NHS
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New Emphasis on Healthcare Quality in the UK and how clinical labs are contributing

Lesley Wright
Director - NHSIQ

Introducing NHS IQ

- **Improving health outcomes across England by providing improvement and change expertise**
- Nationally funded programme, established in 2000 April 2013, 5 improvement organisations hosted by NHS England
- An evidence-based organisation that is aligned to the current needs and challenges of the NHS
- Creating one improvement organisation to build on the wealth of knowledge, expertise and experience that has gone before.

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Our vision

We will demonstrate value and strength by being:

- The '**go-to' organisation** leading improvement in England
- A **catalyst** for change
- A **partner** to drive transformation in the NHS
- A **focal point** for the system - creating impact through connectivity and support.

- Does UK have anything in common with USA ?

- England and America are two countries separated by the same language.
  - George Bernard Shaw

McDonald's!!!

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- What is quality ?

How do we define quality ?
How do we measure quality ?

What is value ?
How do we define value ?
How do we measure value ?

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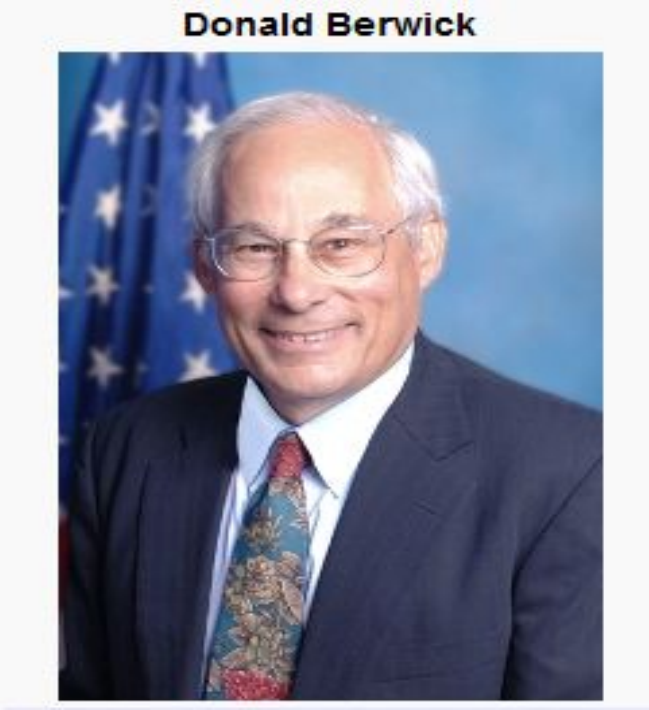
Quality is an issue in healthcare !

CQC publishes suppressed report on Morecambe Bay inspections

Internal review says that with the benefit of hindsight there were possible indications that may have triggered investigation

Donald Berwick



Professor Donald M Berwick, MD
President, CEO co-founder of Institute for Healthcare Improvement in Boston Massachusetts
Clinical Professor of Paediatrics and Healthcare Policy at Harvard Medical School

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Chair an Advisory Group to recommend some important actions that leaders, clinicians, professional bodies, government agencies, others..
‘ to improve the quality and safety of care in NHS’

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The report

A promise to Learn- A commitment to Act: Improving the safety of patients in England

August 6th 2013
Don Berwick

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The problems

- Patient safety problems exist throughout the NHS
- NHS Staff are not to blame
- Incorrect priorities do damage
- Warning signals abounded and were not heeded
- Responsibility is diffused and therefore not clearly owned
- Improvement requires a system of support
- Fear is toxic to both safety and improvement

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The Solutions

- Recognise with clarity and courage the need for **wide systematic change**
- **Abandon blame** as a tool
- Reassert the primacy **of working with patients and carers** to set and achieve health care goals
- Use quantitative targets with **caution**
- Recognise the **transparency** is essential
- Ensure **responsibility** for functions related to safety and improvement are vested clearly and simply
- Give the people of the NHS career-long help **to learn, master and apply** modern methods for quality control, quality improvement and quality planning
- Make sure **pride and joy** in work, not fear, infuse the NHS

Messages

- 10 recommendations
- 3 letters
  - Senior Government Officials and Senior Executives in the health Service
  - Clinicians, managers and all staff of the NHS
  - The people of England

Recommendations

- Place the quality and safety of patient care above all other aims for the NHS (This is your safest and best route to lower cost)
- Engage, empower and hear patients and carers throughout the entire system and, at all times
- Foster wholeheartedly the growth and development of all staff, especially with regard to their ability and opportunity to improve the processes within which they work
- Insist upon, and model in your own work, thorough and unequivocal transparency, in the service of accountability, trust, and the growth of knowledge

I urge you to focus on the culture that you want to nurture: buoyant, curious, sharing, open-minded, and ambitious

Indicators to assess safety improvement and variation

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Quality for the NHS

- **Safety:**
  avoiding harm from the care that is intended to help
- **Effectiveness**:
  aligning care with science and ensuring efficiency
- **Patient experience:**
  including patient – centredness, timeliness and equity

Culture will trump **rules, standards** and **control strategies** every single time.

A safer NHS will depend far more on **major cultural change** than on a new regulatory regime

Other drivers….

- FINANCE – NO MONEY
- NHS £100 billion budget
    - £ 20 billion efficiency savings by 2014/15
    - £ 50 billion efficiency savings by 2020

- Patient expectations
    - Internet

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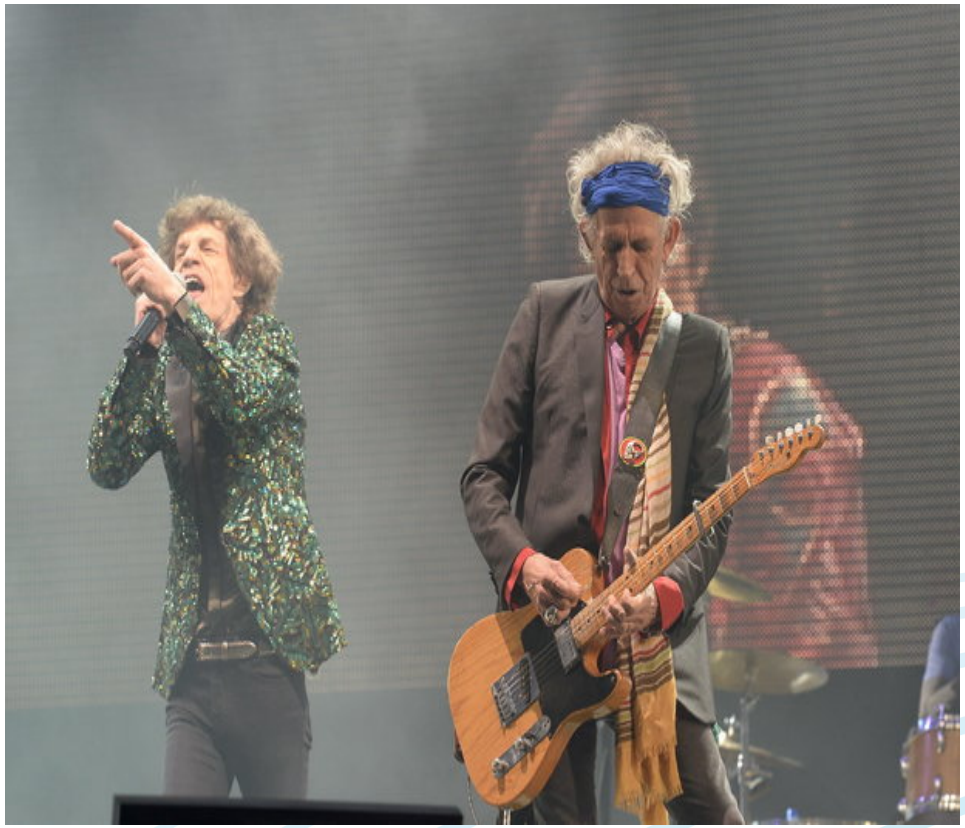
Ageing population



