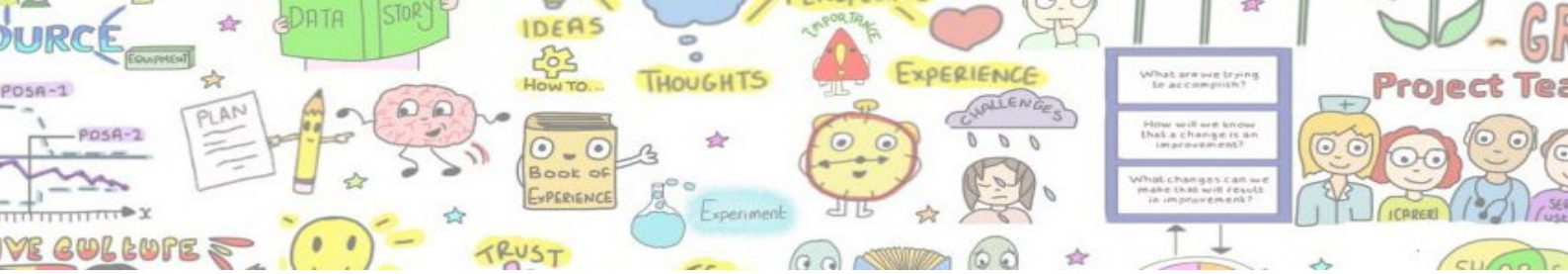
Improvement Leaders' Programme

Participant Manual

EAST LONDON NHS FOUNDATION TRUST

QUALITY IMPROVEMENT DEPARTMENT
9 Alie St, London, E1 8DE

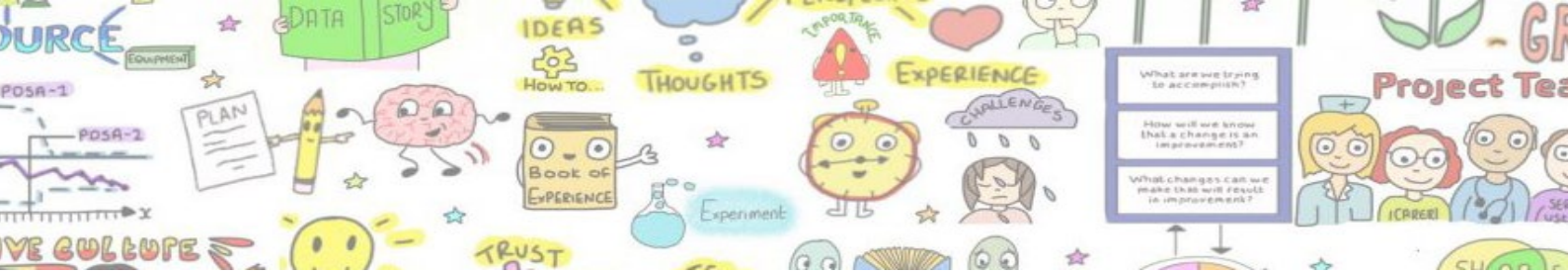
Day 2



Participant Manual

Each module of the Participant Manual contains the following information:

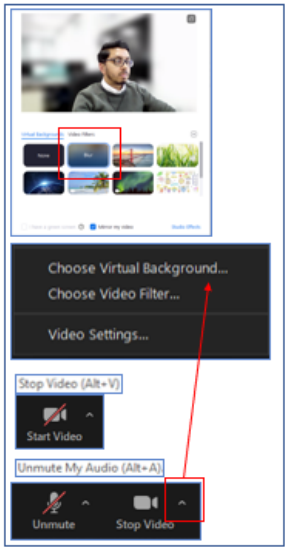
	**LEARNING OBJECTIVES** The expected knowledge and skills participants will gain by the end of each module.
	**KEY CONTENT** Key content covered during each module.
	**RESOURCES** A list of resources used during each module.
	**TRAINING ACTIVITIES** A list of exercises done by participant's during each module.
	**ASSESSMENT AND TAKE AWAY WORK** An assessment of key information covered during each module.



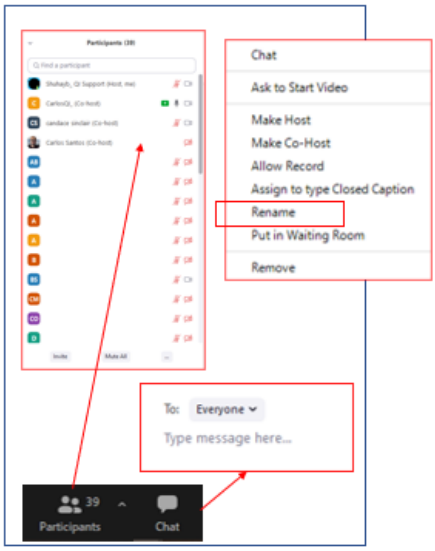
Day 2

Welcome and Introductions

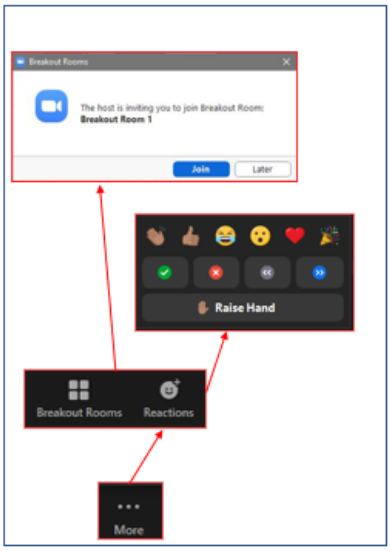
Audio/Visuals



Interactions



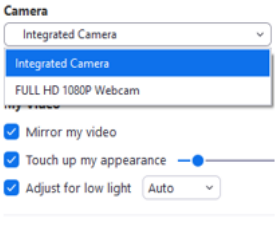
Reactions



Troubleshooting

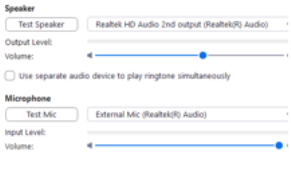
No Video?

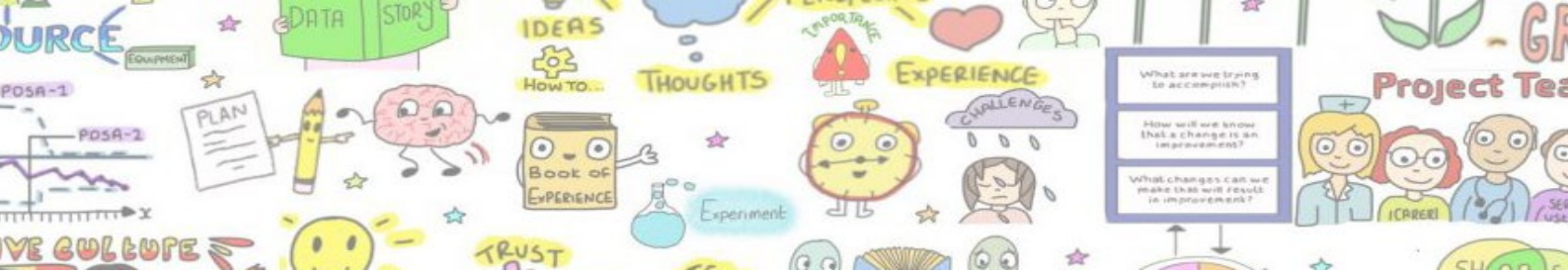
- Make sure that your webcam is plugged in and turned on
- Check the video selection is the correct cam
- Ensure that your webcam is not being used by another application
- If the problem persists – Please restart your device.



No Audio?

- Make sure the speaker selected is the one you intend to use.
- You can also test the speaker you want to use
- MIC CHECK – have you selected the correct MIC?

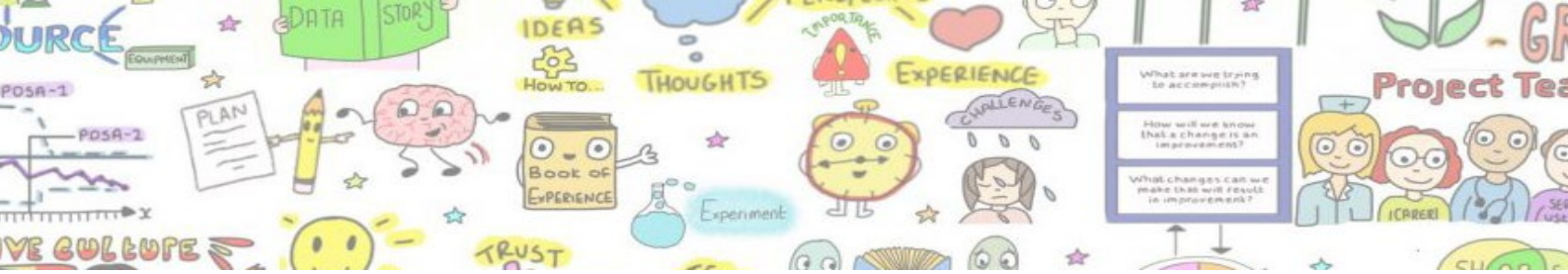




Module 2.1

Messiness of Life

	**LEARNING OBJECTIVES** • Introduction to the Messiness of Life. • Introduction to the Science of Improvement and the Lens of Profound Knowledge. • Application of the Lens of Profound Knowledge to a quality improvement project.
	**KEY CONTENT** • Lens of Profound Knowledge
	**RESOURCES** • PowerPoint Presentation
	**TRAINING ACTIVITIES** • Lens of Profound Knowledge-Reflections (Menti)
	**ASSESSMENT** • N/A



Is life this simple?

