

Prepared for the Board of  
East London NHS Foundation Trust

# The Role of the Board in Building and Sustaining Quality: Part 1

*Robert Lloyd, PhD*  
*Executive Director*  
*Institute for Healthcare Improvement*

06 Jan 2015



# Setting the Context for Change:

## National and Local Perspectives

Kevin & Amar

# How did we get here?



Human Factors  
James Reason  
1990-1998

On Organisation  
with a Memory  
Liam Donaldson  
Chief Medical  
Officer  
2000

Francis Report  
Keogh Reviews  
Berwick Report  
2013



# Our quality improvement programme

Why?

# The strategic case for change

## Make quality our absolute priority

- Improving quality of care is our core purpose
- Of greatest importance to all our stakeholders
- Build on the excellent work already happening to improve quality

## National drivers

- The need to focus on a more compassionate, caring service with patients first and foremost
- More structured and bottom-up approach to improvement

## Enable our staff to lead change

- The desire to engage, free and support our staff to innovate and drive change
- Engaged and motivated staff leads to improved patient outcomes

## The economic climate

- The need to do more with less  
*– improving quality whilst reducing cost*

# The culture we want to nurture

A listening and learning  
organisation

Empowering staff to  
drive improvement

Patients, carers  
and families at  
the heart of all  
we do

Increasing transparency  
and openness

Re-balancing quality  
control, assurance and  
improvement



# Our quality improvement programme

How?



Two stretch aims

Reduce harm by 30% every year

Right care, right place, right time

The mission

To provide the  
highest quality  
mental health  
and community  
care in England

Quality improvement strategy

Long-term  
mission and  
stretch aims

AIM:  
To provide  
the highest  
quality  
mental  
health and  
community  
care in  
England by  
2020

## Build the will

1. Launch event & roadshows
2. Microsite
3. Using the power of narrative
4. Celebrate successes
5. Network of champions / ambassadors
6. Learning events

## Build improvement capability

1. Initial assessment of alignment & capability
2. Recruiting central QI team
3. Online training
4. Face-to-face training
5. Follow-up coaching on projects
6. Develop in-house training for 2016 onwards

## Alignment

1. Align all projects with improvement aims
2. Align team / service goals with improvement aims
3. Align all corporate and support systems
4. Patient and carer involvement in all improvement work
5. Embed improvement within management structures

## QI Projects

### **Reducing Harm by 30% every year**

1. Reduce harm from inpatient violence
2. Reduce harm from falls
3. Reduce harm from pressure ulcers
4. Reduce harm from medication errors
5. Reduce harm from restraints

### **Right care, right place, right time**

1. Improving patient and carer experience
2. Reliable delivery of evidence-based care
3. Reducing delays and inefficiencies in the system
4. Improving access to care at the right location

AIM:  
To provide  
the highest  
quality  
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2020

Build the  
will



**Bespoke QI learning  
events** for staff, service  
users, commissioners,  
governors



**QI microsite** the  
online hub for the  
programme has  
22000 page views  
in 2014  
[qi.eastlondon.nhs.uk](http://qi.eastlondon.nhs.uk)



**QI launch event and roadshows**  
attended by over 1000 staff,  
service users and carers

**Staff and  
service user  
newsletter**  
reaches 4000  
people every  
month



AIM:  
To provide  
the highest  
quality  
mental  
health and  
community  
care in  
England by  
2020

Build  
improvement  
capability

**Face to face improvement training** -  
hundreds of staff, services users,  
Governors to be trained over the next  
few years



Support for improvement  
work from the **Trust's QI**  
**team**



**Partnership  
with IHI** on  
delivery of QI  
training to staff  
and Trust  
Board, and  
strategic  
guidance from  
IHI executive  
team



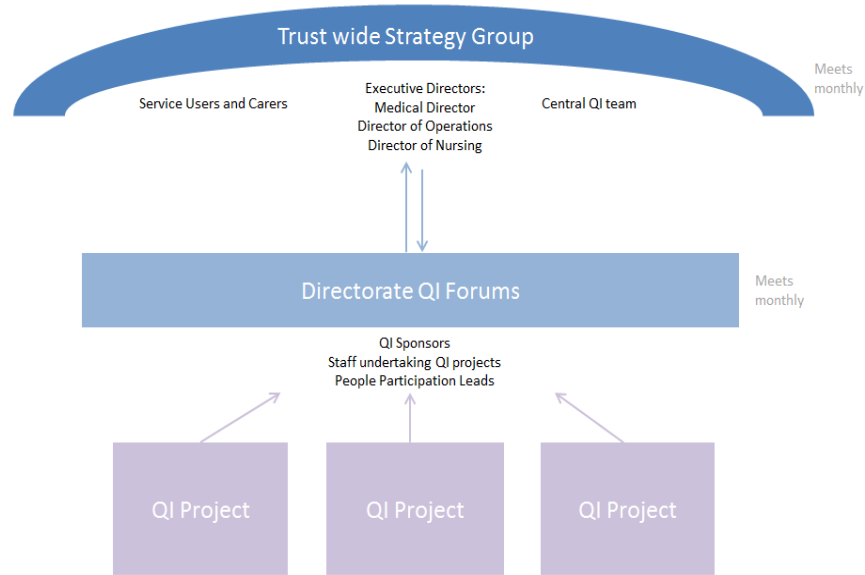
**IHI Open School** online  
training resource available  
to all. Providing essential  
skills to support people  
leading quality  
improvement.



## Quality improvement programme-project support structures

AIM:  
To provide  
the highest  
quality  
mental  
health and  
community  
care in  
England by  
2020

Alignment



A process is in place for teams to submit project ideas to the QI team, who will help with planning, structure and measurement, and ensure projects are aligned with our high-level aims.

AIM:  
To provide  
the highest  
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mental  
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care in  
England by  
2020



## QI Projects

**QI Projects** – 80+ active projects across Trust Directorates, teams are working on improvement projects that support our ambition to **Reducing Harm by 30% every year** and deliver **Right care, right place, right time**



Improving Physical Health  
Monitoring Following Rapid  
Tranquillisation



Reducing violence on  
inpatient wards



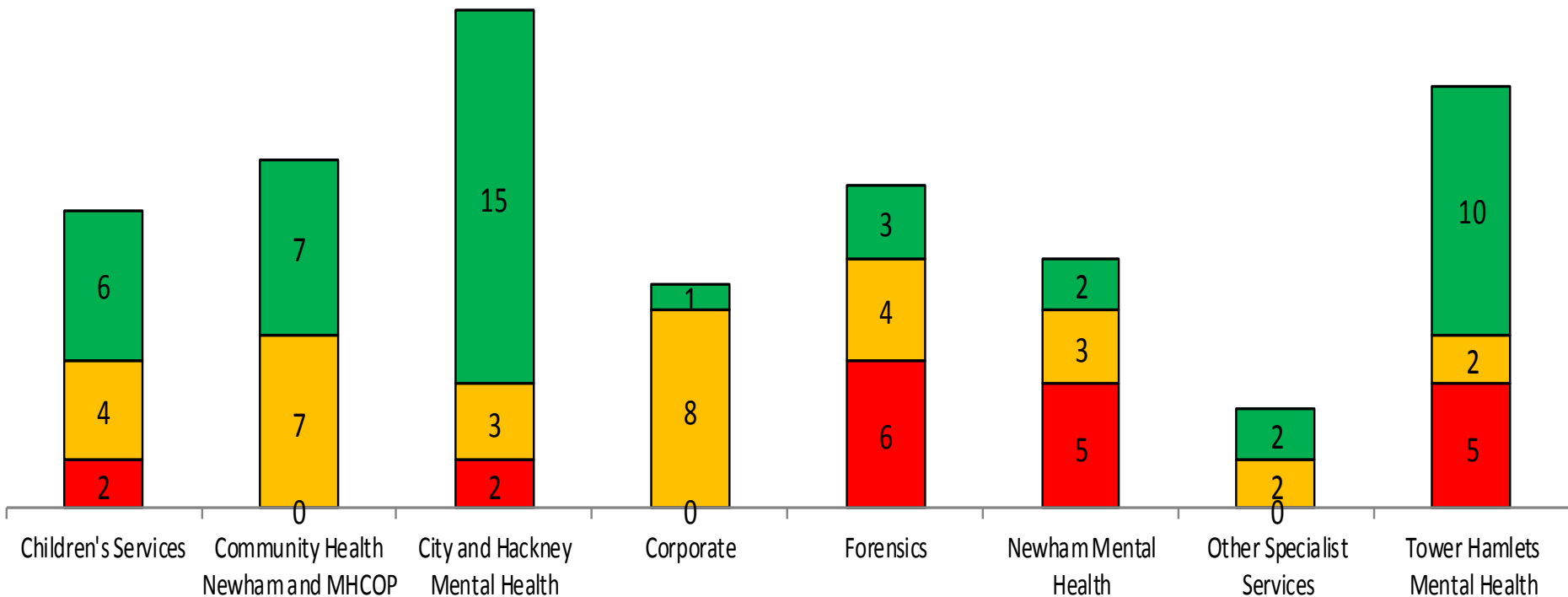
Improving the handover  
process for on-call doctors

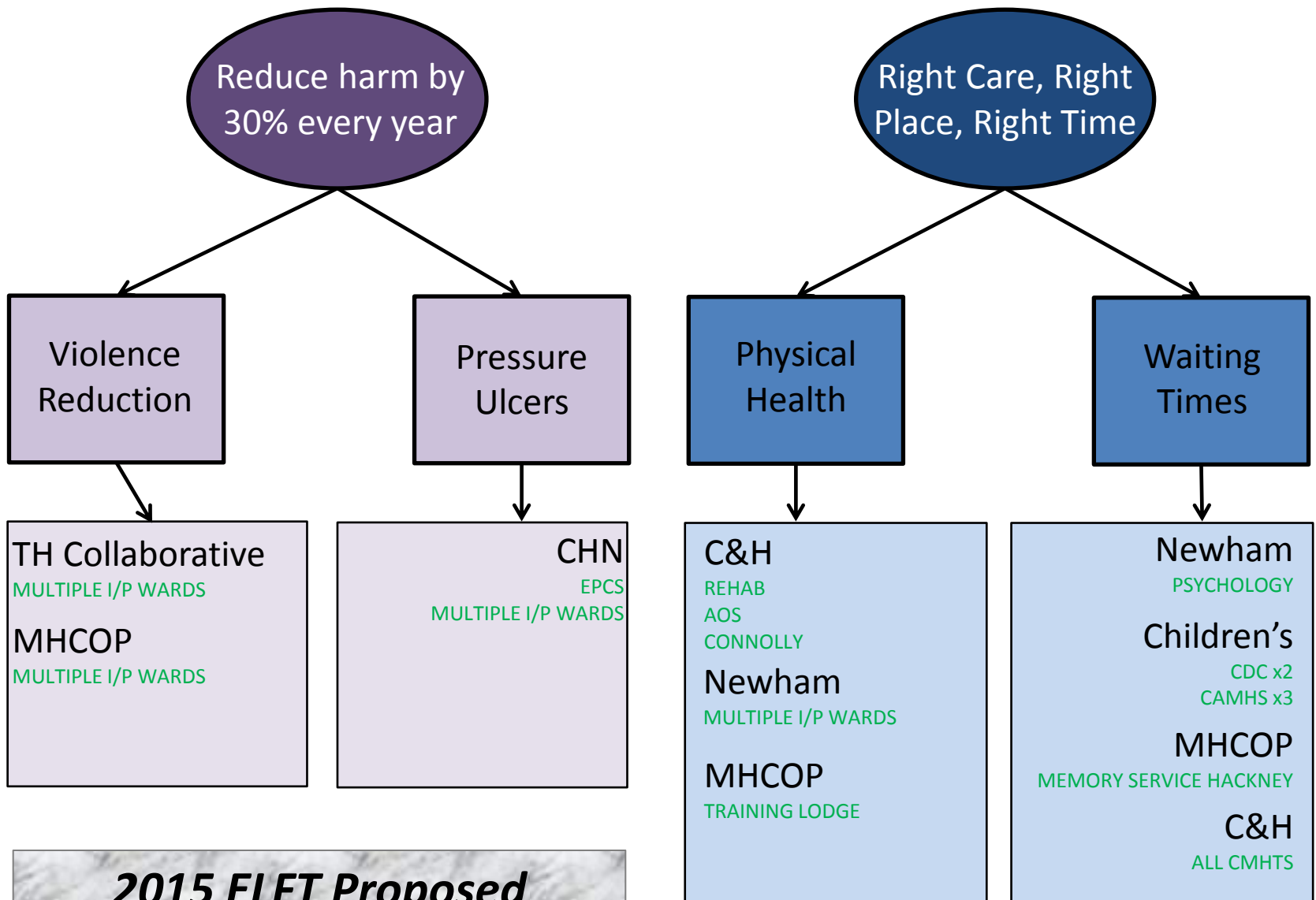
# Activity and Status by Directorate

■ G = Actively testing

■ O = Getting ready to go

■ R = Stalled







*Why are we partnering  
with the Institute for  
Healthcare  
Improvement?*

# Our Mission:

## To improve health and health care worldwide

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18



# About IHI

## Our Mission

To improve health and health care worldwide.

## Our Vision

Everyone has the best care and health possible.

## Who We Are

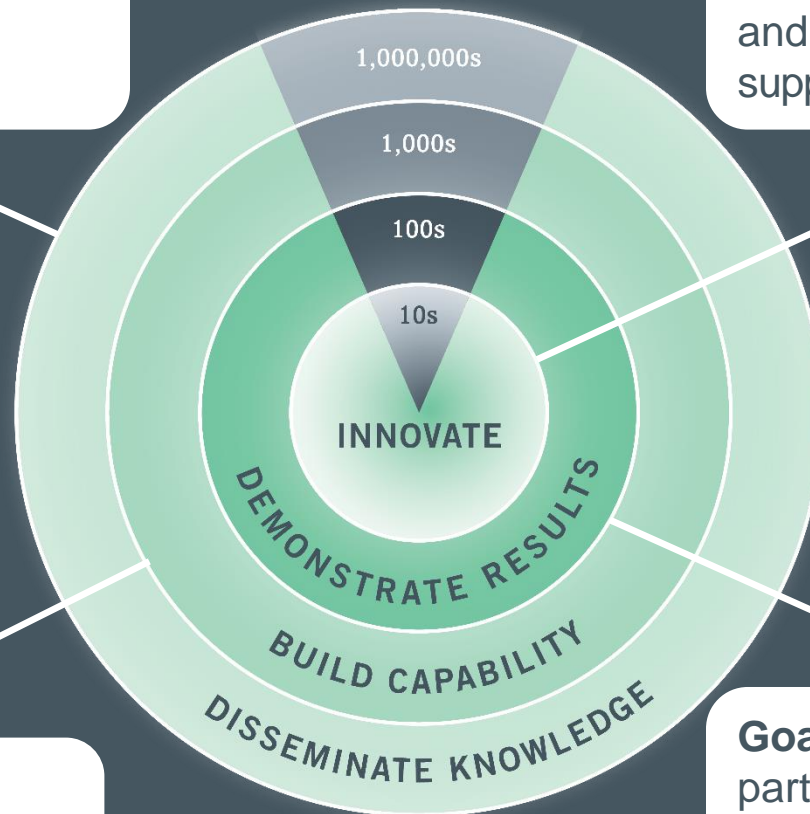
IHI is a leading innovator, convener, partner,  
and driver of results in health and health care  
improvement worldwide.



# The Way We Work: A Leverage Strategy

**Goal:** Build reach and will to accelerate the pace of improvement worldwide

**Goal:** Harvest, create, and test bold, innovative ideas and new models of care that support our strategic initiatives



**Goal:** Offer programming to transfer knowledge and build improvement capability

**Goal:** Leverage strategic partnerships and key initiatives to achieve ambitious improvement goals



# Who, What and Where are we?

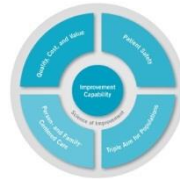


An Innovator

A Convener

A Partner

A Driver of Results



Quality, Cost, and Value

Patient Safety

Triple Aim for  
Populations

Person and  
Family-Centered Care

Improvement Capability



North America

Latin America

Europe

Middle East

Africa

Asia Pacific

QI + Joy in Work



# We accomplish this work with...

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22

## Thought leadership and innovation

- Triple Aim
- 100,000 Lives Campaign
- 5,000,000 Lives Campaign
- WIHI (our radio station)
- Breakthrough Series College
- Global Trigger Tool & Bundles
- Patient Safety Officer Training
- Improvement Advisor Programme

## Ground breaking initiatives

- Safer Patients Initiative (UK)
- Scottish patient Safety Program
- Open School
- Project Fives Alive!
- Maternal and Child Health (Malawi)
- The Conversation Project

## Global conferences and meetings

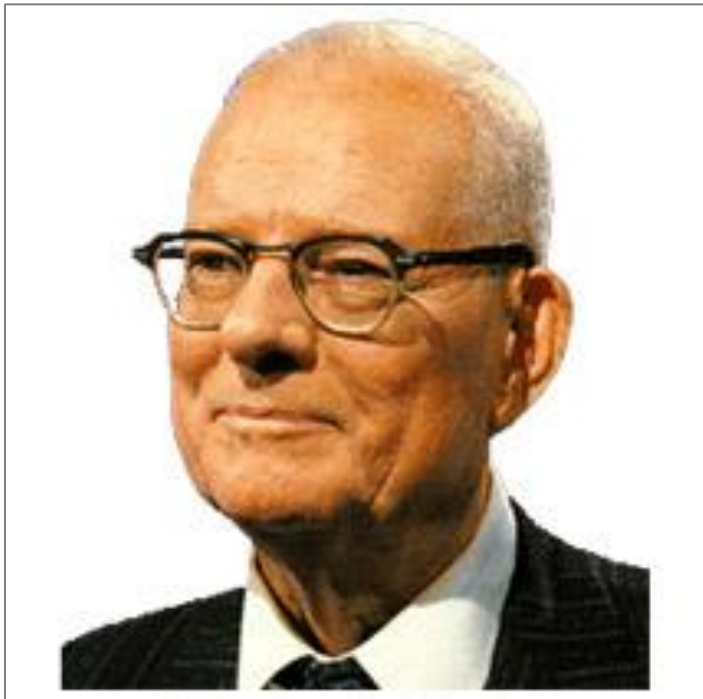
- National Forum on Quality Improvement (26+ years)
- International Summit on Improving Patient Care in the Office Practice and the Community (16+ years)
- International Forum on Quality and Safety in Healthcare (18+ years)
- Latin America Forum
- The APAC Forum on Quality Improvement in Health Care
- Middle East Forum on Quality and Safety in Healthcare (3 years)
- Strategic Partner Camps



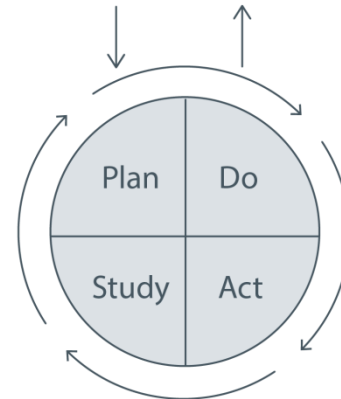
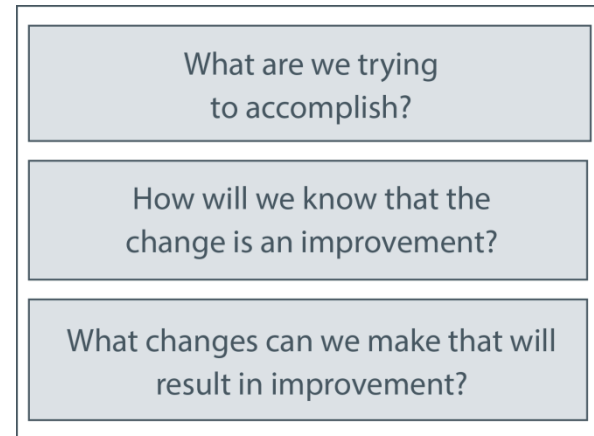
# We use a Proven Methodology: The Science of Improvement

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**W. Edwards Deming**  
1900-1993