Obesity

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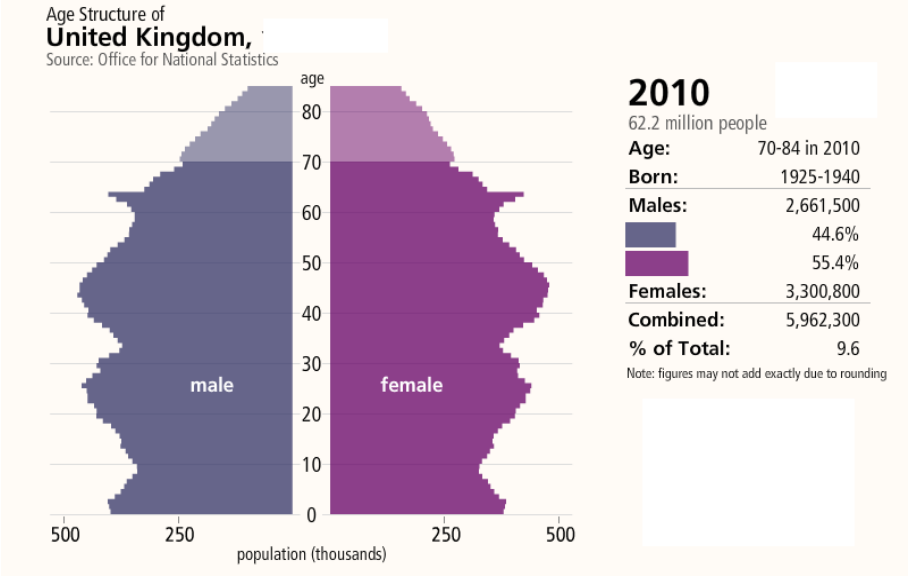
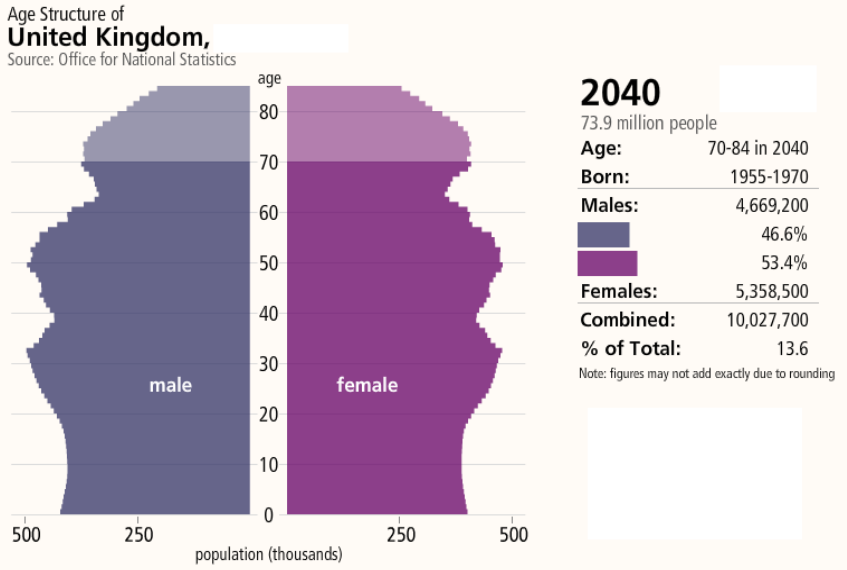
Demographic change

2010



2040



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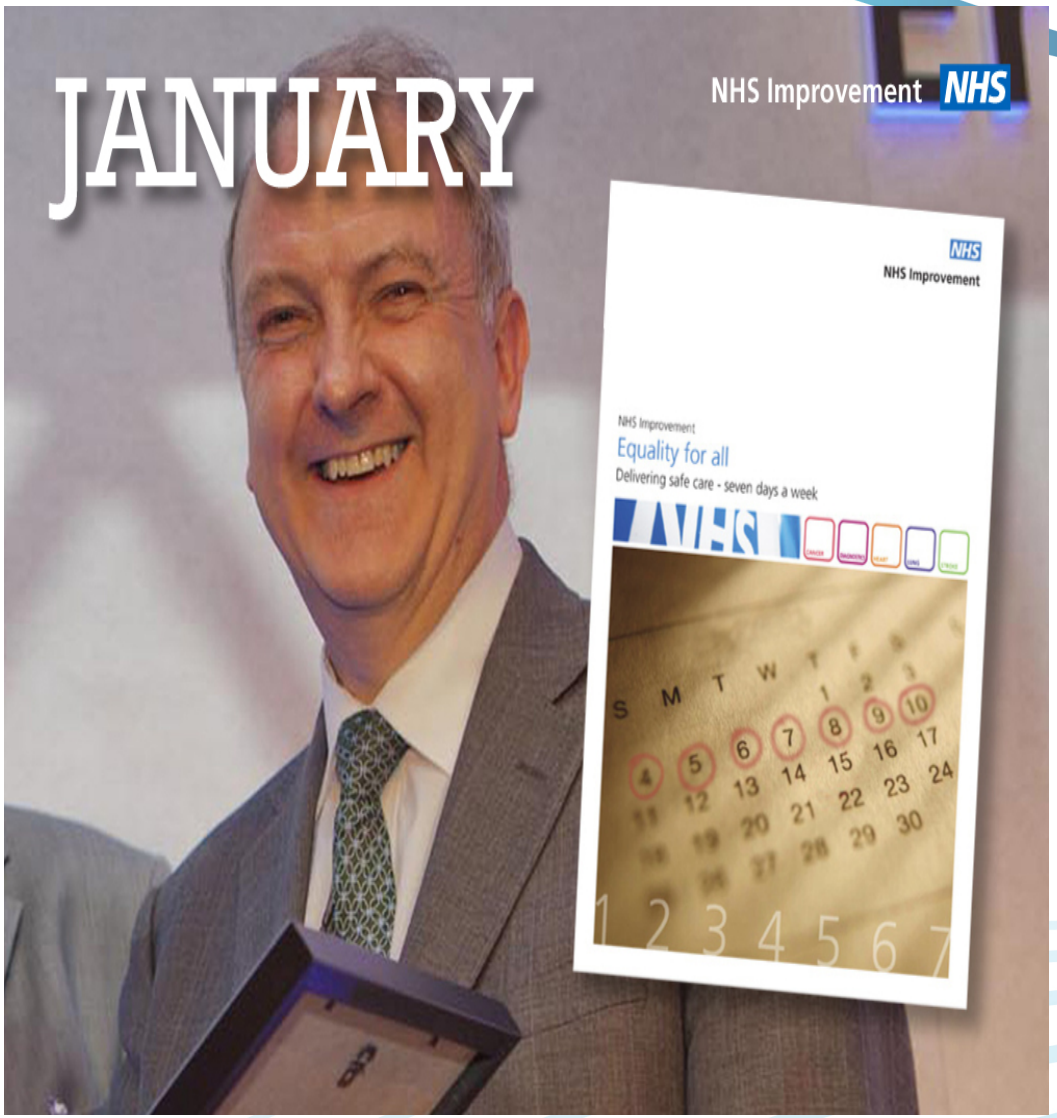
NHS **Outcomes** Framework

