



Quality Improvement  
Workshop



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Housekeeping



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Tweet whilst you're here!

#QIT\_IA



@Improve\_Academy



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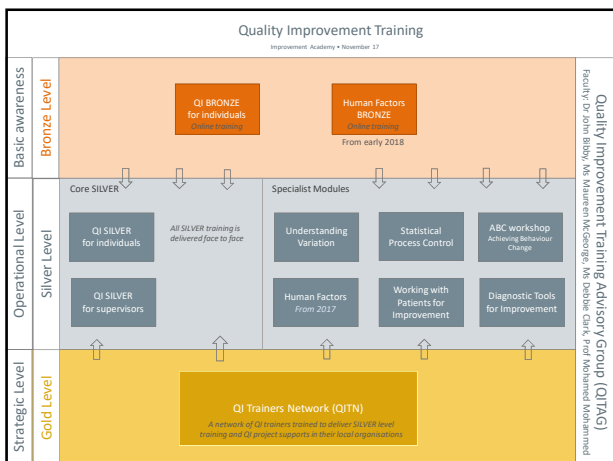
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## Outline Programme

9.30	Registration
9.45	Introductions and background to the project: presentation and questions
10.15	What do you need to get out of today?
10.35	An introduction to some 'improvement principles'
11.00	Refreshments break
11.15	An overview of what we mean by 'Quality', 'Quality Assurance', and 'Quality Improvement'
11.45	The Improvement Model: an overview - how to use diagnostic tools to define your improvement project
13.00	Lunch
13.45	The Improvement model (continued) - measurement for improvement
15.45	Next steps and on-going supports
16.00	Close

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## Ground rules

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**What do you need to get out of today?**



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**An introduction to some aspects of how we bring about improvement**



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The consequences of not learning and sharing



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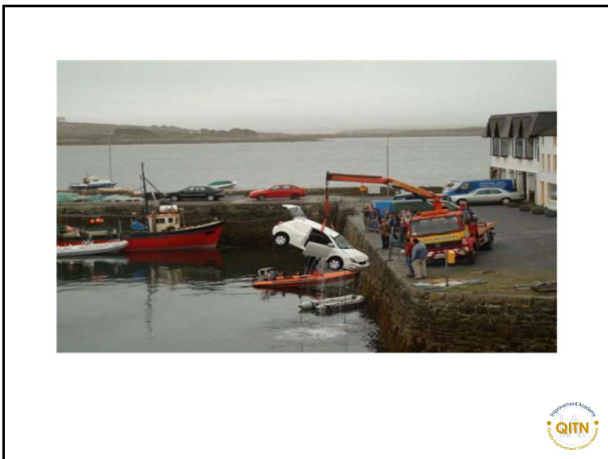
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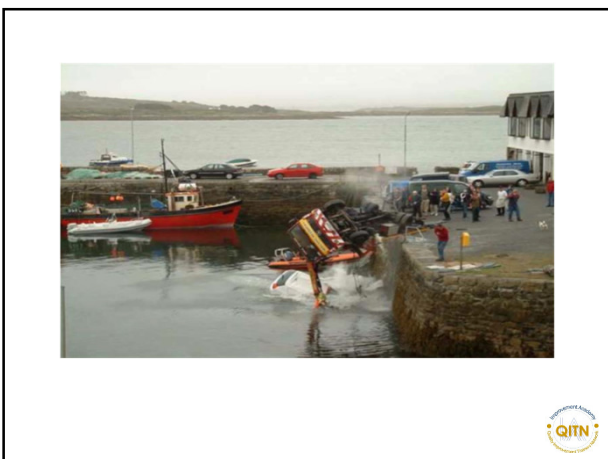
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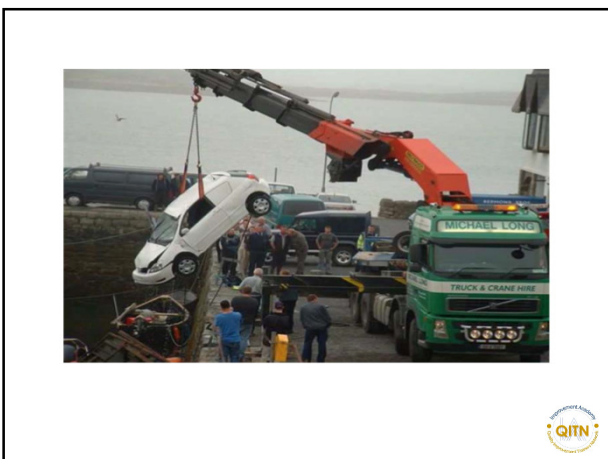
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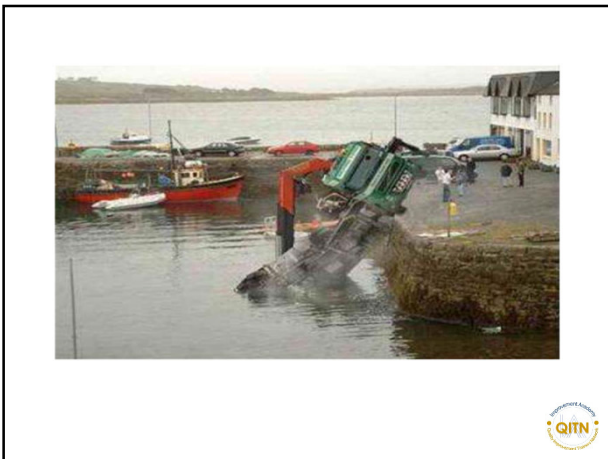
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**'The Theory of Knowledge'**