X ⟶ **Y**

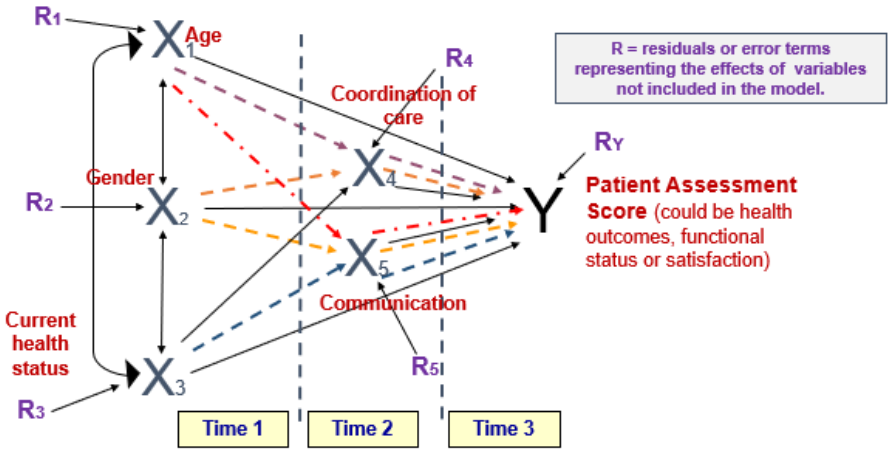
Service user encounter with clinician

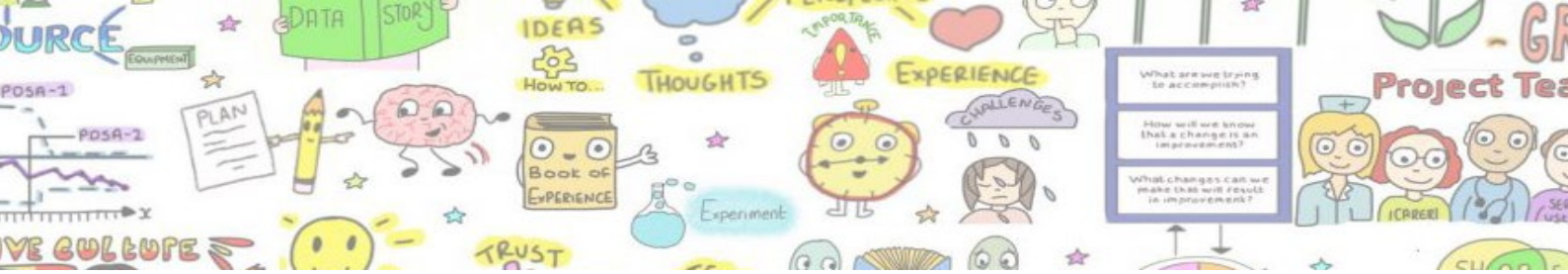
A healthy and satisfied service user

(If only it was this simple!)

Life looks more like this

In this case, there are numerous direct and indirect effects between the independent variables and the dependent variable. For example, X1 and X4 both have direct effects on Y plus there is an indirect effect due to the interaction of X1 and X4 conjointly on Y.





Subject Matter Knowledge

Subject Matter Knowledge: Knowledge basic to the things we do in life. Professional knowledge. Knowledge of work processes.

Science of Improvement (SOI) Knowledge: The interplay of the theories of systems, variation, knowledge, and psychology.

SOI Knowledge

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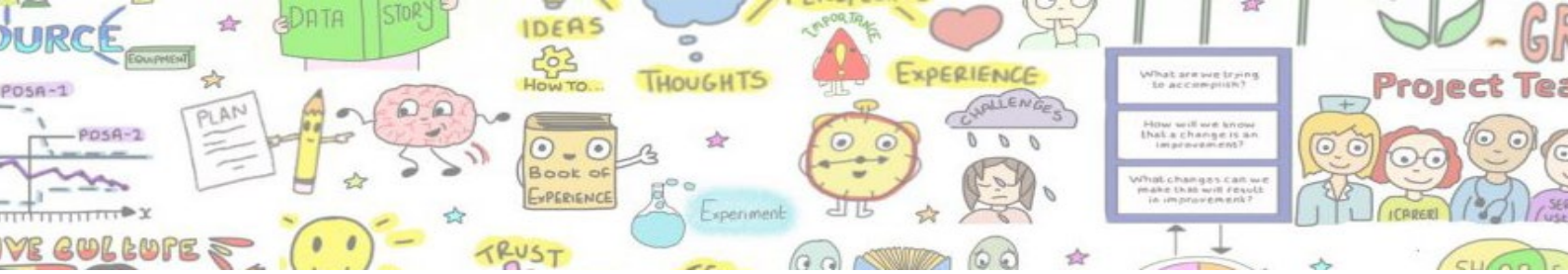
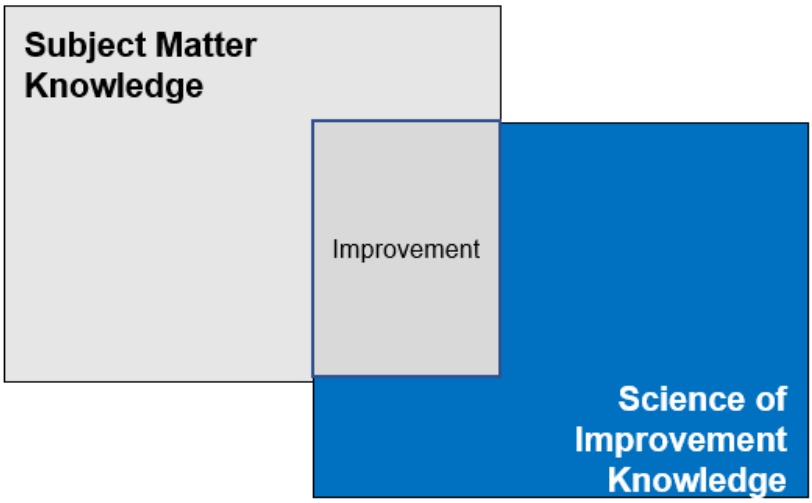


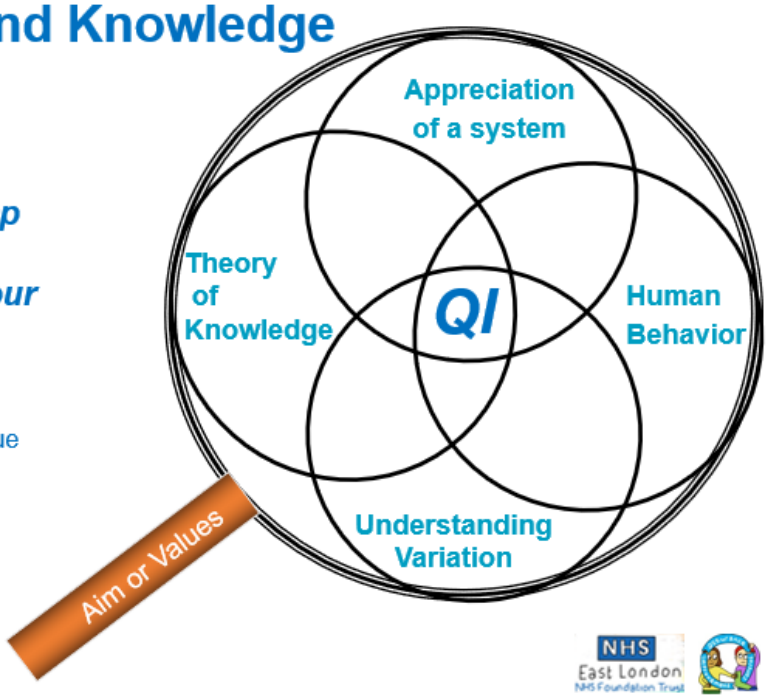
Improvement: Learn to combine subject matter knowledge and Science of Improvement knowledge in creative ways to develop effective changes for improvement.

