Lean Six Sigma
-a Management and Statistics based methodology for strategic change in the NHS

Margot White
Public Sector Consultant, Affinis LbD
"We can't solve problems by using the same kind of thinking we used when we created them."

Albert Einstein
What is Lean Six Sigma?

- Lean
- Six Sigma

![Diagram showing the concepts of Lean and Six Sigma](image)

- **Lean**
  - Value
  - Perfection
  - Pull
  - Flow

- **Six Sigma**
  - Value Stream

**Shifted 6 Sigma**
- Process: 3.4 Total Defects of One Million Opportunities Below The LSL

**3 Sigma Process**
- Centered Around The Target: 66,738 Total Defects of One Million Opportunities Outside the Lower and Upper Specification Limits
What NHS Strategic Themes can be addressed through Lean Six Sigma?

- The NHS Operating Framework for 2009/10
  ‘...continuing to deliver on existing national priorities - sustaining and improving on progress’

- High Quality Care for All - Lord Darzi
  ‘tackling head on variations in the quality of care and giving patients more information and choice’...’an NHS that works in partnership and has quality at its heart’... ‘focus on prevention, improved quality and innovation’
Operating Framework - Existing Priorities

- Healthcare Acquired Infection
- Health Promotion and tackling Inequalities
- Access - 18 week RTT and GP access
- Invest in order to prepare for tighter financial climate
Operating Framework – Service Redesign

- **Staying healthy** - support and advice to stay healthy
- **Maternity and newborn.** Women want greater choice and a more personal experience.
- **Children's Services** effectively designed around the needs of children and families.
- **Acute care.** Specialised centres for major trauma, heart attack and stroke care.
- **Planned care.** More care closer to people's homes.
- **Mental health.** Extend services in the community.
- **Long-term conditions.** Personalised partnerships between people and professionals.
- **End-of-life.** Greater dignity and respect
High Quality Care for All

Empowering patients

More rights and control for patients over health and care:

- Greater choice
- More information
- Increased control
- Greater influence over resources
- Ensuring access to the most effective treatments
- Keeping patients as safe as possible – Reducing infections and reporting and analysing incidents

PROMS, patient reported outcome measures linked to payment by results
**High Quality Care for All**

**Quality at the heart of everything**

- **Bring clarity to quality.** Clear about what high quality care is and reflecting this in a coherent approach to the setting of standards.

- **Measure quality.** The NHS needs a quality measurement framework at every level.

- **Publish quality performance.** Making data on how well we are doing widely available to staff, patients and the public will help us understand variation and best practice and focus on improvement.

- **Recognise and reward quality.** Ensuring that the right incentives are in place to support quality improvement.

- **Raise standards** A stronger role for clinical leadership and management

- **Safeguard quality.** Regulation – of professions and of services – has a key role to play in ensuring this is the case.

- **Stay ahead.** We must support innovation to foster a pioneering NHS.
High Quality Care for All
Putting frontline staff in control

- Giving greater freedom to the frontline.
- Creating a new accountability.
- Empowering staff.
- Fostering leadership for quality.
- High quality workplaces.
- High quality education and training.
How NOT to Implement a Lean Six Sigma Programme in the NHS

- Skip the Define and Measure stages. (We already know the problem)
- The ‘customer’ is too diffuse to define in Health
- Plug it in and expect cost savings next month
- Ignore cultural and interpersonal factors.
- Every individual patient is different - statistical approaches don’t apply
- Narrow focus on speeding processes using a couple of accessible tools
- Focus on support departments – they are more like a factory
- Don’t quality check your measurement systems
Get it Right

- Link to strategic and clinical priorities
- Consider carefully cultural and language issues – interpret for the public sector
- Invest in training and TIME!!
- Get the right people involved – whole teams
- Get the data collection accurate and timely
- Trust staff to have the capacity
- Focus on results. Success is contagious.
- Be consistent and patient
NHS Benefits Gained through Lean Six Sigma Programmes

Reduced

- Length of Stay
- Non-conforming equipment
- Time to Diagnosis
- DNAs
- People & supplies travelling
- Staff absence
- Waiting
- Cost
- Turnaround

Increased

- One-stop services
- Health & safety
- Team work
- Use and accuracy of PIS
- Information transfer
- Patient satisfaction
- Signage and patient information
- Employee satisfaction
- Available patient records
References

- NHS Institute for Innovation and Improvement 2006, Lean Six Sigma: some basic concepts.
- Professor the Lord Darzi of Denham KBE 2008, High quality care for all: NHS Next Stage Review final report.