Domain 1	Preventing people from dying prematurely;
Domain 2	Enhancing quality of life for people with long-term conditions;
Domain 3	Helping people to recover from episodes of ill health or following injury;
Domain 4	Ensuring that people have a positive experience of care; and
Domain 5	Treating and caring for people in a safe environment; and protecting them from avoidable harm.



"The NHS will move towards routine services being available seven days a week. This is essential to offer a much more patient-focused service and also offers the opportunity to improve clinical outcomes and reduce costs"

Sir Bruce Keogh – N HS Medical Director – NHS England

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Factors driving change

Political – local, national, European, Global

Economic – local, national, European, Global

Social – increasing life expectancy, increasing retirement age, demographics

Technological – new technology, access and speed of information

The focus for pathology

- End to end value stream
  - transport, porters, vacuum systems,
  - Electronic order comms, voice recognition, telemedicine, digital pathology
  - user/patient engagement

- Cost effective:
  - economy of flow, v economy of scale
  - keep patient/sample moving
  - cheap tests or expensive beds / OP appointments

- Lateral impact
  - seeing the wider benefit of the diagnostic investigation and results

Flow v Scale !!

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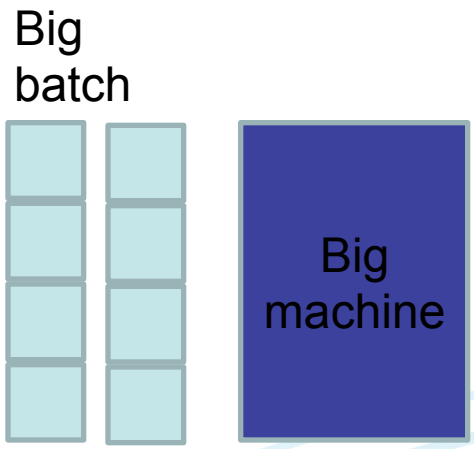
Economies of Scale

- Unit cost

$$\frac{\text{Cost}}{\text{Output (activity)}}$$



How long does it take to fill the machine?
Where is the Cost of the Work in Progress accounted for?

Economies of Flow

Throughput (activity)

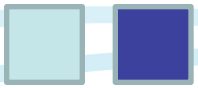
Less scrap and rework

Less Work in Progress

= Effective work

Salaries
+ Intellectual depreciation (training)
+ Capital depreciation
+ Utilities
+ Materials

= Total cost.



One piece flowLittle machines

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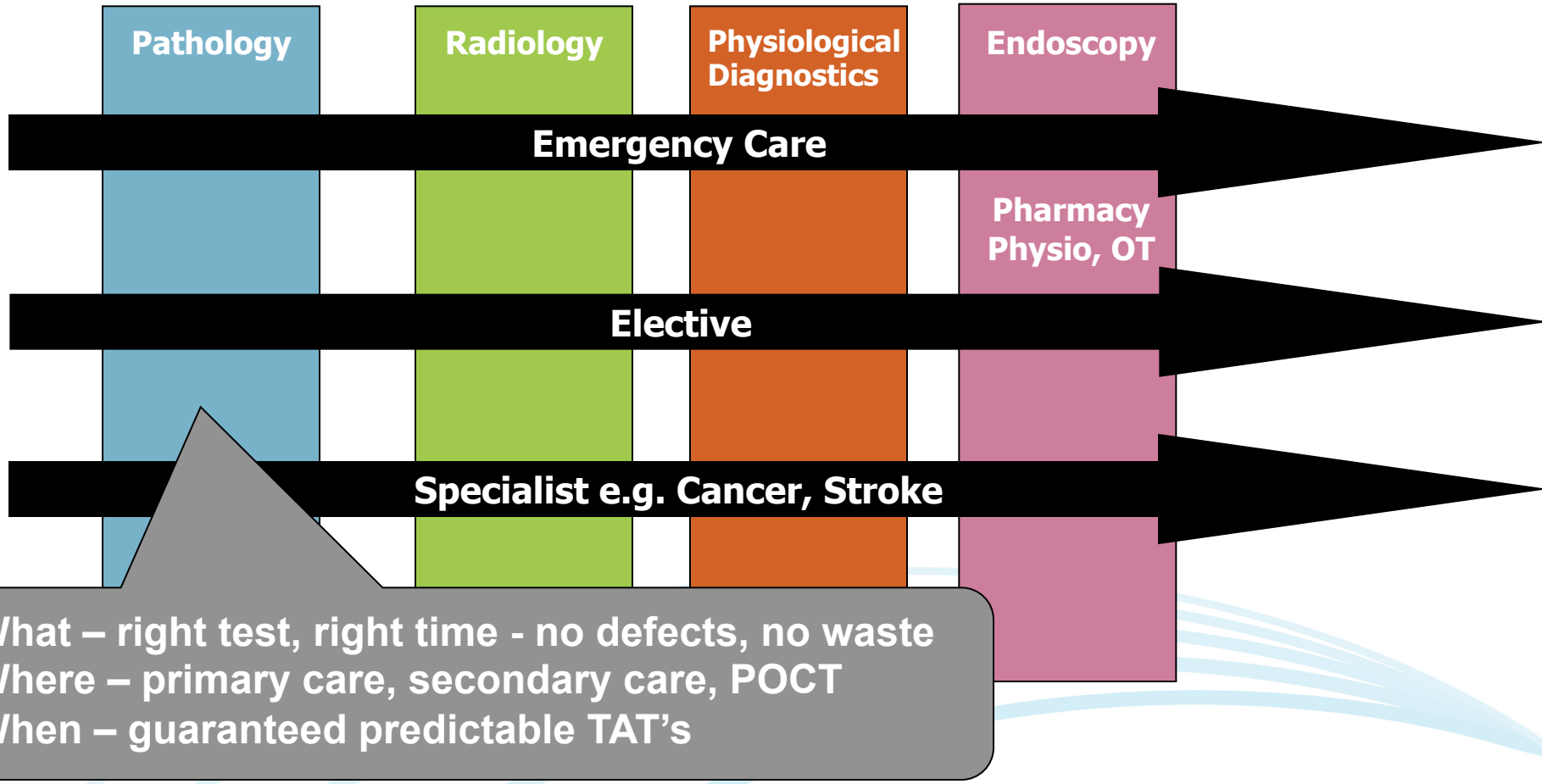
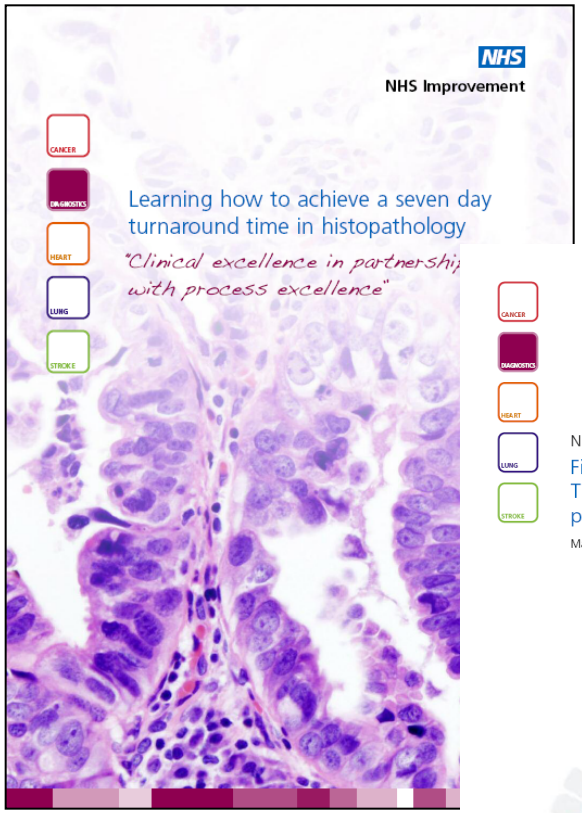
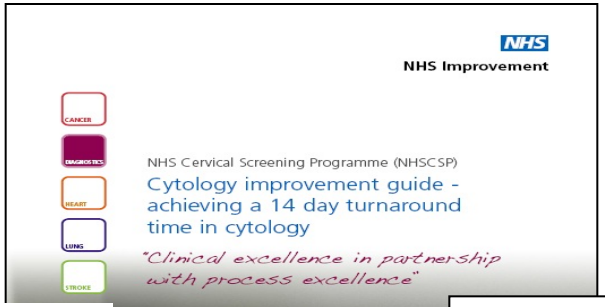
Value Streams (Clinical Pathways)

