

Improving the way we work: Webinar Series

Please note there is no sound at present



Improving the way we work:

An Introduction to Continuous Improvement



hello my name is...



Iain Smith



Michael
Anderson



Rachel Gray

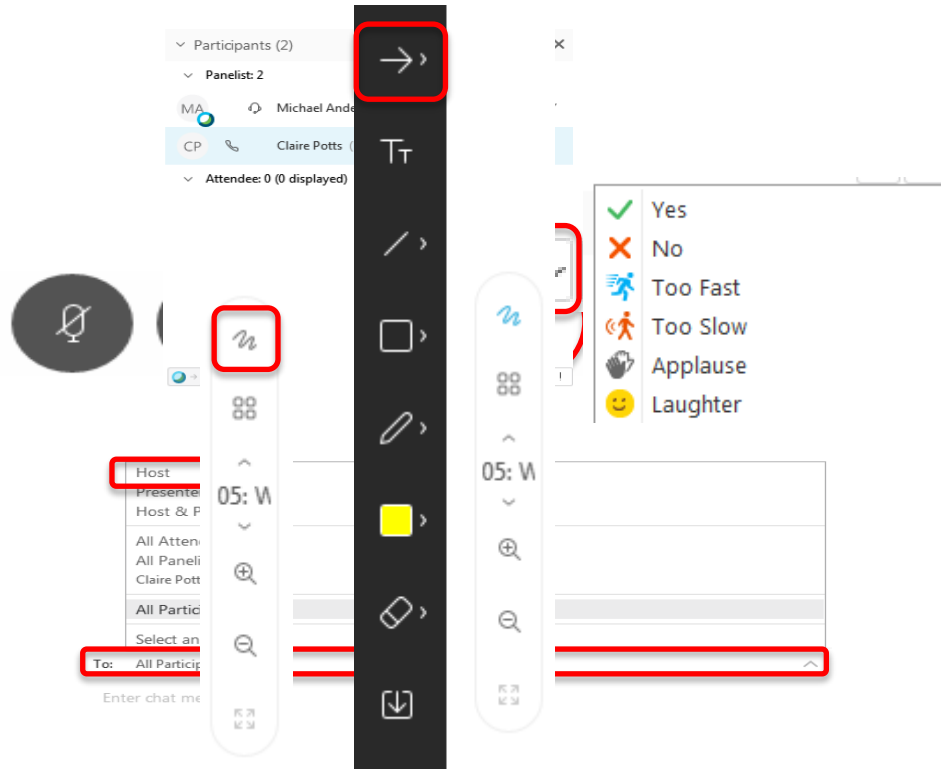


Phil Thomas



Ways to interact

- Feedback icons
- Chat box
- Annotation tools



Doodle Page

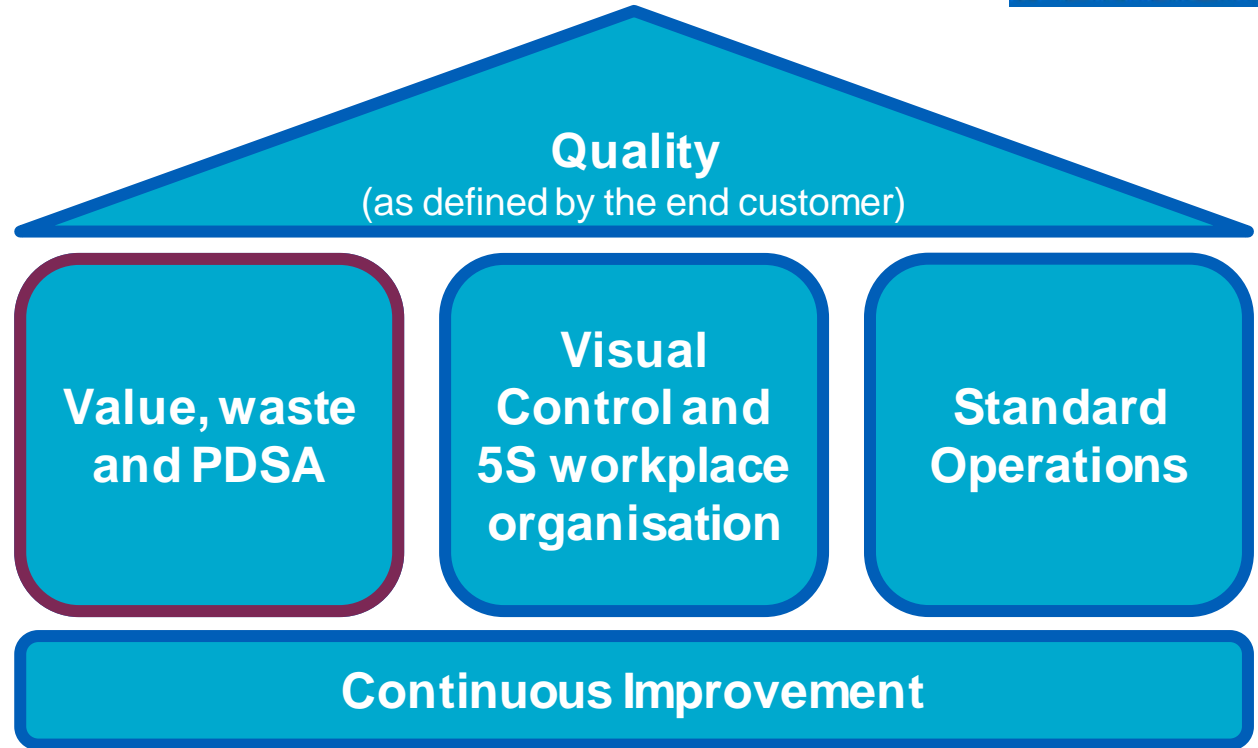


Module One: Introduction to Continuous Improvement



CI and Lean

- Foundation of Lean
- The components work together as a system to drive continuous improvement



Objectives for today

By the end of the session we will have:

- Introduced the methodology known as Lean which underpins Continuous Improvement
- Shared examples of how Lean has been used in healthcare
- Discussed ways in which it can help your working practice



Too Busy for Improvements?



A brief history of Lean

- Developed by Toyota in the 1940's to compete with American car companies
- Needed to meet market demand – mass production not an option
- Needed to produce different models and specifications
- Taiichi Ohno considered the founder of Lean manufacturing



Other companies using Lean

CAPITA

mbed



Many tools associated with Lean

- Standard operations
- Value-stream mapping
- Waste elimination
- Process mapping
- Visual control & 5S
- Communication Cells
- Kanban
