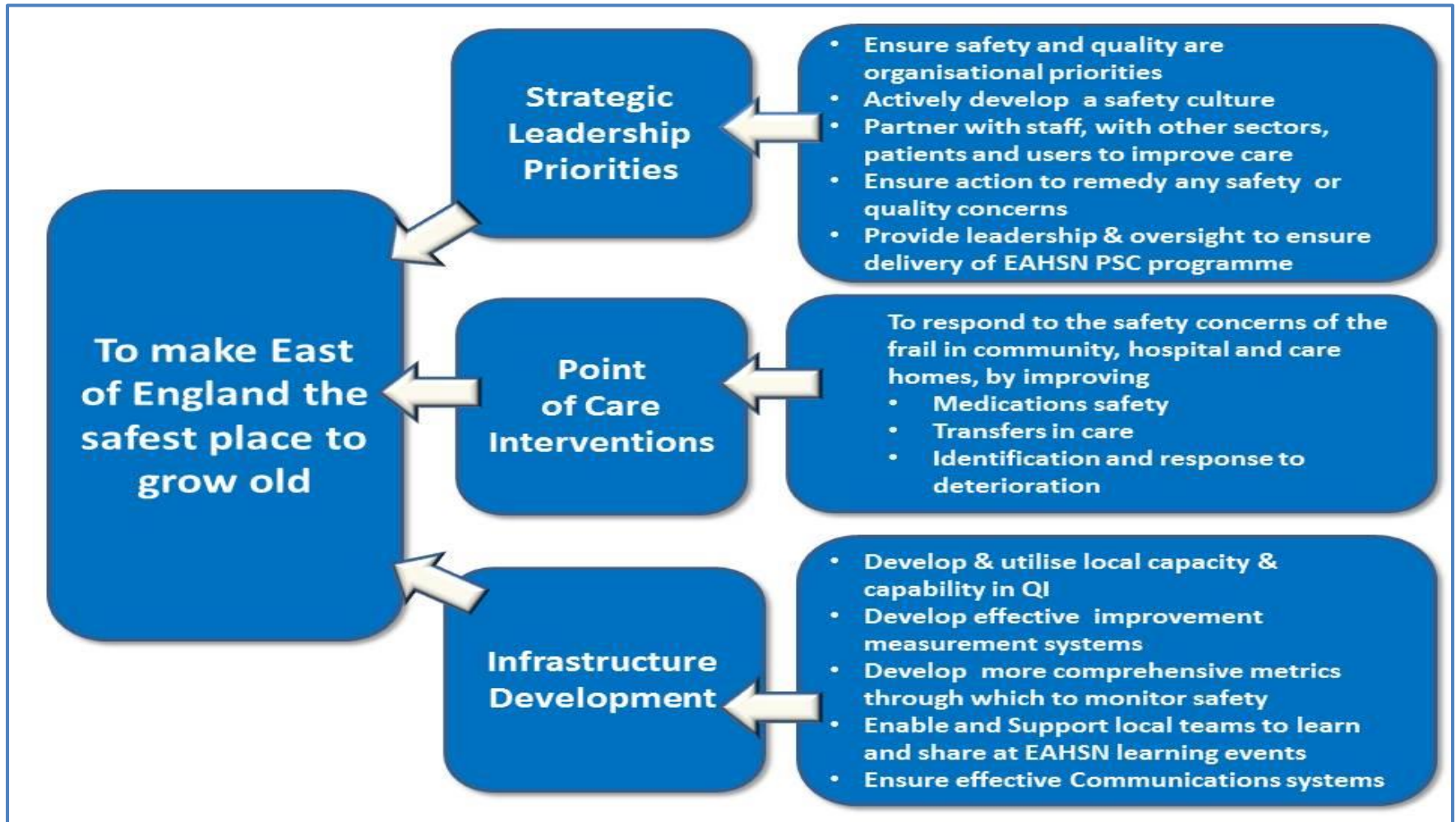
What we are prioritising for PSC improvement projects

Medication

Transfers

Deterioration

East of England Improvement Academy

What is the Improvement Academy

- AQuA
- HEE
- Citizens Senate
- CLAHRC
- Other AHSNs
- Deanery

- Patient Safety Collaborative
- Eastern Faculty
- EAHSN Coaches
- Local projects
- Vanguards