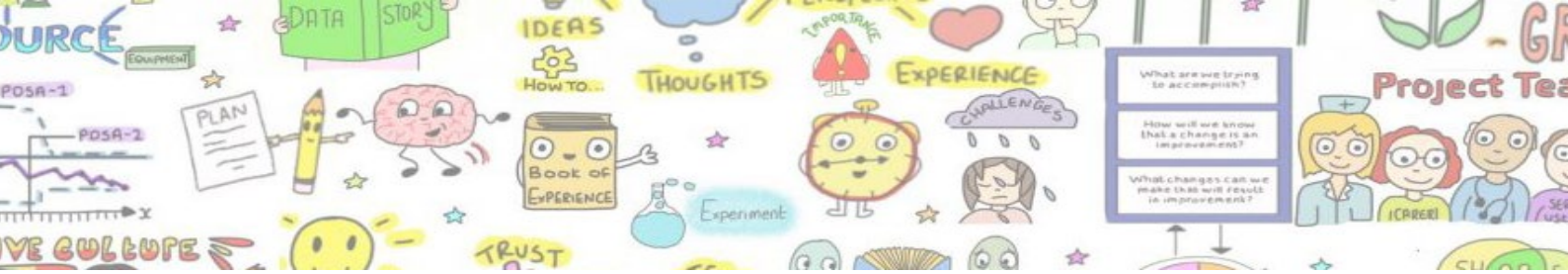


The Lens of Profound Knowledge

"The system of profound knowledge provides a lens. It provides a new map of theory by which to understand and optimise our organizations."
(Deming, Out of the Crisis)

It provides an opportunity for dialogue and learning!





What *insights* might be obtained by looking through the Lens of Profound Knowledge?

Theory of Knowledge

- What theories drive the system?
- Can we predict?
- Learning from theory and experience

Appreciation for a System

- The system must have an aim
- The whole is greater than sum of the parts

Understanding Variation

- Variation is to be expected!
- Common or special causes of variation

Human Behavior

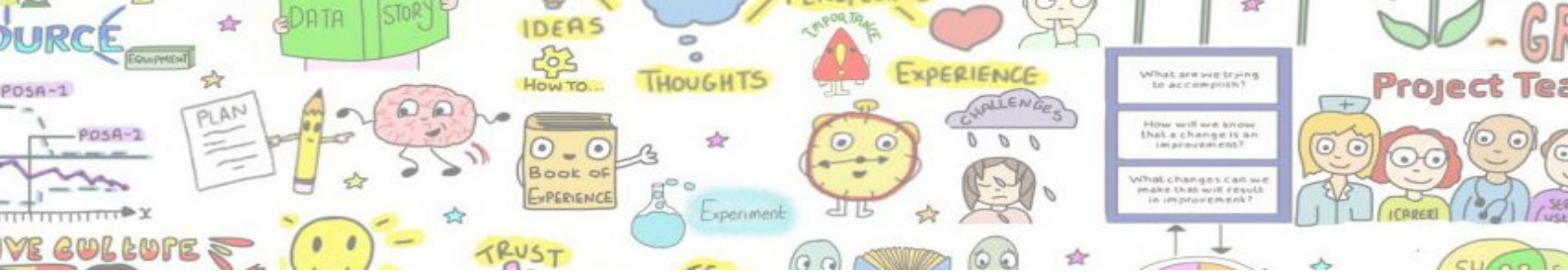
- Beliefs, values & assumptions
- What is the Will to change?

Individual exercise profound knowledge

- Now that you understand the components of Profound Knowledge, we would like you to apply the Lens of Profound Knowledge to your chosen project for 9 mins.
- Use the Profound Knowledge Worksheet provided to record your responses.

Remember that there are no right or wrong responses.

Individual activity – 9 mins



Profound Knowledge Worksheet

Appreciation for a System

In relation to the issue, you have chosen to work on…

- Who are the people in your system?
- What is the culture like?
- What are the structures? How do you organize things?
- What are the key processes?

Human Behaviour

- How ready do you think people in your system are for change?
- Are some people more ready for change than others?
- How do you think people feel about the issue you are going to work on?
- Is there anything else external that might be influencing how people experience this work?

Theory of Knowledge

- What is the issue you have chosen to work on?
- Why do you think this is an issue?
- What theories do you have about what will work/help you overcome this problem?

Understanding Variation

- What data do you have already?
- What is it telling you about the issue you have chosen to work on?

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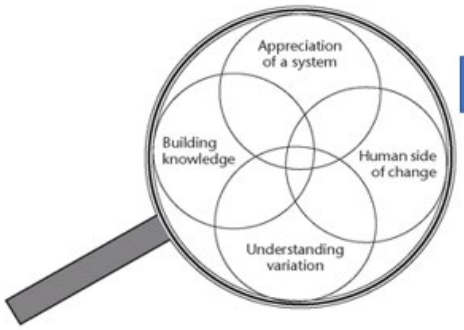
The Science of Improvement

Deming's System of Profound Knowledge



Leads to

Key Improvement Methods:
Model for Improvement with PDSA
Shewhart charts
Operational Definitions
Analytic Studies
Graphical Data Analysis
Intrinsic motivation
Multi-disciplinary teams

Are used with

Combines with

Subject Matter Knowledge

drives

Improvement

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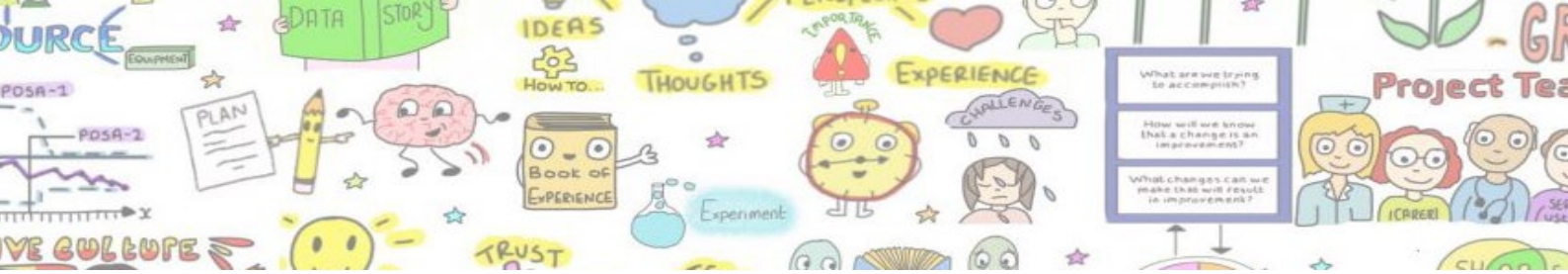

References

- Wicked Problems and Social Complexity " . Jeff Conklin, Ph.D., Chapter 1 in *Dialogue Mapping: Defragmenting Projects through Shared Understanding*. For more information see the CogNexus Institute website at http://cognexus.org, 2004.

- Walter Shewhart, *Statistical Methods from the Viewpoint of Quality Control*, paperback edition, Dover Publications, 2011