- Set-up Reduction
- Multi-process working
- PQ (demand) analysis
- Pareto analysis
- Level scheduling
- Continuous flow
- Takt-time and line balance
- Flow mapping/spaghetti maps
- Error-proofing / poka yoke
- Creative Problem Solving
- Rapid improvement events



What is Lean?

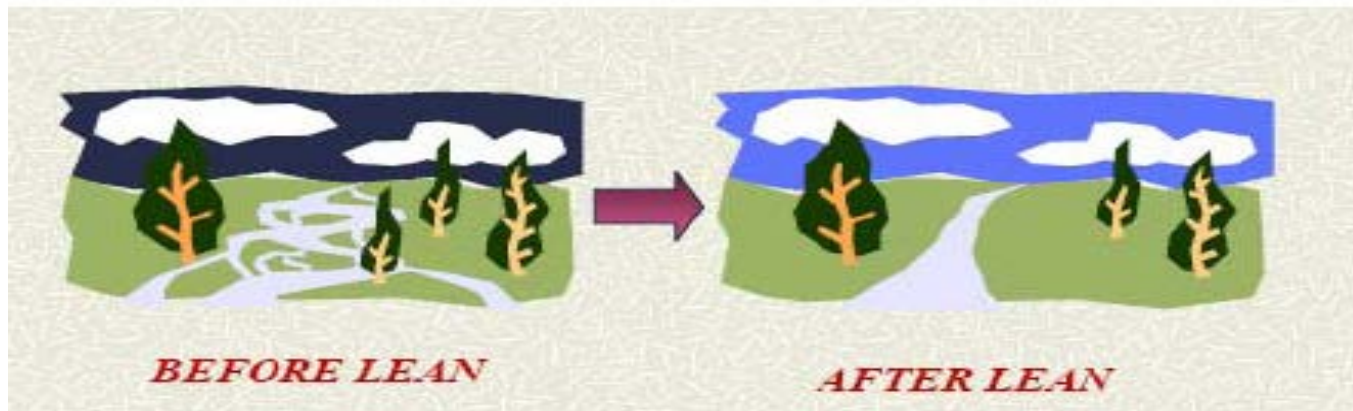
The relentless pursuit of the perfect process
through waste elimination

Lean is the process of identifying the **least wasteful** way to provide **value (better, safer care, with no unnecessary delays at lower cost)** to our **patients / customers**.

We spend 75-95% of our time doing things that increase our costs and create no value for the customer



Keep the process moving,
forward (streamlining the flow)



Lean: Myth vs Reality

MYTH: What Lean IS NOT

- A tangible recipe for success
- A management system or programme
- A set of tools for implementation
- A system for production floors only
- Something that can be implemented in a short period of time



REALITY: What Lean IS

- A way of thinking
- A total management philosophy
- Focussed on total customer satisfaction
- An environment of team and work improvement
- A never ending search for a better way
- Evolutionary



Traditional definitions of Value

Lean

- Processing that changes the shape or character of a product
- Activities that the customer is willing to pay for...