Improvement Alliances

Improvement Action

Improvement Academy

Improvement Analytics

- Board programme
- Faculty Support
- QI skills building
- Clinician leadership

- Improvement Platform - LIFE
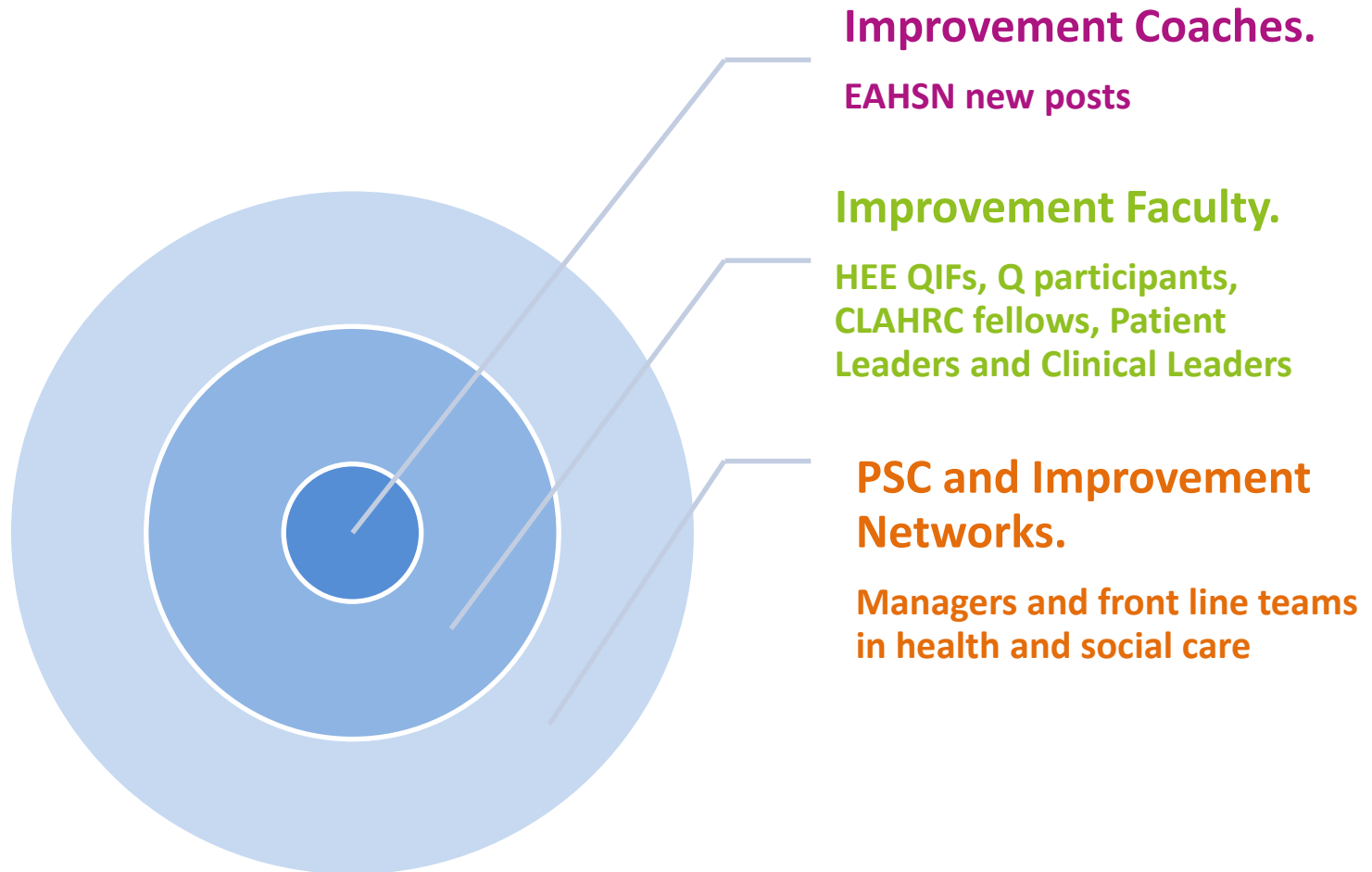- Central Measurement Team
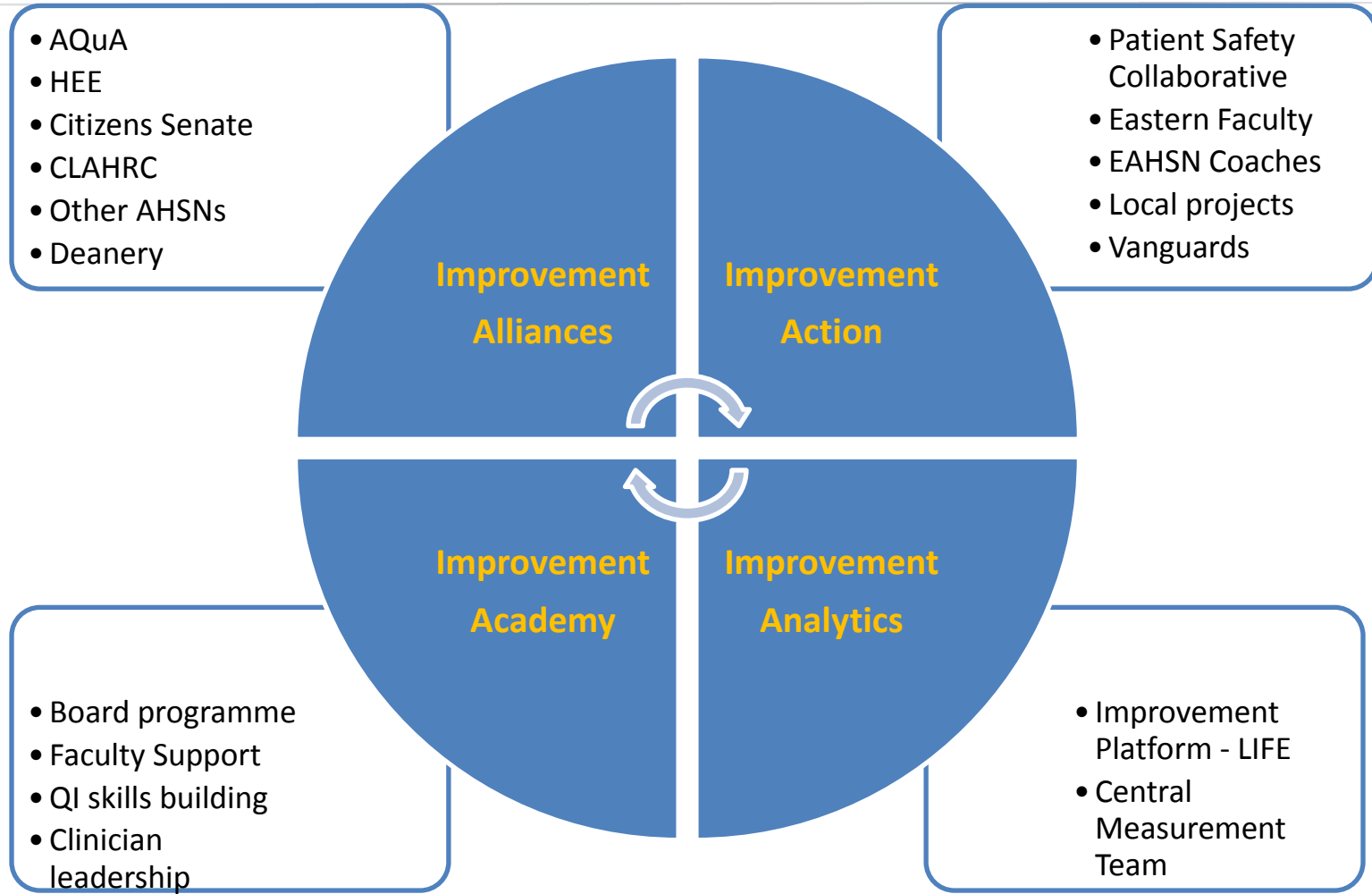
Eastern AHSN are providing organisations and teams in our region involved in NHS care with access to a powerful but easy to use system capable of supporting sustained, measured improvements.

Life is a web based platform providing individuals with the functionality they need to run safety and quality improvement projects. It brings together quality improvement project management tools into one place, allowing users to create, connect and report project information in a way that has not been possible before. It has been developed by our fellow AHSN, the South West Academic Health Science Network in partnership with SeeData Ltd.

Improvement Action

Improvement Coaches.

EAHSN new posts

Improvement Faculty.

HEE QIFs, Q participants, CLAHRC fellows, Patient Leaders and Clinical Leaders

PSC and Improvement Networks.

Managers and front line teams in health and social care

Thank you

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