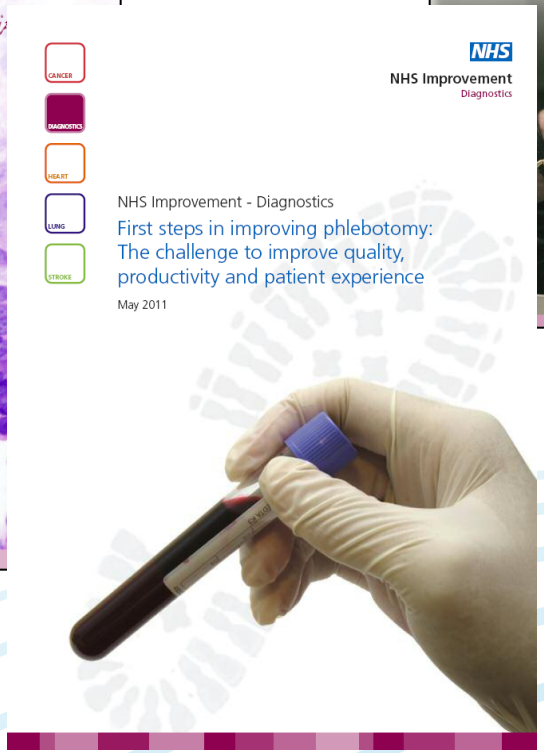


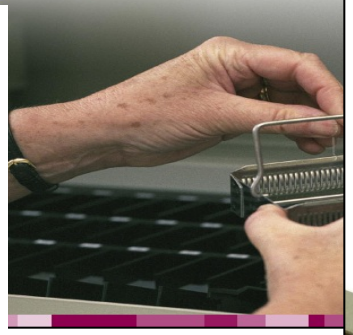
What – right test, right time - no defects, no waste
Where – primary care, secondary care, POCT
When – guaranteed predictable TAT's

Shared learning from NHS Improvement

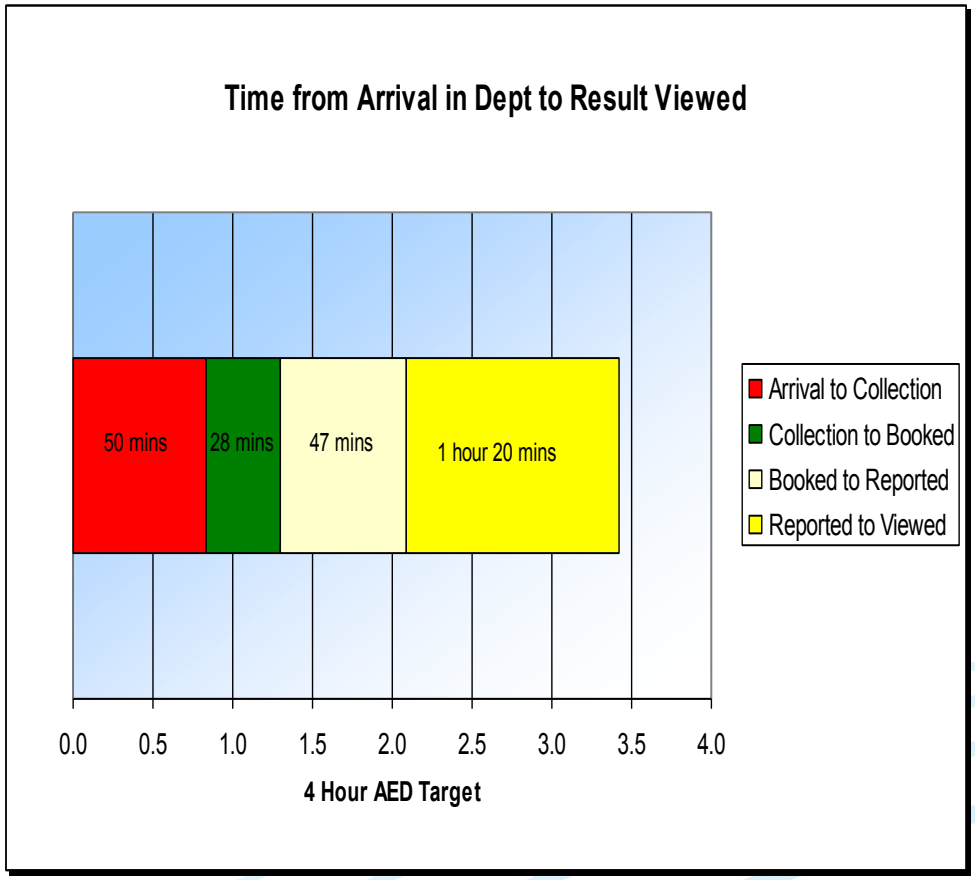








Impact of Phlebotomy on AED



AED Blood Pathway changes

- POD reliability improved
- Phlebotomists in AED 2 days / week (£48 per day)
- A&E given guaranteed of result TAT

Admissions to EAU reduced

- by 5% (20 – 15%)
- 5% due to Blood Results not available: approx 18 admissions per week

Cost saving:

- Based on LOS of 1 day @ £250 Per day: £234k p.a.