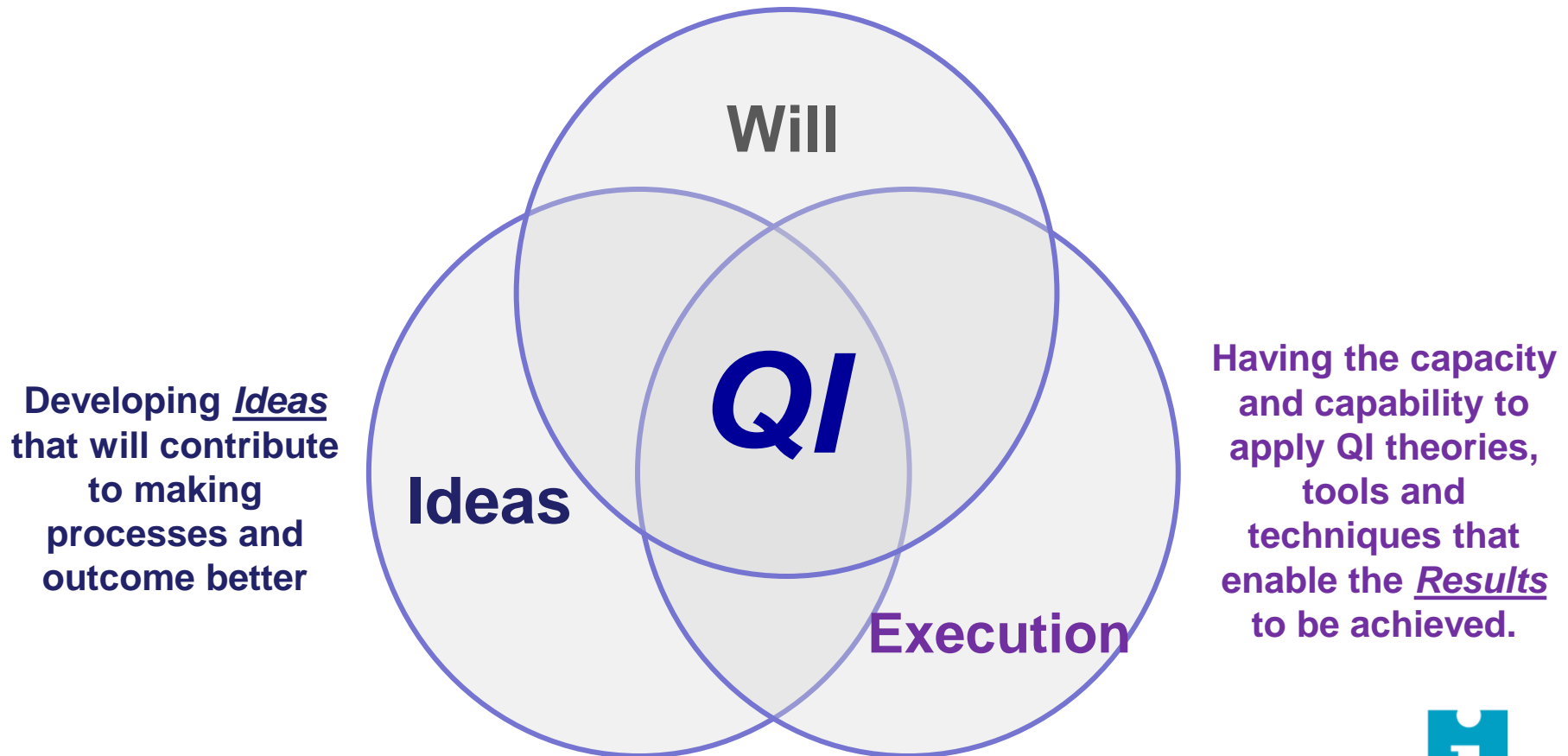


**API's Model for Improvement**



# The Primary Drivers of Organizational Improvement

Having the Will (desire) to change the current state to one that is better





# We have a highly committed Board of Directors



**James M. Anderson**  
Cincinnati Children's Hospital  
Medical Center



**Maureen Bisognano**  
Institute for Healthcare  
Improvement



**Tom Chapman**  
The HSC Foundation



**Michael Dowling**  
North Shore-LIJ Health  
System



**Elliott Fisher, MD, MPH**  
The Dartmouth Institute  
for Health Policy and  
Clinical Practice



**Terry Fulmer,  
PhD, RN, FAAN**  
Northeastern University



**A. Blanton Godfrey, PhD**  
North Carolina State University



**Jennie Chin Hansen**  
American Geriatrics Society



**Helen Haskell**  
Mothers Against  
Medical Errors



**Brent James, MD, MStat**  
Intermountain  
Healthcare



**Gary Kaplan, MD**  
Virginia Mason  
Medical Center



**Arnold Milstein, MD, MPH**  
Pacific Business Group  
on Health



**Rudolph Pierce, Esq.**  
Goulston & Storrs (ret.)



**Mark D. Smith, MD, MPA**  
California Healthcare  
Foundation



**Nancy Snyderman, MD, FACS**  
NBC News and  
University of Pennsylvania



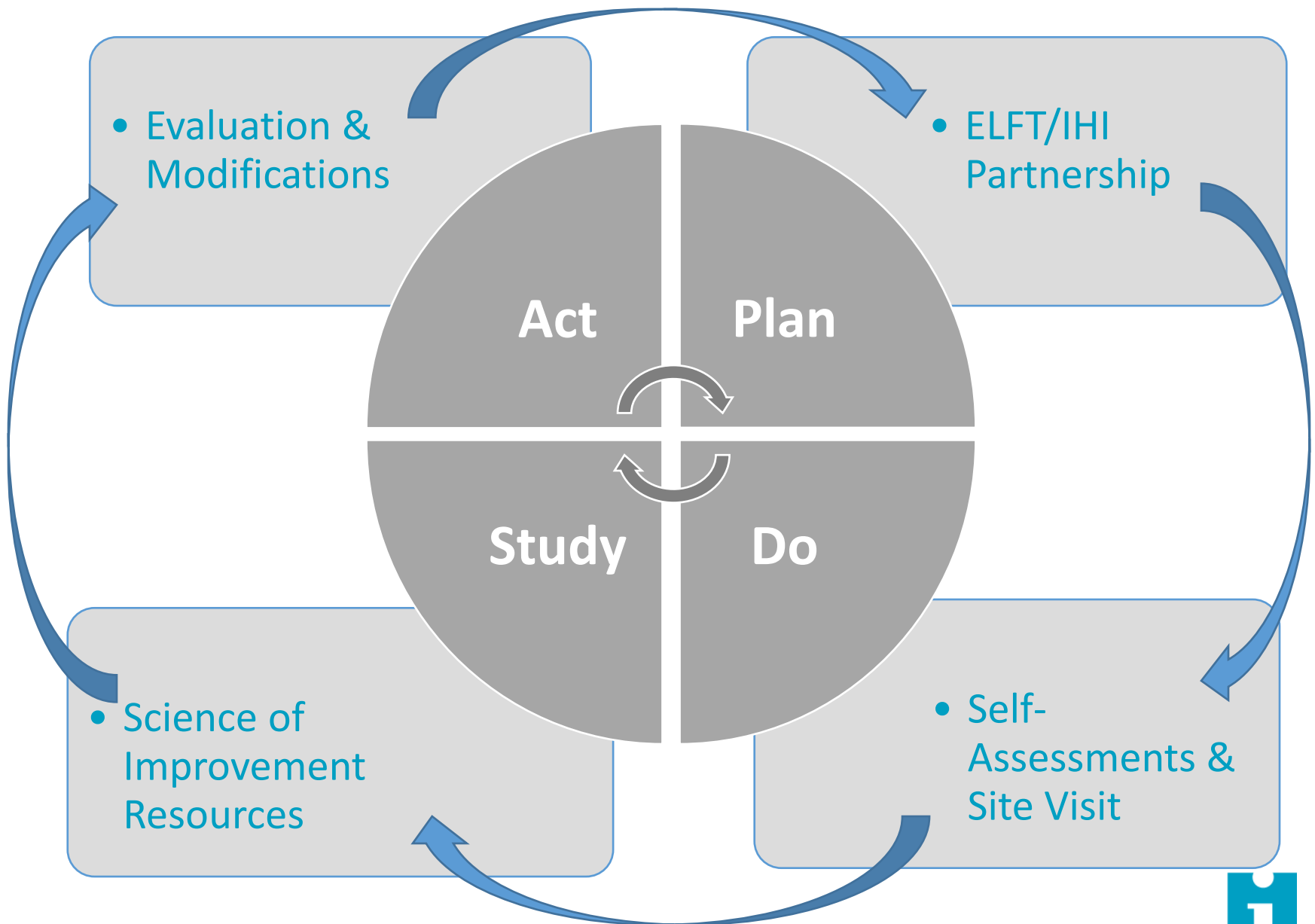
**Diana Chapman Walsh,  
MS, PhD**  
Wellesley College (ret.)



# And a Passionate Staff!



# ELFT/IHI Partnership



# ELFT/IHI Partnership Design: Phase 1

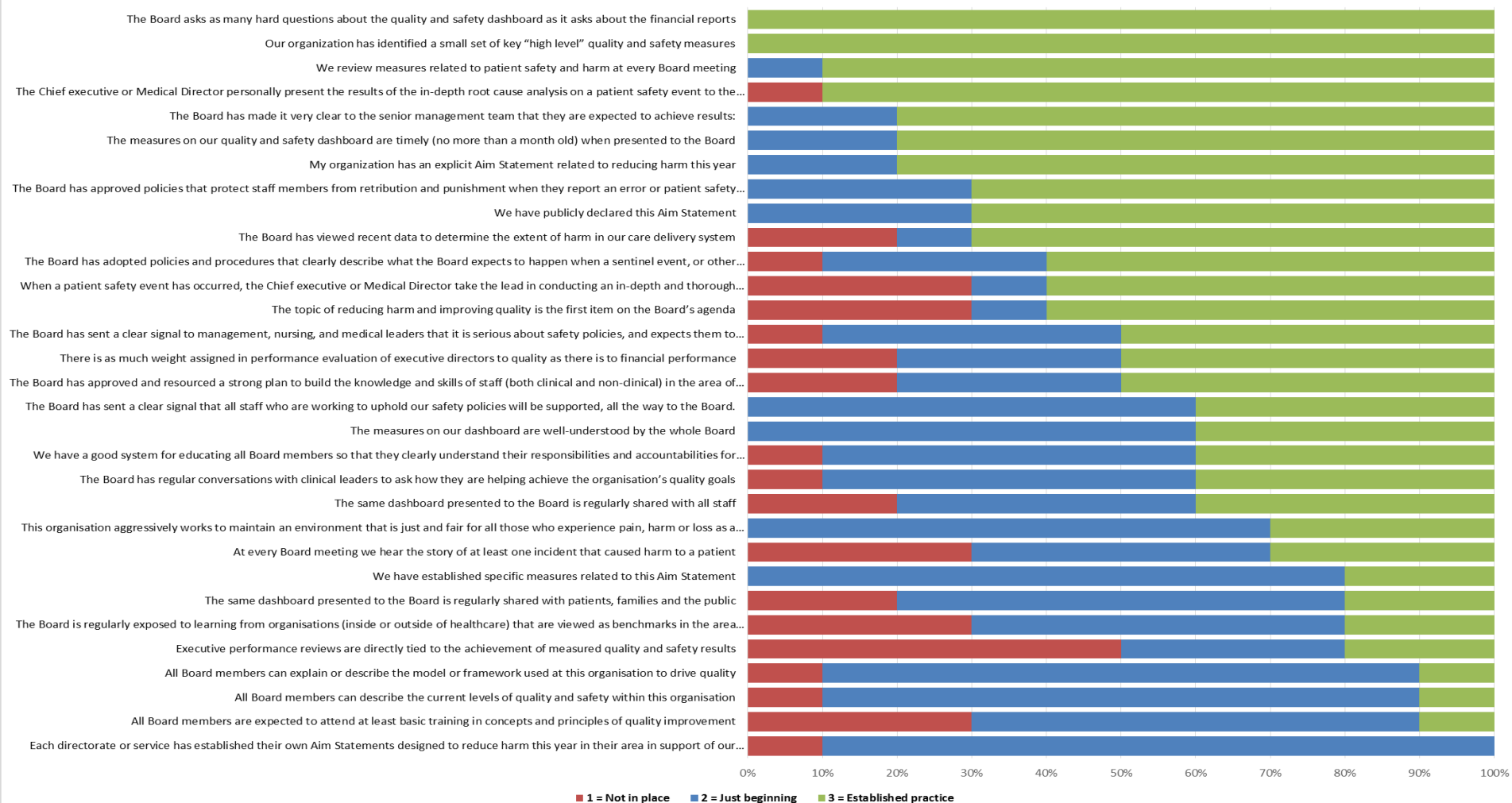
- Building on ELFT's strong QI foundation
- Adapting IHI programs and resource materials to match ELFT's needs
- Self Assessments as a starting point
  - From The Top (n=10)
  - Improvement Capability Assessment Tool (n=62)
  - Written comments
  - Strategic phone calls with leadership
- IHI Science of Improvement resources
  - IHI Open School
  - Improvement Science in Action Workshop (July 30-31, August 1)
  - Readings & Videos
  - Project based and results focus





# Executive and Non-Exec Directors responses to the Leadership Self-Assessment Tool

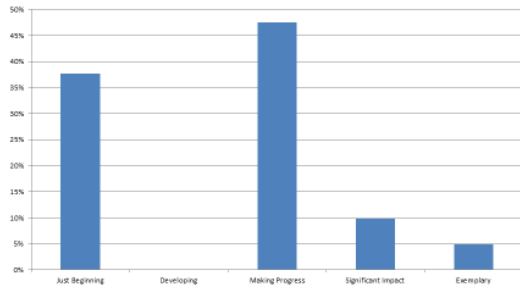
Order of the Items Sorted by the "Established Practice" Response



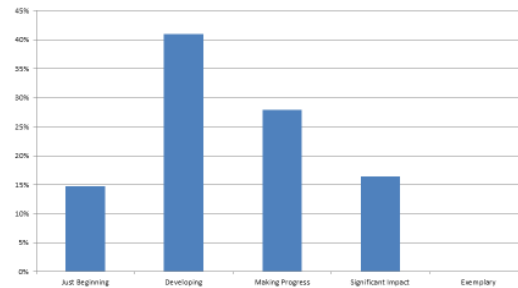
# IHI Improvement Capability Tool

## Overall Results for ELFT by Category (N = 62)

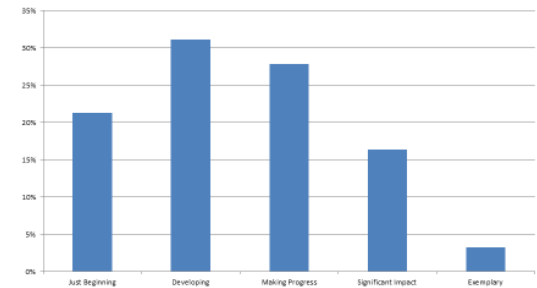
### Leadership for improvement



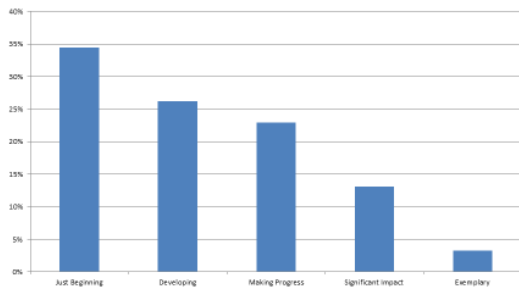
### Results



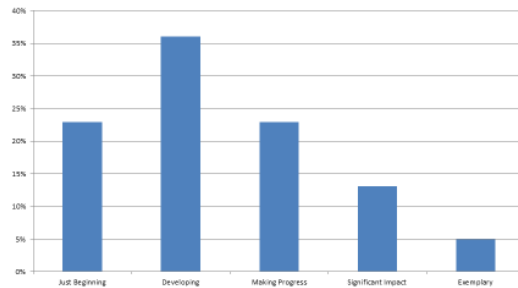
### Resources



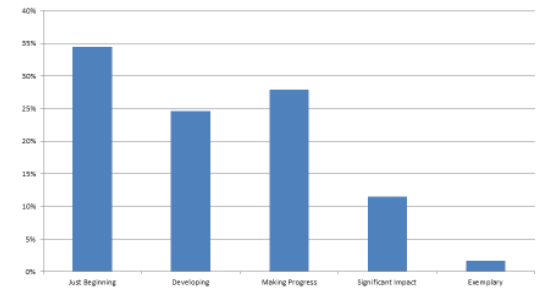
### Workforce & Human Resources



### Data Infrastructure & Management



### Improvement knowledge & competence



*The key in looking at these six categories of organizational assessment is to look at the general patterns of the bars. Are there groupings? All the bars going up or down? Is one response category much higher than the others?*

# The Major Focus Areas for Today

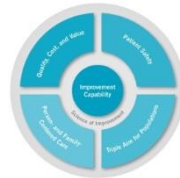


An Innovator

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Quality, Cost, and Value

Patient Safety

Triple Aim for  
Populations

Person and  
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Improvement Capability



North America

Latin America

Europe

Middle East

Africa

Asia Pacific

QI + Joy in Work



# Questions Guiding Today's Workshop

(With special thanks to Marie, Robert, Kevin and Amar)

**Question 1:** What is the difference between a quality improving Board, and a Board that is looking for assurance? How do we strike the balance between assurance and improvement?

**Question 2:** How can we make sure that QI is part of all strategies that the Board signs off? How do we make QI our business strategy?

**Question 3:** How do we get everyone to have a basic knowledge of the science of improvement? What is the role of the Board in building capacity and capability for QI?

**Question 4:** How can the Board be assured that we are moving towards our improvement aims?

**Question 5:** How do we use all of this data we have to make an impact on our QI efforts? How do we analyse the data from a QI perspective and what questions do we ask about the results?

**Question 6:** How do we scale up all of this local improvement work to something that is meaningful at Trust-level? What are the big dots, and how do we aggregate all the work up to move the big dots?





# Questions Guiding Today's Workshop

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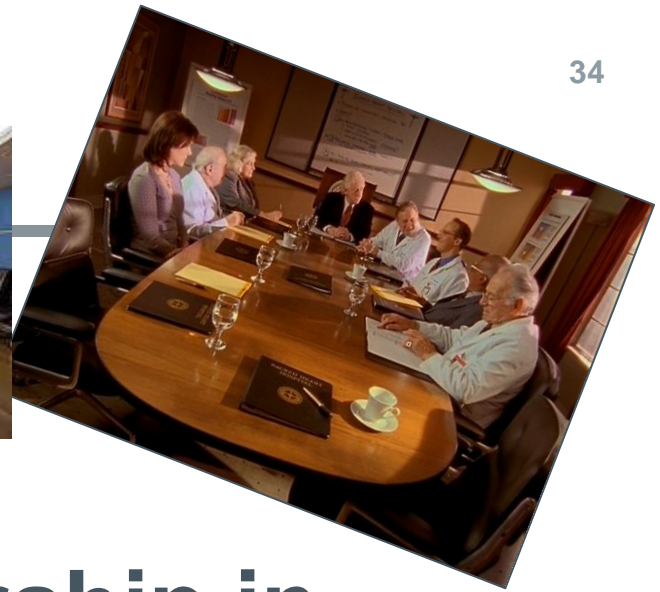
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# The Role of Leadership in Accelerating the Quality Journey



# What is Quality?

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- We want to know what you think is the definition of quality.
- Use the sticky notes on your table.
- Fill in the following statement:  
*Quality is* \_\_\_\_\_.
- Place your note(s) on the designated flipchart.



# Quality is...

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- a combination of value and outcome in the eyes of the consumer
- a product or service delivered with 100% satisfaction the first time, every time
- a product or service that provides an expected value
- a product that lasts, for the best price
- a satisfied customer
- a very good product or service - one you would want again
- above standard results or outcomes
- an excellent product or service delivered by professional, friendly, knowledgeable people in a timely manner at the appropriate time
- an unending struggle for excellence
- accurate results to health care consumers
- anticipation and fulfillment of needs
- A vision which provides growth and satisfaction for the customer or consumer of our service
- attentive and excellent patient care
- attention to detail, timeliness, competence
- being the best, best of the best!
- being present for every experience
- best result possible in a given category



# Dr. Deming's Perspectives

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*“Quality is meeting and exceeding the customer’s needs and expectations and then continuing to improve.”*

*“A product or service possesses quality if it helps somebody and enjoys a good and sustainable market.”*

W. Edwards Deming



# A useful working definition...

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**Leadership is a process of social influence, which maximizes the efforts of others, towards the achievement of a goal.**

Kevin Krause



# Deming's Questions for Leaders...

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- *What business are we in?*
- *What product or service would help our customers more?*
- *Who is responsible for quality?*
- *Where is quality made in this organization?*
- *Where does poor quality come from? People or processes?*
- *Can quality be delegated?*

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Reference: W. Edwards Deming. *The New Economics*, 2<sup>nd</sup> edition. The MIT Press, 1994.



# Interdependent Dimensions of High-Impact Leadership

1

## New Mental Models

How leaders think about challenges and solutions

2

## High-Impact Leadership Behaviors

What leaders do to make a difference

3

## IHI High-Impact Leadership Framework

Where leaders need to focus efforts





# #1 High-Impact Leadership: New Mental Models Defining Quality Old Way and the New Way

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## A Health Care System's Model



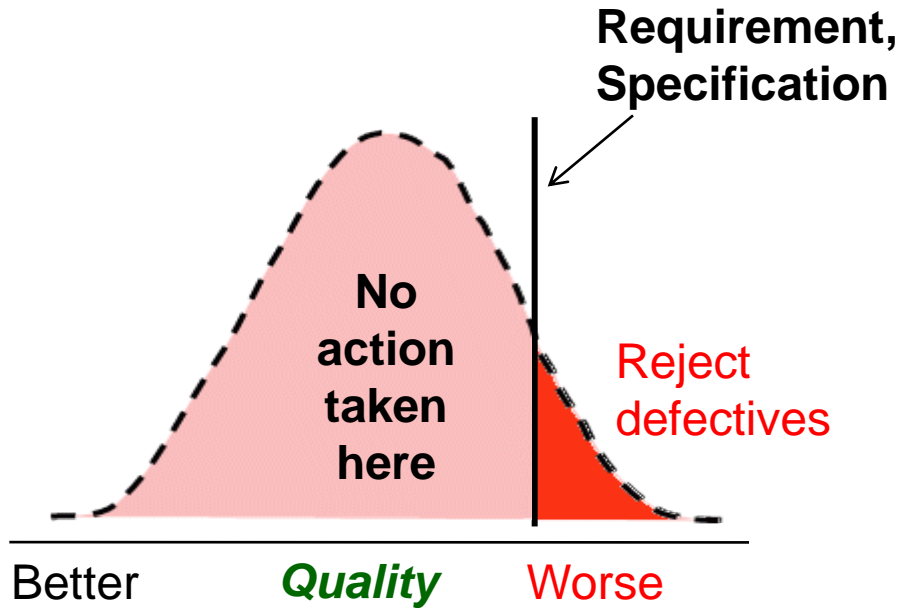
# A Mental Model Many Leaders Have

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# A New Mental Model

## Defining Quality Old Way versus New Way



**Old Way**  
(Quality Assurance)



**New Way**  
(Quality Improvement)

# Mental Models & Quality Theories

## Quality Control

- Monitor Key Process Indicators (KPI's) against targets
- Take Action when not meeting targets
- Regulatory approach

## Quality Improvement

- Process and system improvement
- Reduce Variation
- Align outputs to customer needs
- Continuous & part of daily work
- Science of Improvement

## Quality Assurance

- Inspection-looking for the “Bad Apples”
- Retrospective Review
- Risk Management

# Connecting Juran's and Deming's approaches to Quality

Quality  
Planning

Juran's  
Quality  
Trilogy

Quality  
Control

Quality  
Improvement

Understanding  
Systems  
Thinking

Understanding  
Variation

*QI*

Building  
Knowledge

Understanding  
Human  
Behavior

Deming's System  
of Profound  
Knowledge



# A Proven Model: The Science of Improvement



W. Edwards Deming  
1900-1993

## Four Components of Improvement

- Appreciation of a System/System Thinking
- Understanding Variation
- Theory of Knowledge (PDSA)
- Psychology of People

### Model for Improvement



# #2 High-Impact Leadership Behaviors

## What leaders do to make a difference

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### 1. Person-centeredness

Be consistently person-centered in word and deed

### 2. Front Line Engagement

Be a regular authentic presence at the front line and a visible champion of improvement