Healthcare

- Any activity which improves the customer / patient's **health, well being and experience**



Critical dimensions of value

**OPERATIONAL
(COSTS)**

**CLINICAL
(EFFECTIVE /
SAFE)**

**PATIENT
EXPERIENCE**



Critical dimensions of value

**OPERATIONAL
(COSTS)**

**CLINICAL
(EFFECTIVE /
SAFE)**

**PATIENT
EXPERIENCE**



Three types of work

Value Adding

MAXIMISE!

Any activity which improves the patient's health, well being and experience

Non Value Adding

MINIMISE!

Needs to happen but does not directly add value to the patient's journey

Waste

REMOVED!

Does not add any value to the patient's health, well being or experience



Waste is

- Anything other than the **minimum** amount of equipment, materials, space, and worker's time which are **essential** to **add the required value** to the product or service



Eight types of waste

• T ransport	Unnecessary movement of products & materials
• I nventory	Excess of products & materials being stored
• M otion	Unnecessary movement of people (e.g. walking)
• W aiting	Wasted time waiting for next step in the process
• O ver-production	Making more than is needed before it is needed
• O ver-processing	Doing more work than is required
• D efects	Re-work caused by poor quality, errors & defects
• S kills	Under utilising people's talents, skills & knowledge



Waste is

- A symptom, not a cause, of a problem
- We need to find and correct causes of waste

“Lean contributes a set of principles and tools to disentangle the various forms of waste and tackle their root causes”

Jones & Mitchell (2006), Lean Thinking for the NHS



Causes of Waste

- Poor Layout
- Set-up time
- Poor maintenance
- **Poor communication**
- Equipment
- Work Methods
- Deficient training
- Poor adherence to procedures
- Ineffective scheduling
- Lack of material
- Dis-organisation
- Supplier reliability/quality problems
- Not knowing requirements



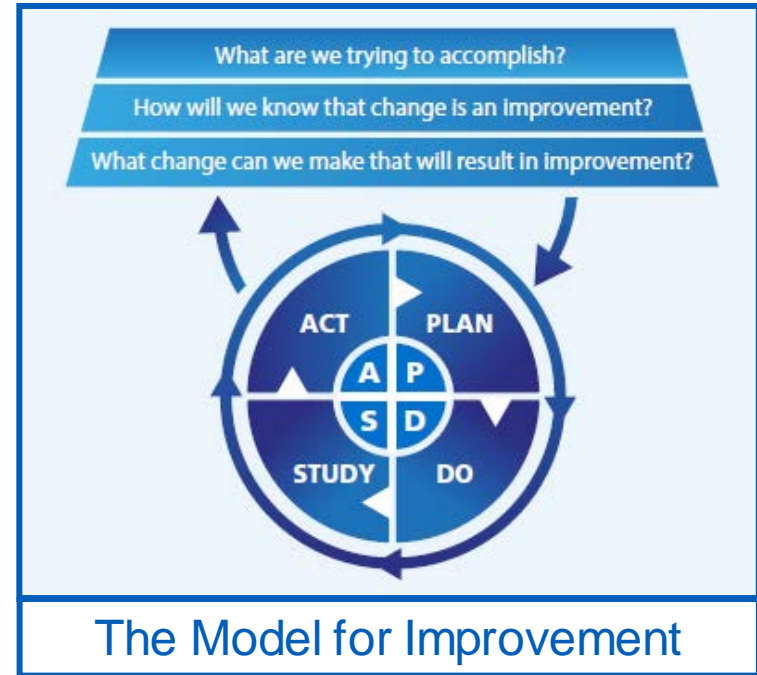
“A bad system will beat a good person every time.”

 **W. Edwards Deming**



The engine that drives Lean

- The Model for Improvement and plan do study act (PDSA) cycles ensure continuous improvement to eradicate waste from systems and processes



Eliminating waste

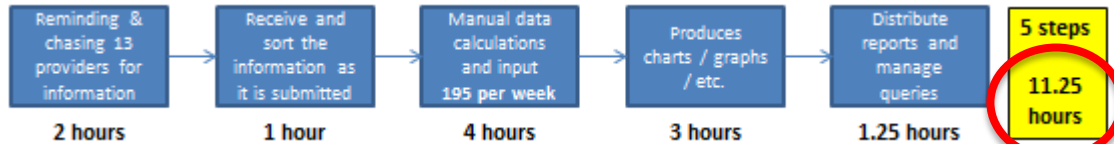
Use the model for improvement and PDSA to:

- **Map** the process
- **Identify waste**
- Re-model the process to **remove** the **waste**
- **Test and improve** the new process
- **Implement** it and sustain the gains.