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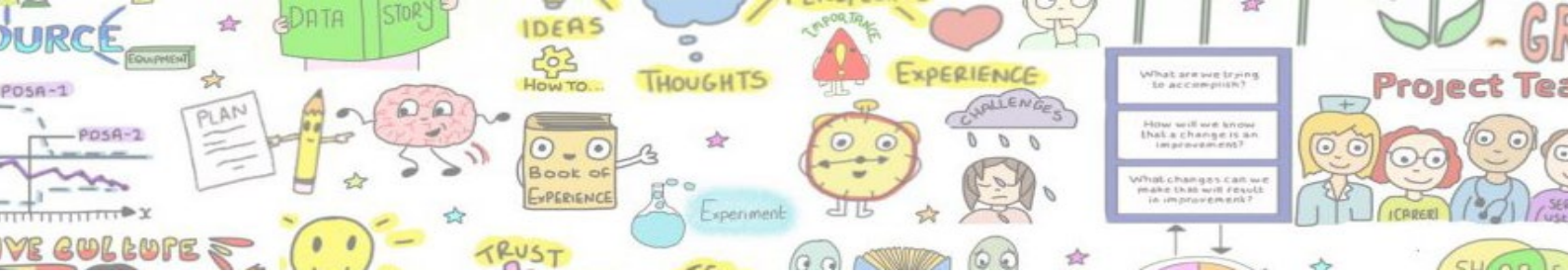
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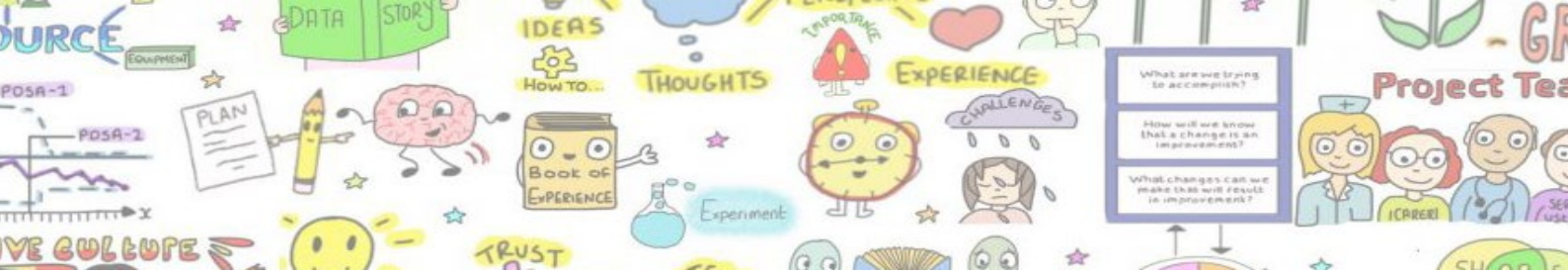
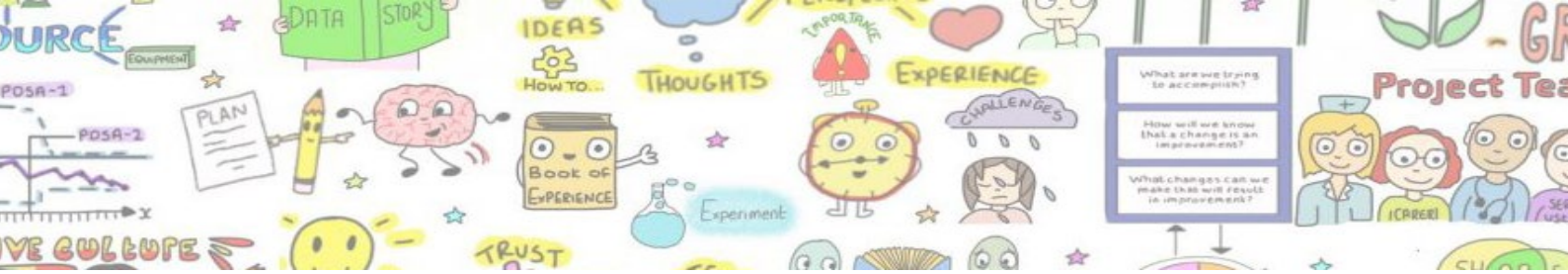
My Notes



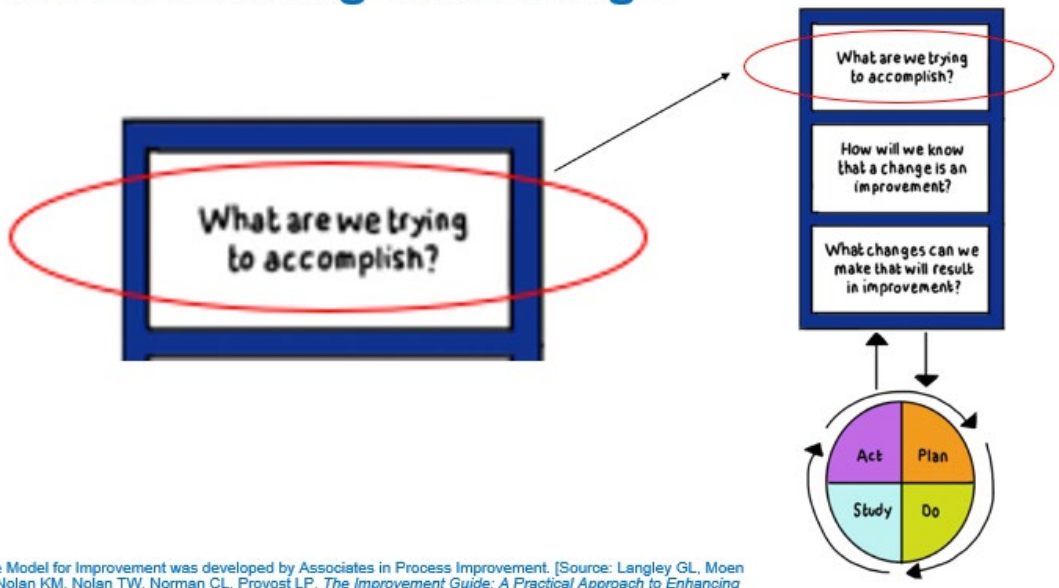
Module 2.2

Developing Aim Statements and Theories of Change

	LEARNING OBJECTIVES • Describe clear, specific plans for your improvement work ahead. • Visually display your team's theory of what "drives," or contributes to, achieving your project aim.
	KEY CONTENT • Aim Statements • Driver Diagrams
	RESOURCES • PowerPoint Presentation
	TRAINING ACTIVITIES • Aim statement reviews
	ASSESSMENT • N/A



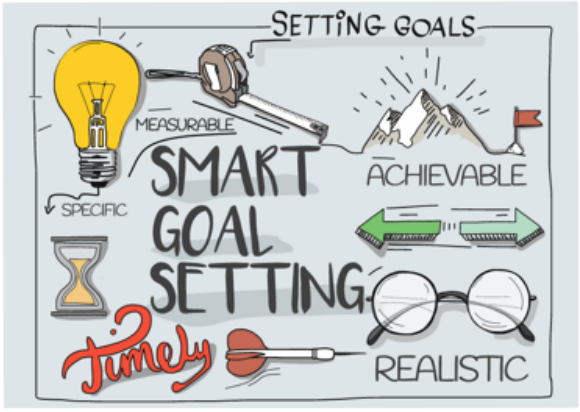
A model for learning and change



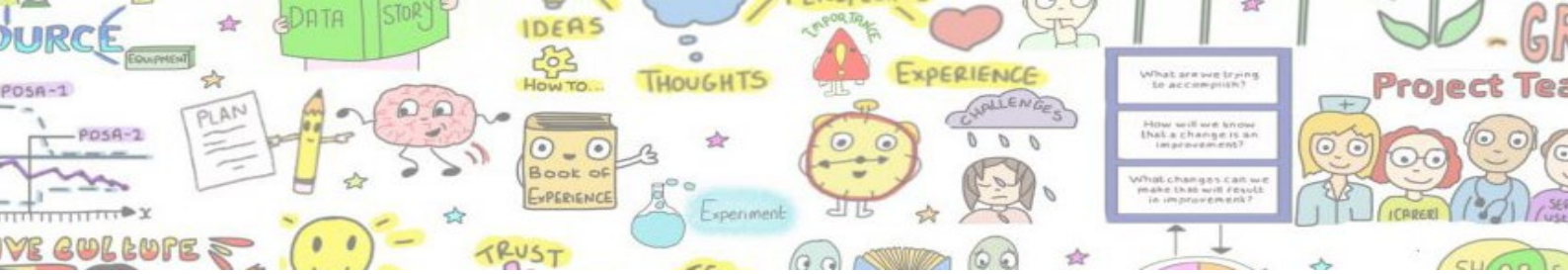
The Model for Improvement was developed by Associates in Process Improvement. [Source: Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.]

Being SMART about your Aim

- Improvement requires us to be intentional about what we are trying to do
- Improvement therefore requires us to have an aim



Berwick D. M. (1996). A primer on leading the improvement of systems. *BMJ (Clinical research ed.)*, *312*(7031), 619–622. https://doi.org/10.1136/bmj.312.7031.619



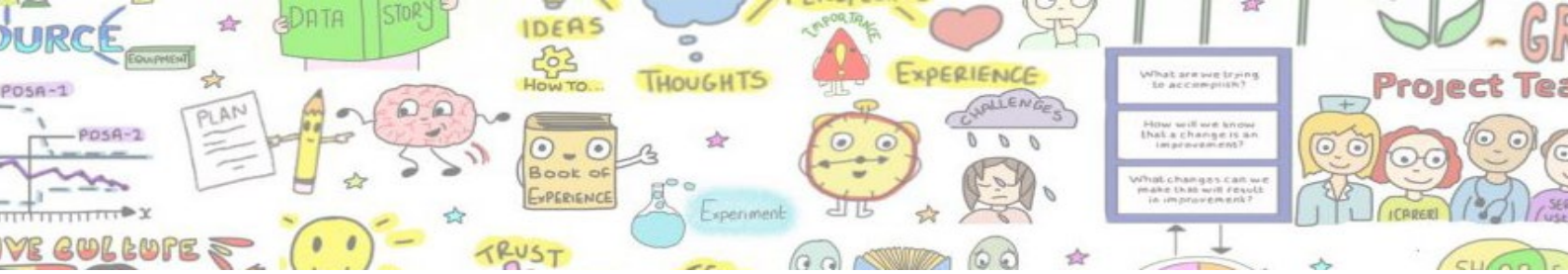
Components of a good Aim statement

- The system – What is the scope of the system to be improved? Specific process/location
- Numeric goal – How good do you want to be?
- Time frame – When do you want to achieve this by?
- Guidance – What else is it useful for the team to know? Where is the voice of the customer?