### 3. Relentless Focus

Remain focused on the vision and strategy

### 4. Transparency

Require transparency about results, progress, aims, and defects

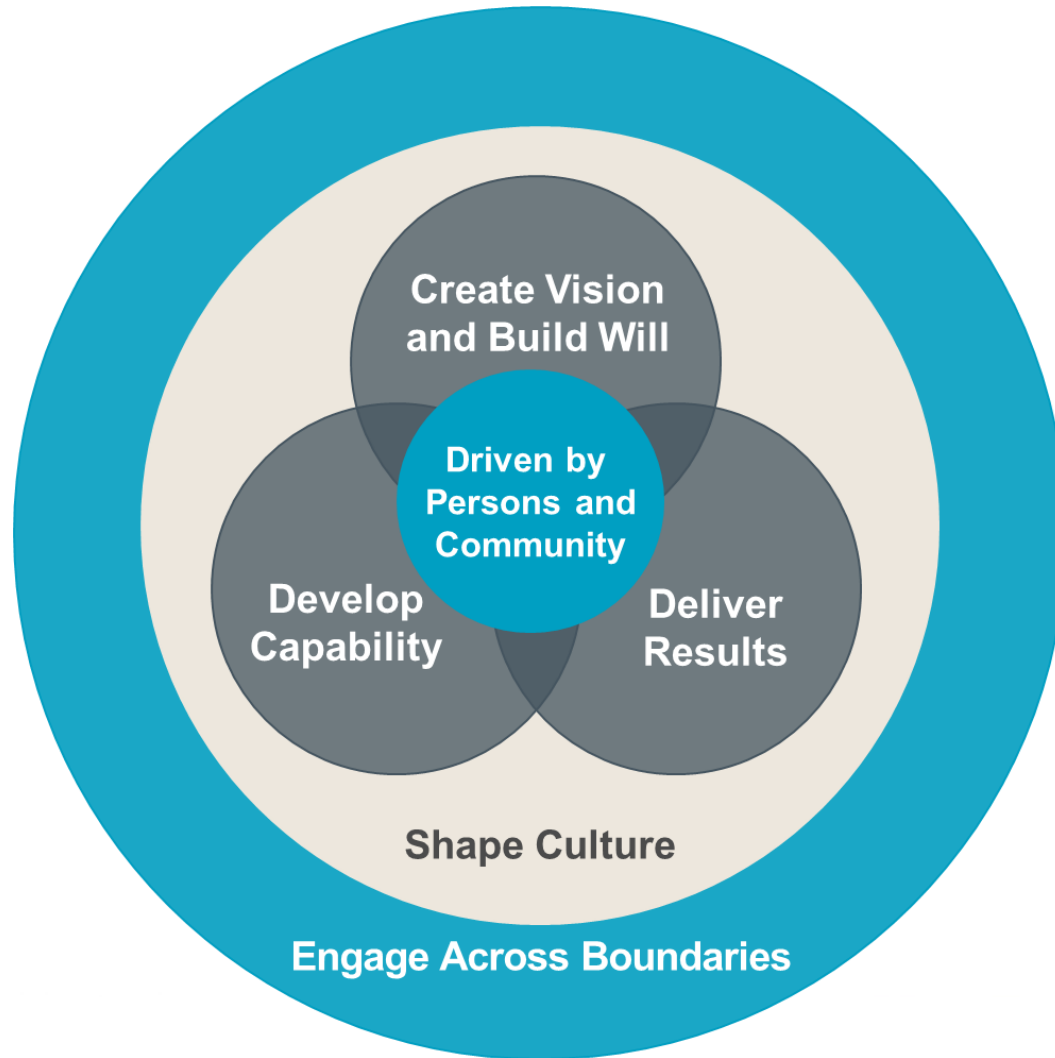
### 5. Boundarilessness

Encourage and practice systems thinking and collaboration across boundaries



# #3 IHI High-Impact Leadership Framework Where Leaders Need To Focus Their Efforts

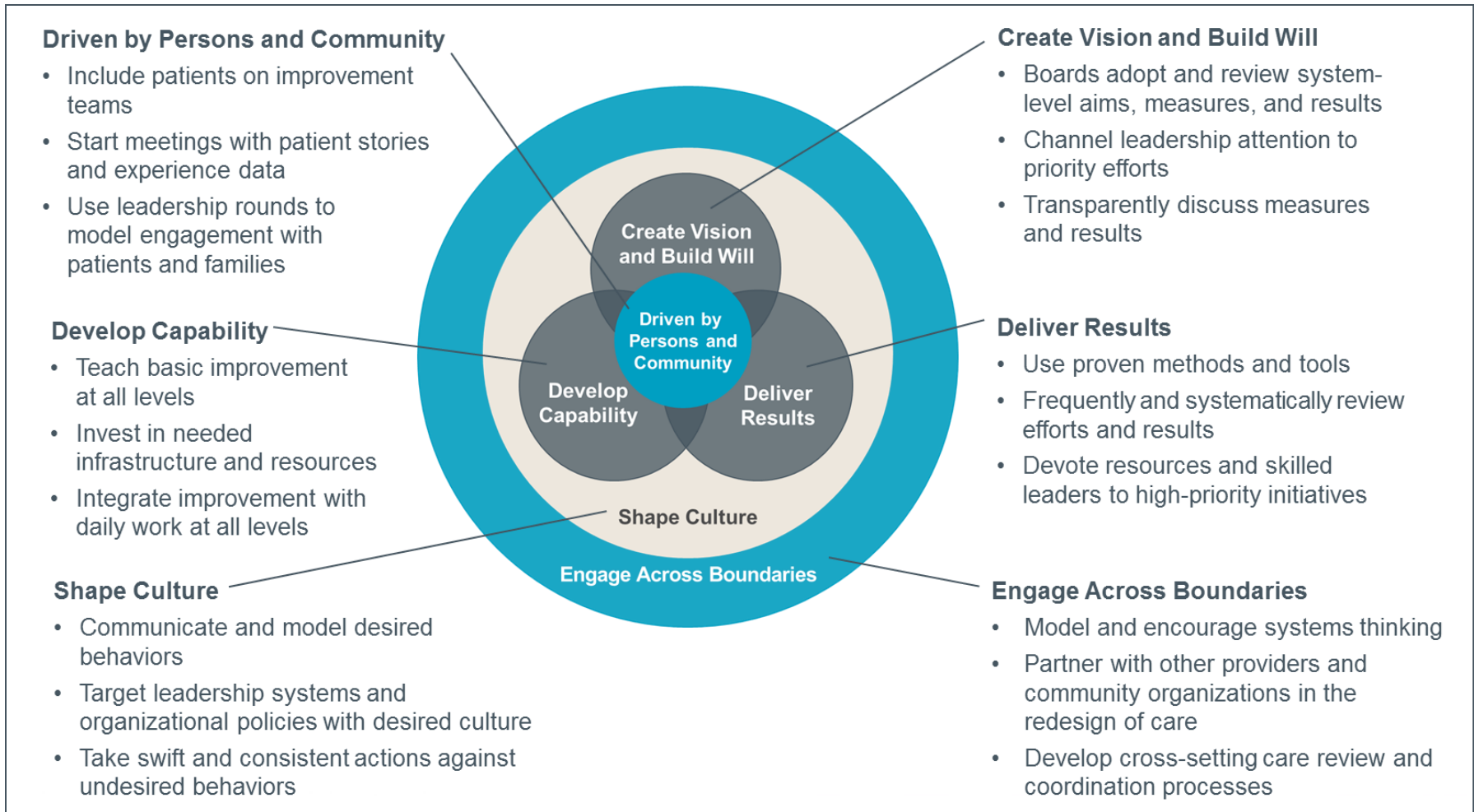
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# #3 IHI High-Impact Leadership Framework

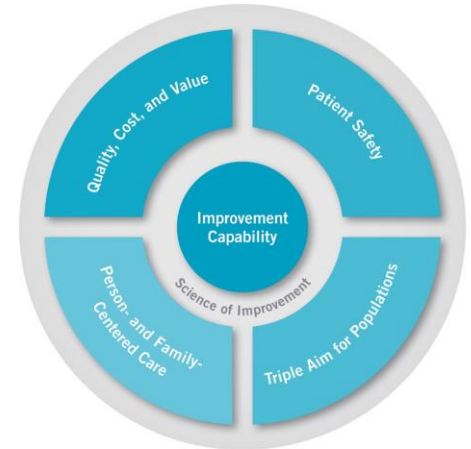
## Where Leaders Need To Focus Their Efforts



# Engage Across Boundaries

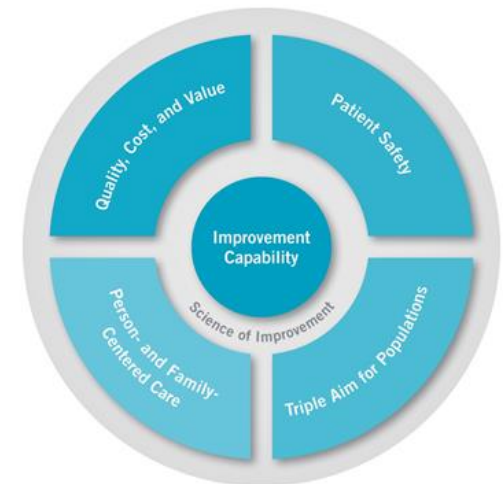
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- Establish a shared purpose
- Communicate a shared vision
- Ask questions and listen to responses
- Build consensus
- Show respect for the partner's business models and constraints
- Adopt a collaborative approach and demonstrate patience
- Volunteer resources when needed
- Ensure that the “right people” are in the room



# Create Vision & Build Will

- Leaders and Board members develop a clear and consistent Vision that focuses on quality
  - Adopt bold, specific, system-level Safety, Quality, and Experience strategic aims
  - Oversee system-level measures of progress toward those aims, using a strategic dashboard
- Leadership “ownership” of safety and quality results
- Systematic reviews of results and progress
- Leadership visibility in improvement work
- Sense-making for the organization (setting priorities)
- Leadership models systems thinking



# Leaders need to...

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- Adopt bold, specific, system-level strategic aims
- Oversee system-level measures of progress toward those aims, using a “strategic dashboard” of measures
- Develop a strong *Quality Committee*
- Build Will by:
  - Starting every meeting with a patient story
  - Using data for improvement not judgment (assurance)
  - Stressing the need for transparency at all levels of the organization
  - Facing up to the difficult conversations (build dialogue)



# Dialogue #1:

## The Role of Leadership

- What percentage of your time do you personally spend on assurance, and how much on improvement?
- What percentage of the Board's time is spent on assurance versus improvement?
- How well do we balance and align our assurance work with our improvement aims?



# Dialogue #2:

## Where Leaders Need To Focus Their Efforts

For each aspect of *Focusing Your Efforts*, please indicate the level of progress you feel exists here at ELFT.

Area of Focus	Not Yet Started	In Progress	Established Practice
Create Vision and Build Will			
Develop Capability			
Deliver Results			
Driven by Persons and Community (Listening to the Voice of the Customer)			
Shape a Culture of Quality			
Engage Across Boundaries			



# Dialogue #3:

## Leaders need to Build Will

For each aspect of *Building Will*, please indicate the level of progress you feel exists here at ELFT.

Building Will by:	Not Yet Started	In Progress	Established Practice
Starting every meeting with a patient story			
Using data for improvement not judgment (assurance)			
Stressing the need for transparency at all levels of the organization			
Facing up to the difficult conversations (building dialogue)			



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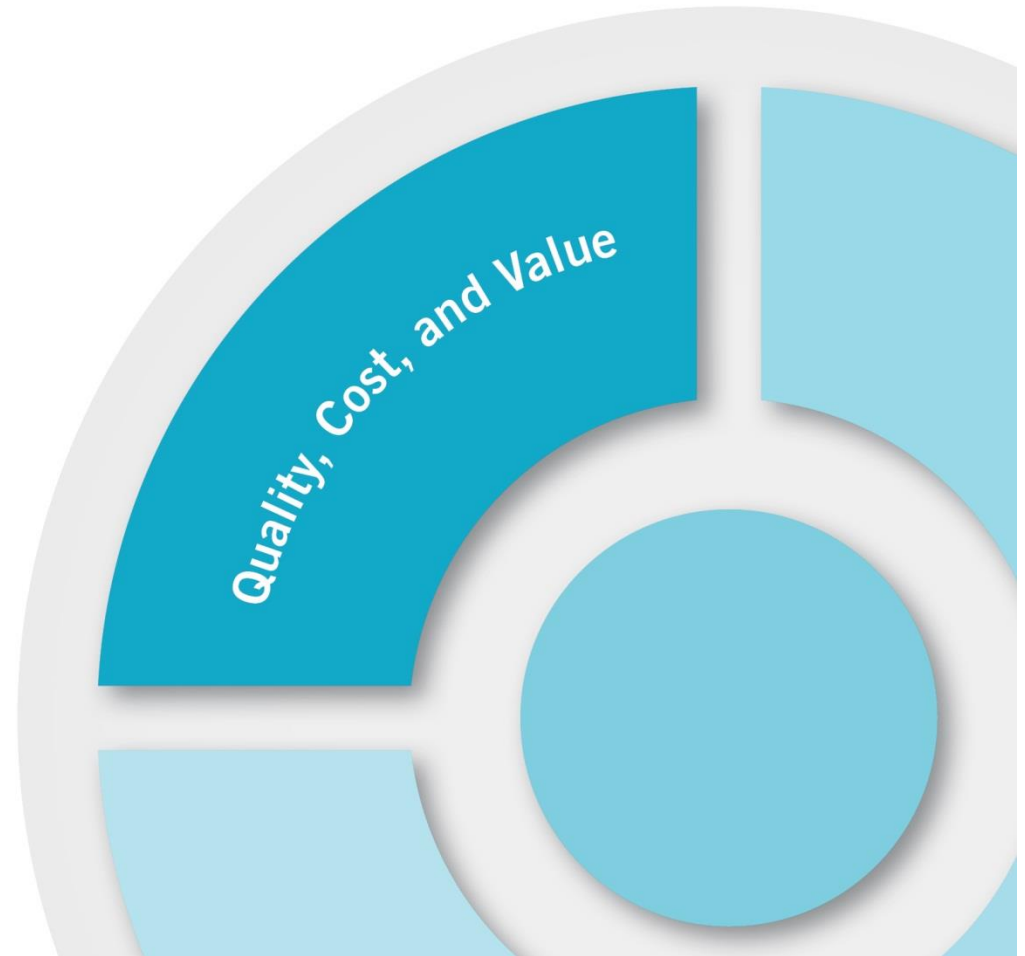




# Quality, Cost, and Value

## Our Goal:

Encourage, empower, and enable health care delivery systems to provide truly value-based care that ensures the best health care. We strive to call out and address disparities in health and health care wherever they exist.





# IHI's *Business Case* for Improving Quality <sup>59</sup>

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- The systematic identification and elimination of harm and waste, while maintaining or improving quality.
- Express the improvement aim in terms of harm or waste reduction:
  - ☐ **Calculate the cost of the harm or waste**
  - ☐ **Add back any costs incurred in the improvement**
- Assure the cost drop to the “bottom line”

Source: Martin LA, Neumann CW, Mountford J, Bisognano M, Nolan TW. *Increasing Efficiency and Enhancing Value in Health Care: Ways to Achieve Savings in Operating Costs per Year*. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2009. (Available on [www.IHI.org](http://www.IHI.org))



## PRIMARY DRIVERS

### WILL

Align Strategy

### WILL

Engage Staff,  
Physicians and  
Patients

### IDEAS

Identify Waste

### EXECUTION

Prioritize, Manage,  
Remove Waste

## AIM

Reduce costs at  
least 2-5% per year  
over the next 5  
years while  
continually  
maintaining or  
improving quality

## SECONDARY DRIVERS

- Align waste reduction strategy throughout Organisation
- Adopt integrated performance measurement systems
- Redesign the system to achieve superior results in reduced costs, improved quality, and patient engagement
- Align operations for the new reimbursement world

- Engage staff in the what & why of value delivery
- Engage patient & family perspective of waste
- Ensure a safe environment for sharing ideas
- Develop and support new skills at all levels of the system

- Eliminate failures in health care delivery
- Improve care coordination across systems
- Eliminate excess administrative costs
- Eliminate overtreatment
- Coordinate strategies & measures (bundled payments, shared savings, process measures)

- Evaluate cost and quality impact
- Prioritize projects and manage Organisational energy
- Create portfolios of projects across the Organisation
- Solve problems and execute improvement cycles
- Establish data & feedback loops
- Measure, monitor and share results
- Spread learning across systems

# Value-based Health Care Delivery

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The central goal in health care must be **value for patients**, not access, volume, convenience, quality, or cost containment

$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$

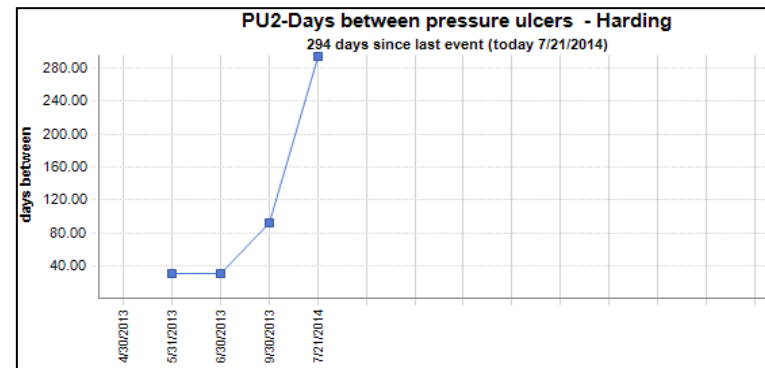
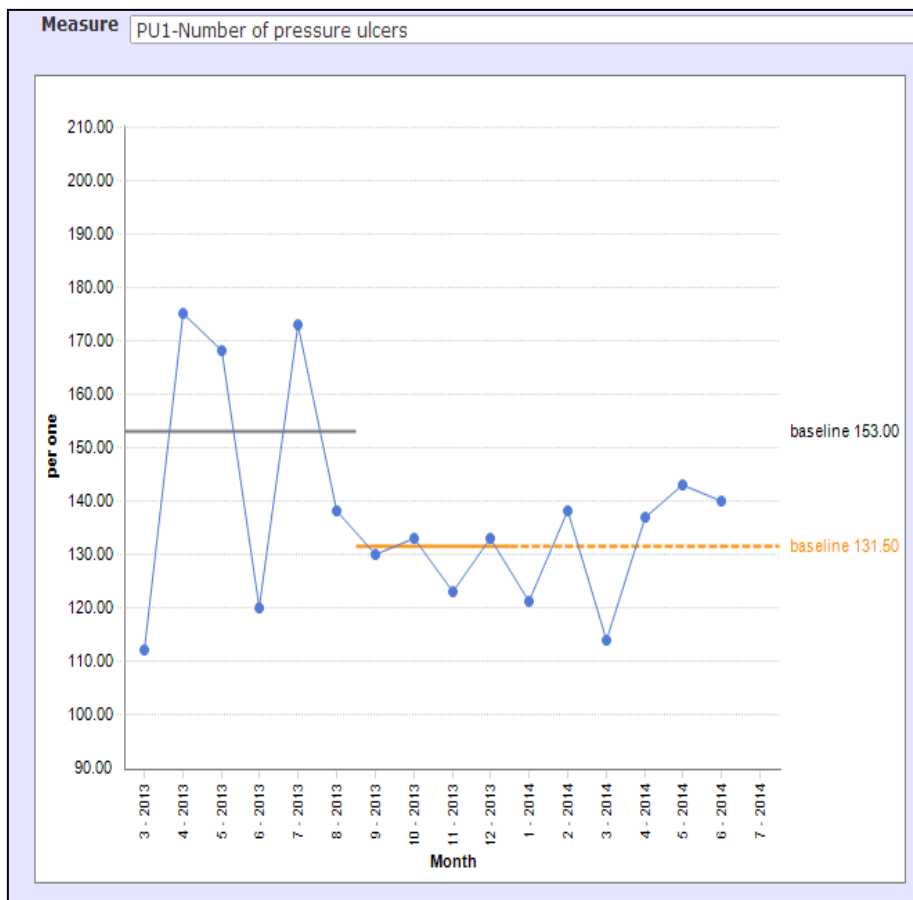
The Value approach requires that we measuring two fundamental parameters:

1. Outcomes: the **full set of patient health outcomes** over the care cycle
2. Costs: the **total costs of resources** used to care for a patient's condition over the care cycle



# Example of Quality as a Business Strategy

## MH in South of England, 2013-14 (Pressure Ulcers)



**Section A: Total number of pressure ulcers**  
How many pressure ulcers does your organisation treat? (enter a number and press ENTER)  [Click to estimate section B](#)

**Section B: Pressure ulcers by grade**  
How many pressure ulcers of each grade does your organisation treat?  Grade 1  
 Grade 2  
 Grade 3  
 Grade 4 [Click here to print](#)

The default numbers are based on percentages from the academic research study. Please overwrite if you are confident your numbers are different.

Total  (Total of section B must be the same as the number in section A)

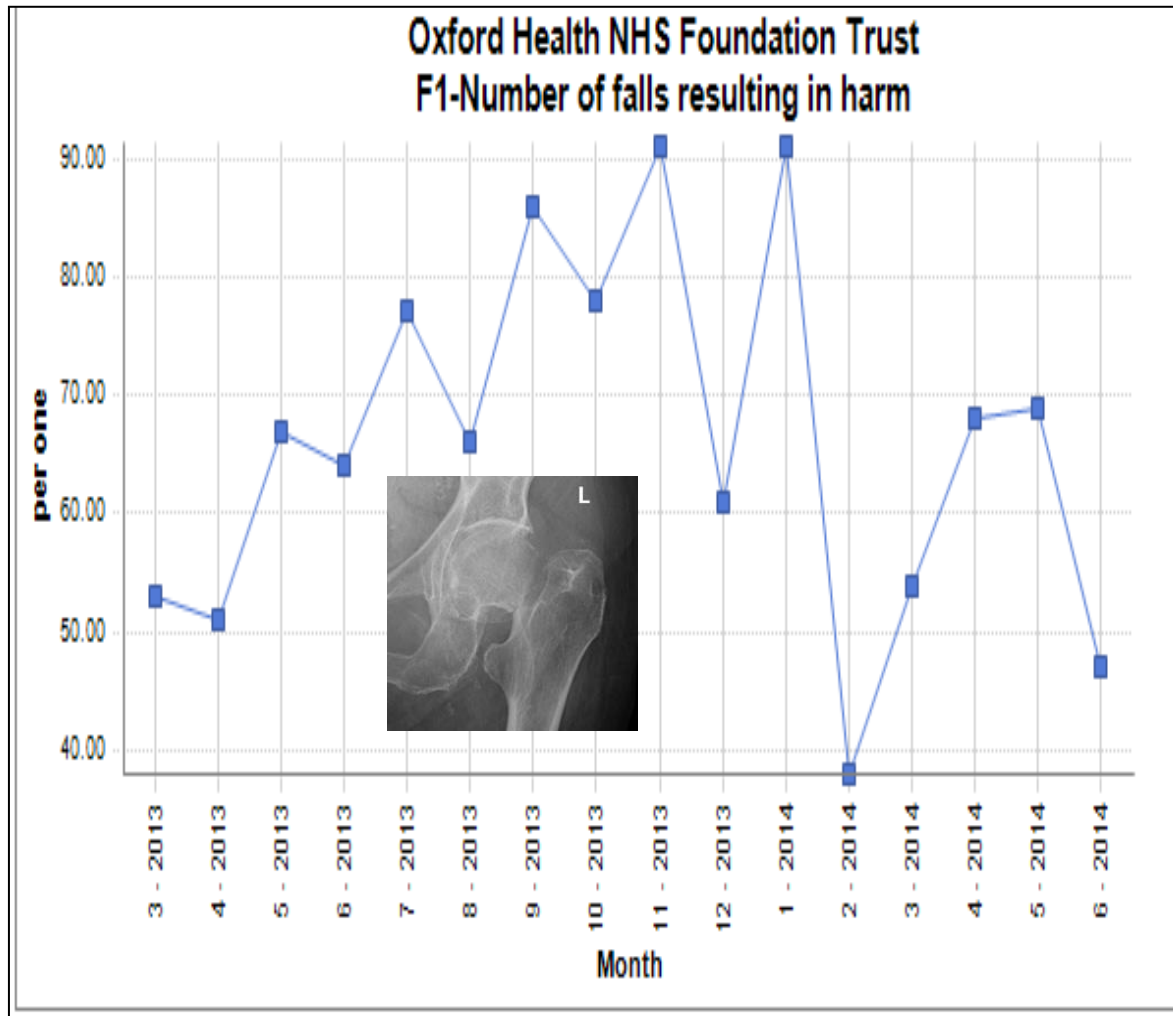
**Section C: Results: Estimated cost of pressure ulcer care at 2008/09 prices (rounded to the nearest thousand £s)**

	Central	Lower range	Higher range
Grade 1	72,000	59,000	87,000
Grade 2	419,000	339,000	507,000
Grade 3	328,000	266,000	397,000
Grade 4	-	-	-
Total	819,000	664,000	991,000

**Section D: Potential savings if the number of pressure ulcers is reduced**  
Enter a planned percentage reduction in the green box, to see the impact on number of ulcers, and cost pressures: % *ulcers would mean 38 fewer pressure ulcers and a potential cost saving of £205k*

<https://www.gov.uk/government/publications/pressure-ulcers-productivity-calculator>

# At what cost? Unreliable Medical Care



## Cost of a hip fracture

- £13,000 for the event
- £64,000 over average remaining life-time of the patient

Source 1000- lives  
Wales

# Deming's Chain Reaction for Improving Value

---

Improve the value of products and services  
from the viewpoint of the customer



Increase demand for the Organisation's  
products and services



**Improve financial performance**



Stay in business



Provide jobs

Sources: Deming, W.E. *Out of the Crisis*. MIT Press, Cambridge, 1992:3. Langley, G. et. al. *The Improvement Guide*. Jossey-Bass Publishers, 2009: 311.





# What is Quality as a Business Strategy (QBS)?

---

Throughout the 1980's. Dr. W. Edwards Deming reached thousands of people with his message to transform their Organisations to ones based on his concepts of quality. This transformation required a new style of management as well as new philosophies, knowledge and methods. QBS began as a template to help Organisations incorporate these philosophies and concepts into the ways they managed their Organisations, Quality as a Business Strategy includes philosophies, concepts and specific methods for incorporating these changes.



