

# Creating and Systemising Change through Improvement



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## THE LORD DARZI REVIEW



# The independent NHS investigation's key findings



# The Current State

### DETERIORATION:

The health of the nation has worsened over the past 15 years, with a substantial increase in the number of people living with multiple long-term conditions.



### PRODUCTIVITY:

Too many resources have been poured into hospitals where productivity has fallen substantially, while too little has been spent in the community.

### WAITING TIMES:

Waiting lists have swelled and waiting times have surged, with A&E queues more than doubling from an average of 40 people in 2009 to over 100 in 2024.



### LASTING DAMAGE:

The Health and Social Care Act 2012 did lasting damage to the NHS and the effects continue to be felt today.

### CANCER CARE:

The UK has significantly higher cancer mortality rates than other countries, with no progress whatsoever made in diagnosing cancer at stage one and two between 2013 and 2021.

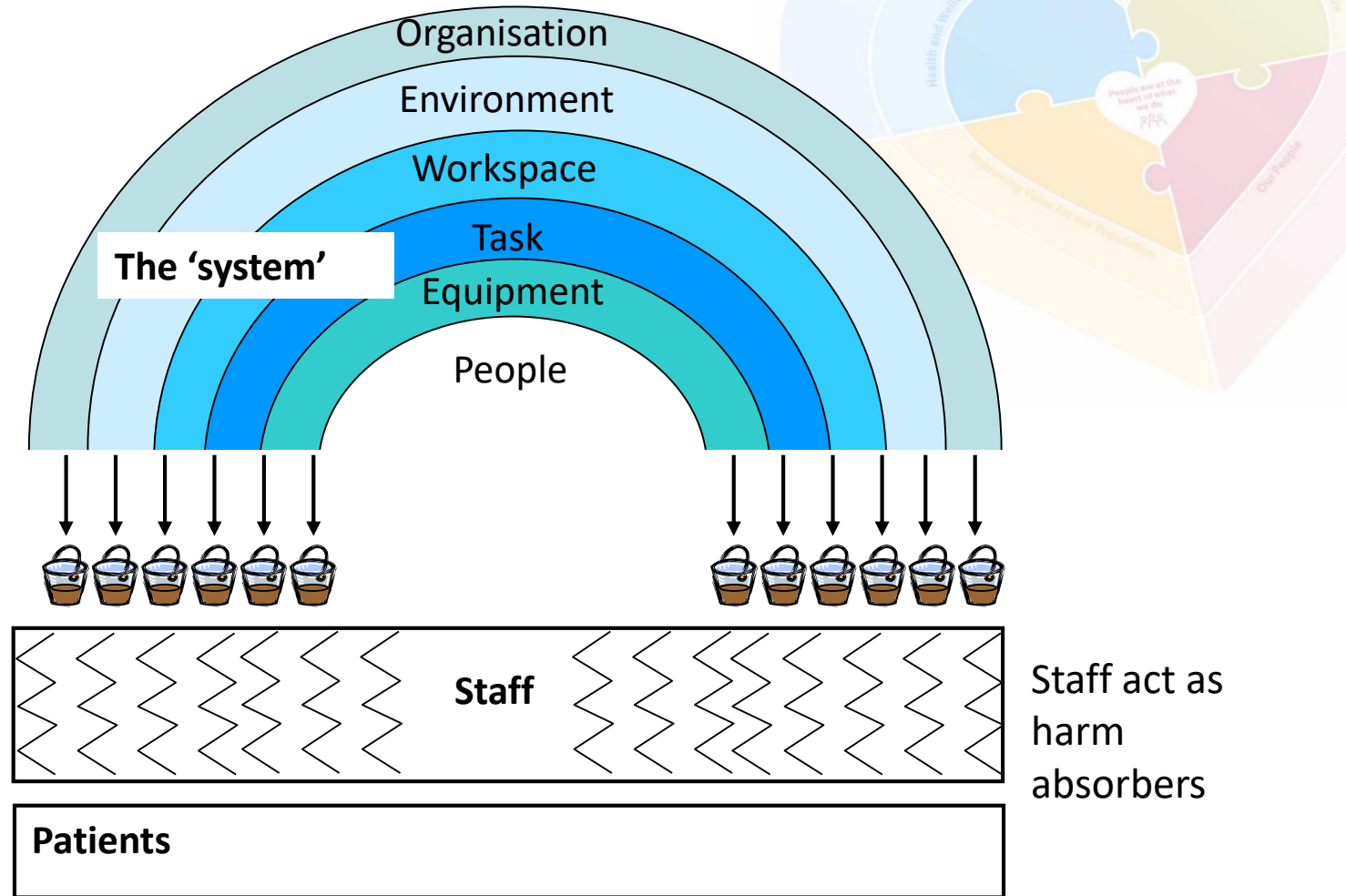


### NOT BEATEN:

Despite the challenges, the NHS's vital signs remain strong. Staff are extraordinarily talented and dedicated. We've turned the NHS around before, we can do it again.