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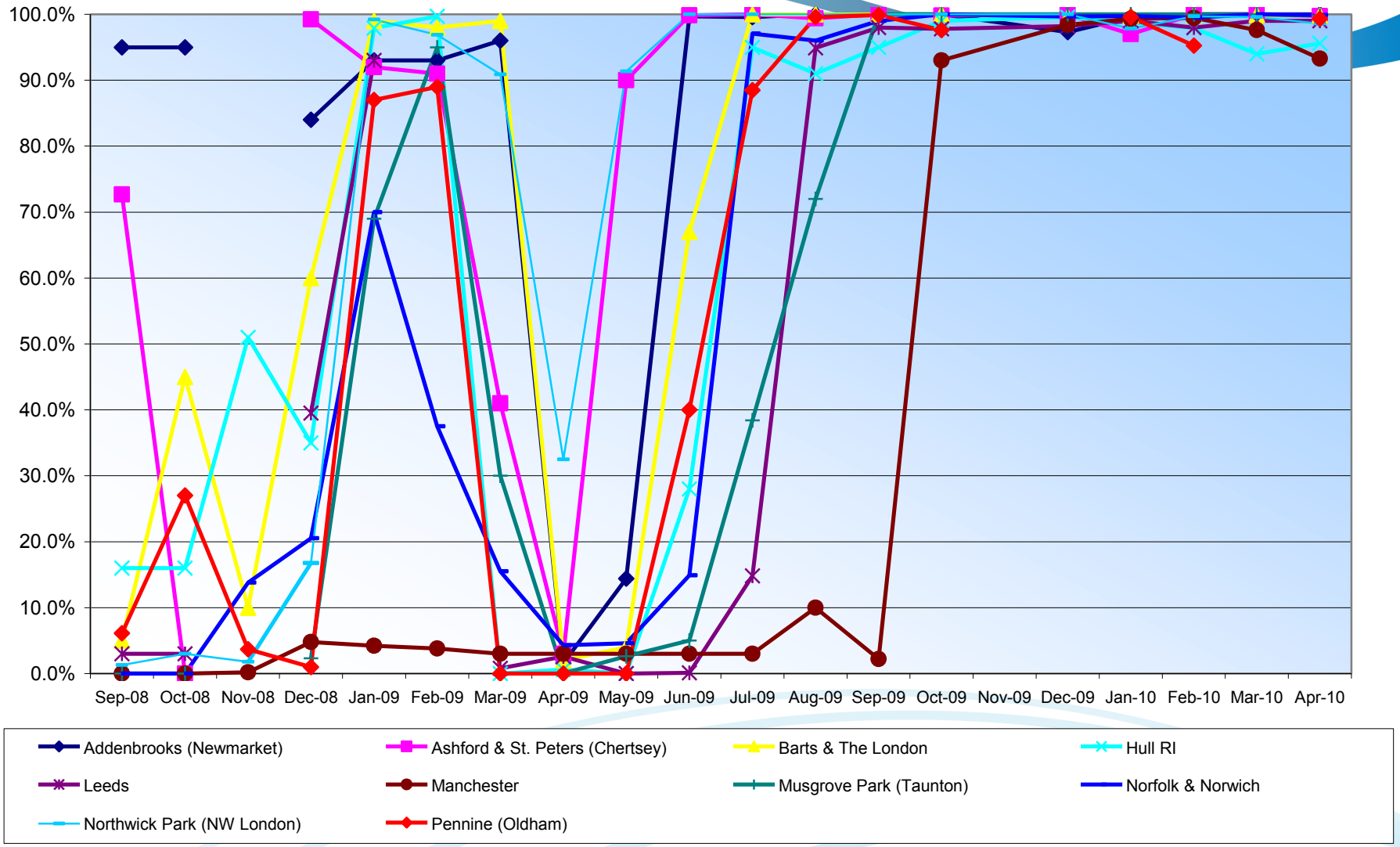
Phase 1 Cytology
% in 14 Day Turnaround



Cytology – Pilot sites

Quality

- Guaranteed Predictable Turn around times
- Reduced defects, improved safety

Innovation

- Robust problem solving via A3 thinking
- Applying Lean principles across the pathway

Productivity

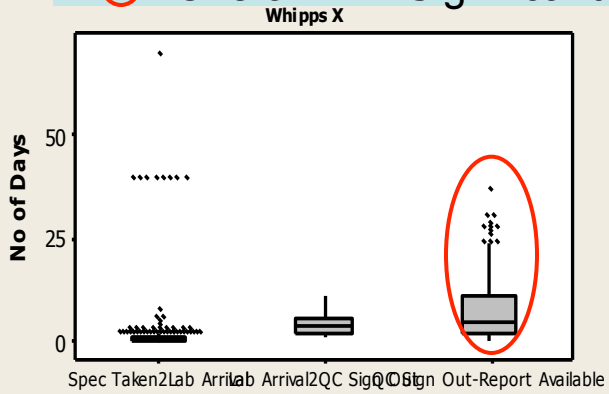
- Reduce waste – potential cost efficiencies identified
- £ Savings c. £100K per site
- >10 million waiting days removed

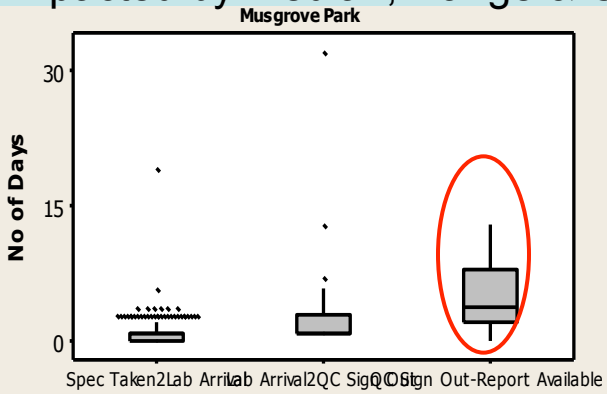
Prevention

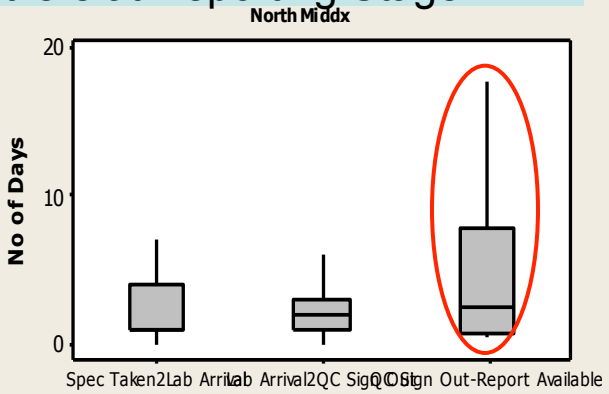
- Impact on **650,000** + women (Pilot)
- **358,000** (Prototype) **3 million** (Spread)
- Guaranteed to be on pathway in < 2 weeks