# Deming's view of our progress

NE p.37

Application	Has Penetrated?	Magnitude
Overall business strategy and planning	Not Yet	Here are the big gains; 97% Waiting to be achieved!
Company-wide systems (personnel, training, systems of reward, merit pay, annual appraisal, pay for performance, legal, financial, purchase of materials, equipment, and services)	Not yet	
Unique processes that produce figures	Yes	3%



# Basic Elements of QBS

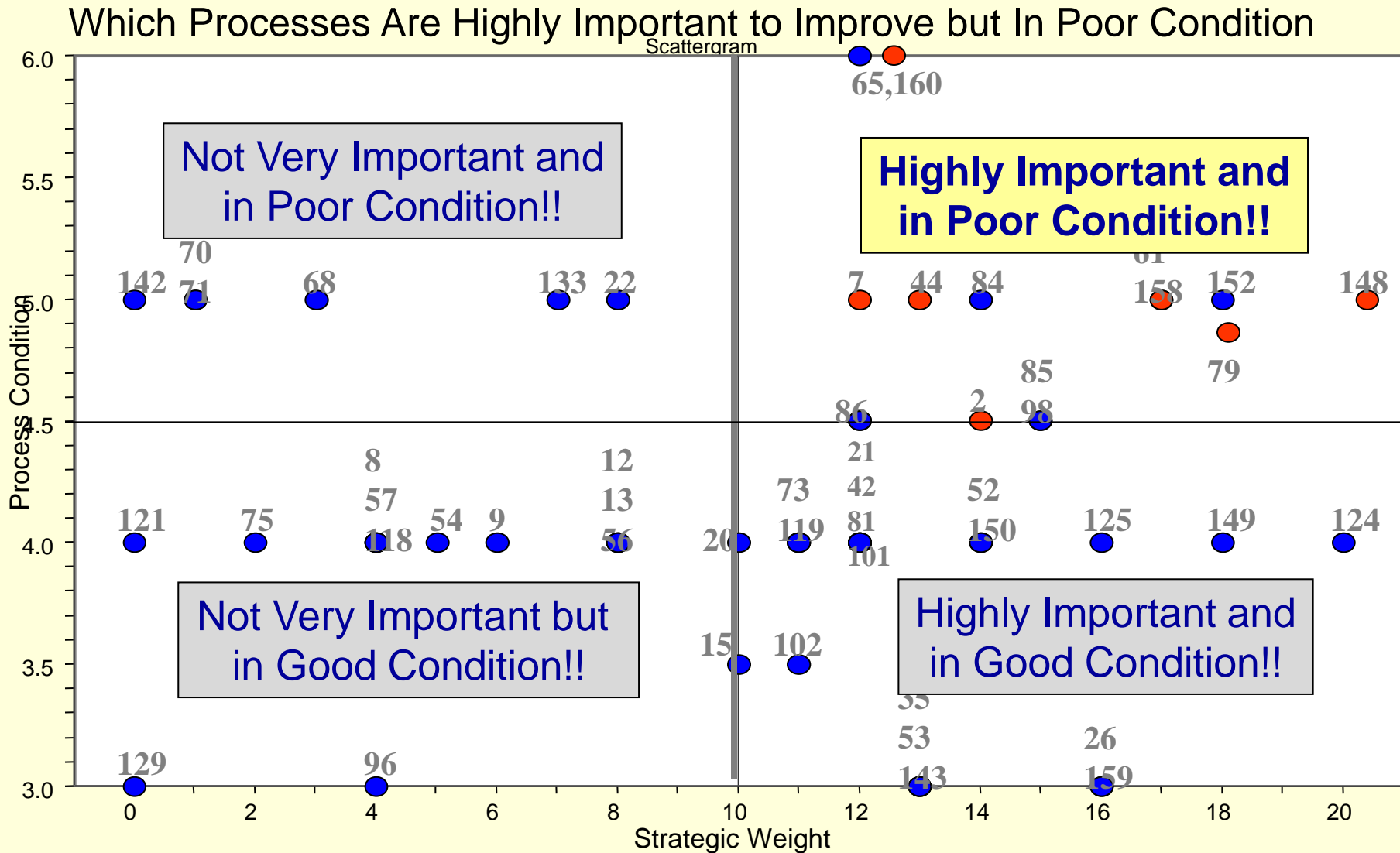
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- A foundation of ***continuous matching of products and services to a need through design and redesign of processes, products, services.***
- ***An Organisation that performs as a system*** to achieve this matching with the need as the target
- ***A set of methods*** to ensure that changes result in real improvements to the Organisation



# What Does QBS Get Us?

Process Condition (1=Good, 6=Very Poor)



Strategic Weight: Importance to Improve If To Meet Strategic Goals

## What Does QBS Get Us? FOCUS!



# Leadership Environment Conducive to QBS

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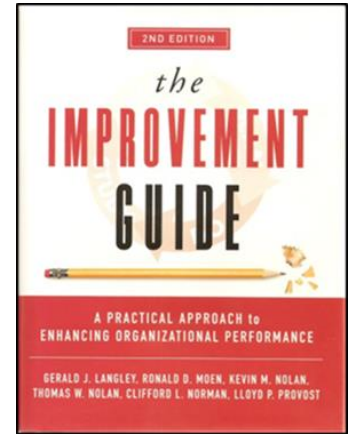
- Creating the desire for continuous improvement
- **Creating an environment that nurtures respect among people**
- Providing encouragement
- **Promoting cooperation**



# Five QBS Activities for Leaders

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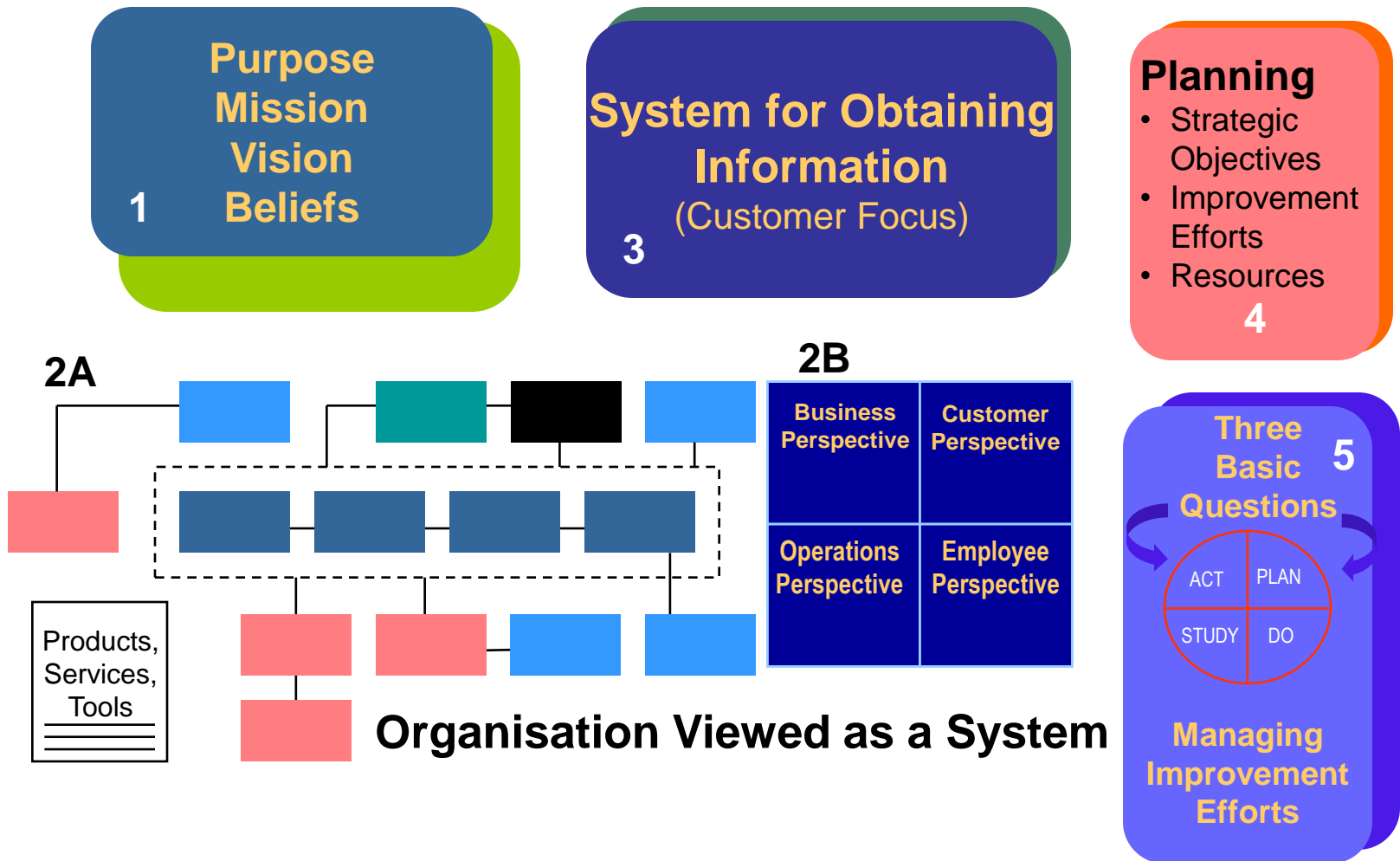
1. Establishing & communicating the purpose of the Organisation (mission & vision)
2. Viewing the Organisation as a system
3. Designing & managing a system for gathering information (patient focus)
4. Conducting planning for improvement and integrating it with business planning
5. Managing individual and team improvement activities



See The Improvement Guide , 2009, chapter 13 for details



# QBS - Five Activities for Leaders



The Improvement Guide p..260



# A Key to Success:

## *Engaging Front-line and Finance Staff*

### to Lower Costs and Drive Quality

72



*Engaging Front-line  
and Finance Staff*



Institute for  
Healthcare  
Improvement

From the Bedside to the Balance Sheet

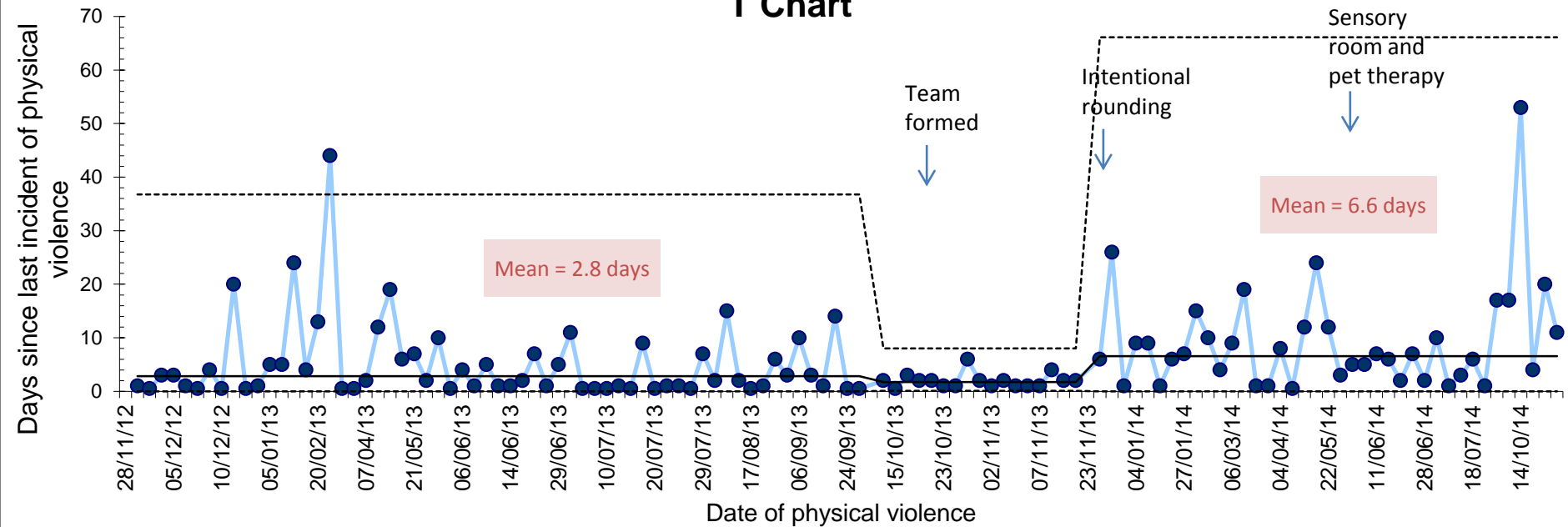
Engaging Front-Line and Finance Staff  
to Lower Costs and Drive Quality



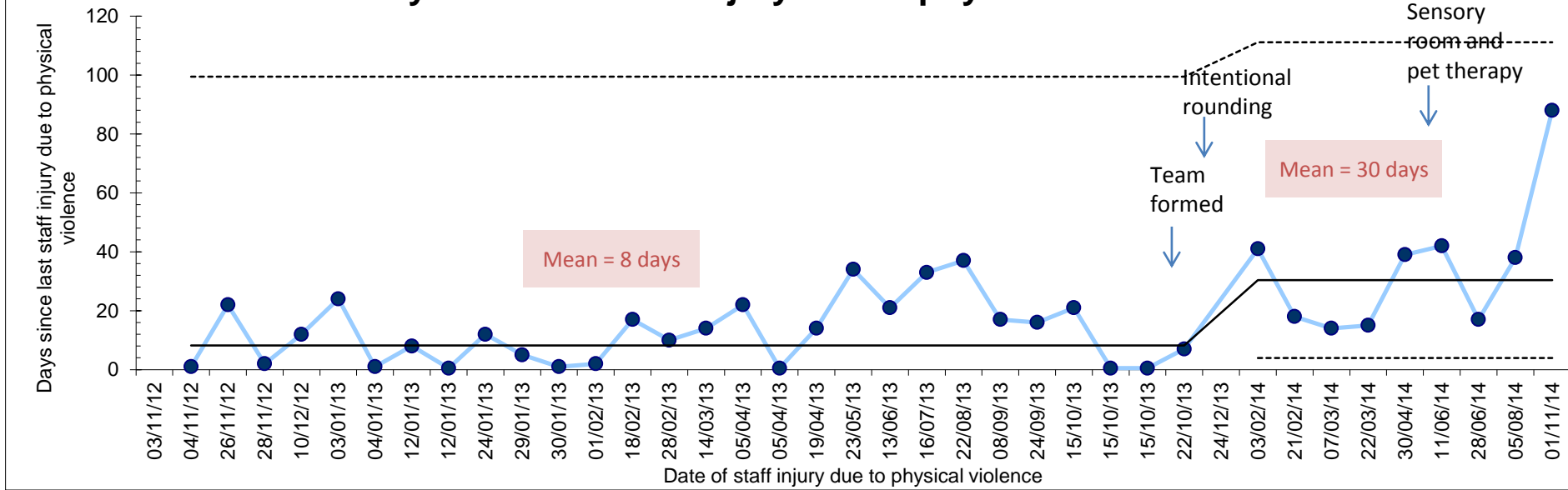


# Days between incidents of physical violence on 3 older adult wards

## T Chart



## Days between staff injury due to physical violence - T Chart



# At what cost? Crisis & Restraint

## Face down restraint

Total number of incidents of face down physical restraint by one or more members of staff	
Number of respondents	27 (50 per cent of all trusts)
Total	3,439
Range	Highest 923; lowest 0 (in 4 Mental Health Trusts)
Median	65

It was like a rugby scrum... They got on top of me and held my face down to the floor... with my arms behind my back. There was someone on every limb... it stayed with me.

## Example

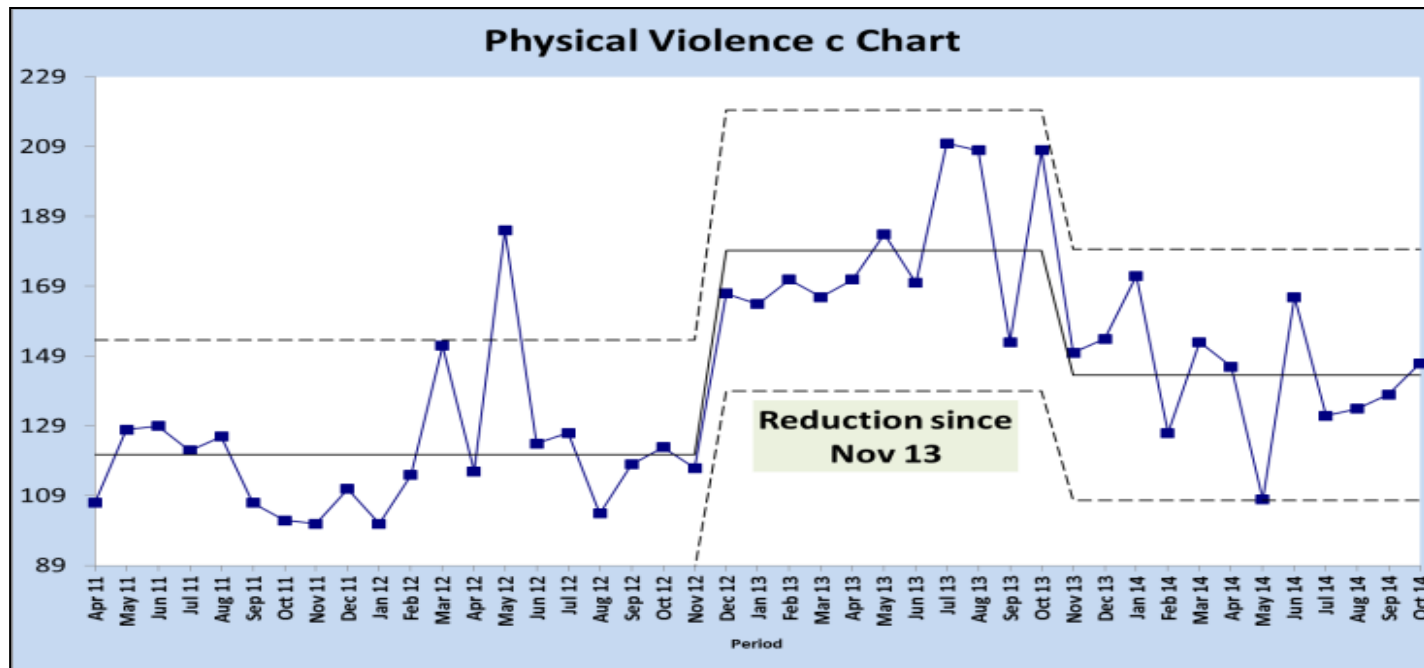
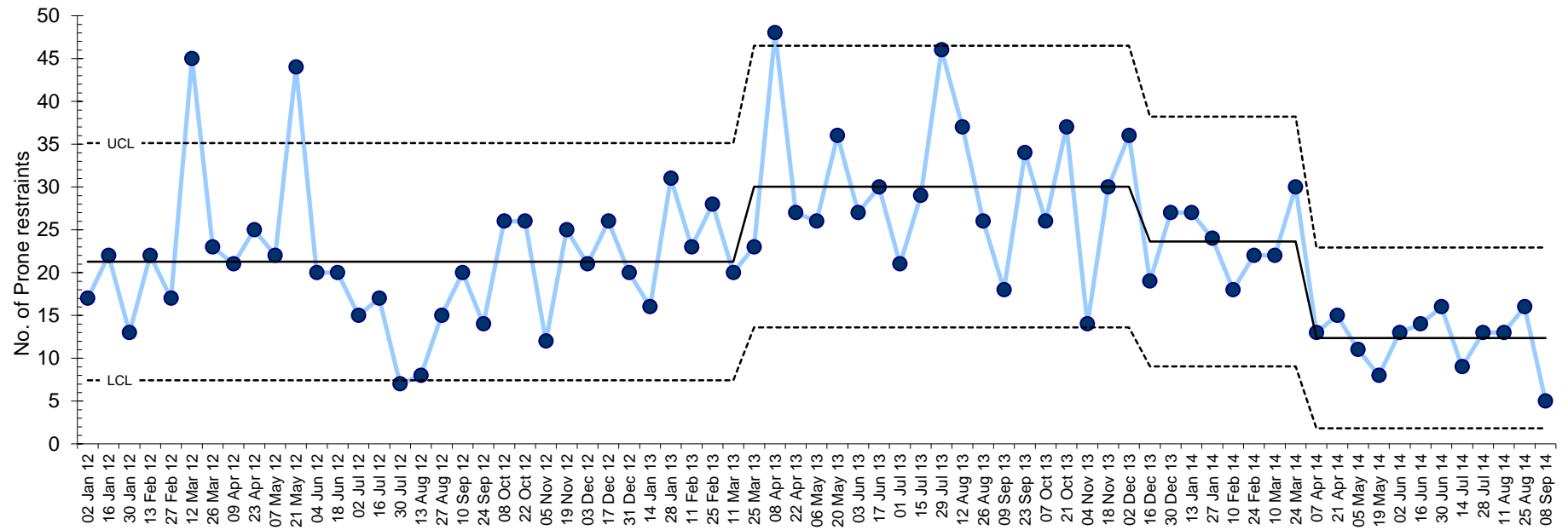
North Central London reduced ambulance conveyance to A&E after analysing activity over a three month period. They found that 57 hours of emergency ambulance time was spent conveying 133 people, mostly from three outer London boroughs, in mental health crisis to A&E departments. Following a workshop in which it was demonstrated that those people did not receive a good service, two boroughs set up 'frequent attender forums', hosted by A&E departments with mental health and substance misuse leads actively involved in agreeing how to better meet individual needs of people using services.

**LondonHealth**  
PROGRAMMES

## 2. Mental health models of care for London



# Restraints in a prone position - bi-weekly data from Jan 2012 to Sept 2014



# Dialogue #4:

## QBS Five Activities for Leaders

For each aspect of *Building Will*, please indicate the level of progress you feel exists here at ELFT.

Five QBS Activities for Leaders	Not Yet Started	In Progress	Established Practice
Establishing & communicating the purpose of the Organisation (mission & vision)			
Viewing the Organisation as a system			
Designing & managing a system for gathering information (patient focus)			
Conducting planning for improvement and integrating it with business planning			
Managing individual and team improvement activities			



# QBS Evaluation Grid

77

Source: ©2014 IHI Improvement Advisor Professional Development Program and Associates in Process Improvement

Area	Score=0	Score=2	Score=4	Score=6	Score=8	Score=10
<b>Purpose</b>	No written statements	Statement exists	Mission and tenets defined and visible	Communicated and understood by employees	Used to align and guide the business	Fully integrated into the structure
<b>System</b>	Work as a process is not understood	Major processes and products have been documented	Relationships between processes are documented	Systems thinking and language is common	Systems diagrams are used in business.	Management systems have integrated the systems view
<b>Whole System Measures</b>	Financial data is viewed periodically	Financial and other operational measures are used	Family of measures is assembled	Balances set of measures reported graphically	Set of measures aligned and variation understood	Measures are integrated into management systems
<b>Information</b>	Information is gathered on ad hoc, reactive basis	System is based on passive information	System is well documented and includes active sources	Information is documented and communicated	Comprehensive system with analysis/synthesis for decision making	Marketing leads and integrates information system
<b>Planning for improvement</b>	No formal planning; reactive culture	Planning for improvement is done on an informal basis	A formal, documented process exists for planning improvement	Integrated process identifies objectives, efforts, and resources	All other planning processes are defined and linked	Planning system is improved and integrated in all areas
<b>Managing improvement efforts</b>	No system exists to manage improvements	Improvements recognized on an as-needed basis & resources assigned	Leaders provide formal guidance for individuals and teams	Improvements are guided by planning; leaders are learning	The impact of improvement is understood and managed	Improvement system is integrated in business and regularly improved
<b>Model for improvement</b>	No standard approach to improvement efforts	Various approaches are used for improvement	Training on the Model and expectation of its use	Theory behind the Model is understood	Improvements are managed as PDSA cycles	Model is routinely used by all levels of the Organisation
<b>Management system</b>	Structure does not exist to make improvement key a focus of daily work	The need for improvement is recognized and responsibility assigned	A formal system for improvement is defined	Top management assumes responsibility for integrating improvement	Improvement is linked to planning and other key business activities	Improvement is completely integrated into all aspects of operating & developing the business

# Dialogue #5:

## Quality as a Business Strategy at ELFT

- What is our current business planning cycle?
- To what degree does improvement fit into this business cycle?  
How could the connection be made more explicit?
- How do we set annual improvement priorities that shape our QI work? Who do we need to engage in defining these priorities?
- How does QI fit with our annual cost reduction requirement?  
We have agreed that QI will start delivering cash releasing cost savings from 2016-17 financial year. How do we start identifying areas of waste, and aligning QI work with these areas of opportunity.



# Questions Guiding Today's Workshop

**Question #1**: What is the difference between a quality improving Board, and a Board that is looking for assurance? How do we strike the balance between assurance and improvement?

**Question #2**: How can we make sure that QI is part of all strategies that the Board signs off? How we make QI our business strategy?

**Question #3**: How do get everyone to have a basic knowledge of the science of improvement? What is the role of the Board in building capacity and capability for QI.