Learning from mistakes



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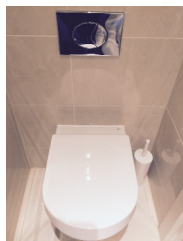
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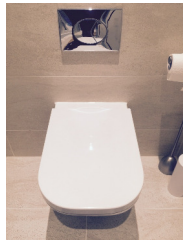
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**Two toilet layouts: why is this an illustration of quality improvement in action?**



Toilet 1



(new and improved) Toilet 2



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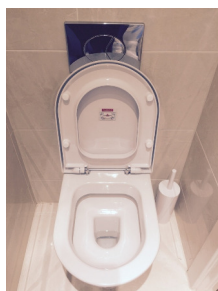
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**Understanding our 'systems'**

- Make it easy to do 'the right thing'
- (Or) make it hard to do 'the wrong thing'

Some examples .....



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ERROR	SOLUTION
Accidentally press fire alarm switch when intending to press light switch as they are next to each other	<i>Place fire alarm switch in an enclosed glass frame that needs to be lifted in order to press fire alarm</i>
Leaving card in ATM machine and walking away with the money	<i>Card is released before money is dispensed</i>
Forgetting to put seat belt on when driving	<i>Car makes beeping noise to alert you to put seatbelt on</i>



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**Can you think of any examples from healthcare?**



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**Six ice-creams: why is this an illustration of the need for quality improvement?**



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### Understanding 'variation'

- Knowing when the variation in your system requires action or, as importantly, when it doesn't.

Note: the Prof Mohamed Mohammed runs half and full day courses on the subject of 'understanding variation'

<http://www.improvementacademy.org/training-and-events/tags/Variation>



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**Can you think of any examples from healthcare?**



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### Human fallibility and the inevitability of error