Examples of Aim Statements

We will reduce Bed Occupancy on the older adults' inpatient ward (Blue Ward) from 90% to 70% by March 2021

We want to increase the number of inpatients receiving a smoking cessation review at ELFT from 35% of all patients to 65% by May 2021



The sequence of improvement

Identifying the quality issue	Understand the problem	Developing a strategy and change ideas	Testing	Implement & sustaining the gains
• Deciding what to improve • When to use QI • Forming a team • Understanding the context (MUSIQ)	• Gathering info • Pareto • Flow Chart • Fishbone • Scatter plot • 3-part data review	• Divergent/ convergent thinking • Driver diagram • Engaging the team • Creativity methods	• PDSA • Time series analysis (run charts, control charts)	•Policy, training, manuals, resource •Quality control, •Audit and assurance processes •Benchmarking

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Intro to driver diagrams

Why – create a shared understanding the system

How – a shared theory of what's happening in the system and how things might be better

What – a tool to create a visual representation of the system on a single page.

"A driver diagram is most useful when it depicts a theory that can be tested empirically.
Without learning through testing and continual revision, a driver diagram becomes just an interesting picture or, at best, it simply represents an unproven implementation plan."

Bennett & Provost (2015)

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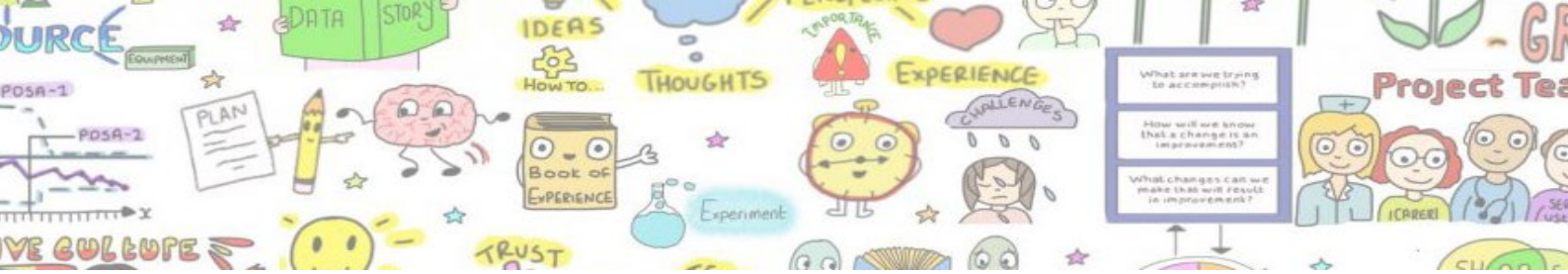
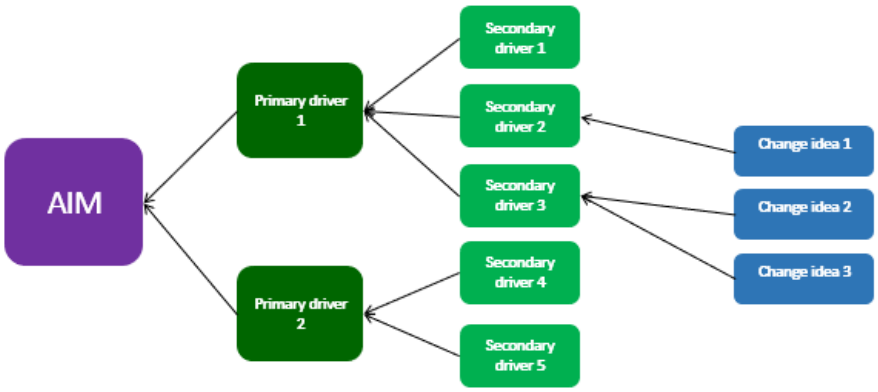


Driver diagram – Quality Improvement



Aim: How good and by when?

Drivers: The factors or improvement areas that the team believe must be addressed to achieve the desired outcome

Change Ideas: Specific ideas for change that work on the drivers. As tangible and 'do-able' as possible

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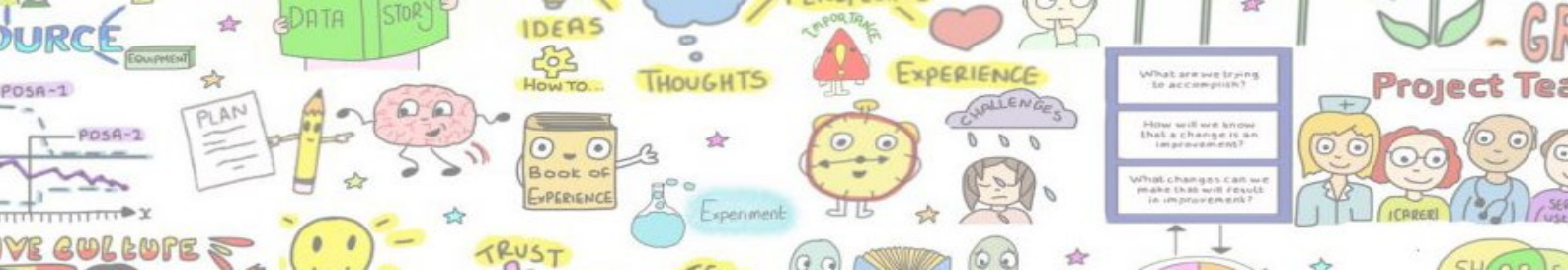
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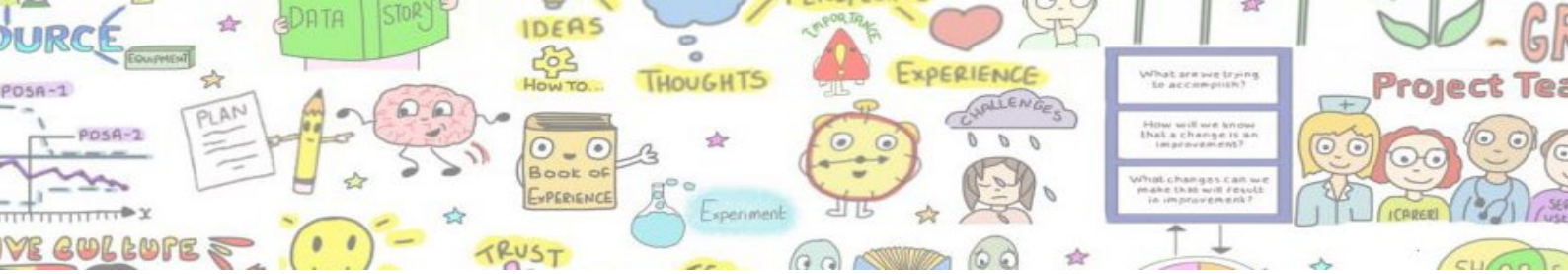
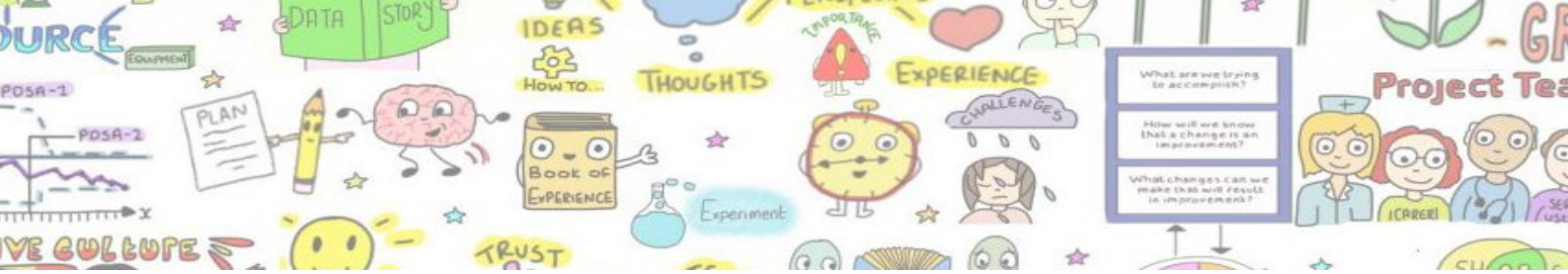
My Notes