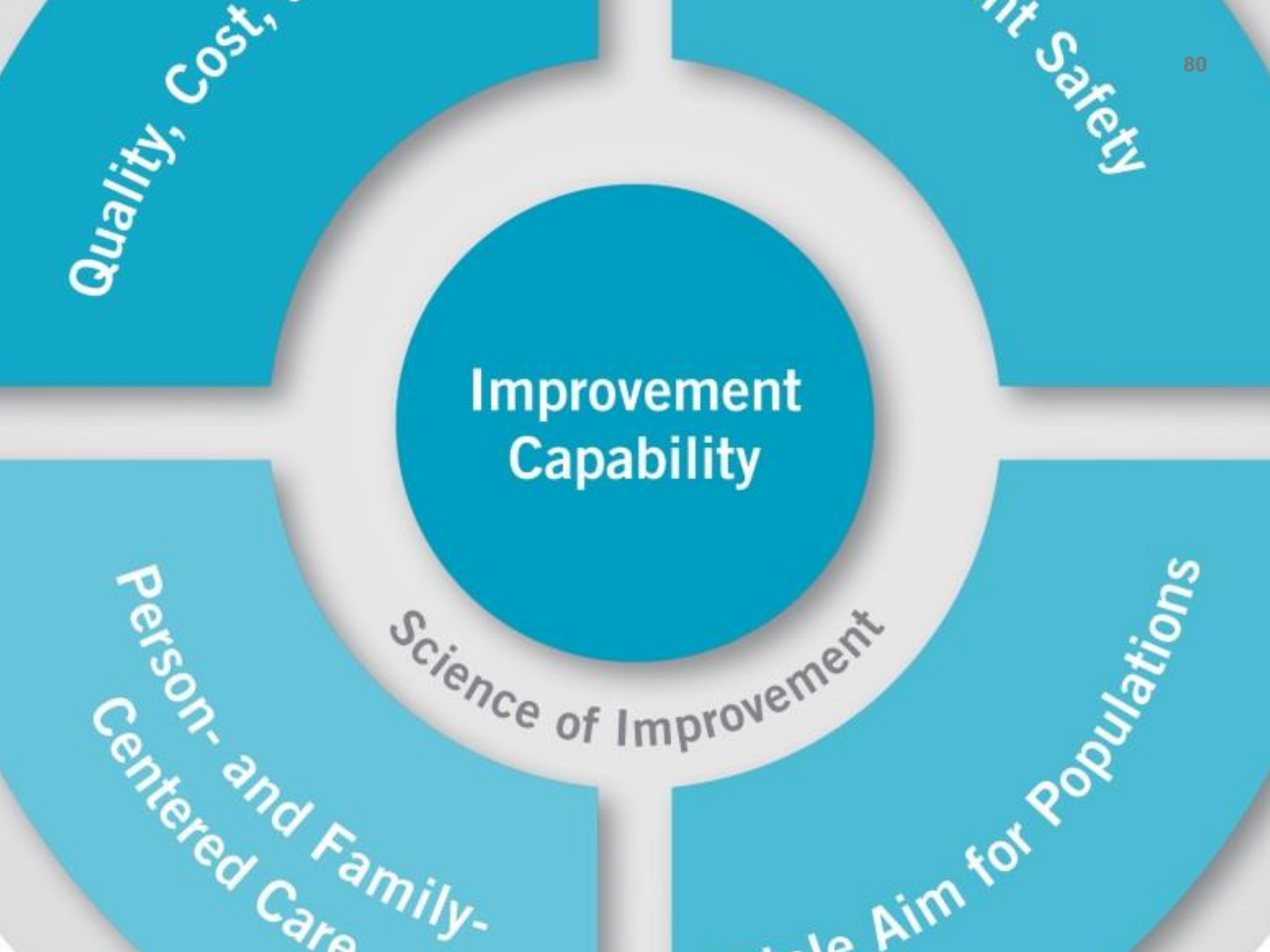
**Question #4**: How can the Board be assured that we are moving towards our improvement aims?

**Question #5**: How do we use all of this data we have to make an impact on our QI efforts? How do analyse the data from a QI perspective and what questions do we ask about the results?

**Question #6**: How do we scale up all of this local improvement work to something that is meaningful at Trust-level? What are the big dots, and how do we aggregate all the work up to move the big dots?









# The Leadership Challenge

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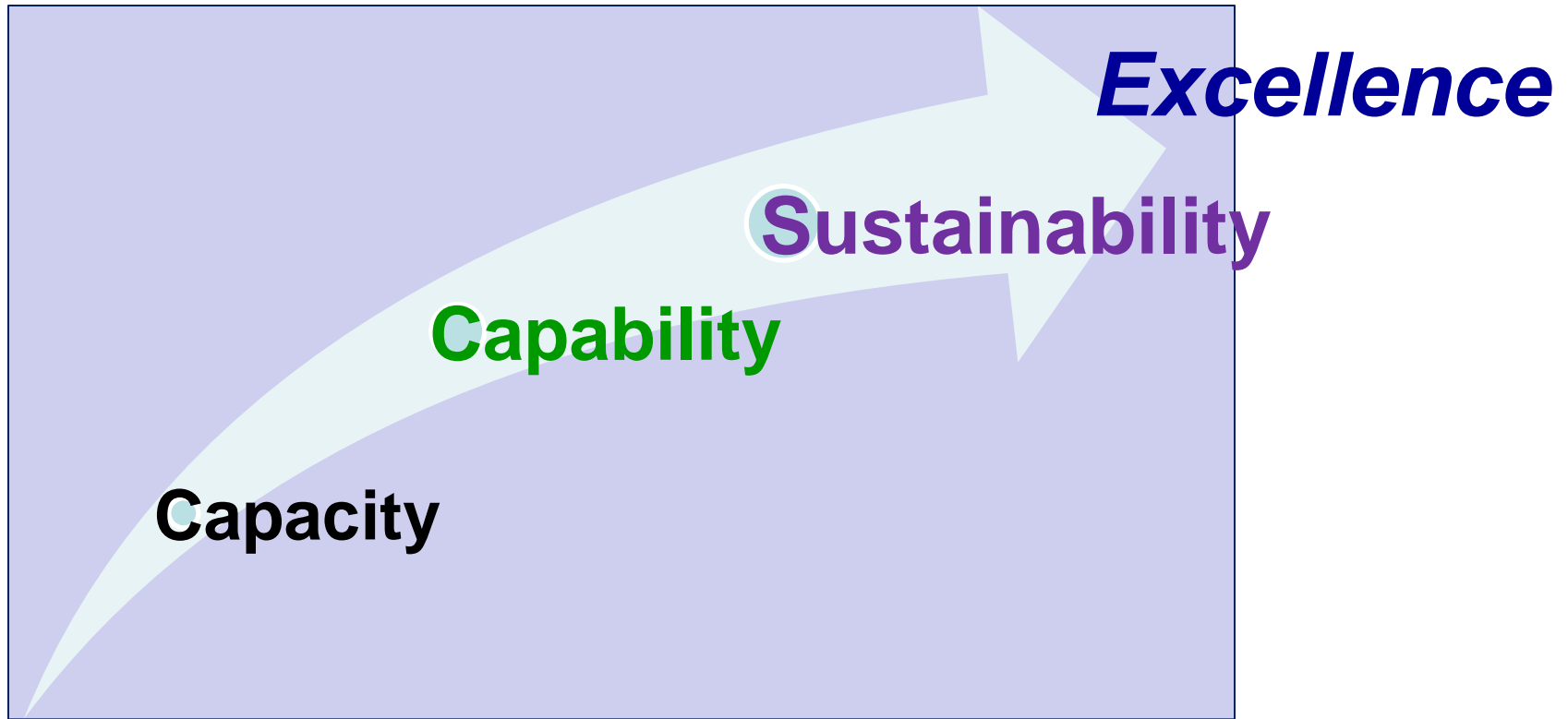
**To build a renewable infrastructure that produces a highly reliable quality and safety system by (fill in the date).**

**How good?  
By when?**



# The Journey To Organizational Excellence

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***“We are what we repeatedly do.  
Excellence then, is not an act but a habit!”***

Aristotle (384 – 322 BC)



# Capacity versus Capability

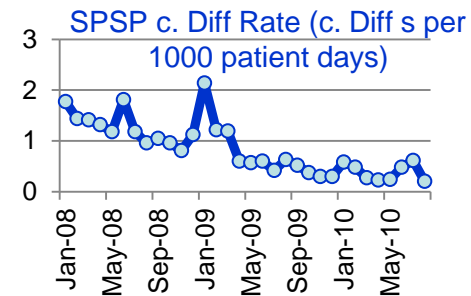
## Capacity (potential energy)

- *The ability to receive, hold or absorb*
- *The maximum or optimum amount of production*
- *The ability to learn or retain information.*
- The power, ability, or possibility of doing something or performing
- A measure of volume; the maximum amount that can be held



## Capability (kinetic energy)

- The power or ability to generate an outcome
- The ability to execute a specified course of action
- The sum of expertise and capacity
- Knowledge, skill, ability, or characteristic associated with desirable performance on a job, such as problem solving, analytical thinking, or leadership
- Some definitions of capability include motives, beliefs, and values



# How can we build skills to transform the healthcare system?

**Helen Bevan**

NHS Institution for Innovation and Improvement, University of Warwick Campus, Coventry, UK

Journal of Research in Nursing  
15(2) 139–148

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jrn.sagepub.com



## Abstract

Across the world, healthcare organisations are implementing radical change strategies in the face of unprecedented financial challenge. In this context, a focus on building capacity and capability for improvement is a key strategy. Global analysis shows that the most common characteristic of healthcare organisations that deliver outstanding performance in cost and quality is a systematic approach to capability building for improvement. The paper looks at where to start in order to build improvement skills at every level of the healthcare system and empower frontline staff to make changes that will deliver results. The current situation of the English NHS is used to illustrate the points made. What will it take to skill up and mobilise the entire healthcare workforce, to create a mass movement of change agents, to sustain the energy for change for the longer term and deliver the transformational results in cost and quality that are sought for patients and populations?

## Keywords

healthcare improvement, capacity and capability, change management, quality improvement, mindset shift

## The context

Across the globe, healthcare systems face unprecedented financial challenges. The National Health Service (NHS) in England is no exception. The English NHS is one of the largest health systems in the world, with 1.4 million staff, providing comprehensive care to a population of 54 million people. There is a gap of up to £20 billion between the current trajectory of NHS spending and what is likely to be available over the next three years (NHS Chief Executive, 2009). Significant efforts are being made to address this. However, the agenda is not just about working with fewer financial resources. Within the NHS, there is a strong national commitment to quality as the biggest strategic priority (Department of Health, 2008). It means that the strategy to reduce costs must also improve quality. The overall challenge is how to utilise improvement approaches to deliver higher quality, safer care at lower cost.

## Corresponding author:

Helen Bevan, NHS Institution for Innovation and Improvement, University of Warwick Campus, Coventry, UK.

Email: helen.bevan@institute.nhs.uk

*“A focus on building capacity and capability for improvement is a key strategy. Global analysis of healthcare systems that deliver outstanding performance in cost and quality shows their most common characteristic is a systematic approach to capability building for improvement.”*

**Helen Bevan**

*Journal of Research in Nursing*

15(2) 139-148, 2010.



# Key Terms

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**Capacity** – having the right number and level of people who are actively engaged and able to take action.

**Capability** – the people have the confidence and the knowledge and skills to lead the change and take action.

Helen Beven, “How can we build skills to transform the healthcare system?”  
*Journal of Research in Nursing*, 15(2) 139-148, 2010.

# Key Questions for Building Capacity and Capability

---

1. Will you involve everyone or just a few targeted groups?
2. Who needs to know what? (the dosing formula)
3. What methods do you plan to use to build capacity and capability?
4. Do you have a model or framework to guide your journey?
5. How will you make sure the learning system can be sustained?

Adapted and expanded from a conversation with Tom Nolan, Associates in Process Improvement on material he presented at the IHI Strategic Partners Roundtable, April 17-18, 2006.



# Key Questions for Building Capacity and Capability

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# Key Question #1

Will you involve everyone or just a few targeted groups?

**Non-executives?**

**Executives?**

**Governors?**

**Managers?**

**Senior clinicians?**

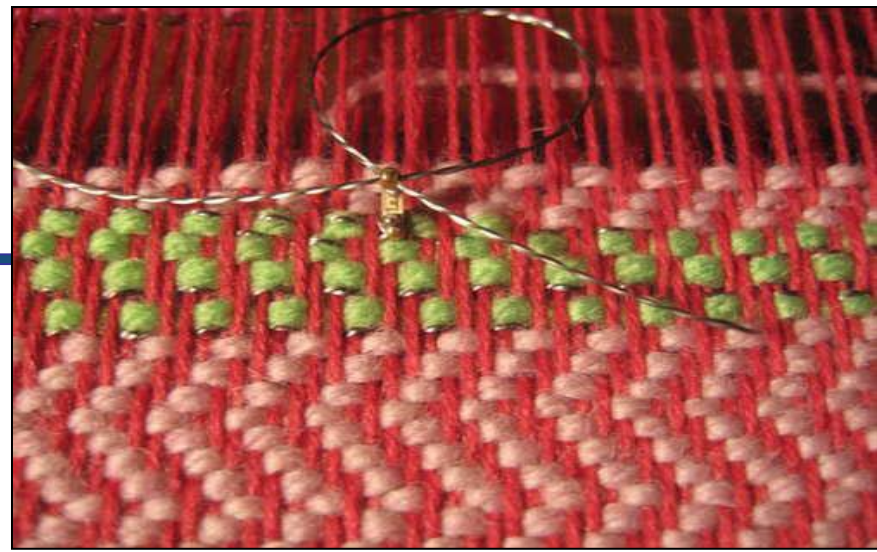
**Front Line Workers?**

**Improvement Advisors (IAs)?**

Adapted from Tom Nolan, Associates in Process Improvement presented at the  
IHI Strategic Partners Roundtable, April 17-18, 2006



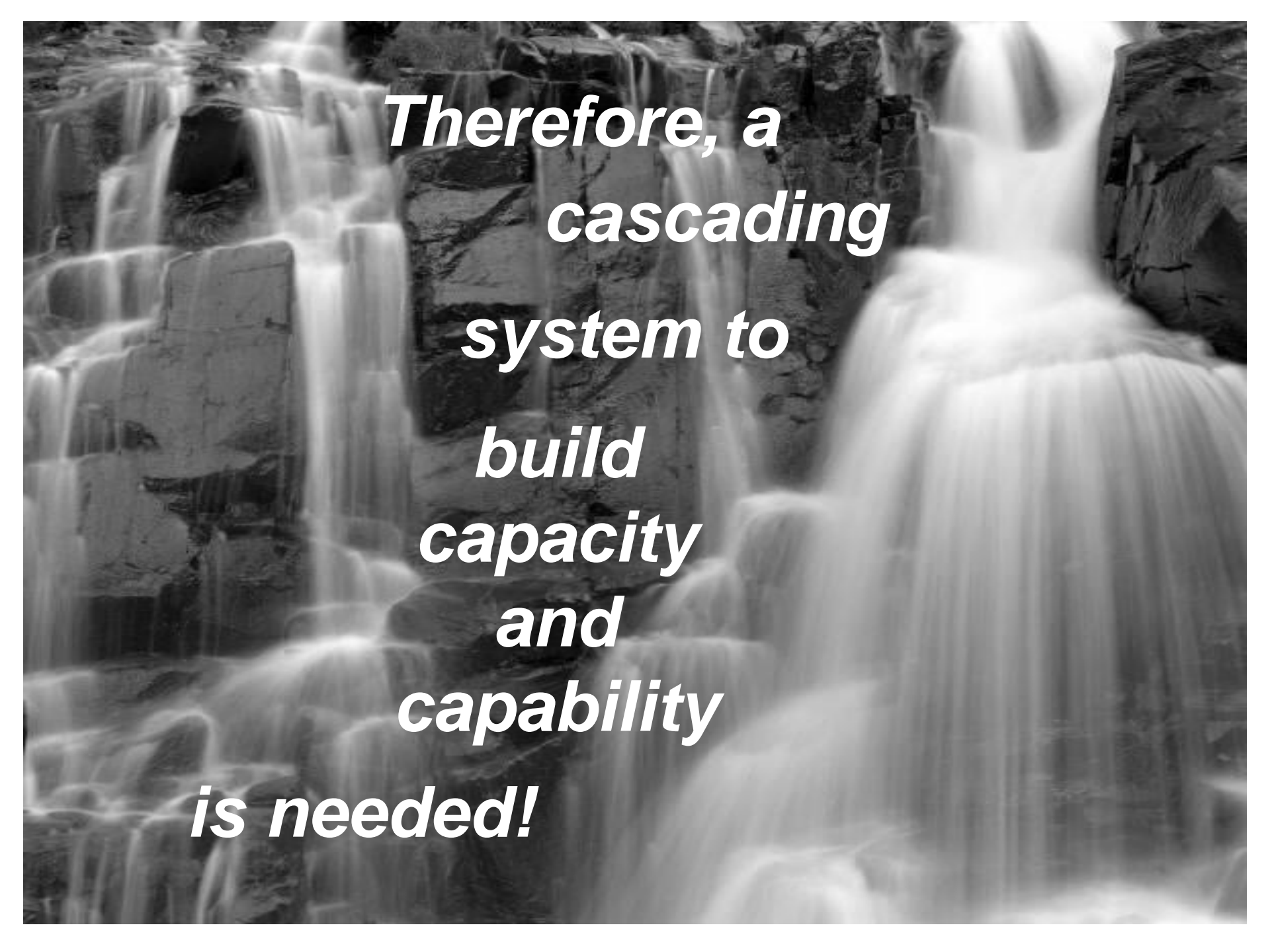




Improvement concepts, methods and applications must be woven into the fabric of daily life and at all levels of the organization.

- From point where care is delivered,
- To management meetings and strategy sessions
- And, in the board and governance level decisions





***Therefore, a  
cascading  
system to  
build  
capacity  
and  
capability  
is needed!***

**Many organizations start the  
cascade at the top...**

**...and**

**let things...**

**trickle...**

**...downward!**





While others  
believe that  
the cascade  
should start  
at the staff  
level...



upward!  
percolate  
...and



# But successful organizations cascade down and percolate up throughout the entire organization

---

**Top Down?**

Details on the Microsystem can be found in:  
*Quality by Design: A Microsystems Approach.*  
By E. Nelson, P. Batalden and M. Godfrey.  
Jossey-Bass, 2007.

**Macrosystem**

**Spread from  
the Middle?**

**Mesosystem**

**Microsystem**

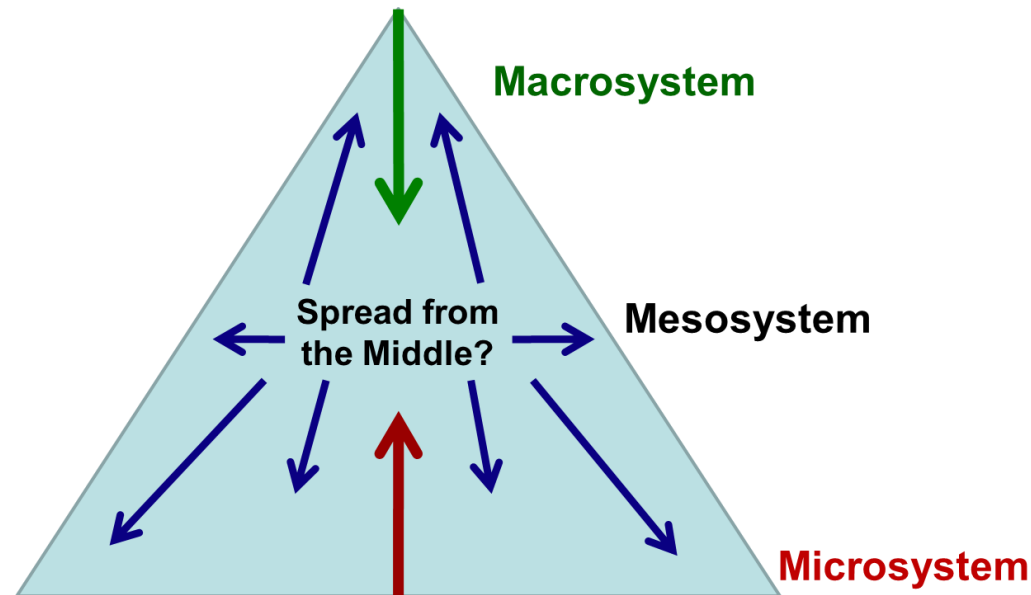
**Bottom Up?**



## Key Question #2

### Who needs to know what? (the Dosing Formula)

**Different levels of knowledge and skill in the Science of Improvement are required at different levels of the organization.**



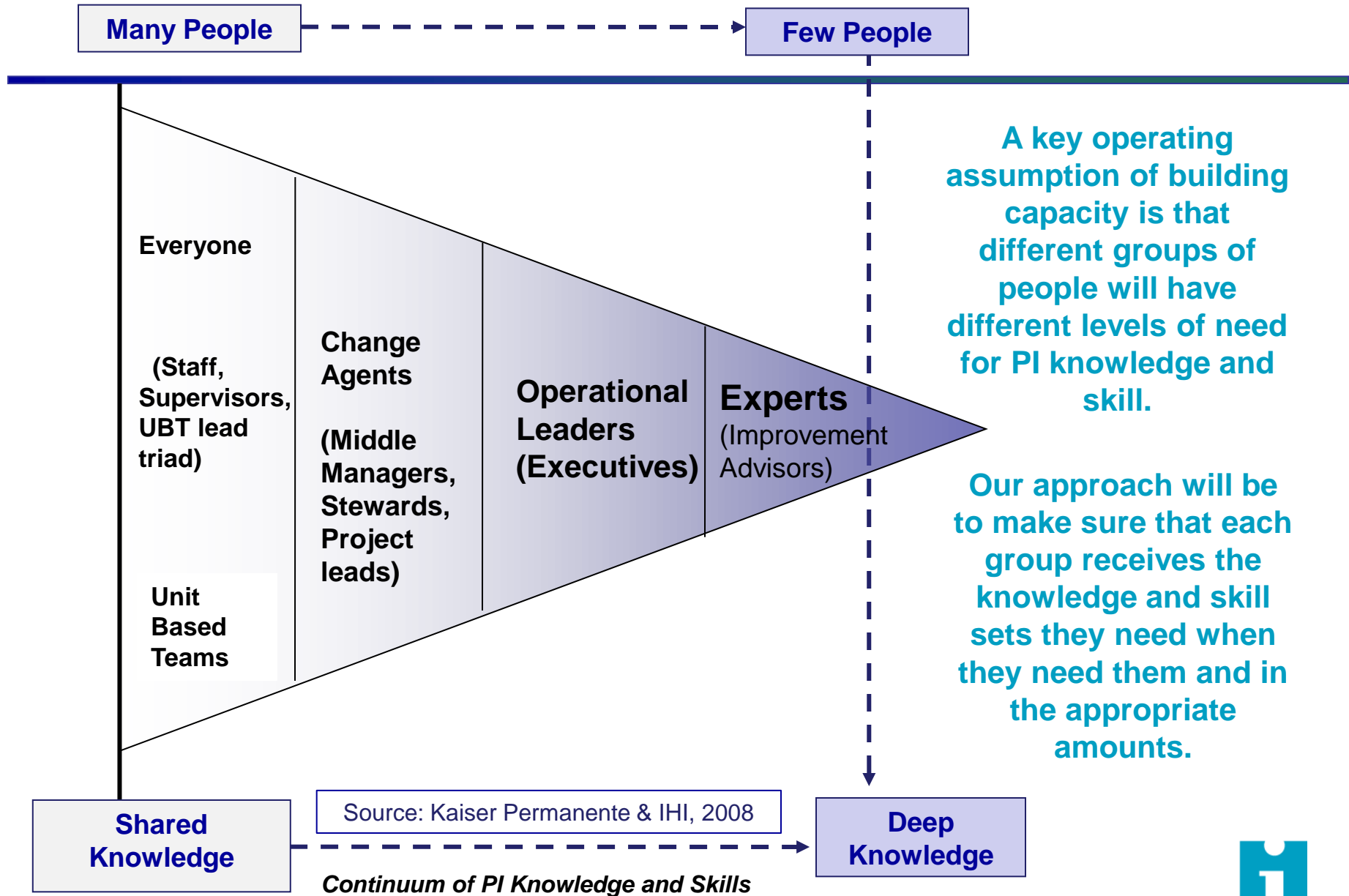
# The Dosing Formula

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- Not everyone in the organization needs to have expert level of knowledge about the SOI
- Determining who needs to have what levels of knowledge about the SOI is a key leadership responsibility
- It is not enough to fill people with new levels of knowledge and skill. We must allow them to have the time to apply the new knowledge and skill to daily work.



# The Dosing Formula: Who needs to know what?





# Who needs what? (The Dosing Formula)

---

This Exercise is designed to create a dialogue on what we call the “dosing formula.” That is, which groups of individuals within your organization need to have what levels of knowledge and skill to successfully build a sustainable infrastructure that produces highly reliable QI excellence?