*"Every time a human being touches something it's likely to go wrong."*

*James Reason*



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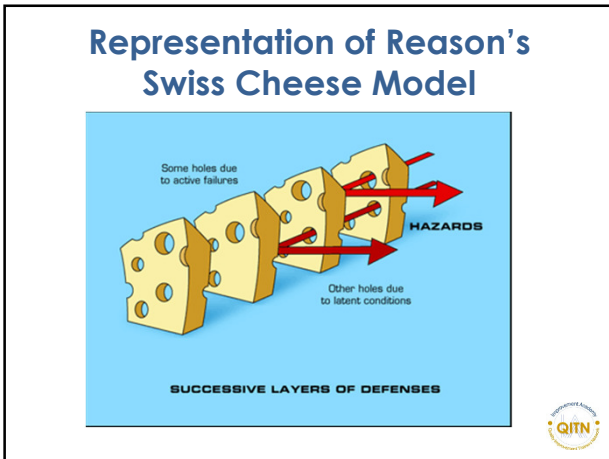
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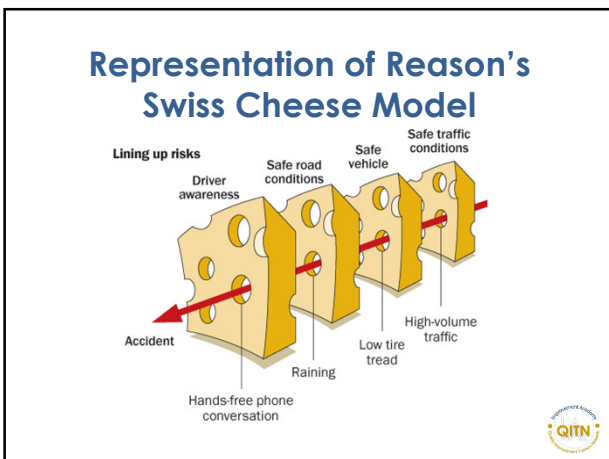
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## Understanding 'psychology' and 'human behaviour'

- Healthcare involves LOTS of people
- We are all fallible
- If we make 'mistakes' it is not always our 'fault'
- (But) we can make it harder to make mistakes (ref Principle 1)

And remember .... **nobody goes to work to do a bad job**



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We must accept human error as inevitable - and design around that fact.

— Donald Berwick —



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## Patient safety

**What changes improve safety?**

Note: there is an evidence-base to what works well ... and what is less effective.



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## 'Strong', 'Moderate' or 'Weak' interventions?

From: C Lee, K Hirschler. *How to make the most of actions and outcomes*

1. Additional study / analysis	
2. Architectural/physical plant or equipment changes	
3. Checklist/cognitive aid	
4. Disciplinary action	
5. Double checks	
6. Eliminate look and sound-a-likes	
7. Eliminate /reduce distractions	
8. Engineering controls (interlock /forcing function)	
9. Enhanced communication	
10. Enhanced documentation	
11. Increase in staffing / decrease in workload	
12. New device with usability testing before purchasing	
13. New procedure / policy / Training	
14. Simplify the process and remove unnecessary steps	
15. Software enhancements / modifications	
16. Standardise equipment or processes or care plans	
17. Tangible involvement and action by leadership in support of Patient Safety	
18. Warnings and labels	




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1. Additional study / analysis	WEAK
2. Architectural/physical plant or equipment changes	STRONG
3. Checklist/cognitive aid	MODERATE
4. Disciplinary action	WEAK
5. Double checks	WEAK
6. Eliminate look and sound-a-likes	MODERATE
7. Eliminate /reduce distractions	MODERATE
8. Engineering controls (interlock /forcing function)	STRONG
9. Enhanced communication	MODERATE
10. Enhanced documentation	MODERATE
11. Increase in staffing / decrease in workload	MODERATE
12. New device with usability testing before purchasing	STRONG
13. New procedure / policy / Training	WEAK
14. Simplify the process and remove unnecessary steps	STRONG
15. Software enhancements / modifications	MODERATE
16. Standardise equipment or processes or care plans	STRONG
17. Tangible involvement and action by leadership in support of Patient Safety	STRONG
18. Warnings and labels	WEAK




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**If we find something that works,  
how do we make it more  
common place?**