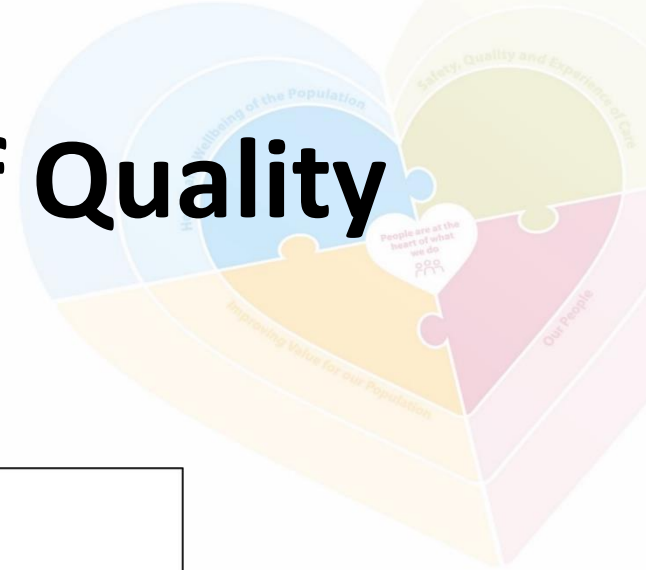


Adapted from REASON, 2005



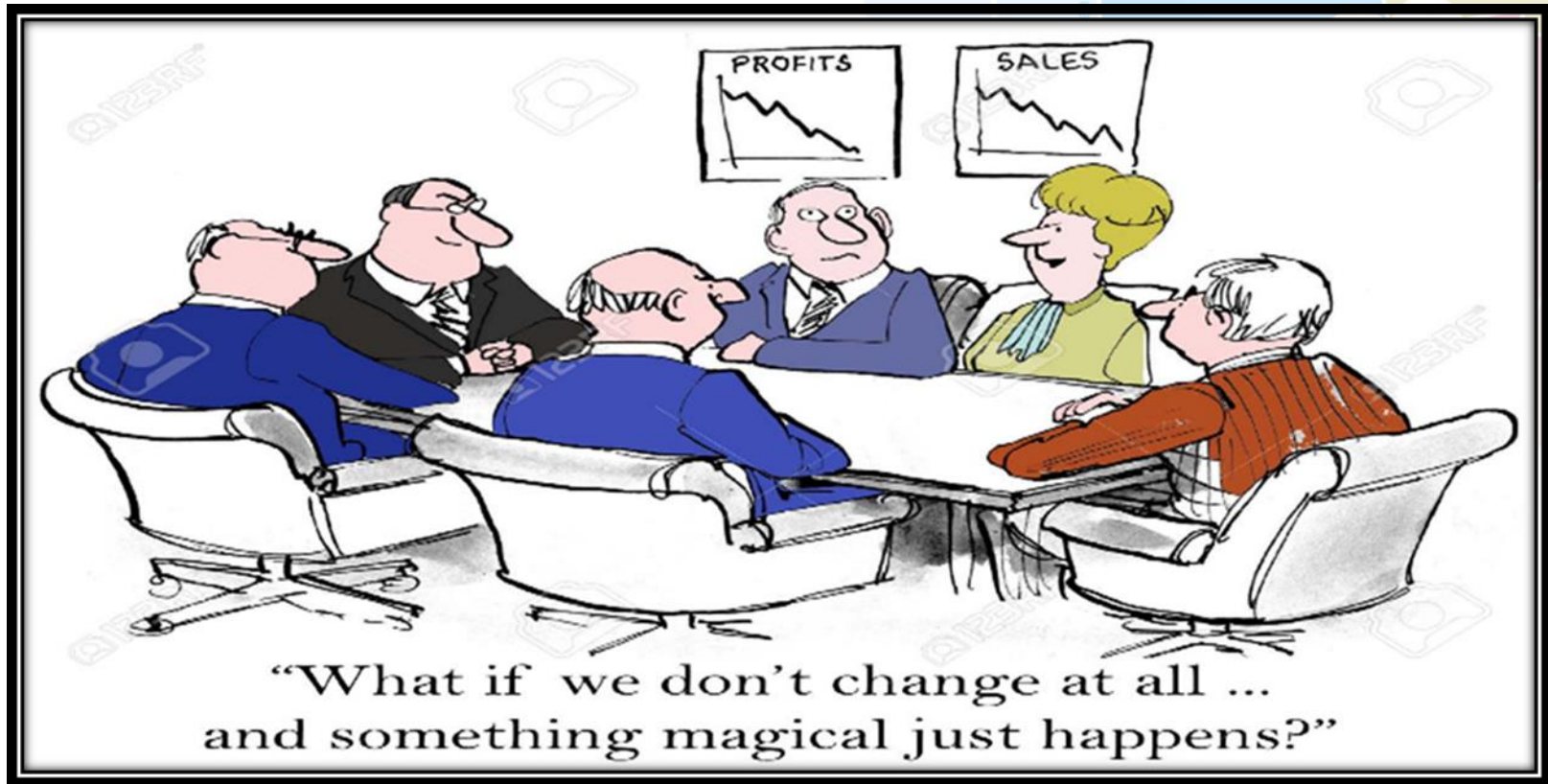
**Factors within the healthcare system that could potentially lead to poor Quality**