The worksheet on the next page provides a list of *Skills & Knowledge* (the rows) associated with organizations that have demonstrated QI excellence. For each of the listed *Skills & Knowledge* items indicate the level or “dose” of *Skill & Knowledge* you think each group (the columns) needs using the following response scale:

- 1 = They need to know the basic terms, concepts and methods when they hear them**
- 2 = They need to be able to explain the terms, concepts and methods to others**
- 3 = They need to be able to teach the terms, concepts and methods to others**
- 4 = They need to be seen as an organizational lead and champion for the terms, concepts and methods**



# Who needs what? (The Dosing Formula)

Skills & Knowledge	Non-Execs, Board of Directors	Senior Management	Clinical Leadership	Middle Management,	Frontline Staff	QI Experts (IAs)
Models for QI (theory & concepts)						
Leadership for improvement & cultural transformation						
Teamwork and Facilitation						
Gathering information						
Analyzing and interpreting data						
Presentation skills						
Understanding variation						
QI tools and methods						
Change management						
Patient-centered care						



## Where are we?

On track to train over 400 people through 5 six-month waves of learning between 2014-16. First 3 waves delivered with the IHI

On track. All senior staff being encouraged to join QI training over next 2 years

New need recognised. Developing Improvement coaches programme will train 30 QI coaches in 2015

On track. Most Executives will have undertaken the ISIA, and all will have received Board training with the non-Executives

Currently have 3 improvement advisors, with 1.5wte deployed to QI. Will need to build more capacity at this level.

Estimated number = 3300  
Requirement = introduction to quality improvement, identifying problems, change ideas, testing and measuring change

Time-frame = train 10-20% in 2 years

Estimated number = 250  
Requirement = deeper understanding of improvement methodology, measurement and using data, leading teams in QI

Time-frame = train 30-50% in 2 years

Estimated number = 25-30  
Requirement = deeper understanding of improvement methodology, understanding variation, coaching teams and individuals

Time-frame = train 100% in 2 years

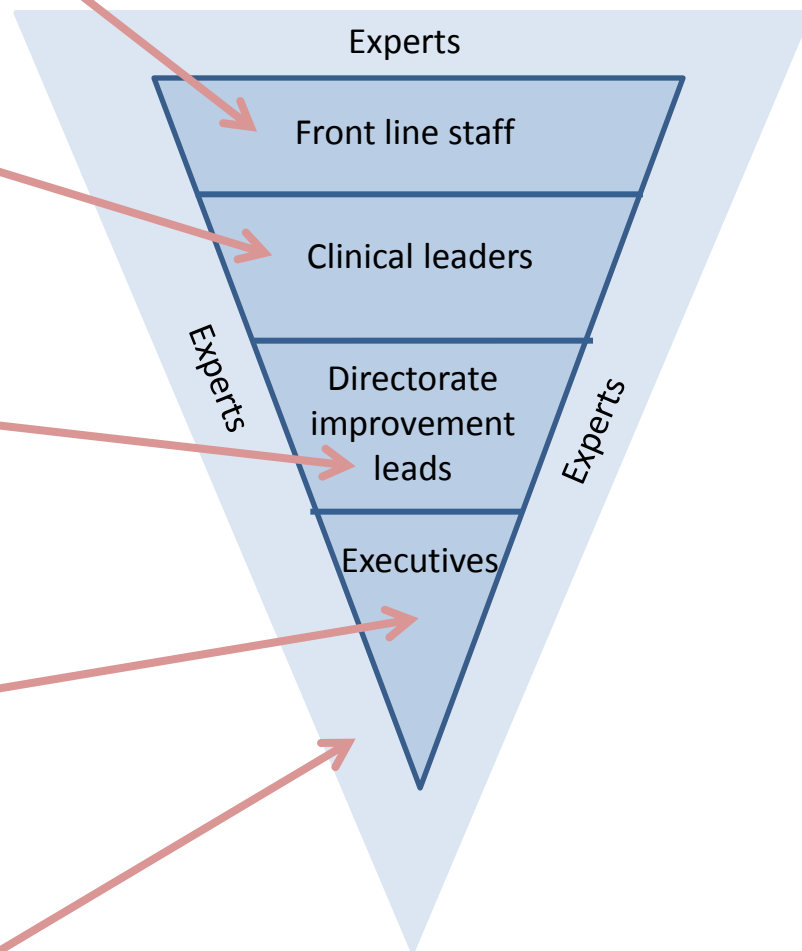
Estimated number = 10  
Requirement = setting direction and big goals, executive leadership, oversight of improvement, being a champion, understanding variation to lead

Time-frame = train 100% in 2 years

Estimated number = 5  
Requirement = deep statistical process control, deep improvement methods, effective plans for implementation & spread

Time-frame = train 100% in 2 years

## ***ELFT Dosing Formula Results***



# The Key Components for Building Capacity and Capability

---

$$S + P + C^* = O$$

**Structure + Process + Culture\* = Outcomes**

Sources: Donabedian, A. (1966). "Evaluating the quality of medical care." *Milbank Memorial Fund Quarterly* 44(3): Suppl:166-206. Donabedian, A. *Explorations in Quality Assessment and Monitoring. Volume I: The Definition of Quality and Approaches to its Assessment*. Ann Arbor, MI, Health Administration Press, 1980.

\*Added to Donabedian's original formulation by R. Lloyd and R. Scoville, 2011 to make the role of culture more explicit..



# ELFT Support Structures for QI

# QI Sponsors vs QI Team Support

QI Sponsor	QI Team Support
<ul style="list-style-type: none"><li>• Senior member of staff from project's local directorate</li><li>• Not necessarily an expert in improvement methodology</li><li>• Here to help mentor and support you in the project</li><li>• Help over come any barriers you may experience</li><li>• Championing cause</li></ul>	<ul style="list-style-type: none"><li>• QI fellow/Improvement Advisor linked with every QI project</li><li>• Provide advice and support on any aspect of QI methodology</li></ul>

# Project Sponsor



$$S + P + C = O$$



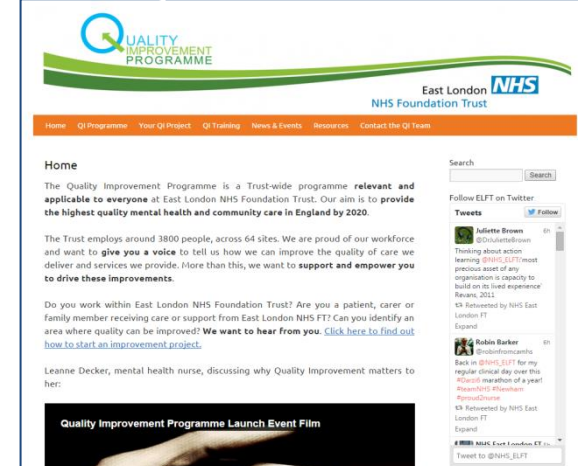
# QI Team



# QI Forums



# QI Resources



# QI Project Roles

1. Team Lead

2. Project team

3. QI sponsor

4. QI support

Quality improvement project charter		East London NHS Foundation Trust
Your name		
Your contact details (tel & email)		
Improvement project team members		
Project title		
Clinical team(s) involved		
How are you getting Service User/Careers involved?		
Directorate		

How does your project align with our strategic improvement aims? (tick which aim and ~~update~~ your project aligns with)

AIM		
Work stream	Reducing harm by 30% each year	Right care, right place, right time
	Reducing inpatient violence	Reliable delivery of evidence-based care
	Reducing falls and harm from falls	Improving patient and carer experience
	Reducing harm from pressure ulcers	Reducing delays & inefficiencies
	Reducing harm from medication	Improved access to services at the right location
	Reducing harm from restraints	
	Other type of harm	

What are you trying to accomplish?  
Topic or issue you would like to improve (1-2 sentences):

Aim statement (How good do you want to be by when?)

Why is ~~this~~ an important issue to tackle? What's the business case? (4-5 sentences)

How will you know that a change is an improvement?  
(Identify outcome, process and balancing measures - between 4 and 8 is optimum)

What changes can you make that will lead to improvement?  
(What change ideas would you like to test, the more the better)

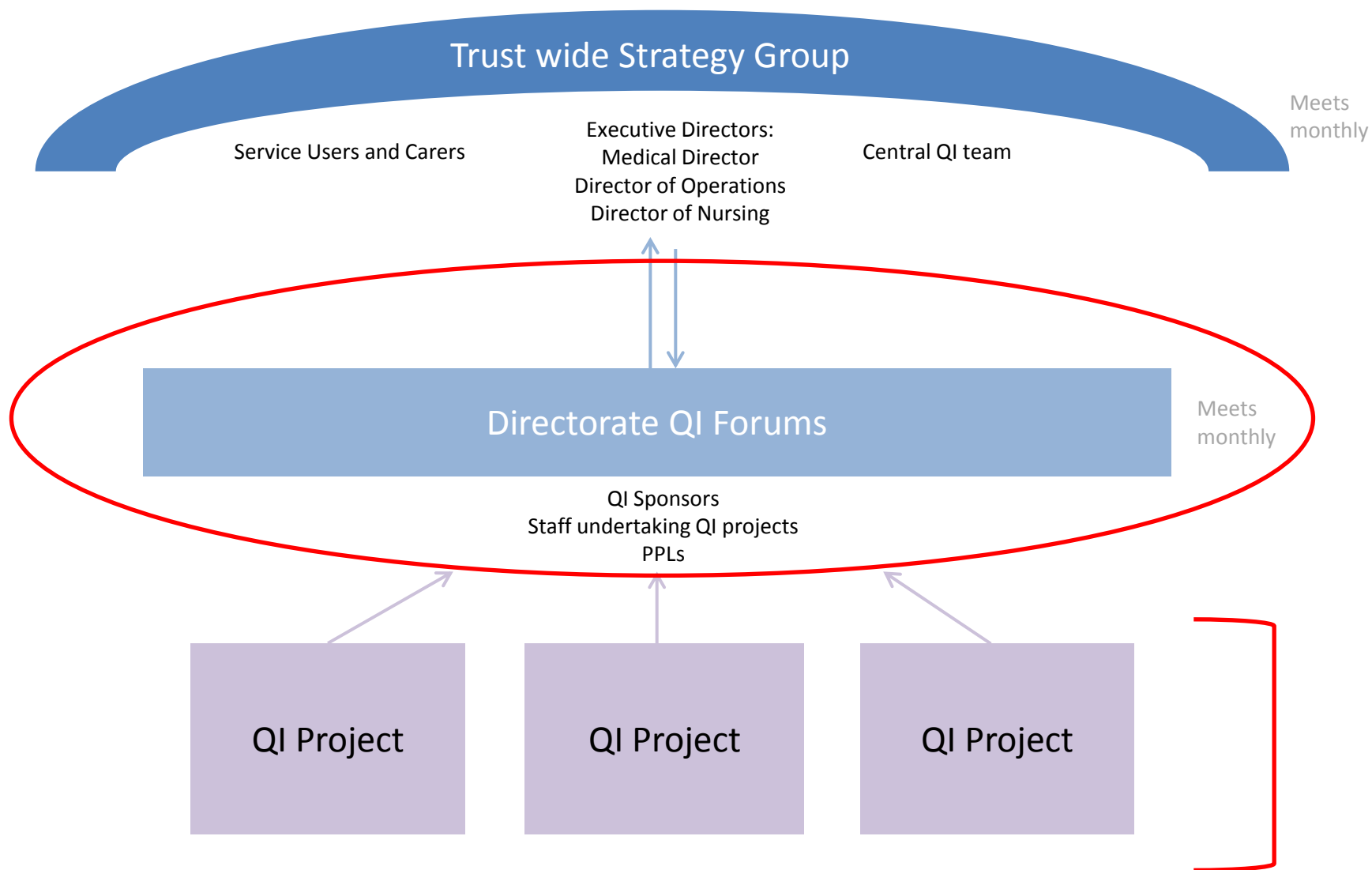
~~Are there any barriers that you can identify to getting this project going?~~

What ring-fenced time have you agreed for your team to meet?  
(~~should~~ be weekly or fortnightly, for 30-60 minutes, with all improvement team members present)

Name of team manager who has approved this project:

Date charter submitted:





**Quality improvement programme-project support structures**

# Directorate QI Forums

1. Run monthly in all directorates
2. Attended by QI sponsors, QI team and project team members
3. Prioritise, monitor and supervise projects
4. Identify and shape future QI priorities
5. Allow different QI team project members to learn from each other

# Dialogue #6:

## Building Capacity and Capability

- Is ELFT building **both** capacity and capability for quality?
- Is one aspect a bigger challenge than the other?
- How do we find resources to develop support structures and processes we need to achieve our quality priorities (e.g., providing protected time to lead or be a member of a QI team)?
- How do we find the space and resources to support ongoing operations **PLUS** support improvement work?

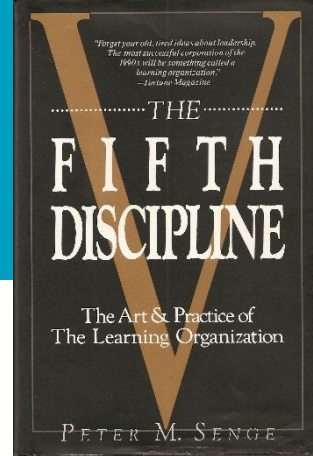
**Capacity** – having the right number and level of people who are actively engaged and able to take action.

**Capability** – the people have the confidence and the knowledge and skills to lead the change and take action.



# Dialogue #7:

## Building a Learning Organization



- “The organizations that will truly excel in the future will be organizations that discover how to tap people’s commitment and capacity to learn at *all* levels of an organization.” (Peter Senge)
  - The **Disciplines of the Learning Organization** include:
    - Systems Thinking
    - Personal Mastery
    - Mental Models
    - Building Shared Vision
    - Team Learning
- Which of these disciplines does Senge call “the fifth discipline?”
- Senge would ask leaders “*Does your organization have a learning disability?*” Learning organizations demand a new view of leadership.
  - Imagine that your organization is an ocean liner, and that you are “the leader.” **What is your role?** (The captain? The helmsman? The head engineer? The social director? The chef?)



# Questions Guiding Today's Workshop

**Question #1:** What is the difference between a quality improving Board, and a Board that is looking for assurance? How do we strike the balance between assurance and improvement?

**Question #2:** How can we make sure that QI is part of all strategies that the Board signs off? How we make QI our business strategy?

**Question #3:** How do get everyone to have a basic knowledge of the science of improvement? What is the role of the Board in building capacity and capability for QI.

**Question #4:** How can the Board be assured that we are moving towards our improvement aims?

**Question #5:** How do we use all of this data we have to make an impact on our QI efforts? How do analyse the data from a QI perspective and what questions do we ask about the results?

**Question #6:** How do we scale up all of this local improvement work to something that is meaningful at Trust-level? What are the big dots, and how do we aggregate all the work up to move the big dots?

# Discussion Questions for Today

Question #4: How can the Board be assured that we are moving towards our improvement aims?

Question #5: How do we use all of this data we have to make an impact on our QI efforts? How do we analyse the data from a QI perspective and what questions do we ask about the results?

Question #6: How do we scale up all of this local improvement work to something that is meaningful at Trust-level? What are the big dots, and how do we aggregate all the work up to move the big dots?

**These questions are very interrelated and will form, therefore, the remaining content of this workshop.**



## Question #4: How can the Board be assured that we are moving towards our improvement aims?

<b>Milestones in the Quality Journey</b>	<b>1</b>	<b>2</b>	<b>3</b>
Quality is understood by all members of the organisation as our prime business strategy			
Measures are a direct extension of ELFT's strategic aims and business strategy			
Appropriate and realistic targets and goals are established for each of our measures			
Data are collected in a manner that enables time series analysis of the measures (e.g., by day, week or month; no quarterly data!)			
Statistical analyses of the measures are made by using statistical process control (SPC) methods			
Leaders and managers make decisions about the performance of measures by using principles of common and special causes of variation			
Management has put in place strategies to close the gap between the current capability of our processes and the targets and goals we aspire to achieve			
Management and the board understand that ELFT's outcome measures (i.e., the 'big dots') will not move until all the process measures (i.e., the 'smaller dots') are aligned and integrated as a system			
Resources, structures and processes are in place to create capacity and capability for quality and safety throughout ELFT			





***So how do you  
improve?***





# Which of these ideas is the best way to improve?

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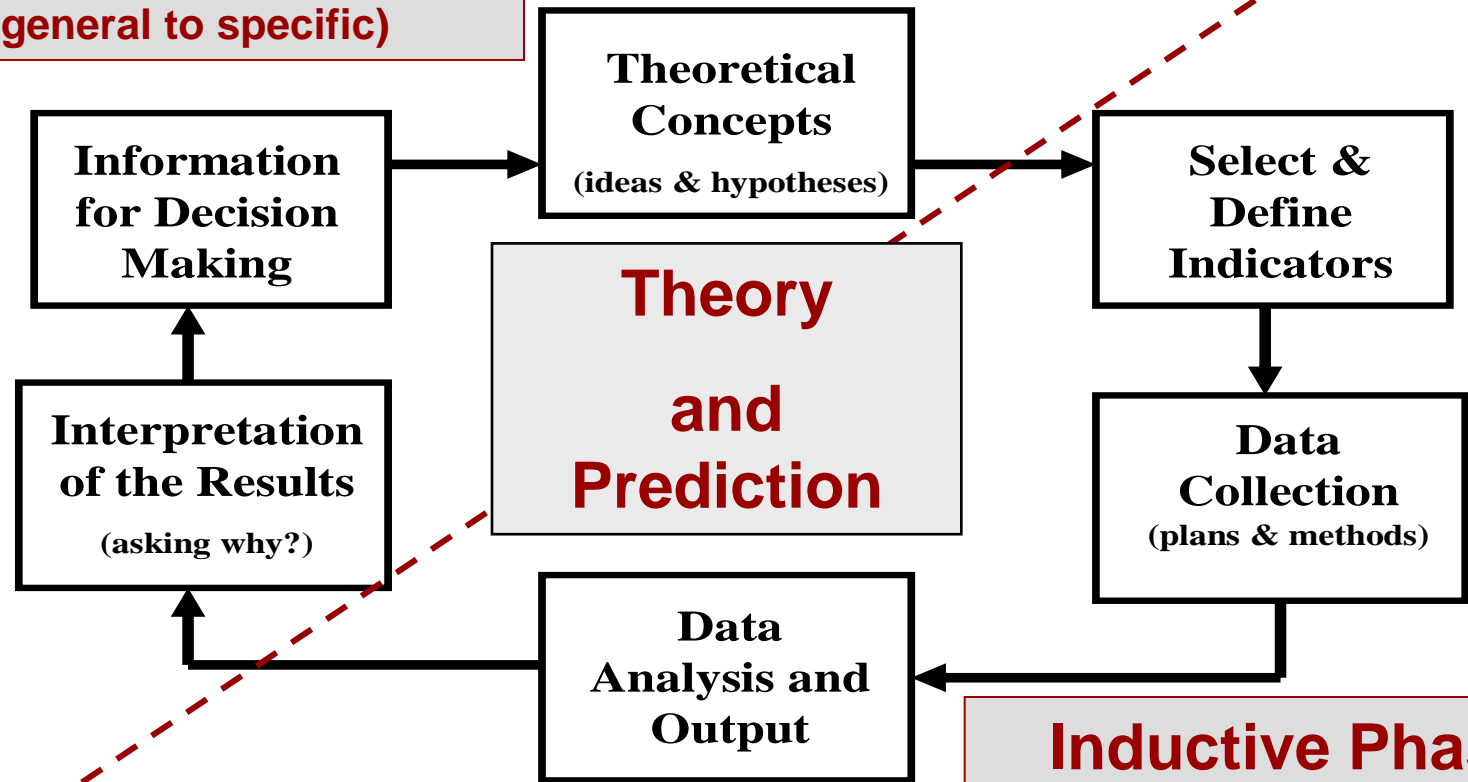
- Build Skills?
- Increase Knowledge?
- Hard work?
- Build Relationships?
- Attention to detail?
- Write More Policies?
- Design a Study?
- Work more hours?
- Pay Attention?
- More Resources?
- Hire More Staff?
- Power & Control?
- Collect Data?
- Hope & Luck?



# The Scientific Method provides the foundation for all improvement

## Deductive Phase

(general to specific)

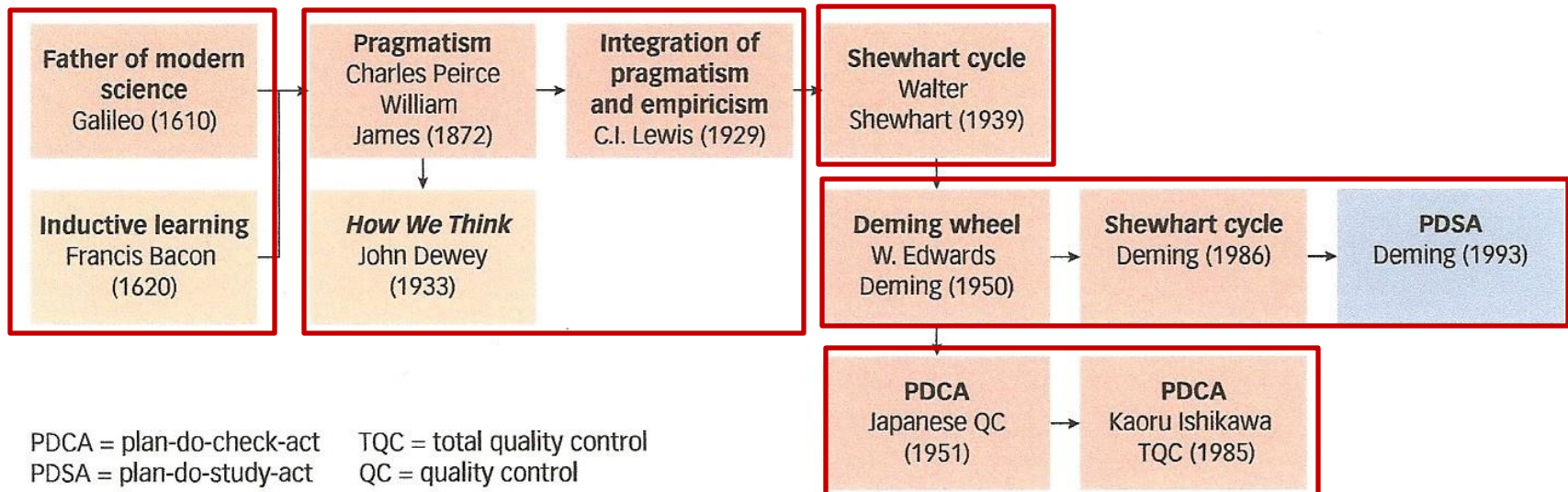


## Inductive Phase

(specific to general)

# Understanding the Timeline is Critical

## Evolution of the scientific method and PDSA cycle

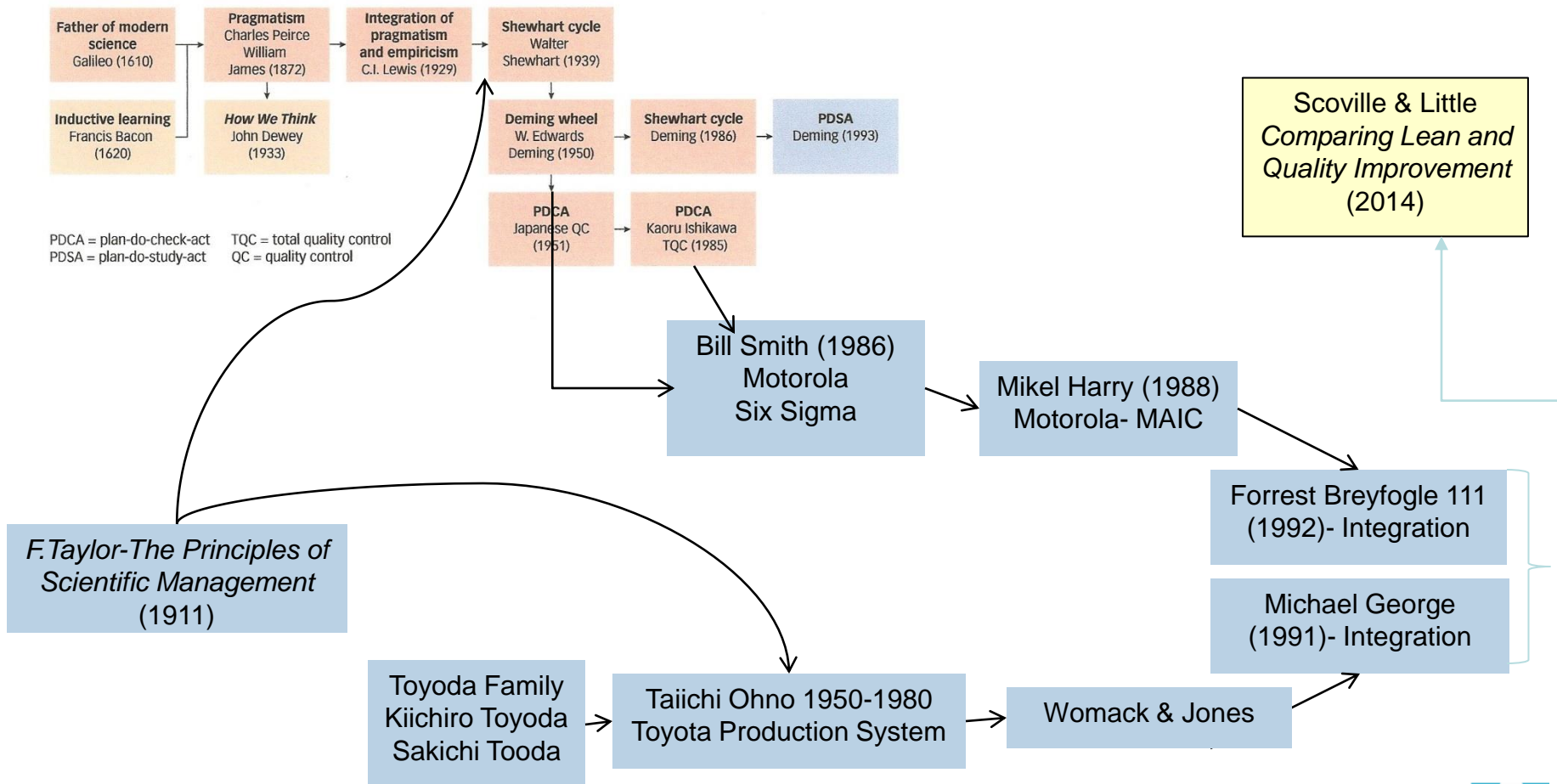


Source: Moen, R. and Norman, C. "Circling Back: Clearing up Myths about the Deming Cycle and Seeing How it Keeps Evolving," *Quality Progress* November, 2010:22-28.