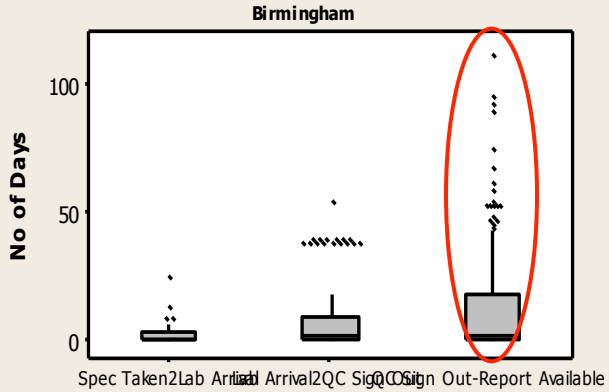
Boxplots from Pilot Site Baseline Data

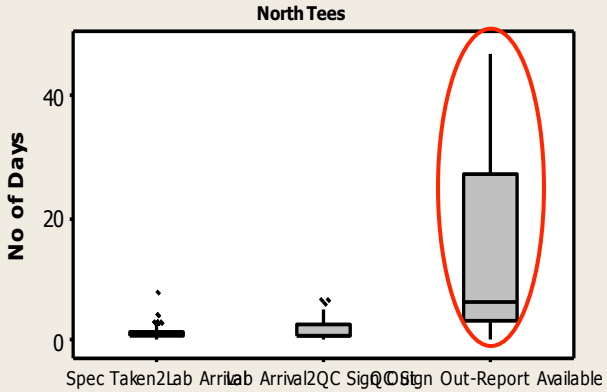
Overall TAT Significantly Impacted by Median, Range & Outliers at Reporting Stage

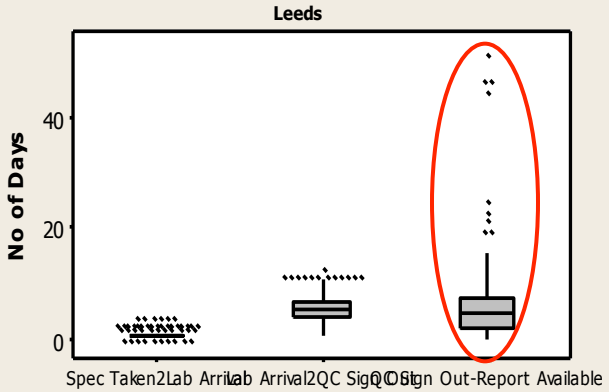


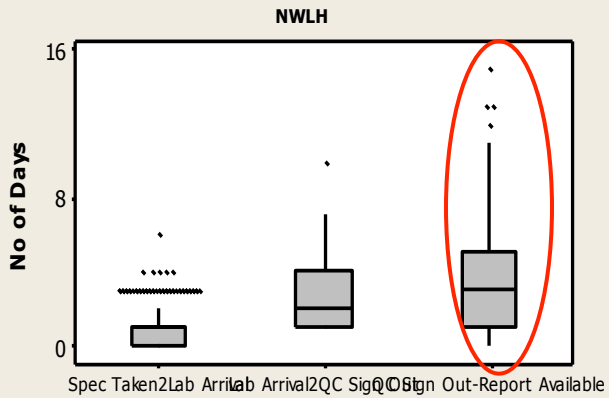


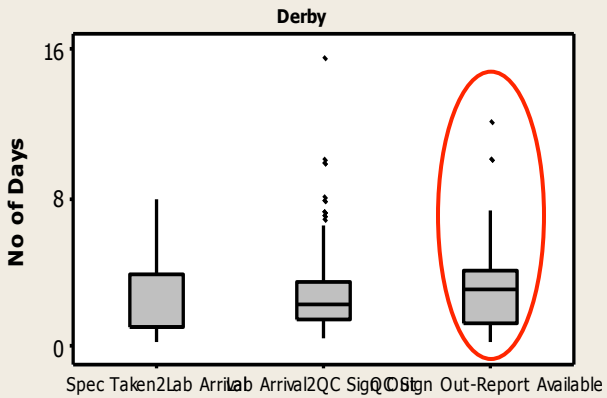




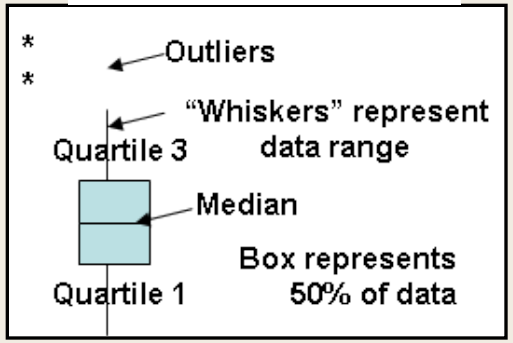








EXAMPLE



No Boxplot for UCLH as timgates not logged

Lateral Impact of 7 day Histopathology

- MDT meetings
  - reports available – time saving for MDT co-ordinators,
  - 15 MDT's 250 hours per annum **= £3,760**
  - NHS England **= £564,000**

- Dermatology: 300 OP appointments per annum **= £22,500**
  NHS England: 45,000 appointments per annum **= £3.375m**

- Urology:
  - Biopsy Friday, MDT Tuesday am, Patient informed Tuesday pm

- " Changes made in Histopathology have changed the service beyond recognition. Reducing the need for follow up clinic slots"

  – Consultant Gastroenterologist – July 2010

Reduced follow up Out patient appointments

‘When I see complex surgical patients for suture removal at one week, I can also now give them their result (including the Moh’s patients) and therefore discharge them straight away which means one less follow-up’

Consultant Dermatologist

Impact:

25 fewer outpatient slots required per month, charged at £60 each to PCT (total £1500)

Royal College of Pathologists – KPI's

- RCP acknowledged the urgent need to reform pathology services to achieve more efficient use of resources without reduction in quality.
- KPI's established in 2012:
  - End to end pathology service
  - Biochemistry, haematology and medical Microbiology and Virology clinical advice to be available 24 hours / day 365 days/ year
  - 90% of core investigations from A&E Emergency care within 1 hour of sample collection
  - Standardised user satisfaction survey
  - Consultant, Clinical Scientific staff appraisal
  - **http://www.rcpath.org/clinical-effectiveness/kpi**

Royal College of Pathologists Curriculum

- Service improvement:
  - one of the five domains of the Medical Leadership Competency Framework incorporated into the Royal College of Pathologists' 2010 Histopathology curriculum.