# IOM 6 Dimensions of Quality





# How Do We Create Change?



**Every System is Perfectly Designed to Get the Results it Gets  
(Deming)**

# Quadruple Aim

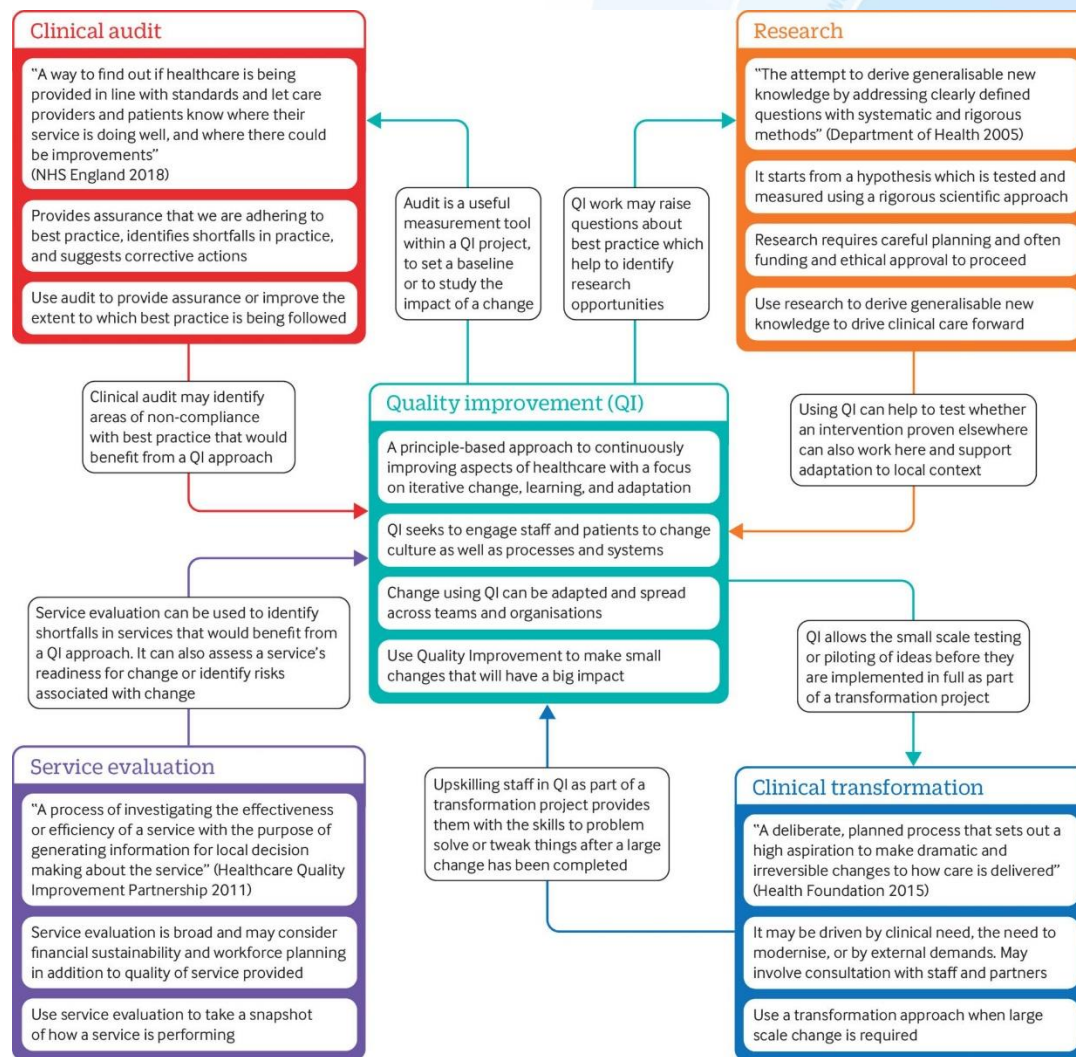


A great place to **Live**

A great place to **Work**

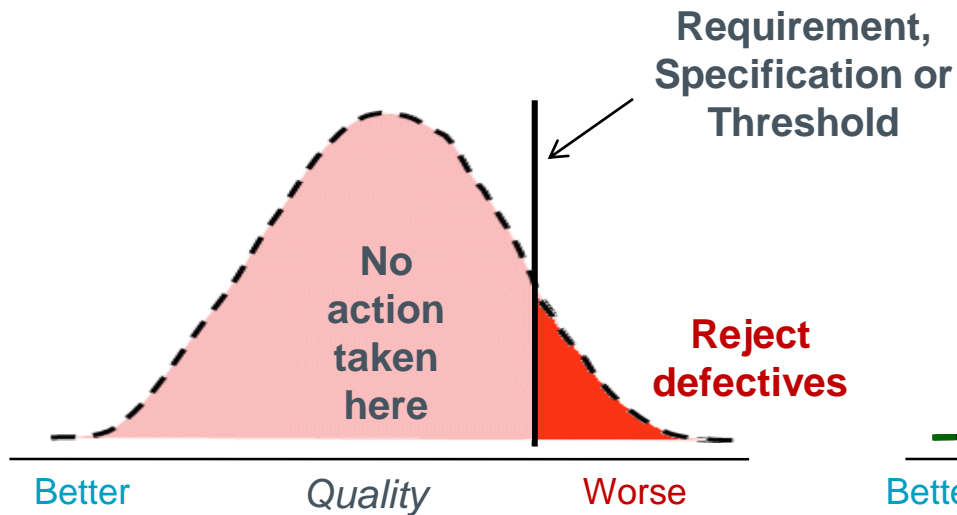
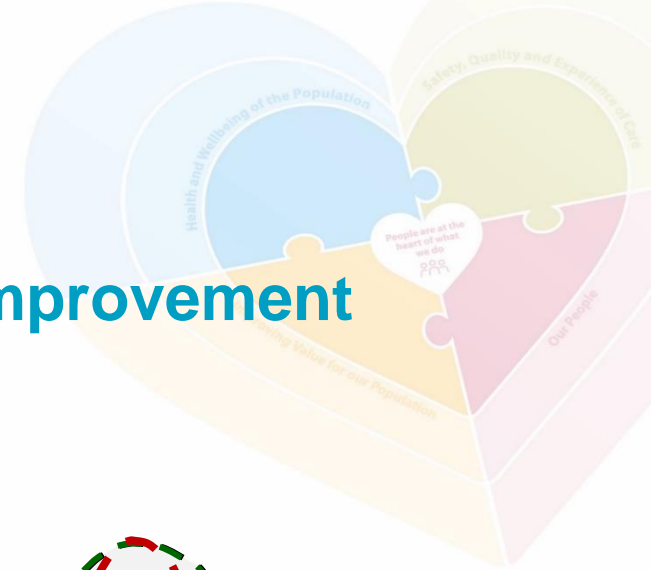
A great place for **Care & Support**

# Using Audit to Create Change



Adam Backhouse, and Fatai Ogunlayi BMJ 2020;368:bmj.m865

# Quality Assurance vs Quality Improvement



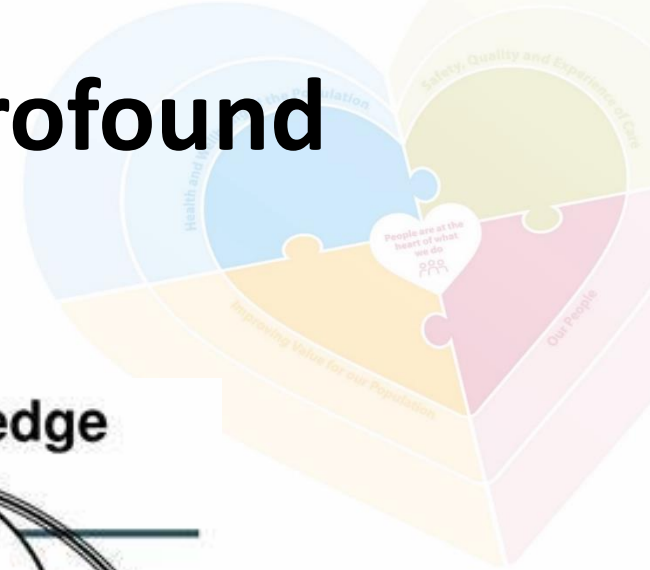
Old Way  
(Quality Assurance)



New Way  
(Quality Improvement)