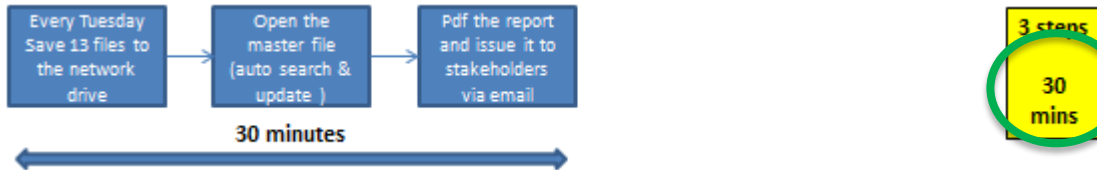


CNE Flu Immunisation Process

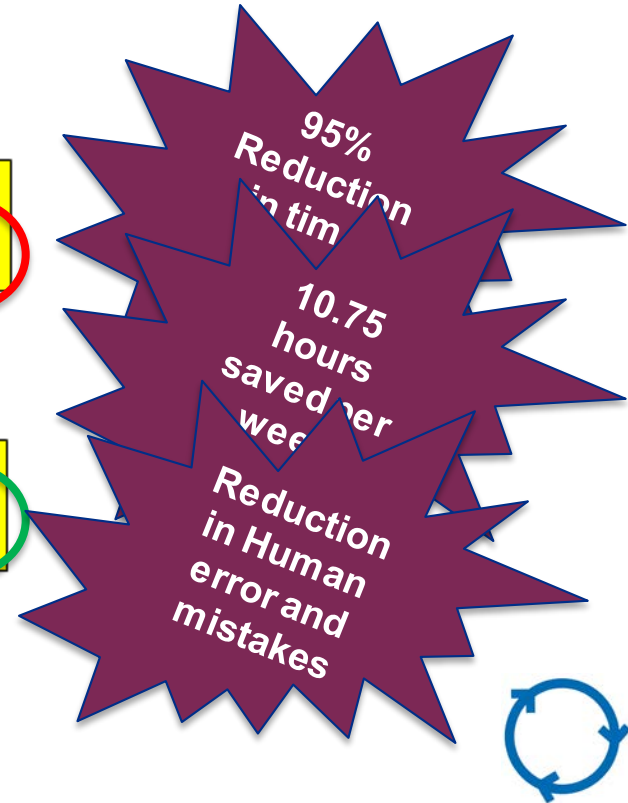
- Map & identify Waste:



- Remove the waste & test:



- Implement it and sustain the gains.



Recap

Who is considered to be the founder of Lean?

- A. Yoko Ono
- B. Taiichi Ohno
- C. Henry Ford



Recap

Which of the eight wastes is missing?

1. Skills
2. Defects
3. Over-processing
4. Transportation
5. Waiting
6. Over-production
7. Inventory
8. ???

- A. Movement
- B. Motion
- C. Management
- D. Motivation



Recap

What does **PDSA** stand for?

- A. Plan, Data, Study, Achieve
- B. Plan, Do, Study, Act
- C. Perform, Dance, Sing, Act
- D. Postpone, Delay, Stop, Apologise

Clue: It is not the People's Dispensary for Sick Animals in this context!



Summary – key points


- There are **multiple customers** in healthcare. A **Lean** perspective **prioritises** the **patient**
- Patient **value** can be thought of as “any activity which **improves** the **patient's health, well being** and **experience**”.
- We need to **engage** with our **customers** to find out **what matters** to them.



Homework

- Download and complete a waste walk in your working area (from the NHS Networks Collaboration Space)
- Email your completed sheets (or some of your identified wastes) to us: Rachel.Gray12@nhs.net

Process Waste Walk



Type of Waste	Describe examples of this waste observed in your work environment	Describe your ideas about what we can do to reduce or eliminate it
<p>1. Transportation Unnecessary handoffs, transfers, distances of material & information. <i>Example of waste</i> Transporting samples, equipment or supplies. Moving notes around.</p>		
<p>2. Inventory Information or things e.g. patients or specimens waiting in a queue <i>Example of waste</i> Excess stock in cupboards or store rooms that is not being used.</p>		
<p>3. Motion Unnecessary people movements and journeys, travel, walking, searching <i>Example of waste</i> Staff walking to pick up notes or having to walk to collect equipment</p>		
<p>4. Waiting / Time People waiting for things or information to arrive. Information waiting on people to arrive. <i>Example of waste</i> Waiting for patients, waiting for staff, waiting for results, waiting for doctors.</p>		
<p>5. Overproduction Making or processing more than is necessary or making things faster than necessary <i>Example of waste</i></p>		





Coming next week

Module Two: Visual Controls and 5S