# Adding Six Sigma & Lean to the Timeline

Evolution of the scientific method and PDSA cycle / FIGURE 1



# Three of the Quality Pioneers provided guidance and direction

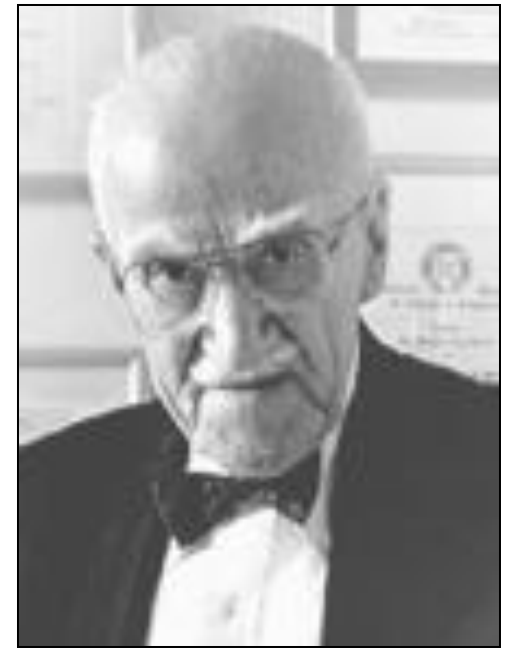
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**W. Edwards Deming**  
(1900 - 1993)



**Walter  
Shewhart**  
(1891 – 1967)



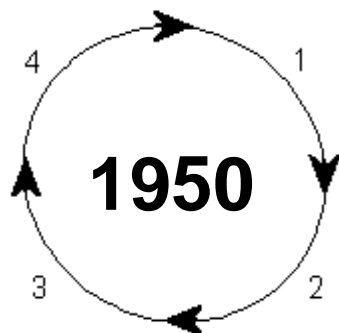
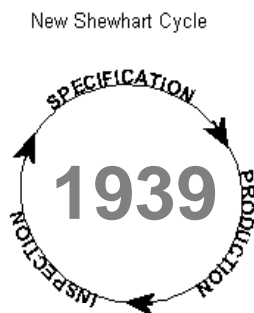
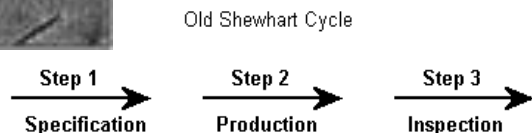
**Joseph Juran**  
(1904 - 2008)





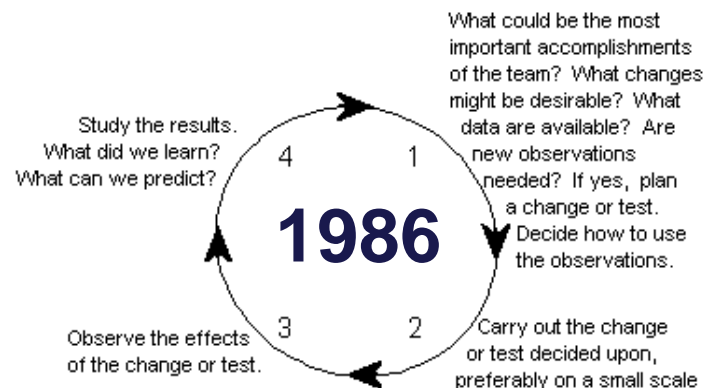
Walter A.  
Shewhart  
(1891 – 1967)

# Development of the Shewhart Cycle



## The Deming Wheel

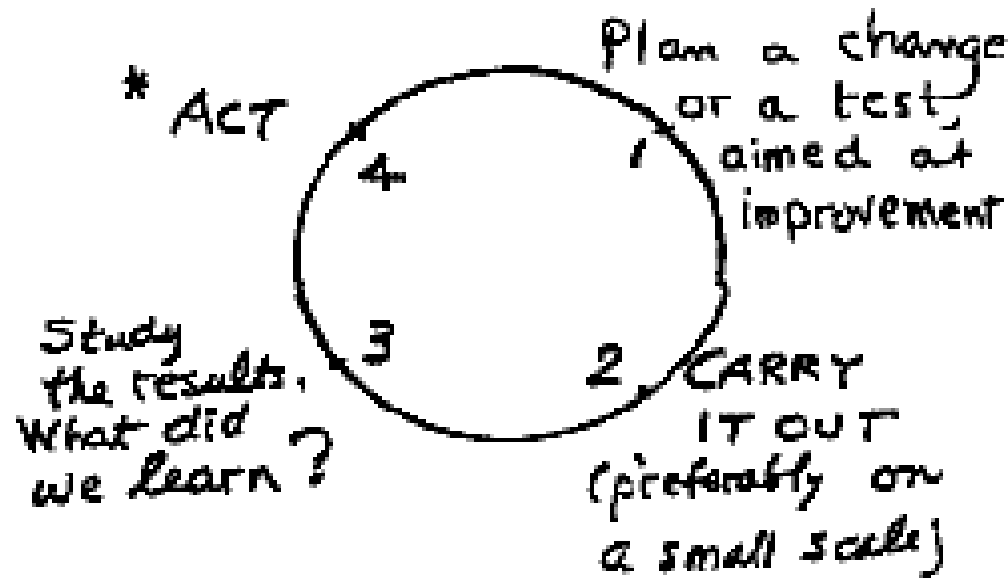
1. Design the product (with appropriate tests).
2. Make it; test it in the production line and in the laboratory.
3. Sell the product.
4. Test the product in service, through market research. Find out what user think about it and why the nonusers have not bought it.



Step 5. Repeat Step 1, with knowledge accumulated.  
Step 6. Repeat Step 2, and onward.



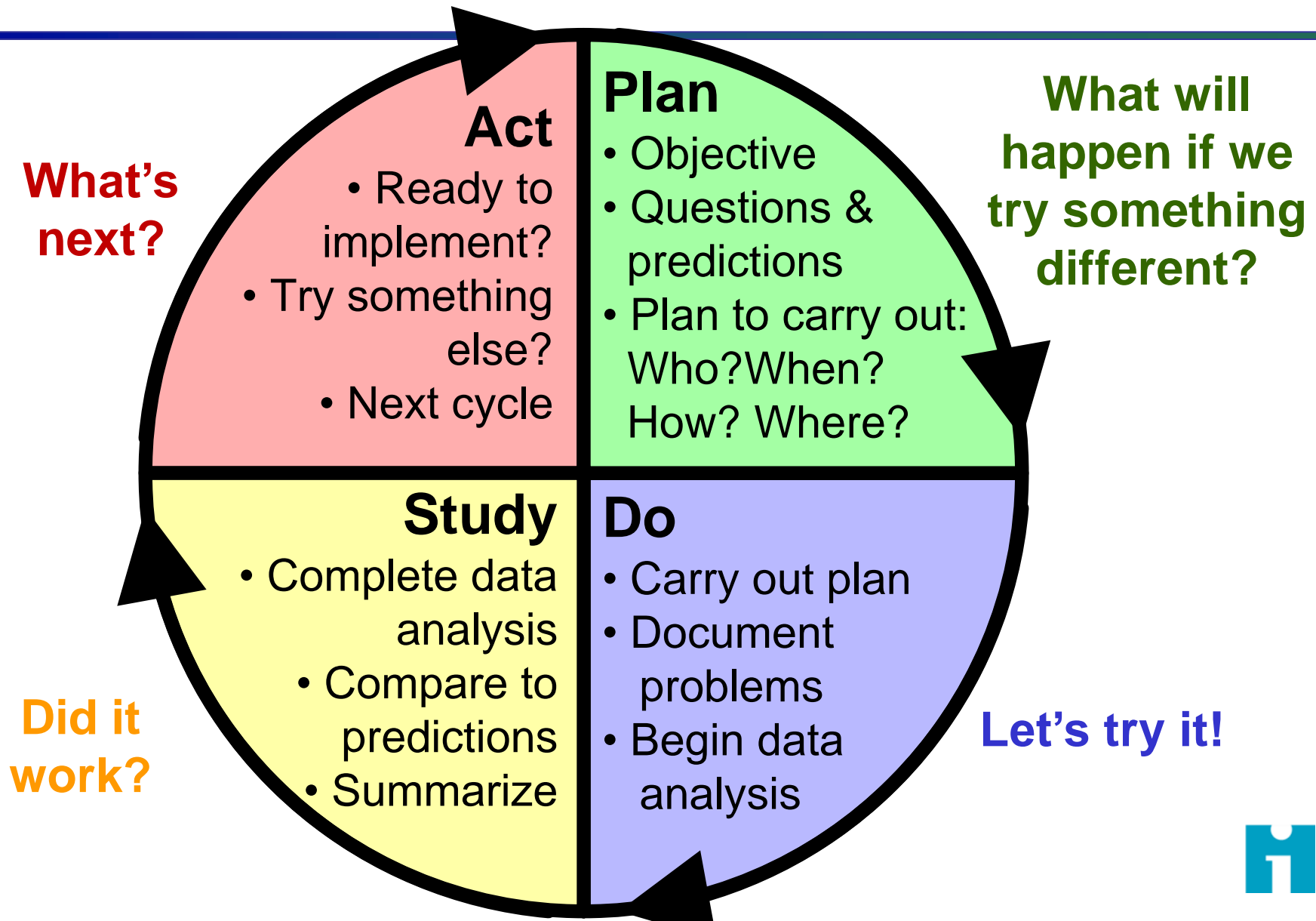
## THE SHEWHART CYCLE



- \* ACT. Adopt the change.  
or Abandon it.  
or Run through the cycle again, possibly under different environmental conditions.

## Deming's Sketch of the Shewhart Cycle for Learning and Improvement, 1985

# The Cycle for Learning and Improvement



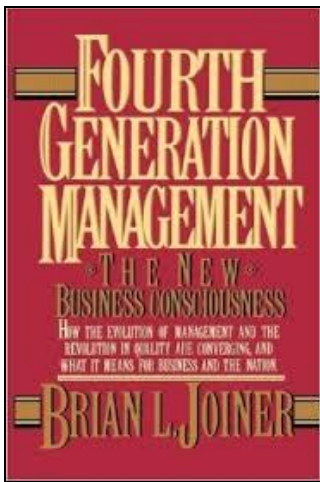


# Dr. Brian Joiner



Dr. Brian Joiner, a student of Dr. Deming's, described four generations of management:

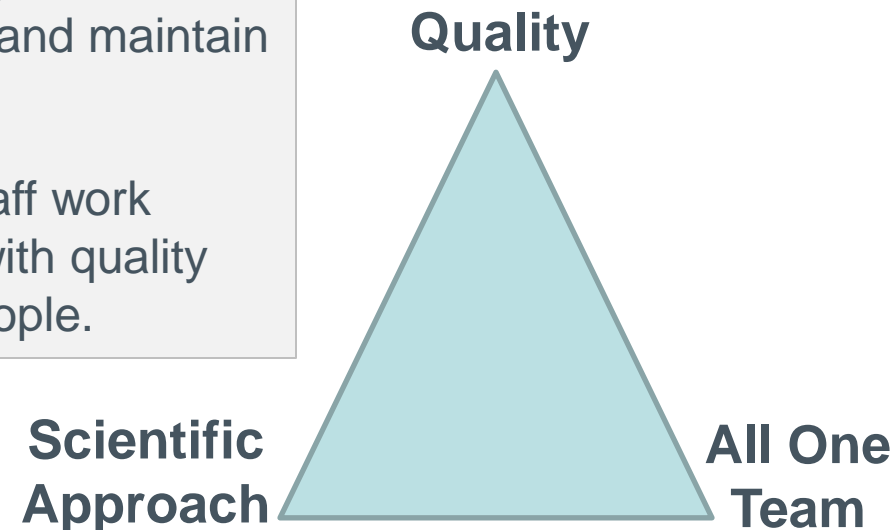
- **First Generation:** do it yourself.
- **Second Generation:** Master craftsperson takes on apprentices but remains the model and arbiter of production (and quality).
- **Third Generation:** manage by results—usually by specifying the goals required without detailing the methods (by what method?).
- **Fourth Generation:** simultaneous focus on three chunks of work: quality, the scientific approach and all one team, the Joiner Triangle (see next page for details).



# The Joiner Triangle

the Joiner Triangle provides a framework for implementing Quality Improvement. It consists of:

- **Quality** as seen through the eyes of our customers
- The **Scientific Approach** as the methodology for solving problems and making decisions; iterative learning, using data effectively, to build and maintain effective methods.
- The **All One Team** aimed at unifying staff work efforts, getting all employees involved with quality efforts, collaboration and respect for people.



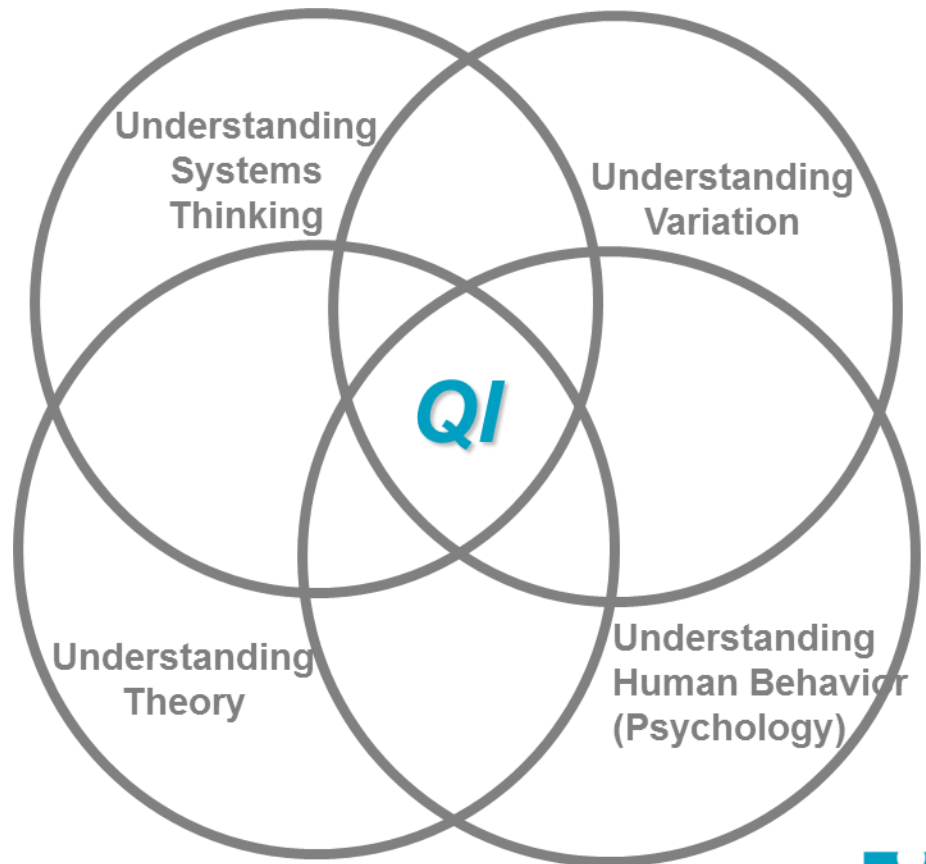
# Two of the leading Quality Models

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## Juran's Quality Trilogy



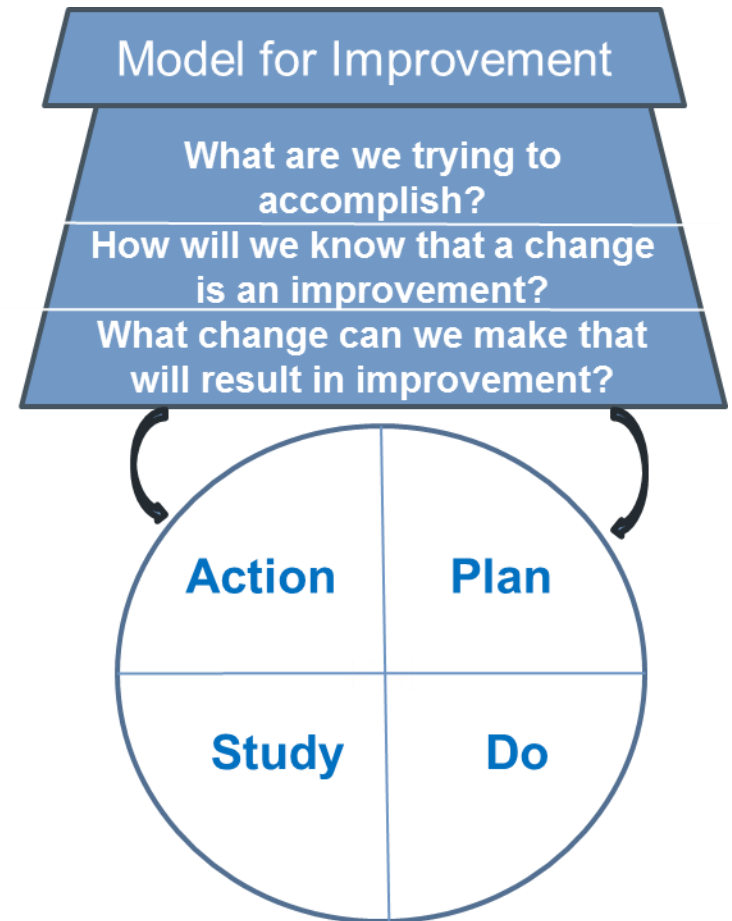
## Deming's Profound Knowledge



## *API added three basic questions to supplement the PDSA Cycle. The PDSA Cycle is used to develop, test, and implement changes.*

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- Is applicable to all types of organizations.
- Provides a framework for the application of improvement methods guided by theory.
- Emphasizes and encourages the iterative learning process of deductive and inductive reasoning.
- Allows project plans to adapt as learning occurs.

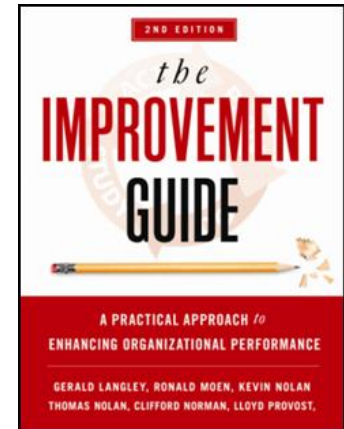
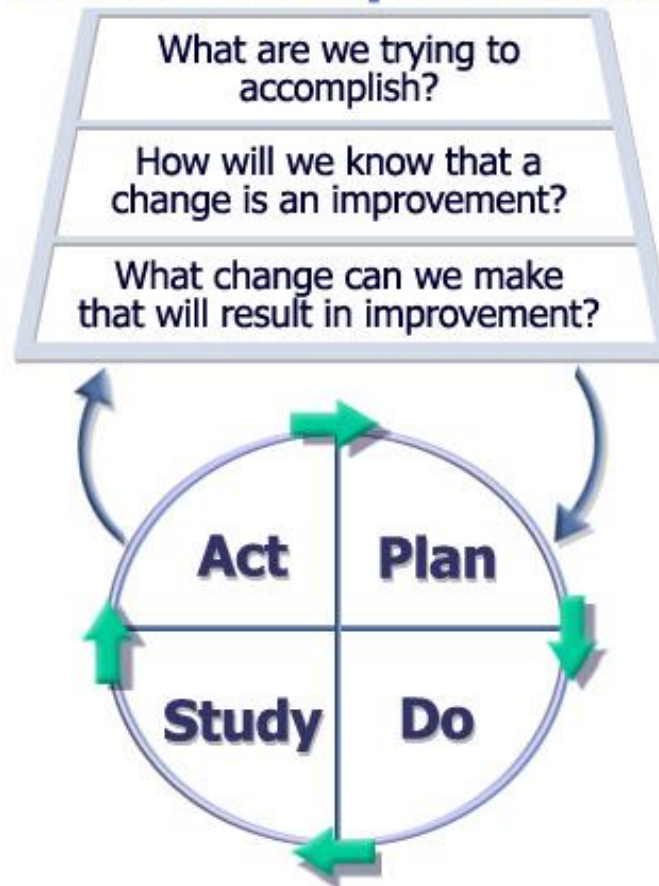


# The IHI Approach

When you  
combine  
the 3  
questions  
with the...

PDSA cycle,  
you get...

## Model for Improvement



...the Model  
for  
Improvement.



# Appendices

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- A. Robert Lloyd, PhD, Faculty Bio
- B. IHI Goals by Work Area
- C. Quality Models & Approaches Across the Years
- D. Evolution of Quality Management (over time)
- E. Evolution of Quality Management (1950-1974)
- F. Evolution of Quality Management (1978-2014)
- G. Evolution of Quality Management in Healthcare
- H. Choosing a Quality Model



A.