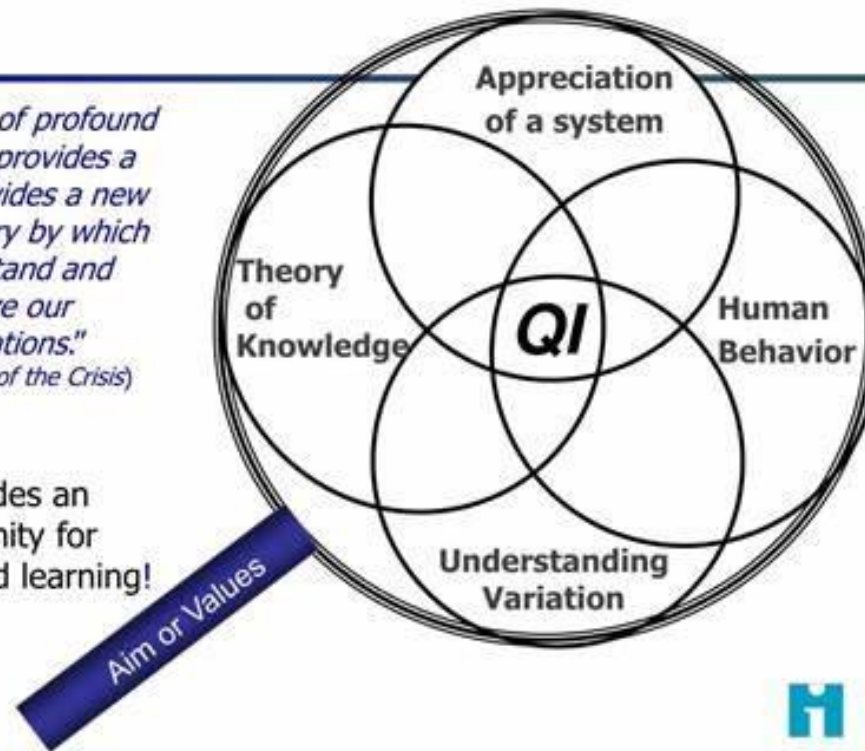
# Demings System of Profound Knowledge



## The Lens of Profound Knowledge

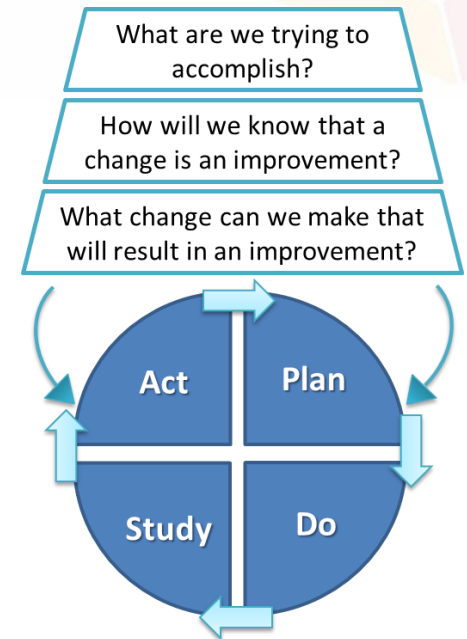
*"The system of profound knowledge provides a lens. It provides a new map of theory by which to understand and optimize our organizations."*  
(Deming, *Out of the Crisis*)

It provides an opportunity for dialogue and learning!

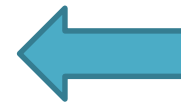
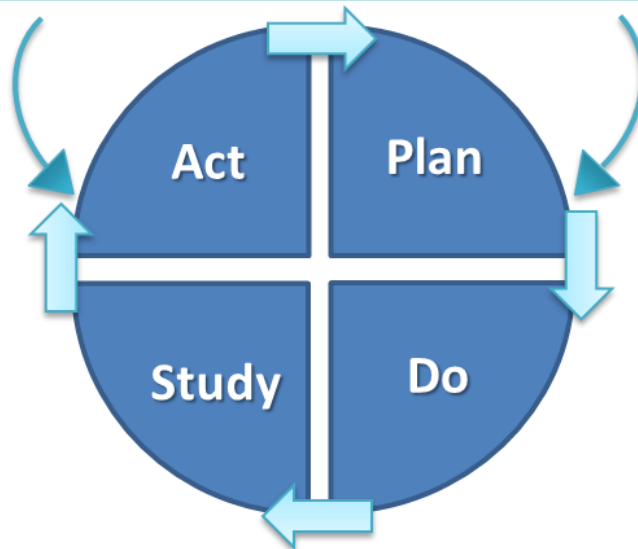
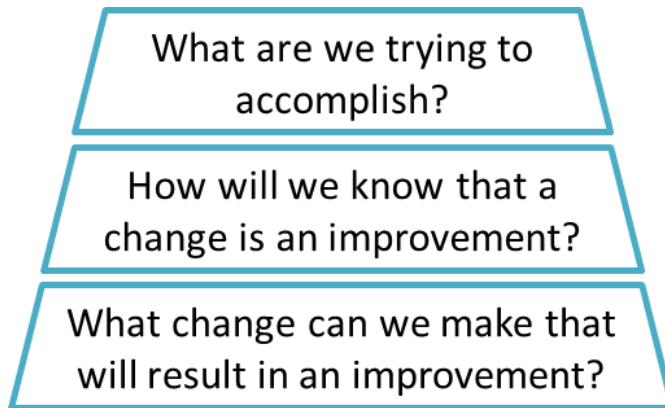
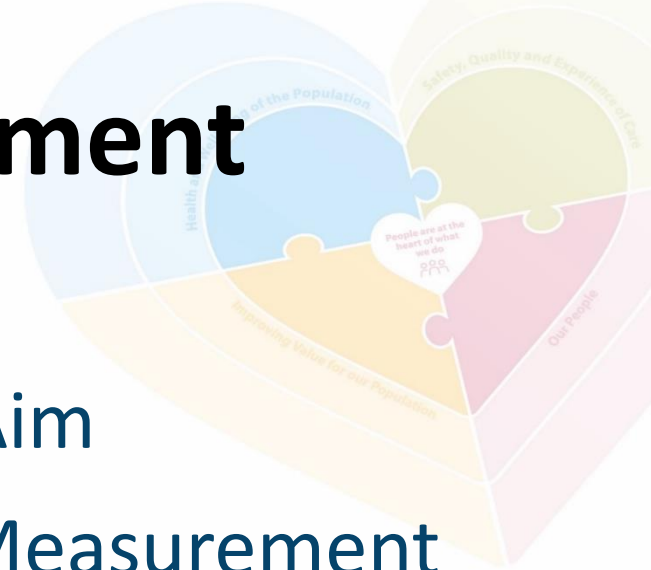


# Quality Improvement

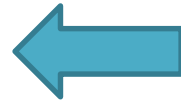
- A systematic approach that uses specific methods and tools to improve quality
- An applied science - no one agreed approach
  - LEAN, Model for Improvement
- Key elements:
  - change resulting in improvement
  - method - an approach with appropriate tools
  - understanding the context