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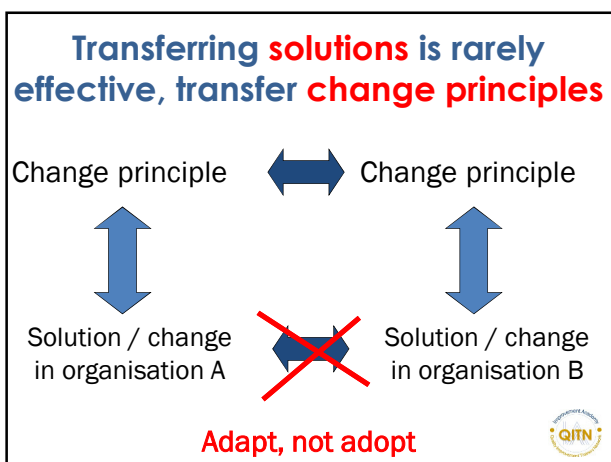
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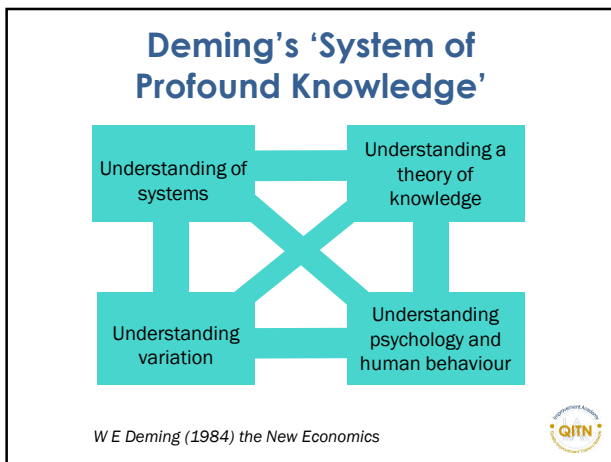
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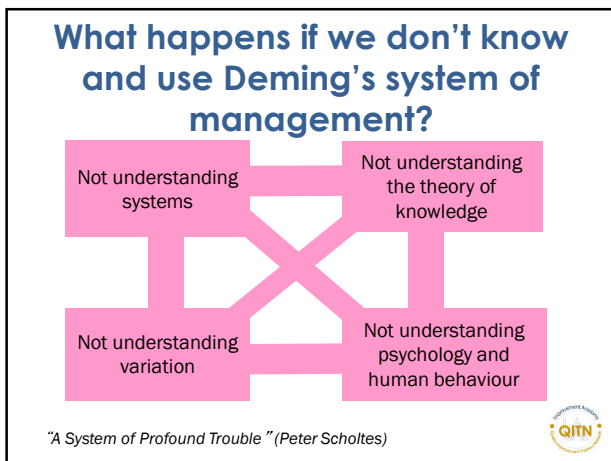
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**If we don't understand the 'theory of knowledge'**

- We make changes without improvement
- We fail to learn from the past
- Problems remain unsolved
- There is thought without action, and action without thought
- We don't know how to learn, how to improve, how to improve learning, or how to improve improvement



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**If we don't understanding our 'systems'**

- We make changes that create problems somewhere else
- Barriers, divisiveness and distrust grow out of internal competition and autonomy
- We engender of culture of scapegoating and blame
- We lose sight of our 'customers'



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**If we don't understand variation**

- We see trends where there are none, and miss trends where there are trends
- We blame people for problems over which they have no control ... or give credit to those who are 'lucky'
- We have no sense of the capability of our systems
- We can adopt "superstitious" management interventions



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### If we don't understand 'psychology' and 'human behaviour'

- Cynicism, demoralisation, demotivation
- Paternalism, offensiveness, indignities
- Sadness and anguish
- Guilt and anger, resentment
- Burnout and turnover
- Unrealistic expectations
- Game-playing, disingenuousness
- A 'crazy-making' place
- No joy in work
- No pride of work



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### W. Edwards Deming

"Once the individual understands the system of profound knowledge, he will apply its principles in every kind of relationship with other people. He will have a basis for judgment of his own decisions and for transformation of the organizations that he belongs to".

Source: The New Economics, W. Edwards Deming, 1993

**But note, he went on to say ...**

**"If I had to reduce my message for management to just a few words, I'd say it all had to do with reducing variation."**



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- Quality
- Quality assurance
- Quality improvement



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## What is Quality?



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### Task: What IS Quality?

**Work on your tables**

- Discuss the question “*What is Quality?*”
- Write down as many **individual words** or **brief statements** that are elements of quality



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### What is Quality?