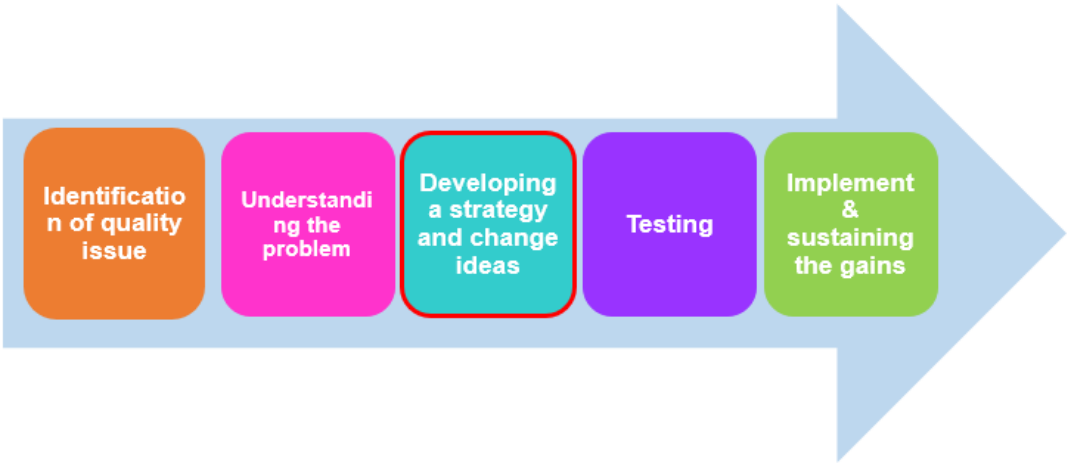
Module 2.3

Quality Measurement Journey

	**LEARNING OBJECTIVES** • Understand the critical nature of the second question of the Model for Improvement • Understand the link between concepts and measures • Identify & understand the three types of measures (outcome, process & balancing) • Understand and apply knowledge to how to develop an operational definition • Understand how to develop a data collection plan
	**KEY CONTENT** • Model for Improvement • Different Types of Measures
	**RESOURCES** • PowerPoint Presentation
	**TRAINING ACTIVITIES** • N/A
	**ASSESSMENT** • N/A



The ELFT sequence of improvement



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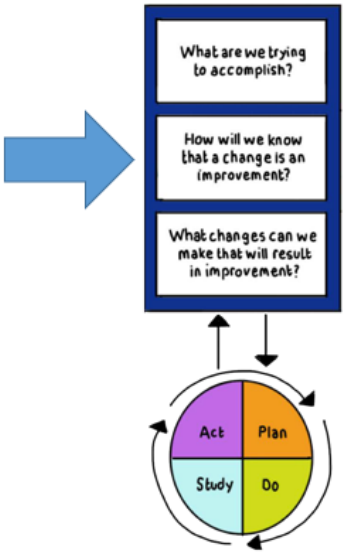
Model for Improvement – Question 2

"Not every **change** is an **improvement** but every **improvement** is a **change**"



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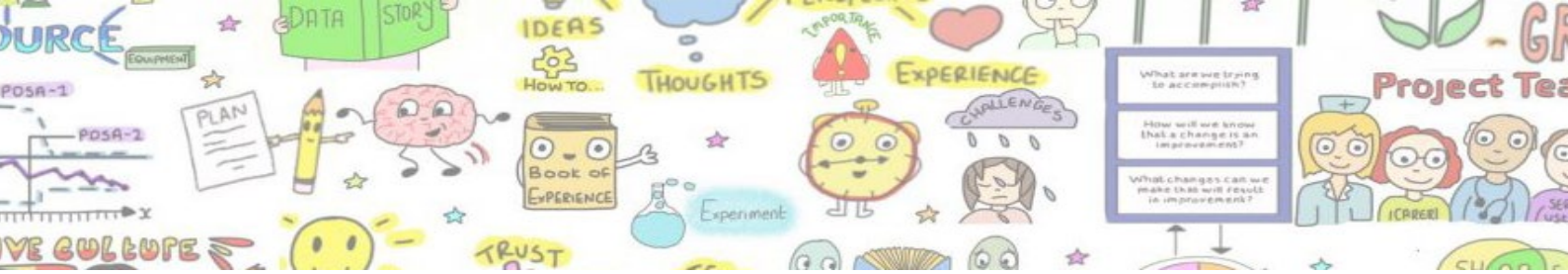
[Source: Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.]



But… How do we know that a change is an improvement?

Improvement is NOT just about measurement!

"You can't fatten a cow by weighing it" Proverb

However, without measurement you won't know …

"Have we made a difference?"

"Is this change making a positive impact?"

"Have we met the aim of our project?"

"What is the best action to take next?"

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Let us take you through the quality measurement journey – Key milestones

Photo by David Clode on Unsplash

Aim (How good? By when?)

Concept

Measure (What?)

Operational Definitions (How?)

Data Collection Plan

Data Collection

Analysis → ACTION

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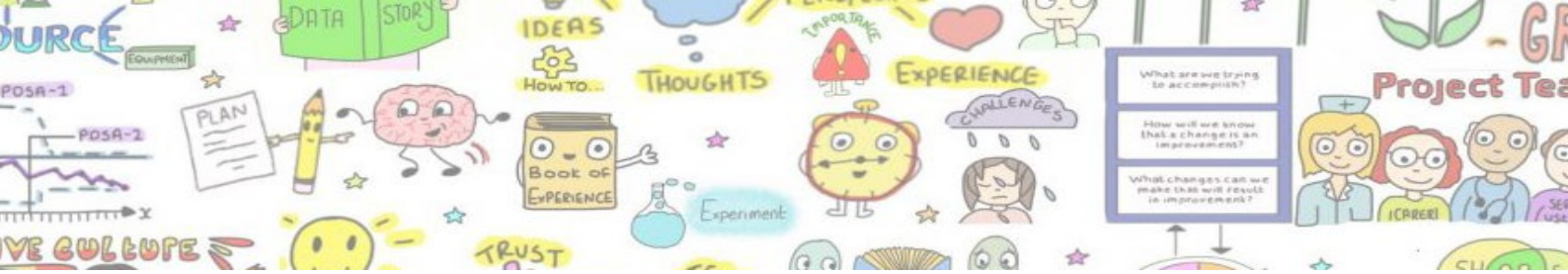
Source: R. Lloyd. *Quality Health Care: A Guide to Developing and Using Indicators*. Jones and Bartlett Publishers, 2004.



Quality Measurement Journey

AIM – increase recycling of waste to 80% by December 2020

Concept – increase recycling

Measures – % waste recycled per Trust site

Operational Definitions – weight of waste recycled/weight of total waste

Data Collection Plan – weekly; no sampling; all sites

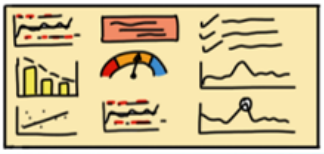
Data Collection – QI project lead collects data

Analysis – control chart → **ACTION**

Types of measures in QI

Outcome Measures

- Tells us whether aim is being achieved.