- Entrants to training from August 2010 onwards are obliged to follow this curriculum.

Royal College of Pathologists curriculum

- NHS Improvement lead the first training programme in service improvement for specialist trainees – (Nov 2011)
- 15 projects, quantifiable improvements
- A3 thinking
- Go see, ask why, respect people
- Human dimensions of change
- Coaching from a mentor

Training programme

Prior to attending:

- All trainees are to follow a gastric biopsy from specimen collection to report authorisation and document:
- Times and dates of key steps in the pathway
- Any points where there are delays/waits with some quantitative assessment of the greatest delay
- In addition, they will be asked to submit ideas for improvement projects based on the specimen walk

Programme format

- Early September
  - Issue preliminary documentation of programme to trainees
- Mid September
  - Webex explaining objectives of workshop advice how to undertake a ‘go see’ specimen walk
- Early November
  - 2 day intensive lean training workshop
- December
  - Presentation of results to RCPath day for Heads of School and Deaneries
- Mid January
  - Trainees to present projects to each other
- February
  - Frontiers in Laboratory Medicine Conference (FILM) presentation of training pilot/poster of best trainee project

Leadership and sustainability

John Toussaint –CEO, ThedaCare, Wisconsin, On the Mend

An effort that slashed errors and improved patient outcomes, raised staff morale and saved **$27m** in costs – **no lay offs**

“In the end the enemy of our improvement efforts **was us**.
Leadership was treating each improvement initiative as time limited,
Improvements ended when a project was over because nobody was in charge of sustaining change and measuring results”

“Quality and efficiency are inextricably linked in a truly lean organisation”

“ Teams are continually reminded to consider the patient FIRST”

“ “In order to change outcomes, leaders at Theadcare needed to change”

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Lean Leadership Programme

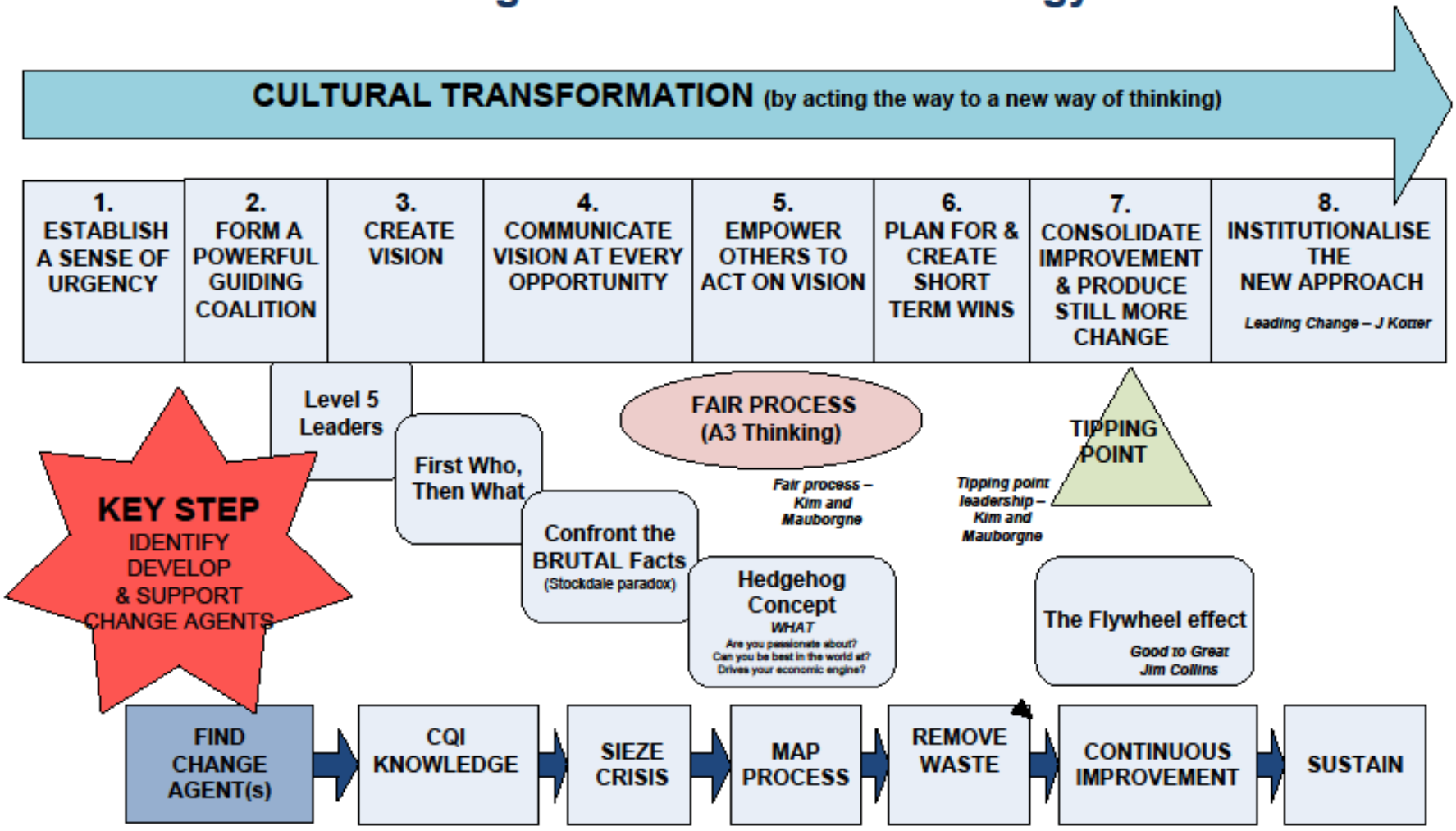
Aim:
Accelerate the spread of Lean Thinking across NHS Pathology Services in England by developing a cohort of opinion leaders with the skills to lead Lean transformation, linked via a network of exemplar sites

Input: 50 Pathology senior managers and clinicians (25 x 2 waves)
Phase 1: Learning how to apply Lean Principles
Phase 2: Learning how to coach a team to apply Lean Principles

Time scale: Sept 2012 – March 2013

Dave Clark & Suzanne Horobin June 2012

Developing a Continuous Quality Improvement (CQI) Management Culture in Pathology



Programme – Input

- Preparation for participation – CEO support
- Human Dimensions of Change
- Lean Leadership behaviours
- Measurement / data for improvement
- 2 day training programme
- A3 problem solving
- Webex support, Reading for readiness
- Exemplar visits
- Coaching from team

Programme – Output

- Project A3
- Planned improvement outcomes linked to QIPP
- Measures for quality, safety, cost, delivery
- Evidence of embedding into the culture of the department