Dictionary definition:

- Essential or distinguishing characteristic
- Good moral, mental or aesthetic characteristic
- Virtue
- Degree of goodness or value

*Oxford English Dictionary*



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**What is Quality?**

Define in terms of  
customer satisfaction

*W Edwards Deming*



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**What is Quality?**

Client quality

- What **users want** from the service


Professional quality

- Service meets needs as **defined by professional providers and referrers**
- Service correctly delivers techniques & procedures necessary to meet needs

Management quality

- Most **efficient and productive** use of resources within limits set by higher authorities / purchasers

*Øvretveit J, 1992*



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**What is Quality?**

Structure

Process

Outcome

*Donabedian A. (1980)*  
*Basic approaches to assessment: structure, process, and outcome.*  
*In: The Definition of Quality and Approaches to Its Assessment.*  
*Ann Arbor, MI: Health Administration Press; 77-128*



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Accessibility  
Equity  
Appropriateness  
Effectiveness  
Efficiency  
Social  
Acceptability

*Maxwell R. (1984)  
Quality assessment in  
health. BMJ 288:1470-2.*



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### What is Quality?

The dimensions of **performance** of a system that people who depend on that system **care about**.

*Don Berwick  
[www.ihl.org.com](http://www.ihl.org.com)*



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### What is Quality?

**S**safety  
**E**ffectiveness  
**E**xperience

*Lord Darzi (2009)  
Quality Framework: Guidance  
for Community Services*



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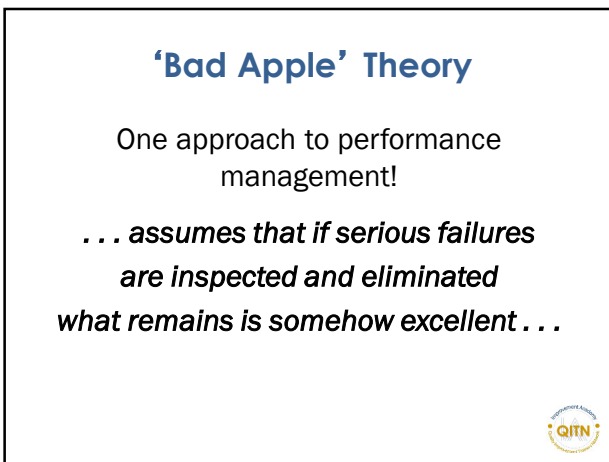
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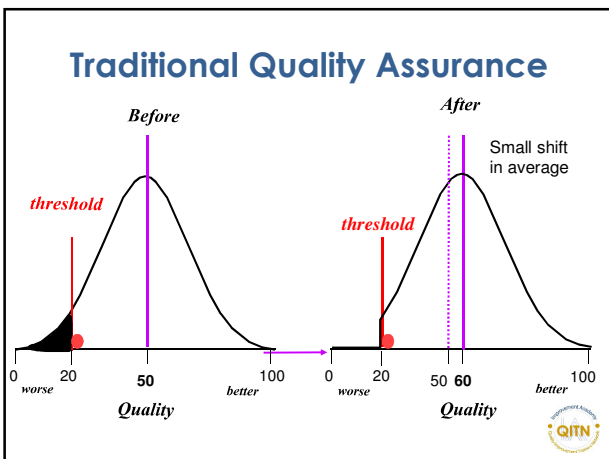
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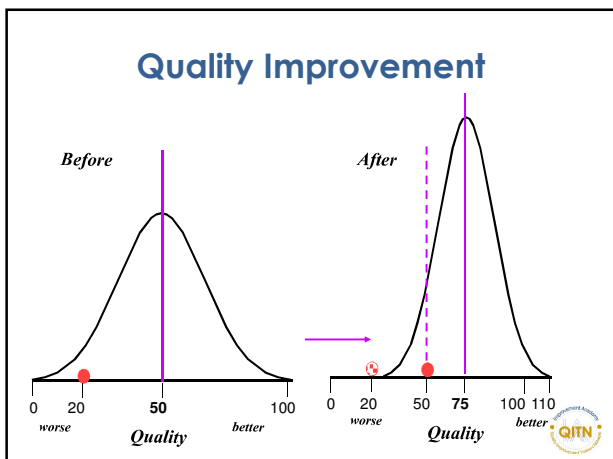
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### What is the difference between QA and QI?