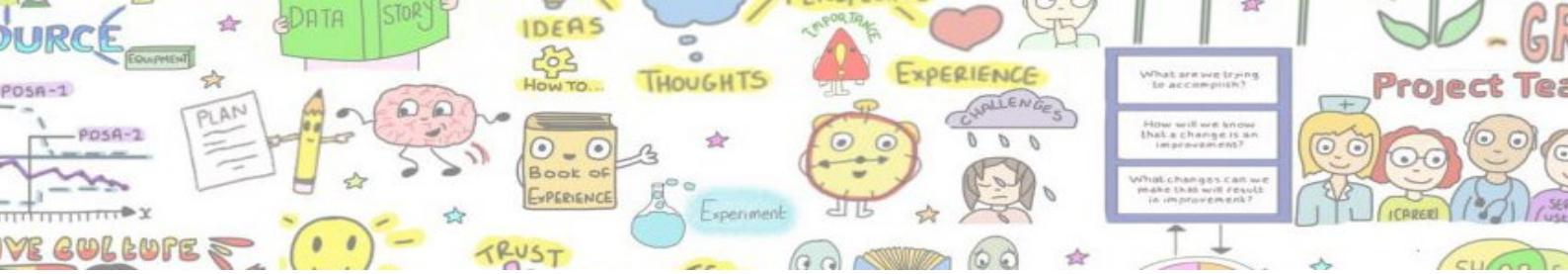


Process Measures

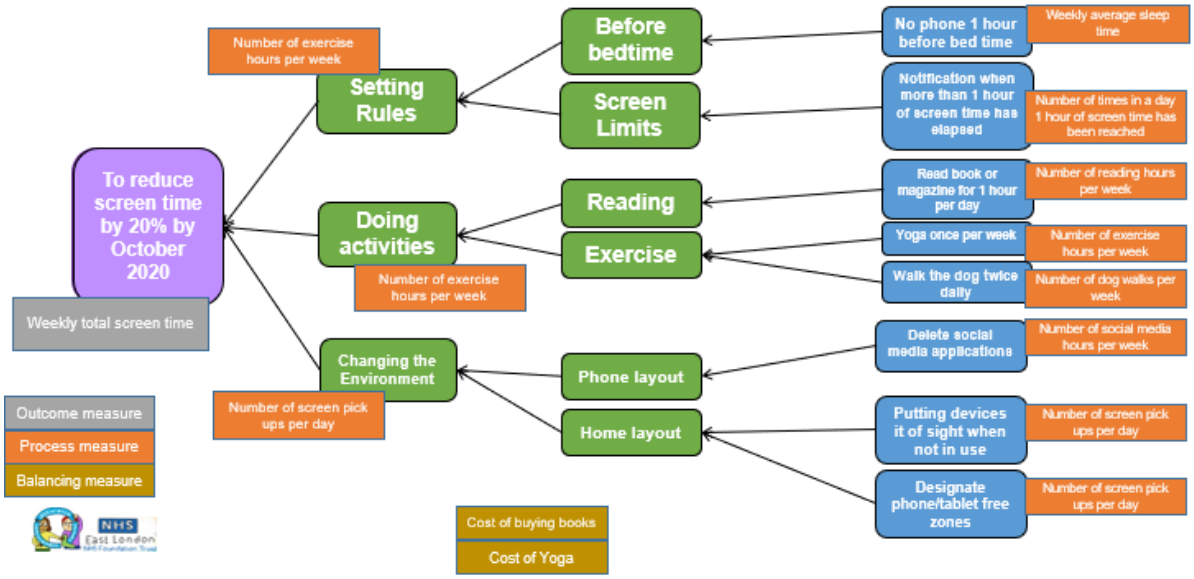
- Attached to drivers or change ideas.
- How are the parts or steps in the system that you are trying to influence performing?

Balancing Measures

- What happened to the system as we improved the outcome?
- Any benefits/untoward consequences?



Example: Potential family of measures



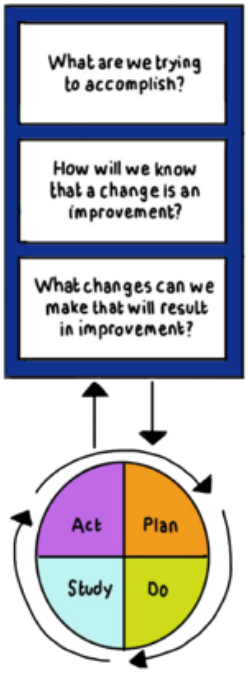
Measure at two levels…

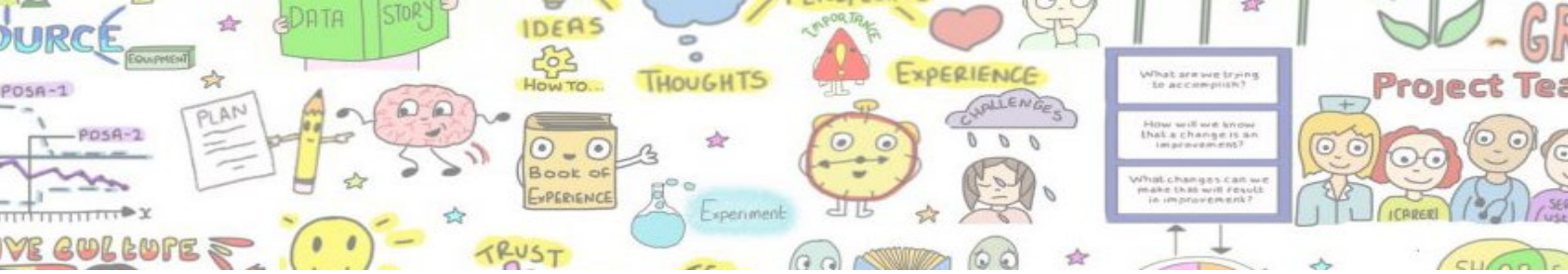
Project: maintained throughout the life of the improvement project.

- **Quantitative Data**
- Qualitative Data

PDSA: Measures are done on an as needed basis for diagnosis and for assessment of the changes tested

- **Qualitative data always**
- Quantitative data as needed

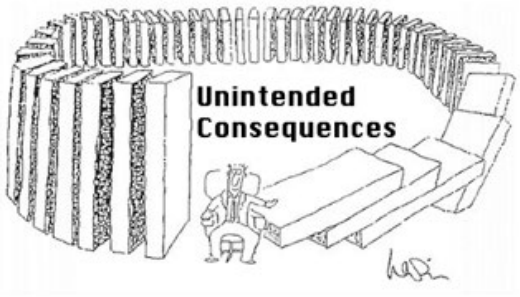




Balancing Measures:

Looking at the system from different dimensions

- Outcome (quality, time)
- Transaction (volume, no. of patients)
- Productivity (cycle time, efficiency, utilisation)
- Subpopulations (who is benefitting, who is not)
- Financial (charges, staff hours, materials)
- Appropriateness (validity, usefulness)
- Patient satisfaction (surveys, complaints)
- Staff satisfaction



Operational Definitions…

… a description, in quantifiable terms, of what to measure and the steps to follow to measure it consistently.

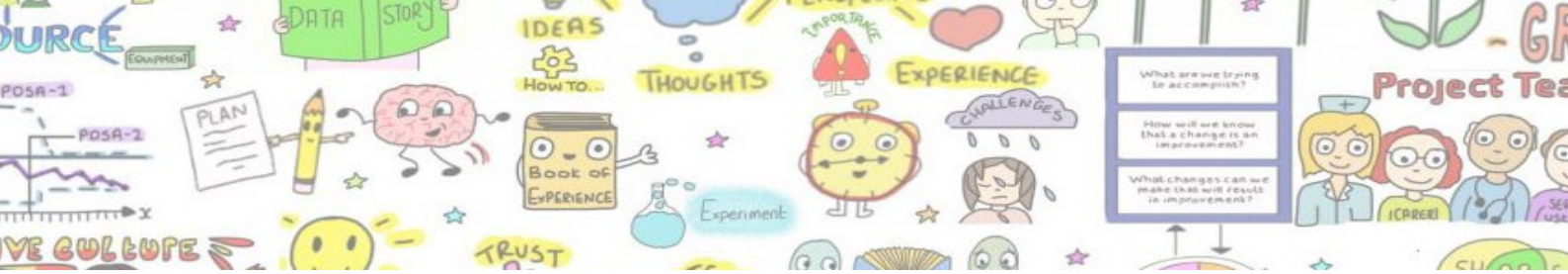
Is clear and unambiguous

It gives communicable meaning to a concept

Specifies measurement methods and equipment

Identifies criteria

Source: R. Lloyd. *Quality Health Care: A Guide to Developing and Using Indicators*. Jones and Bartlett Publishers, 2004.



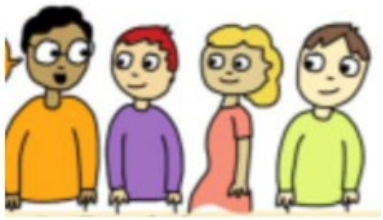
Unclear operational definitions often lead to confusion…..

Violent incidents on a ward

DNA's

Falls

Appointment waiting times



Now go and collect some data

Who is going to collect the data?

Pick people to help you collect the data

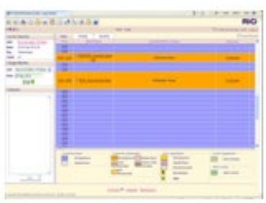
How will the data be collected?

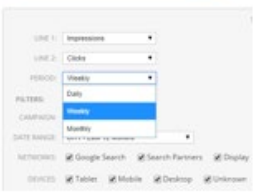
What is most easily accessible (Clinical Systems, Management Systems, Surveys on paper?)