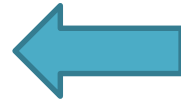
# Model for Improvement



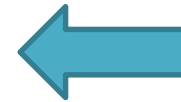
Aim



Measurement

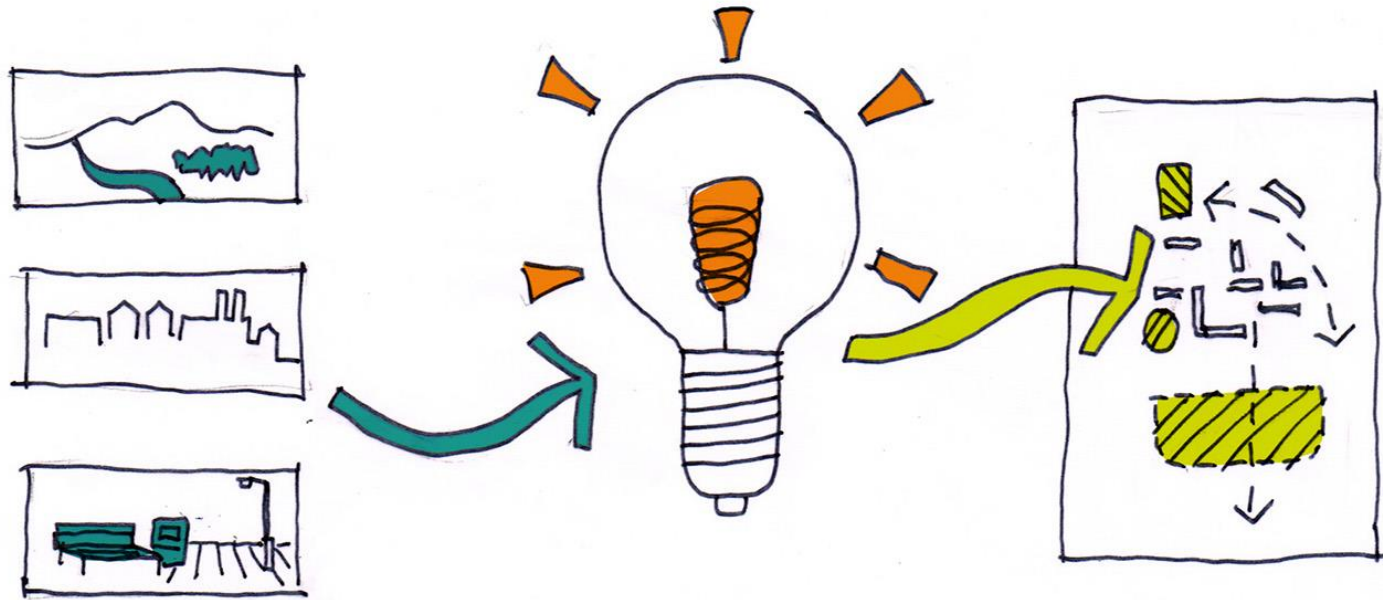


Change Ideas



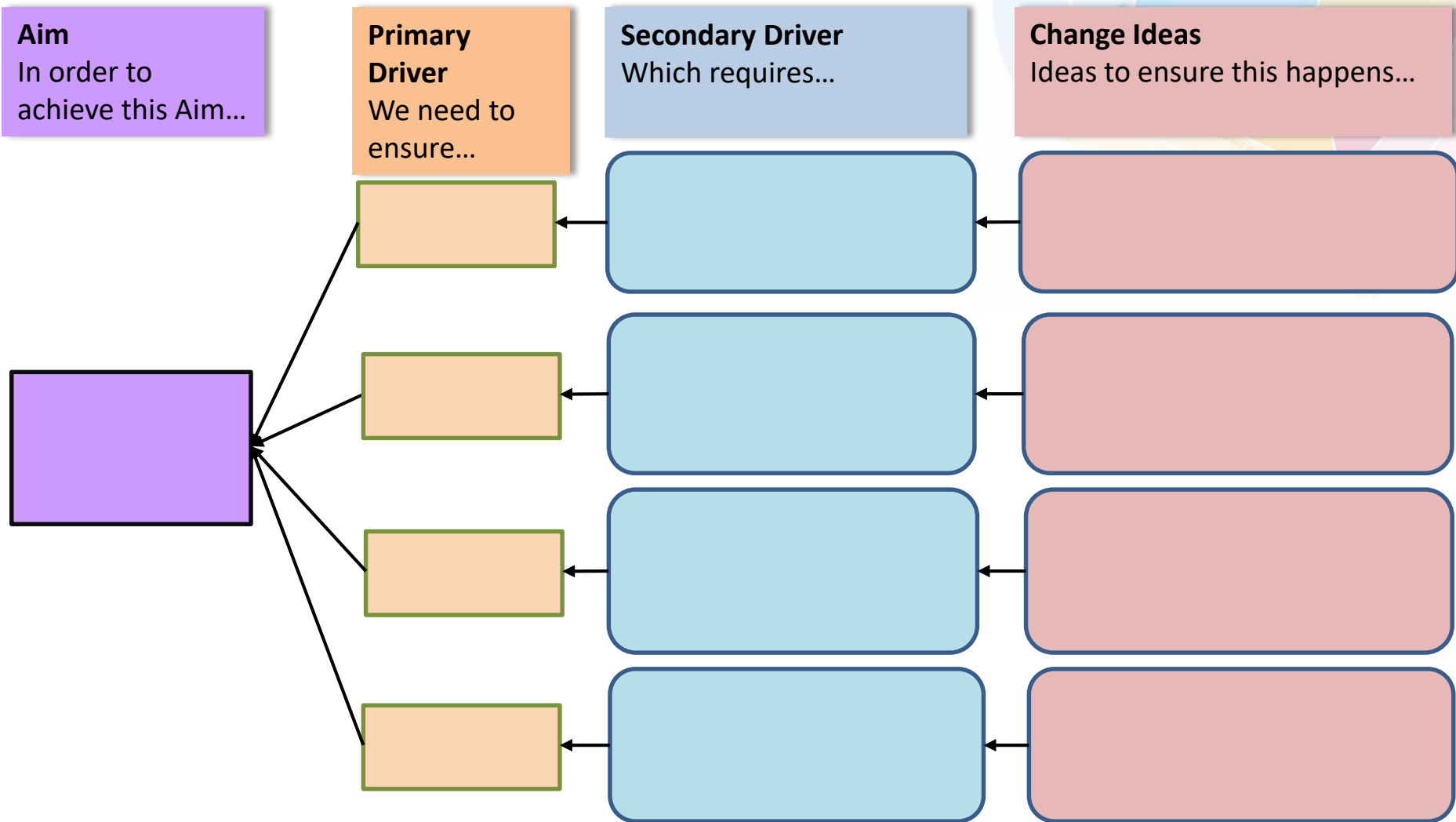
Testing ideas  
before  
implementing  
changes