- Benchmarking, versus continuous improvement

QITN

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### How do we know if Quality has 'improved'?

QITN

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**We measure**

*“Without data you’re just another person with an opinion.”*

W. Edwards Deming



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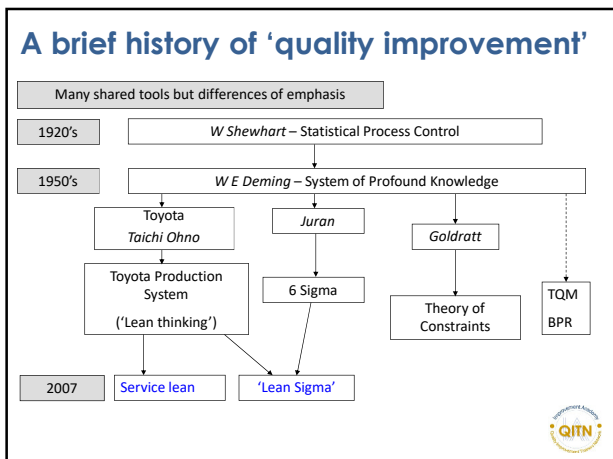
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**Lean – The 5 Principles**

1. Identification of **Customer Value**
2. Management of the **Value Stream** or patient journey
3. Align healthcare processes to facilitate the smooth **Flow** of patients and information
4. Introduce **Pull** between steps where continuous flow is impossible
5. Pursue perfection – develop and amend processes continuously in pursuit of the ideal through **Reducing Waste**

based on Womack  
1996 & 2002



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## Lean Tools - 7 Wastes

- W**aiting
- O**verproduction
- R**ework
- M**otion
- P**rocessing
- I**nventory
- T**ransport



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## Refreshments and Networking



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How do services  
'improve' themselves?



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“Here is Edward Bear, coming downstairs now, bump, bump, bump on the back of his head, behind Christopher Robin.

It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it”.

**AA Milne – Winnie the Pooh**

**Sometimes they don't .....**



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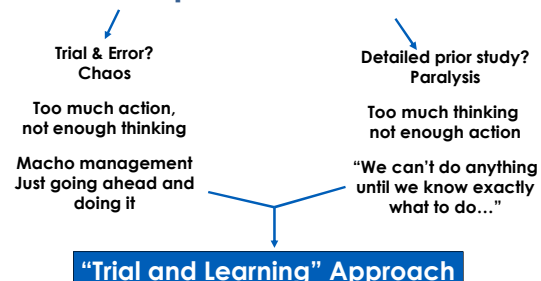
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### Usual approaches to Change in a Complex environment



**Trial & Error? Chaos**  
Too much action, not enough thinking  
Macho management  
Just going ahead and doing it

**Detailed prior study? Paralysis**  
Too much thinking not enough action  
“We can't do anything until we know exactly what to do...”

**“Trial and Learning” Approach**



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## The Improvement Model - an overview



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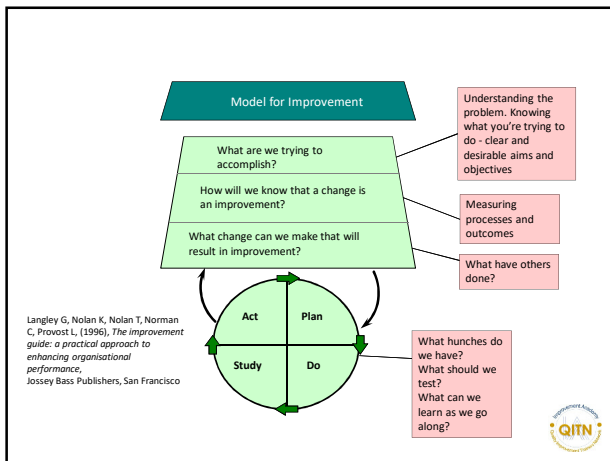
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