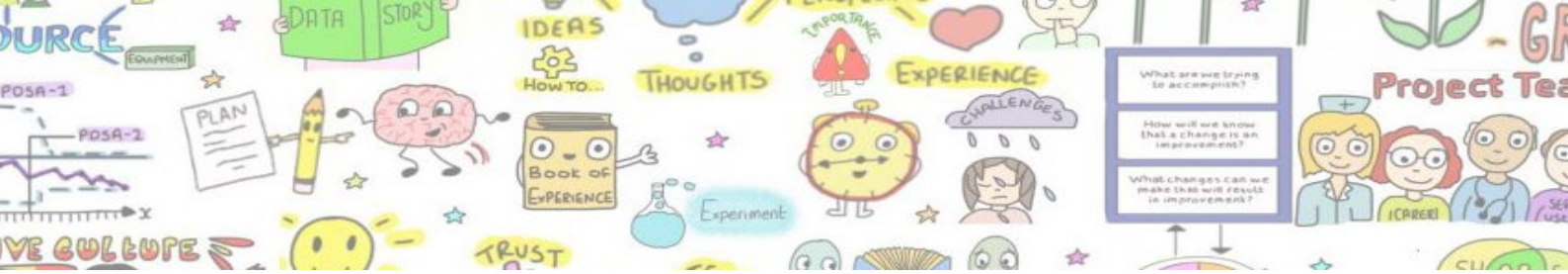
How often are we collecting the data?

Daily, Weekly, Fortnightly or Monthly

Do we need to exclude anything?





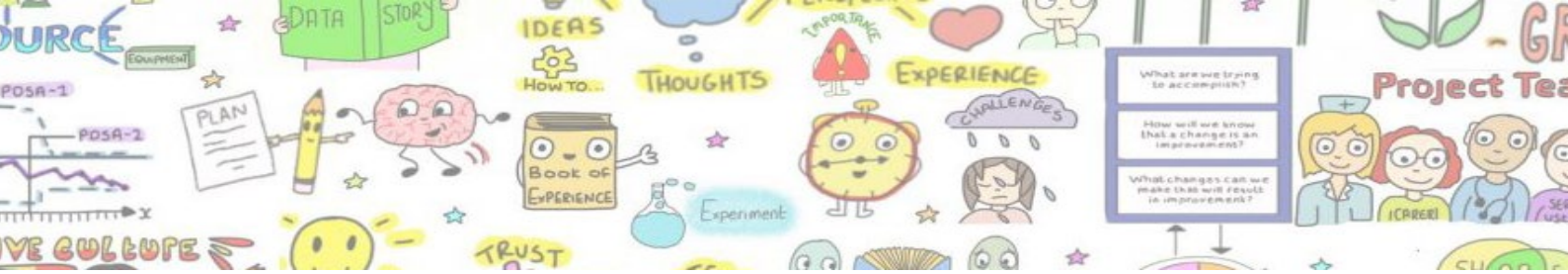


Measurement plan examples

Measure Name (Be sure to indicate if it is a count, percent, rate, days between, etc.)	***Operational Definition*** (Define the measure in very specific terms. Provide the numerator and the denominator if a percentage or rate. Be as clear and unambiguous as possible)	***Data Collection Plan*** (How will the data be collected? Who will do it? Frequency? Duration? What is to be excluded?)
Percentage of people who DNA an appointment to the outpatient clinic	***Numerator***: number of patients, each week, who did not attend and did not contact the service 24hrs before the appointment time ***Denominator***: number of patients booked into appointments each week	• Collected on RiO • By Admin lead • Each Monday for the previous week • Excludes patients who called in before the start of appt
Percent of medication errors on green ward	***Numerator***: Number of medication errors (as defined by wrong site, wrong dose, wrong patient wrong medication) ***Denominator***: Total number of medications administered	▪ Weekly collection ▪ Collected by senior nurse on datix ▪ Only collected for green ward

Measurement journey - Final Tips

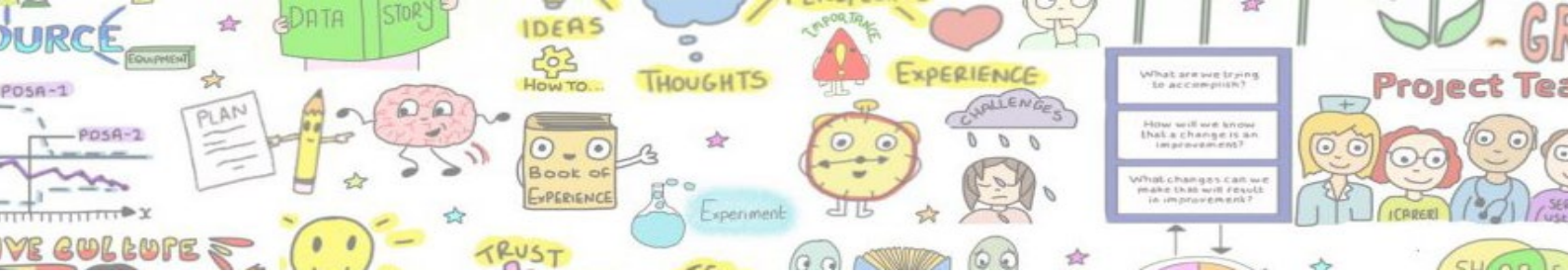
- ✓ Measurement for learning not judgement
- ✓ All measures have their **limitations**
- ✓ Plan for **data collection early**
- ✓ You need a **balanced set of measures**
- ✓ Use measures to guide improvement and testing
- ✓ Integrate measures into daily routines
- ✓ Focus on the **vital few**!
- ✓ Keep it **simple**!



References

- Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009. P93-96
- Source: R. Lloyd. Quality Health Care: A Guide to Developing and Using Indicators. Jones and Bartlett Publishers, 2004.
- Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

NHS East London


DATA
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HOW TO...
THOUGHTS
EXPERIENCE
CHALLENGES
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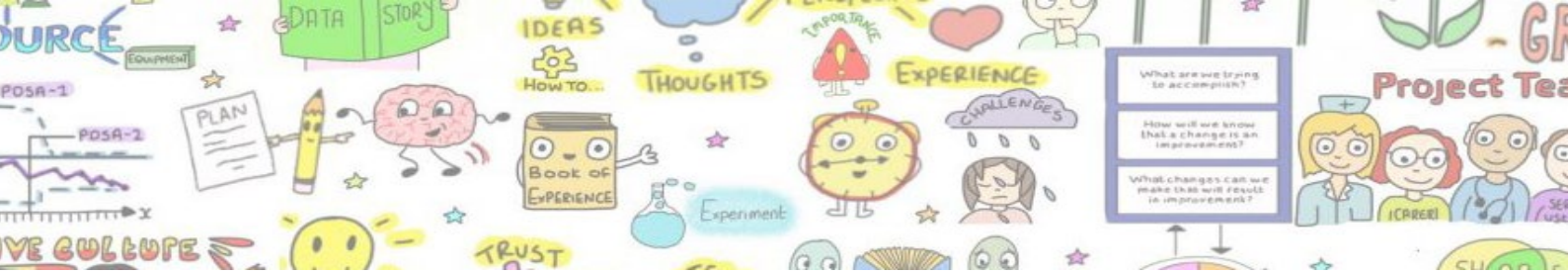
Book of Experience
Experiment
TRUST
Project Tea

My Notes



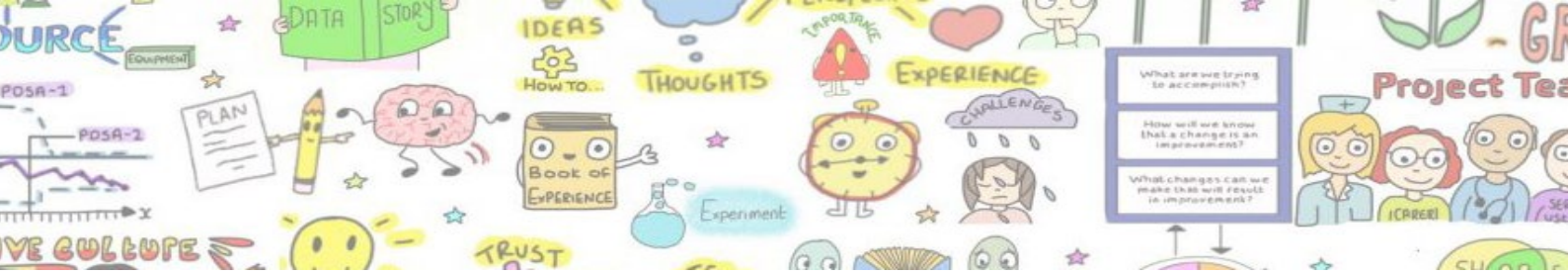
Module 2.4

Aim Statement Checklist

Aim Statement Checklist

In order to ensure your QI project aim is Specific, Measurable, Achievable, Realistic and Timely (SMART), ensure it ticks all the items on this checklist:

Component of the Aim	Yes / No
Is the problem clearly stated?	
Is it clear who will benefit from the improvement?	
Is there a numerical goal or amount the team aims to improve by?	
Is there a calendar date the aim is to be achieved by?	



Activity

Spiral Journaling

One thing I learned from the teaching this morning…	One thing I learned about myself today…
What one tool I will use to understand the problem…	What will help me to succeed in completing the action period work?