# Study Design: Aim, Driver Diagram Project Charter

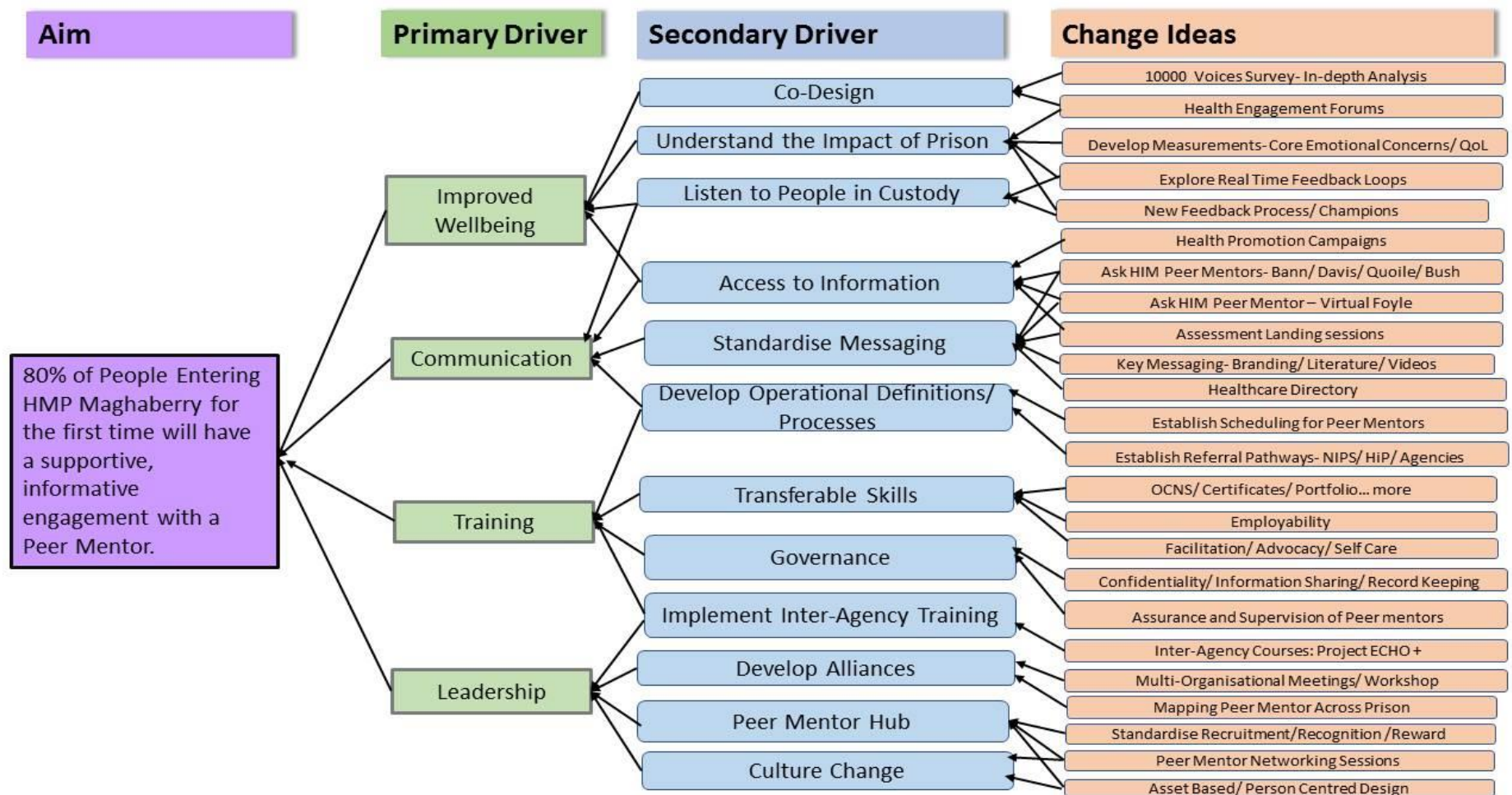




# Driver Diagram



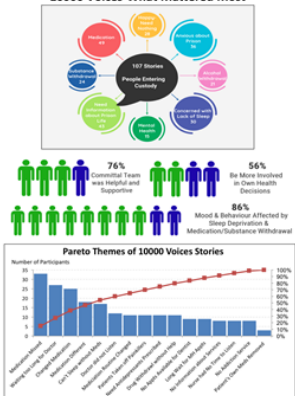
# Driver Diagram



## Understanding the System

4336 People Enter HMP Maghaberry Yearly (NIPS 2017)  
QI Team Co-designed and Adapted 10000 Voices Survey for use in Prison

### 10000 Voices-What Mattered Most



## Communication

### A Whole Prison Approach to Improving Health

QI Multidisciplinary Team – Healthcare Staff, NI Prison (NIPS), People in Custody and Agencies: Start 360, Housing Rights, Barnardos, NIACRO.

- 4 Work-streams**
  - Key Messages**- simple, visual messages reinforced by all staff in the commitment process and in the committal residential Bann House.
  - Induction**- healthcare staff working with people in custody to co-design an interactive session for all people newly arrived in prison. Explaining healthcare services access and keeping well whilst in prison.
  - Prison Staff Induction**-initiating a new training programme for NIPS new recruits explaining health and wellbeing and services in prison.
  - Directory of Services**-Designing a new directory to share knowledge of referral pathways and health services available

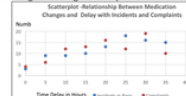


## Healthcare Peer Mentors

### Start with Hello

- Healthcare Navigators to be piloted in Bann House
- Role to Connect with People in the first 24 hours of Entering Custody
- Help Navigate Complex Prison Systems
- Signpost to Healthcare services using Referral Pathways
- Directory of Services Co-Designed through PDSA Cycles with Mentors

**Project Measures:**  
10000 Voices Data  
No. of incidents  
No. of Complaints  
Quality of Life WHOQOL  
Pt. Activation Measure



### Community Prison Healthcare Mentors

- Collaboration with NIPS, SEHSCT, British Red Cross, ICR, Belfast Met
- 9 Month Training Programme
- Red Cross Values, all mentors part of Red Cross Organisation
- Peer Mentors to Lead and Design Prison Health Initiatives
- Promote a Culture of Mutual Benefit

## Project Aims

- Reduce Percentage of Omitted First Doses of Medication in HMP Maghaberry by 60% by June 2018.
- Improve Connection and Flow of Information to People Entering Custody.

