

Healthcare Finance Insights

#88: Six Sigma vs Lean

I was sitting in a meeting at a trust last week and a very sharp young lady asked me whether I thought Six Sigma or Lean worked better in an NHS setting. It was an interesting question and gave me pause for thought. Although they're very different I like both approaches. It was almost like being asked which is your favourite child.

Whilst they often get lumped together there are marked differences between them.

6σ

*THE COMMON
SIX SIGMA
SYMBOL*

Six Sigma was invented in 1980 by a guy called Bill Smith while he was working at Motorola. By 2005 they had attributed \$17 billion of savings to Six Sigma in their organisation alone. The methodology gained massive popularity when the legendary Jack Welch made it central to his approach at General Electric in 1985.

In a nutshell Six Sigma focuses on eliminating defects and reducing variability.

Practitioners use the steps of the DMAIC (define, measure, analyse, improve, control) model in a pre-determined order to develop, design and then re-design a process until eventually there's a one-in-a-million chance that an error will occur. This obviously chimes in very closely with the hot topic of patient safety, hence its popularity in healthcare.

General Electric and Motorola went even further and developed certification programmes as part of their Six Sigma implementation, verifying individuals' command of the Six Sigma methods at the relevant skill level (Green Belt, Black Belt etc.). Inevitably this put a focus on only using trained practitioners to undertake Six Sigma projects.

It also takes a lot of effort to do Six Sigma correctly - it's heavily focused on the analysis of data and you probably do need trained experts to maintain the rigour of the approach. Because these people are generally rare and expensive, transformation projects can often stall or at best be slow moving due to resource constraints.

For this reason Six Sigma works best in large teaching hospitals. In fact a small DGH may not actually generate enough patient data to test the full Six Sigmas. And even if larger trusts can amass the data required there is a potential for 'death by numbers' where endless days

are spent sticking to Six Sigma's exacting statistical tools rather than making changes as quickly as possible for patients.



JOHN KRAFCIK

On the other hand Lean tends to work well in all trusts. Lean management is focused on eliminating waste using a set of proven standardised tools and methodologies that target organisational efficiencies.

Although Japanese manufacturers, particularly Toyota, had been engaged in this type of work for many years, the term 'Lean' was first coined by John Krafcik in his 1988 article, 'Triumph of the Lean Production System'.

The ideas that underpin the Toyota Production System are easily grasped by most people. Just taking part in a 5S exercise (sort, simplify, sweep, standardise, self-discipline) is generally all staff members need to begin engaging in Lean. Lean focuses on removing anything the patient isn't prepared to 'pay' for, a concept most people readily get their heads around.

From porters, healthcare assistants and catering staff all the way to members of the Board, everyone can get involved and understand what it means to them in their role. Lean's flexible tools can work in all parts of any trust.

The work involved in Lean should not be underestimated – the collection and analysis of data is fundamental to the process – but its main focus is on people. Staff are empowered to generate their own insights and therefore, their own improvement ideas. This approach creates its own momentum. Once someone has successfully used Lean tools they tend to dig deeper and to continue making incremental improvements. Because they guide the collection of data it becomes more meaningful to them.

Whilst Lean has been adopted in the NHS it's US healthcare systems that have led the way in translating Toyota's Lean principles into healthcare settings. They have been able to affect radical change and have moved a long way to achieving zero defects.

So, for me, you get quicker results using Lean, but possibly more meaningful ones using Six Sigma.

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0845 111 8775

enquiries@assista.co.uk