



Lean in Healthcare

Improving theatre throughput
and the patient pathway

Using Lean methods to improve theatre throughput and the patient pathway

When we ask people in the healthcare sector why they come to work, the answer is always 'to help the patient'. But morale is hit too often when the 'system' gets in the way. A 'lean' way of working gets back to the simplicity of helping the patient, and understanding how to do it better. Lean is not primarily about tools and techniques (though these can be valuable) it is a way of thinking about work, centred on the purpose for which it exists, treating the patient.

This thinking is aligned with the idea of the patient pathway, because this is what the patient sees, and this is therefore the level at which we can be effective in understanding and designing the work. Our role is to enable clinicians, managers and staff first to understand this system of work, then to reflect and make decisions on the knowledge gained. Finally, it is to guide the change that is made to the point where performance is measurably different.



"Mapping the steps along the patient pathway was a revelation to staff familiar with only one part of it. Overall, they were delighted with the approach, feeling empowered rather than directed"

Stella Goddard
General Manager
Theatre and Critical Care
East Sussex Hospitals Trust

The Client

The Conquest Hospital is one of two general hospitals of the East Sussex Hospitals NHS Trust. It provides a wide range of acute services. The most common procedures at Conquest Hospital are arthroscopy and discography followed by primary knee and hip replacements, but a large variety of other operations are also performed, which means that scheduling and change-overs between cases must allow for flexibility in time and other resources.

A priority for Conquest is to demonstrate continued improvements to help keep the Trust in financial balance and support the application for Foundation Trust Status. Improving theatre throughput was identified as an area that could be improved.

The Challenge

Within the patient journey a key frustration and source of 'waste' is the time lost in theatres.

Symptoms include:

- Lists not starting at their scheduled time.
- Patients not being ready when required.
- Extended gaps between procedures.
- Lack of anaesthetic resource
- Under recovery on PBR.

It was proposed that a five day Rapid Improvement Event (RIE) deploying Lean principles be used to reduce the time taken from the end of one operation to the beginning of the next for a single patient pathway.

In delivering greater productivity it was recognised that the highest priority will always be the surgical needs of the patient and that no changes in process can challenge this order.



"Effective management - Lean management, means thinking about flow from the patient's point of view. So it is important that we work with healthcare providers to improve the *whole* patient pathway, not just a few steps of it."

Harry Longman
Lean Consultant
The Consultancy Company

Our Approach

Our approach was to lead a short, focused intervention with the specific object of reducing the average theatre changeover time for orthopaedic procedures. We ran a five-day Rapid Improvement Event (RIE) using Lean principles.

An RIE is an intense structured approach designed to make an improvement to a specific part of an overall process. A key element of the work involves mapping and measures.

Mapping

Flow is central to a Lean understanding of work. Our consultants together with staff mapped the flow, step-by-step, of a patient from the ward through reception, the anaesthetic room, theatre and back to recovery.

Mapping highlighted possible opportunities for change around the handover of a patient from one stage to another.

The process maps revealed where blockages occur and where measures could be used to test and improve the system.

Measures

During the week, direct measures were taken on changeover times, using the definition of "minutes between one patient leaving and the next entering the theatre".

Measures are a way of highlighting and measuring problems at a granular level; in order to eliminate waste.

Next Steps

Lean is about flow from end to end along a patient pathway. The greatest benefits of Lean comes from looking at a whole pathway.

Once the new process has been applied to all orthopaedic theatre lists every day, staff can start to roll out the process across other patient pathways.

Using the same principles of staff involvement, we would suggest "finding out" to understand the pathway and unlock greater opportunities for improvement.

Benefits

- A significant reduction in theatre turn-around times on a pilot basis.
- A plan to establish the piloted turn-around process as the standard way of working.
- Established mechanism to create significant additional theatre capacity with existing resources.
- More operating time for consultant surgeons; increased revenue at marginal cost for the trust; reduced interruptions for managers.
- First hand experience of applying Lean techniques and the creation of a group of empowered individuals as potential champions for change.

If we can help you with your efficiency challenges, please call us for an initial meeting on 01865 841177.

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