### Project Driver Diagram



## A Welcome When People Arrive In Prison



## Medication Pathway

A Multidisciplinary QI Team - With Shared Focus of Welcome  
**Value Stream Map**



VSM revealed a complex prescribing system with wastes, resulting in an unstable process with great variation.  
**89% of First Doses of Medication being missed.**

### PDSA-Improvement Cycles

- 1: Reduce Administration Tasks- Reducing Batching and Wastes
- 2: Introduce Medicines Reconciliation by Pharmacy Team in A.M.
- 3: Co-locate Pharmacist with GP for Prescribing
- 4: Committal Team using Patient Group Directive (PGD) in Process

### OUTCOMES

SPC Analysis revealed a Significant Shift in Reduction of Meds Delay



A Standardization of the Process with Reduced Variation in Time Delay



The SPC Chart for Percentage of First Dose of Medicines Omitted shows over 50% improvement in the prescribing process



Improvement in the Quality and Safety of Prescribing was Revealed through a Shift in the Reduction of Prescribing Errors



## Transformation of the Medicines Pathway

### Future Plans

- Pharmacist Independent Prescriber - RQIA QI Pilot Funding '18**  
Recruitment of PIP to work alongside Committal team.  
Work at Time of Peak Demand.  
Front Facing Support, providing Medicines Optimisation  
Explanation of Medication Changes and Substance Withdrawal.
- Patient's Own Medication (POM)**  
Small Number of Patient's Prescribed Medication brought into Committal and 45% of these Destroyed as don't Comply with Regulations.  
New Protocol with NIPS and SEHSCT for POMs  
Communication with Law Society, PSNI, Probation re Protocol.
- Forensic Medical Officers (FMO) in Police Custody Suites**  
Audit of FMO Medical Records reveal % illegibility of Form and Difficulty in Comprehension.  
Plan to Improve Transfer of Information to Improve Quality and Safety
- Pull System for Prescribing- SBRI- GOV TECH Funding Award**  
Tech Firms to be given Grant to Develop Innovative Solution to Enable Prescribing Information Sharing and Consent from Courts and Custody Cells  
Front Load Prescribing Process, to enable the Committal Team to Prepare Before Arrival.

Prison is a small village, we need to listen to, learn from and support each other- Prison Mentor

A great place to **Live**

A great place to **Work**

A great place for **Care & Support**

# Kotter's 8 Step Change Model



## 01 Create

Establish a feeling of urgency of hurriedness towards change.

## 02 Build

Formulate a guiding coalition

## 03 Form

Develop a strategy to bring about change.

## 04 Enlist

Communicate or put forth the vision or strategy for change

## 05 Enable

Empower employees for taking action to incorporate changes

## 06 Generate

Formulate and generate short-term goals

## 07 Sustain

Capitalize of wins or gains in order to produce bigger results

## 08 Institute

Incorporate new and better changes in workplace culture

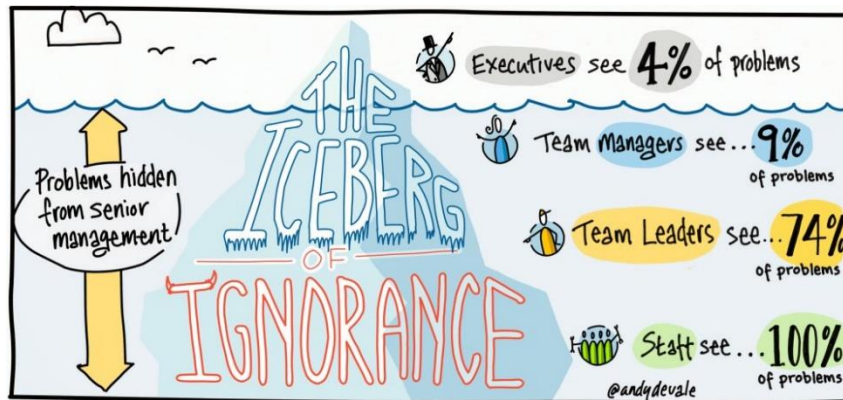


# Creating a Sense of Urgency



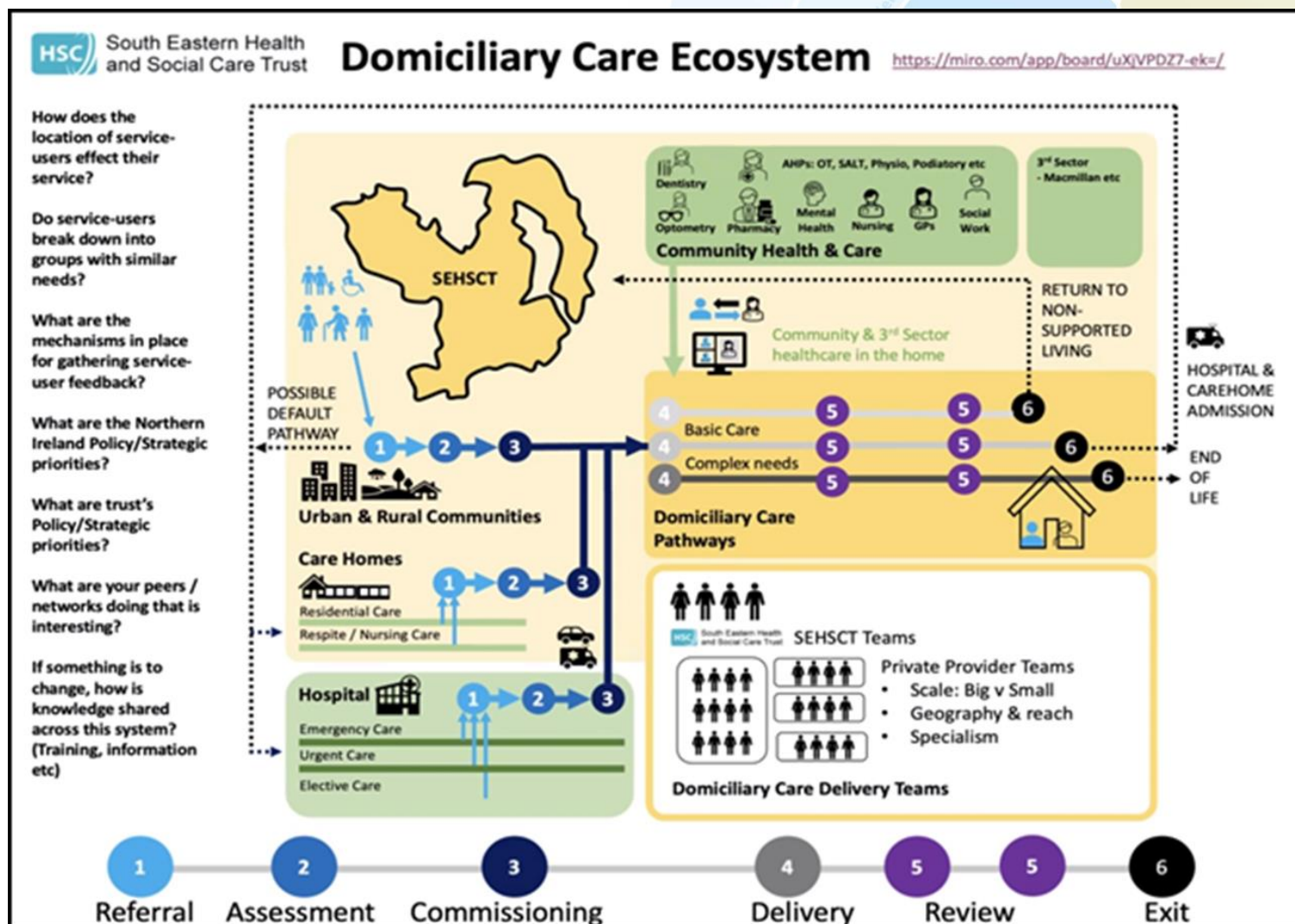
# Form a Guiding Coalition

Co-design is about challenging the imbalance of power held by individuals, who make important decisions about others lives. Often with little or no involvement of the people who will be most impacted by those decisions.