# IHI Faculty Bio

## Robert Lloyd, Ph.D.

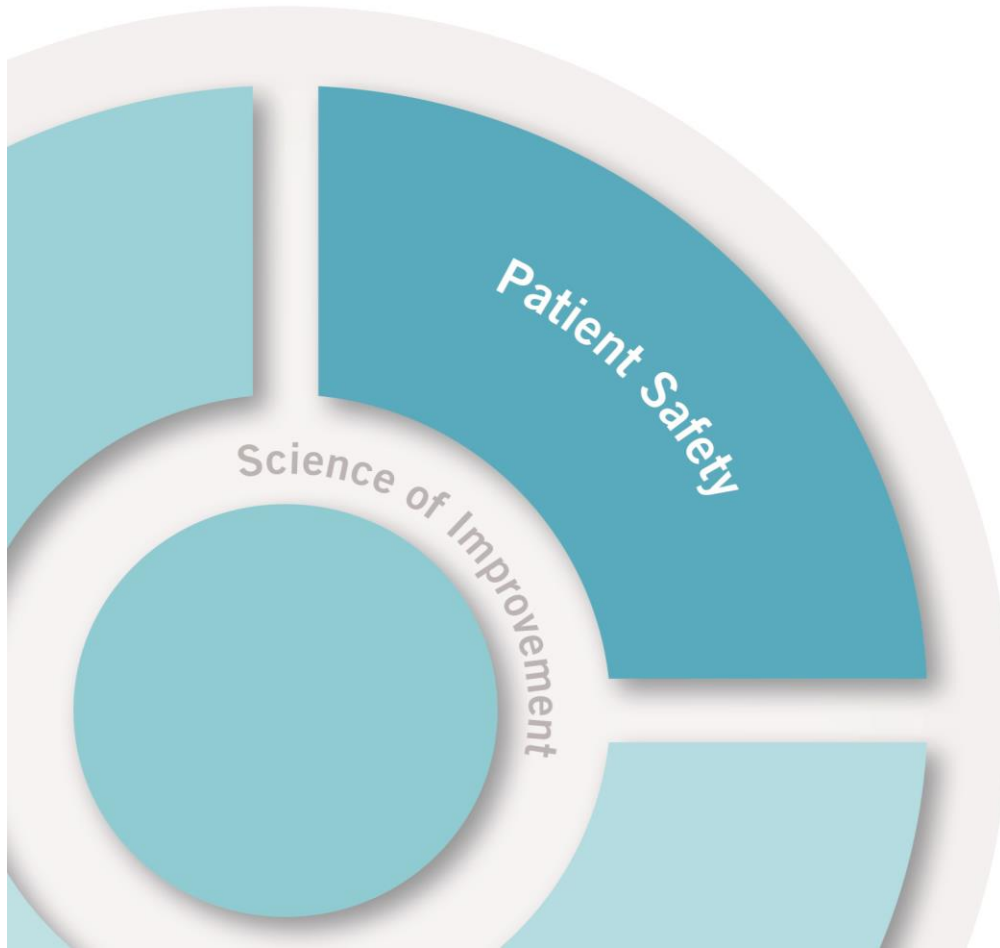
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**Robert Lloyd, PhD**, Executive Director Performance Improvement, Institute for Healthcare Improvement provides leadership in the areas of performance improvement strategies, statistical process control methods, development of strategic dashboards and capacity and capability building for quality improvement. He specializes in helping senior leaders and board members understand their role in the quality journey. Dr. Lloyd also serves as faculty for the IHI Improvement Advisor (IA) Professional Development programme and helps to lead IHI initiatives and demonstration projects in the US, Canada, the UK, Sweden, Denmark, Africa, the Middle East and New Zealand. Dr. Lloyd is the author of two books and numerous articles and chapters on quality measurement and improvement. He lives in Chicago, Illinois with his wife Gwenn, daughter Devon and Cricket the family Shih Tzu.



# Patient Safety

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## Our Goal:

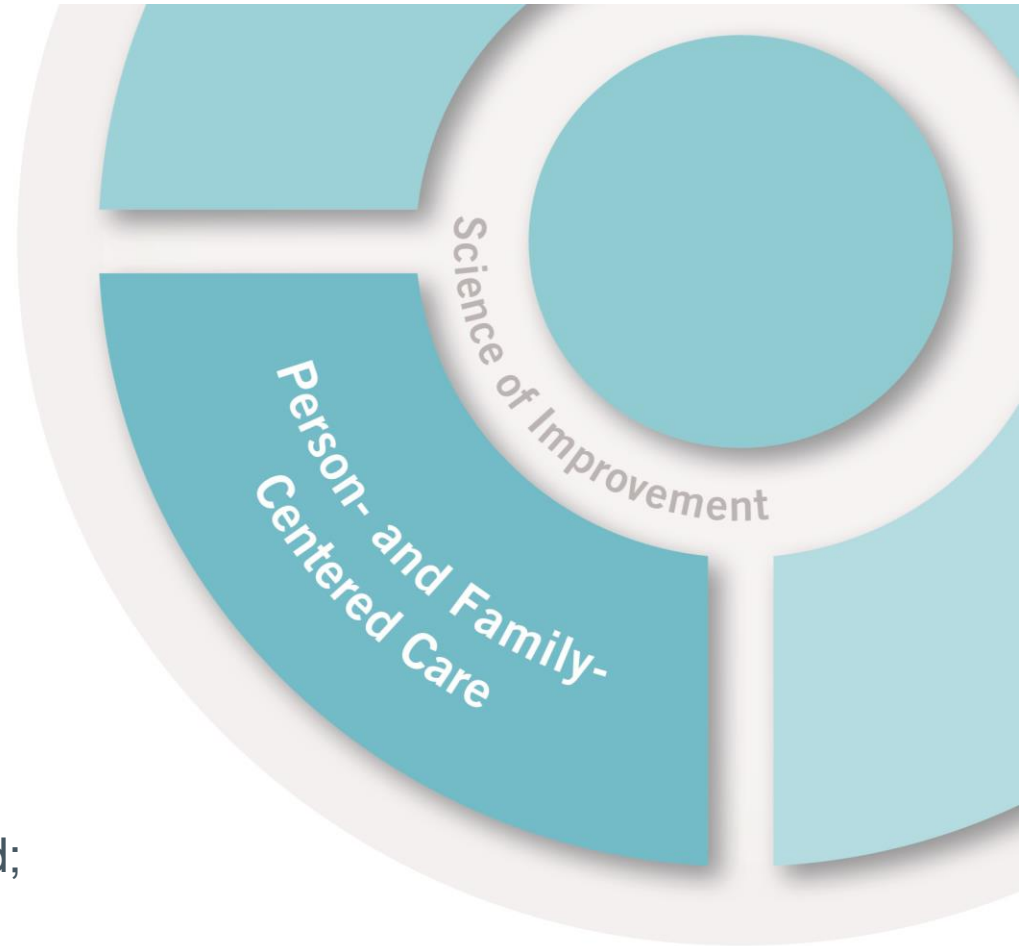
Work with countries, regions, organizations, and individuals to build safety into every system of care, ensuring that patients receive the safest, most reliable care across the continuum.



B.

# Person- and Family-Centered Care

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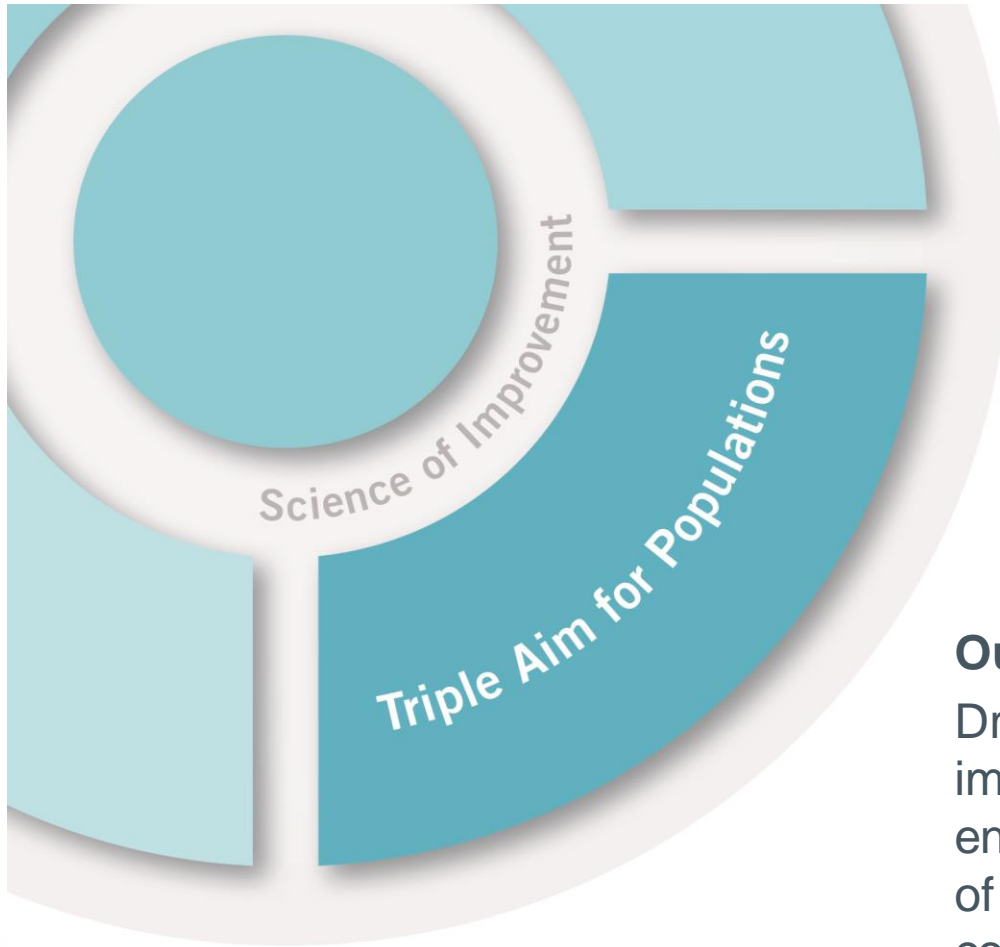
## Our Goal:

Usher in a new era of partnerships between clinicians and individuals where the values, needs, and preferences of the individual are honored; the best evidence is applied; and the shared goal is optimal functional health and quality of life.



# Triple Aim for Populations

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## Our Goal:

Drive the Triple Aim, simultaneously improving the health of the population, enhancing the experience and outcomes of the patient, and reducing per capita cost of care for the benefit of communities.



B.

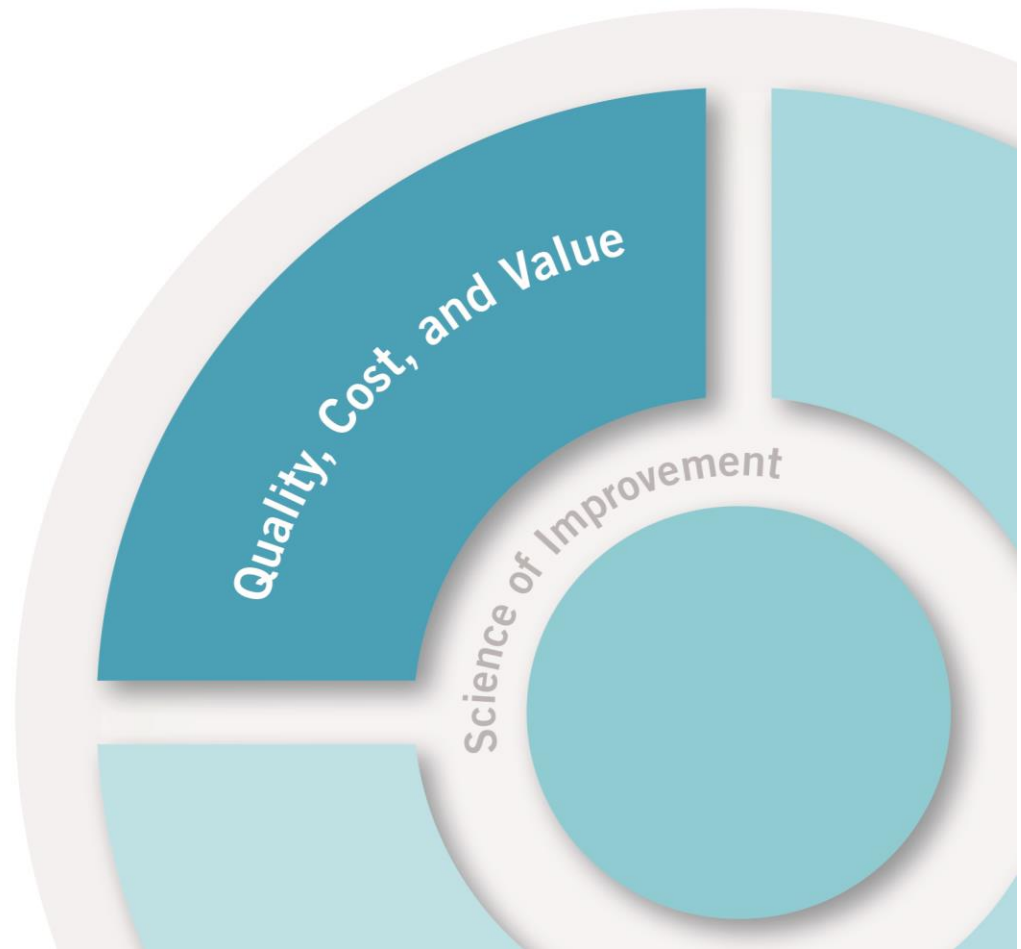
# Quality, Cost, and Value

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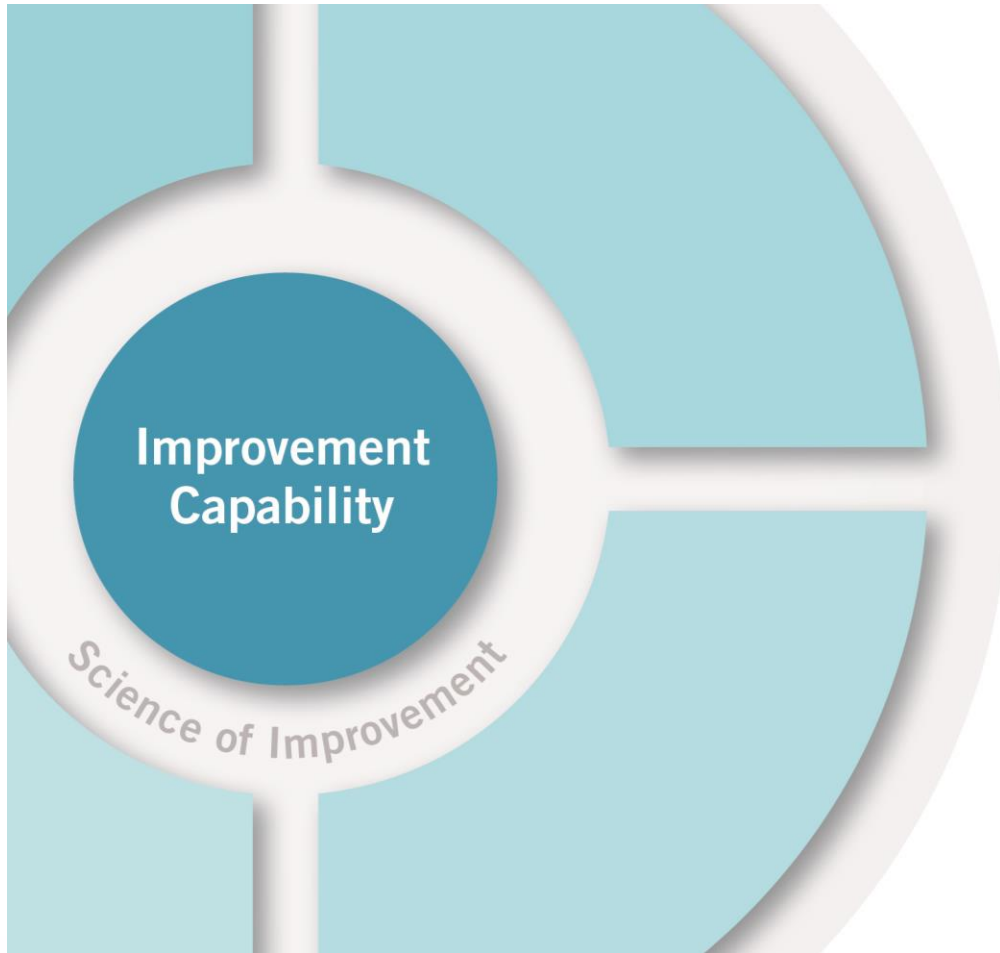
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## Our Goal:

Encourage, empower, and enable health care delivery systems to provide truly value-based care that ensures the best health care. We strive to call out and address disparities in health and health care wherever they exist.



# Improvement Capability



## Our Goal:

Build practical improvement capability based on the science of improvement into every organization, health care executive, and professional, while driving innovation to dramatically improve performance at all levels of the health care system.

C.

# Quality Models & Approaches Across the Years

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Human Factors (Ancient Greece, early 1900s)

International Organization for Standardization (ISO) (1926)

Toyota Production System (1950s)

Six Sigma (Motorola, 1980s)

Baldrige Criteria (1987)

European Foundation for Quality Management  
(EFQM) (1988)

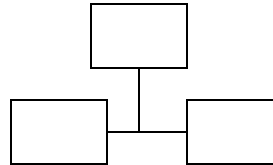
Model for Improvement (1996)



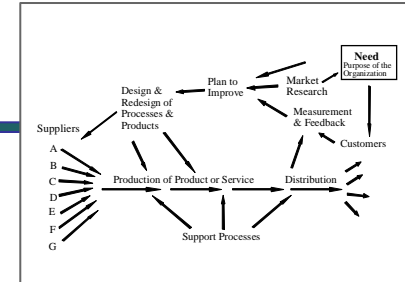
# D. Evolution of Quality Management



Age of the Craftsman  
B.C. - 1800's



Age of Mass Production  
Early 1800's - Present



Age of  
Quality Management  
1950's - Present

Evolution of Quality Management

Theory of Management

- \* Person doing the work manages the entire job, from planning to job completion.
- \* Craftsman is responsible for communication with suppliers and customers.
- \* Rewards are tied to the customer.

- \* Scientific study is used for simplification of methods for individual tasks.
- \* Planning is separated from execution.
- \* Focus of management is on production at low cost.
- \* Rewards are tied to the individual.

- \* Management views all work as processes that link to form a system.
- \* The focus of management is on improving the system.
- \* Improvement requires partnership between suppliers and customers.
- \* Rewards are tied to the customer and teamwork.

Impact on Quality

- \* Quality = High cost.
- \* Responsibility for quality belongs to the craftsman.
- \* Direct customer feedback provides the definition of quality.

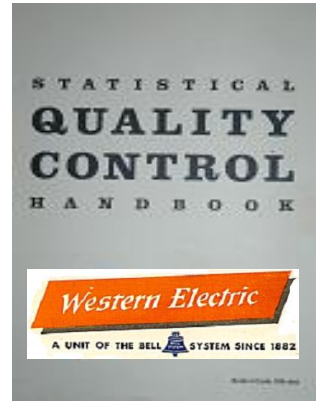
- \* Quality = High cost and low productivity.
- \* Simplification objective establishes the Q.C. Department to measure and report.
- \* Focus is on reducing costs.
- \* Quality is achieved by inspection and sorting.

- \* Quality = Low cost and high productivity.
- \* Quality is the focus of the organization.
- \* Quality is defined by the need of the customer.
- \* Q.C. Department assumes the role of consultant for improvement activities.

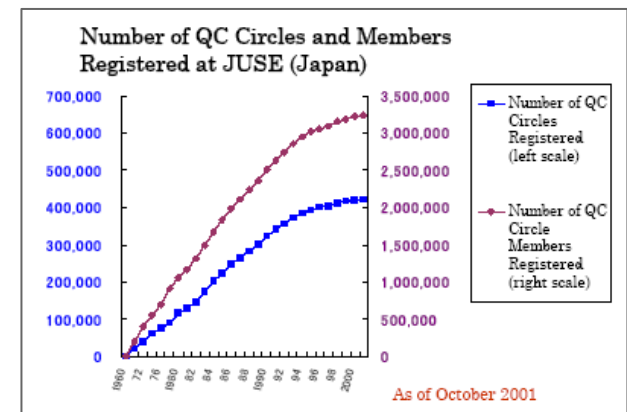
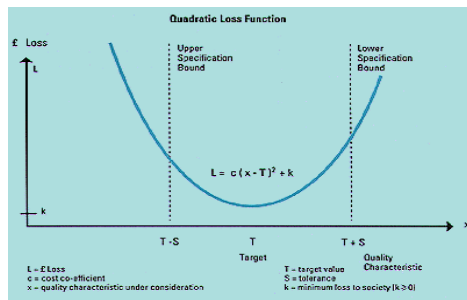
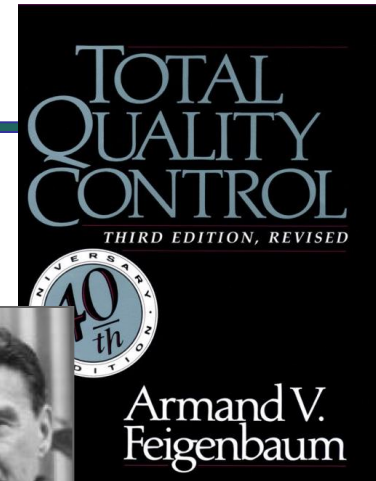
Source: Ron Moen, Associates in Process in Improvement

# E.

## Evolution of Quality Management (1950-1974)



- 1951 – *Total Quality Control* published by Armand Feigenbaum
- 1956 – Western Electric “*Statistical Quality Control Handbook*”
- 1958 – Genichi Taguchi begins teaching his methods of loss function and robust design.
- 1962 – Quality Circles start. Kaoru Ishikawa asked a number of Japanese companies to participate in an experiment.
- 1974 – Kaoru Ishikawa publishes *Guide to Quality Control*, 7 simple tools for improvement.



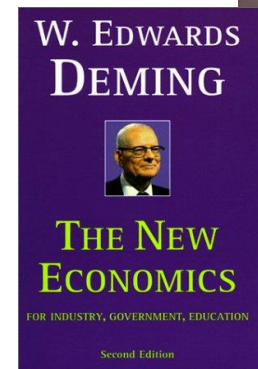
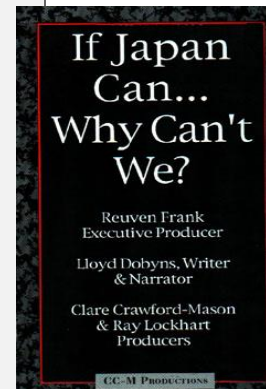
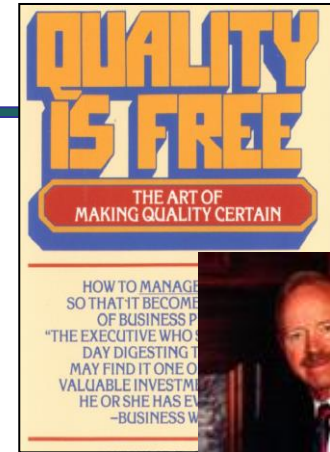
Source: Ron Moen, Associates in Process in Improvement





## F. Evolution of Quality Management (1978-2014)

- 1978 – George Box, William G. Hunter and J. Stuart Hunter publish their landmark book *Statistics for Experimenters*
- 1979- Philip Crosby publishes *Quality is Free*
- 1980 - Quality revolution begins in US
  - NBC airs *If Japan Can, Why Can't We?*
  - Deming consults for Ford and GM
- 1987 - Malcolm Baldrige National Quality Award is established.
- 1994 – Deming publishes the *New Economics* which emphasizes the use of the System of Profound Knowledge.
- Present - Quality programs spread to Service Industries under a variety of names, tools and approaches.
  - Proliferation of quality programs: TQM, Six Sigma, Kaizen, SQC, SPC, Taguchi Methods, Benchmarking, CQI, Lean Six Sigma, etc.
  - Attempts are being made to package the various contributions from the past into an overall “one best approach.”





G.

## Evolution of Quality Management in Healthcare

- B.C. – Hippocrates (3rd century B.C.). Medicine was and is taught and learned as a craft.
- 1973 – Avedis Donabedian proposed measuring the quality of healthcare by observing : structure, processes, and outcomes.
- 1970s – Quality Assurance (QA) of hospital care using structural standards
- 1980s – QA by government and insurers. The regulatory route relied on punishment and blame.
- 1986 – Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) announced its Agenda for Change and stated that the “philosophical context” for the Agenda of change is set by the theories of Continual Quality Improvement (QI).
- 1986 – National Demonstration Project (NDP) on Quality Improvement in Healthcare. A demonstration project to explore the application of modern quality improvement methods to healthcare.
- 1990 – NDP report: Berwick, D, Godfrey, J and Roessner, J. *Curing Health Care*. Jossey-Bass, 1990.
- 1991– Don Berwick founded the Institute for Healthcare Improvement (IHI) committed to redesigning health care delivery systems in order to ensure the best health care outcomes at the lowest costs.
- 1993 – IHI adopts *API Model for Improvement* as its foundation for Improvement.



H.

# Choosing a Quality Model

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The choice of a quality system, approach or model should be driven by the objectives of the organization, its culture and its products or services!

The decision should NOT be driven by how popular a particular approach is or even if it has been used successfully in other settings.