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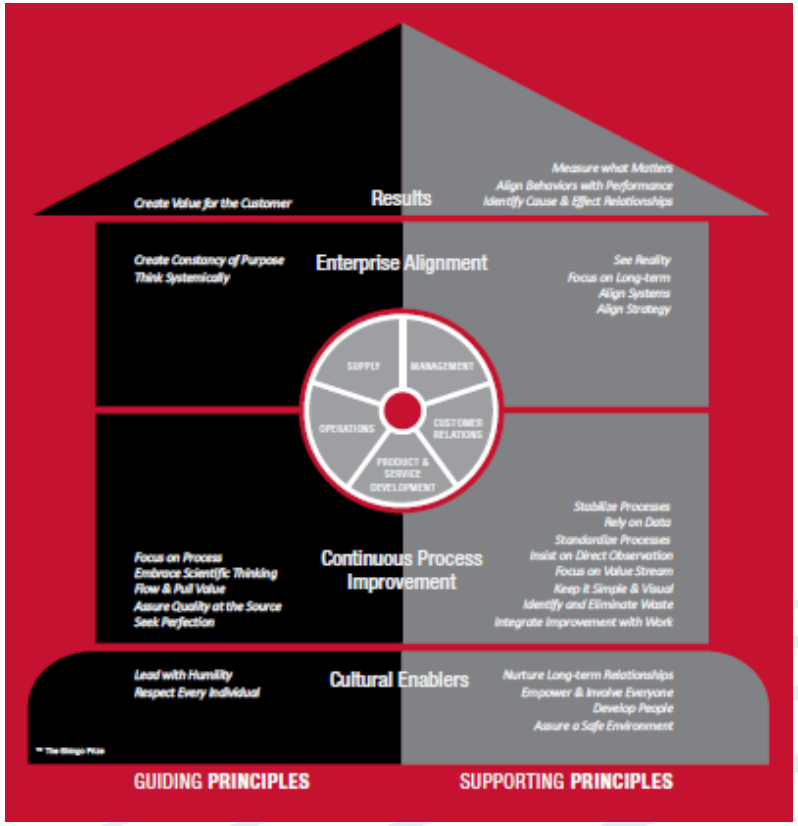
Programme measures

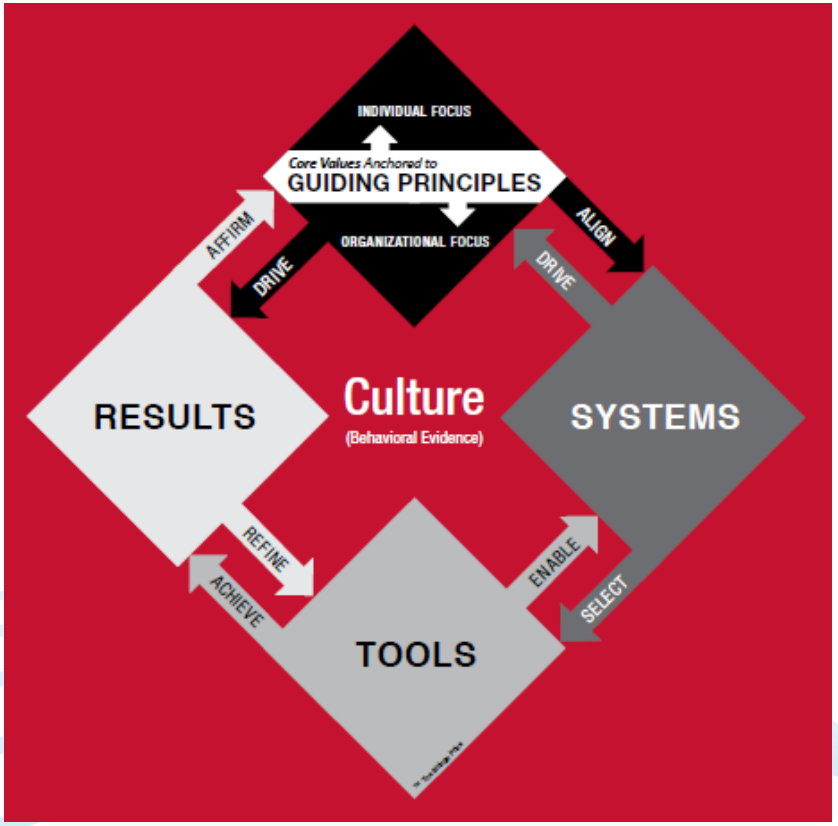
- % of leaders completing the programme
- % of projects completing programme aims
- % reduction in defects
- % increase score in engagement survey
- % improvement in productivity
- % reduction of inappropriate testing
- Cost reduction opportunities
- Evidence of voice of the customers is at the heart of the project

Spread – Need for Exemplar sites

- Support the CQI leadership programme – ‘inspire and motivate’
- Demonstrate :
  - Highest productivity of resources
  - Leadership for change using improvement methodology
  - Transparent measurement
  - A patient focussed approach with user engagement
  - A ‘can do’ culture of all staff engagement
  - Daily problems solving
  - A place to go see improvement in action

Shingo Model





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Shingo operational Excellence

- Internationally award for operational excellence based on four principles:
  - Cultural Enablers
  - Continuous Quality improvement
  - Enterprise alignment
  - Results

- Awarded to industry, business, military and now healthcare
  - Lake Region medical Ltd - USA – producers of diagnostic guide wires
  - Patriot Missile - Red River Army Depot
  - Denver Healthcare

- Shingo mission is to:

  'create excellence in organizations through the application of universally accepted principles of operational excellence, alignment of management systems, and the wise application of improvement techniques across the entire organizational enterprise'

Cultural Enablers

Principles

-Respect every individual

Supporting concepts:

- Assure a safe environment
- Develop people
- Empower and involve everyone

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Continuous Quality Improvement

Principles:

- Focus on process
- Embrace scientific thinking
- Flow and pull value
- Assure quality at source
- Seek perfection

Supporting concepts:

- Stabilise the process
- Rely on data and facts
- Standardise processes
- Insist on direct observation
- Focus on value stream
- Identify and eliminate waste
- No defects passed forward
- Integrate improvement with work

Enterprise Alignment

Principles:

- Create constancy of purpose
- Think systematically

Supporting concepts:

- See reality
- Focus on long term
- Align systems
- Align strategy
- Standardise daily management

Results

Principles:

- Create value for the customer

Supporting concepts:

- Measure what matters
- Directly tied to strategic priorities
- Simple and easy to capture
- Timely and linked to work cycle
- Drive improvement
- Align behaviours with performance
- Identify cause and effect relationships
- Create value for the customer

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The reality

- Pressure on the cost of delivering healthcare is here for good
- Ever increasing public expectations of waiting and better outcomes is a fact of life
- Most effective way to reduce costs is to continuously improve the quality of the processes that deliver the service.

Continuous Quality Improvement

Science of Improvement

www.saasoft.com

Foundation **I**mprovement **S**cience in **H**ealthcare

www.journalofimprovementscience.net

Thank you

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Improving health outcomes across England by providing improvement and change expertise