- Prioritising relationships
- Using creative tools
- Building capability
- It uses inclusive convening to share knowledge and power
- Experience Based Co-Design EBCD

# Data Driven

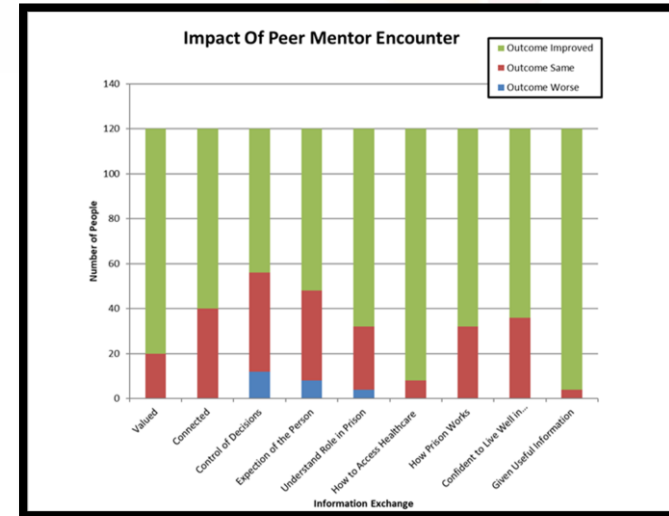
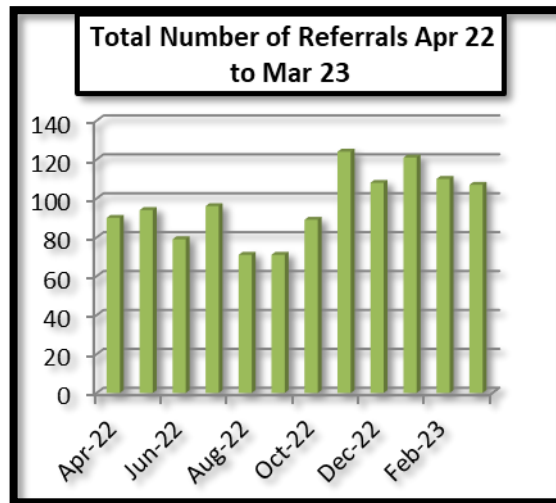
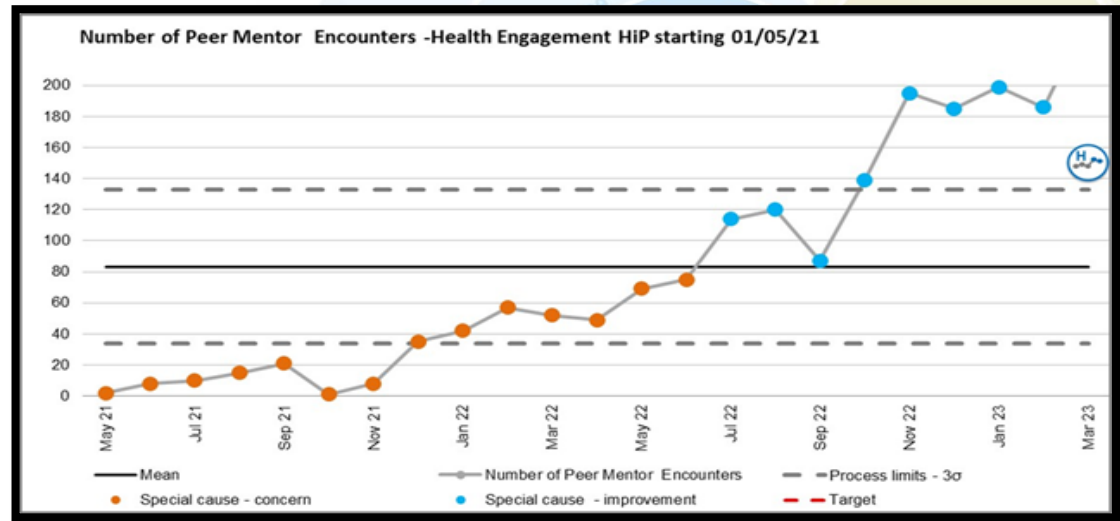




# Data Driven

## Ask HIM Mentor Impact

Number of Mentors- 13  
Number of Encounters-1897  
Foreign Nationals- 36  
Induction - 254





# Measurement for Improvement

Measure Type	Characteristics	Number
Outcome	<ul style="list-style-type: none"><li>• Voice of the customer or patient</li><li>• How is the system performing?</li><li>• What is the result?</li><li>• Always links back to your aim</li></ul>	1-2
Process	<ul style="list-style-type: none"><li>• Voice of the workings of the system</li><li>• Are the parts/steps in the system performing as planned?<ul style="list-style-type: none"><li>○ Can be an early indication of improvement in the outcome</li><li>○ Careful not to overdo the number</li></ul></li></ul>	3-5
Balancing	<ul style="list-style-type: none"><li>• Looking at a system from different directions/dimensions</li><li>• Looks at the impact a change may have on other parts of the system<ul style="list-style-type: none"><li>○ Unintended consequences</li><li>○ Upstream/downstream</li></ul></li><li>• Optional, but wise</li></ul>	1-2

# An Operational Definition...

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

- It gives communicable meaning to a concept
- Is clear and unambiguous
- Specifies measurement methods and equipment
- Identifies criteria

# Operational Definitions

## Build a Structure

Your task as a team is to build the **tallest freestanding structure** possible in 10 minutes.  
The marshmallow must be on top.

# Introduce Clear Definitions

- **Tallest** = Vertical height from table surface to the top of the marshmallow, measured with a ruler.
- **Freestanding** = Structure stands for at least 5 seconds without any external support (e.g., no hands, no tape to table).
- **On top** = Marshmallow must be the highest point on the structure and visible from above.

Go Again- **8 minutes**



# Habits of the Improver

Figure 1 – The habits of improvers

