

Briefing

OPERATING THEATRES - MAXIMISING A VALUABLE RESOURCE

Operating theatres are critical in the delivery of acute patient care. However, in a time of shrinking budgets and increasing demands in the health service, acute hospitals face significant operational challenges in maintaining the excellent clinical outcomes and low waiting lists that have been delivered to date.

The 2013 Operating Theatre benchmarking project has highlighted the challenges trusts face and the ways in which they are working to maintain quality patient centred services.

WORKLOAD OF SURGICAL DEPARTMENTS

Over 10 million operations are performed each year in England in just over 3,000 operating theatres¹.

The average theatre would see over 1200 procedures a year, although this could vary according to the type of theatre. The majority of these patients undergo planned or 'elective' operations, but 18% of procedures are for patients requiring emergency surgery.

Over the last decade the number of operations has continued to increase and the average time spent by patients on surgical waiting lists has reduced. The median time patients are waiting for general surgery is 6 weeks; with admitted patients waiting a median of 13 weeks, and those on outpatient pathways just over 5 weeks².

It is estimated that total expenditure on surgery in the NHS in England amounts to £4.5 billion (over 4% of the total NHS budget)^{2 3}, with individual theatres costing on average of £1.5 million a year to run³⁴. Our benchmarking study estimates that the cost of each theatre hour is on average £561 (65% being staff cost).

WHAT ARE THE HURDLES FOR SURGICAL DEPARTMENTS?

The efficient operation of theatre departments is reliant on effective planning, constructive working with other specialties and proactive engagement of patients themselves.

¹ Number of Operations: *Hospital Episode Statistics (2011/12)* on Finished Consultant Episodes which required a main procedure or intervention, NHS HSCIC. Number of Operating Theatres: *The number of operating theatres in NHS provider organisations in England* (Quarter 3 2012/13), Department of Health.

² Waiting times – NHS England Feb 2014 - <http://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2013-14/>

³ Royal College of Surgeons [estimate](#) (2013).

⁴ ISD Scotland – [Theatre services national collection](#) (2011/12)

1 - Effective planning - One barometer of the planning process is the extent to which lists that have been scheduled are ultimately cancelled and remain unused. On average, participants in our study scheduled 35 hours of operating activity per theatre per week, of which 10% were cancelled, though the best performing trust managed to cancel only 3% of scheduled lists.

2 - Preventing last minute changes – On average participant trusts had 7.5 cancellations per 100 procedures. Cancellation of procedures are not always under the control of the department: patient cancellations accounted for 39% of all last minute procedure cancellations, while hospital cancellations due to clinical reasons accounted for 34% and the remainder were due to non-clinical reasons.

3 -Efficient patient flow in the department - Ensuring that patient flow in and out of theatres is as streamlined as possible not only results in increased productivity, but also improves patient experience. A main focus for trusts is reducing the theatre time wasted due to late starts and early finishes which overall accounts for 18% of theatre hours used. However, trusts also add to scheduled list time by starting lists early and finishing late (7.5% of total hours used). Additionally, another potential target for improvement is the 19% of time where the theatre is empty waiting for the next patient in the list to be brought in. Although this time cannot be completely erased, minimising turnaround time is still a goal for many trusts.

Across all trusts, total active time in general theatres is 65% (i.e. when patients were in theatre); 45% is actual procedure time and 20% pre and post operative time. The proportion of active time in dedicated daycase theatres is very similar at 62% of total active time, 42% being procedure time. As expected, the average number of procedures per list is higher in daycase (5 procedures per list) compared to general theatres (3 procedures per list).

An audit on the reasons for late starts highlighted surgeon delay was the main reason for 34% of all cases, anaesthetist delay accounted for an additional 11%, while 26% of the lists were delayed due to the patient not being ready to enter theatre. This points to the potential benefits of improvement opportunities for trusts in the coordinating of patient flow in the department.

WHAT TRUSTS ARE DOING TO SOLVE THESE CHALLENGES?

1 -Effective planning: (Chesterfield Royal Hospital NHS FT)

Implemented an agreed a process for accurate planning and review of planned scheduled list throughout the year between Theatres and Specialties. When vacant theatre lists identified by scheduling team notification is sent out and Consultants asked to cover using flexible sessions built into the consultant job plan.

2 Preventing last minute patient cancellations: (Medway NHS FT)

All patients are contacted 5 days prior surgery by case managers to confirm not only the day of surgery but that the patient is fit and ready for the procedure, and logistic arrangements (like transport) are in place.

3 Efficient patient flow in the department:

Improving preoperative patient flow (Peterborough and Stanford NHS FT)

Conducted observation audit to identify and understand the constraints in getting patients into the anaesthetic room on time. Each step in the admission process was timed for a day surgery patient. Initiative resulted in changed admission process for patients, improving patient experience, and the review of the staff rota to match staff on duty with patient flow.

4 Reducing late starts (Pennine Acute NHS Trust)

Conducted manual audit to understand in detail the underlying reasons for late starts this initiative called '5 why'. The root cause analysis provided insight into how late starts can be prevented. Actions plans and progress are reviewed as part of improvement work plan to assess impact on re-occurrence.

BENEFIT FOR PATIENTS

In surgery, focus has changed from survival to outcomes and quality of life for patients. Trusts are developing ways to provide patient centred services, improve theatre efficiency and patient experience. Our benchmarking programme enables trusts to track detailed progress and exchange practical ideas for further improvement.

The FTN Benchmarking process

This is the FTNs second benchmarking project on Operating theatres. Each participant trust established a project team with a clinical, data and operational manager lead, and a board-level sponsor to oversee the project. Following an initial scoping phase, trusts attended a workshop where the data collection and data definitions were discussed in detail and agreed. During the data collection and validation periods support was provided by the FTN Benchmarking team, with regular contact to ensure trusts were collecting comparable and robust data.

Performance across trusts was assessed by collecting trust-level for the period of June 2012 and November 2012 and patient-level information for 2 weeks in March 2013. Data was gathered on theatre activity, quality and safety, staffing levels and costs

A findings workshop provided an opportunity for trusts to discuss the main findings as a group, share best practice, identify improvement opportunities and develop focused action plans for improving operating theatres.

The FTN Benchmarking programme

The Foundation Trust Network is the trade association for NHS foundation trusts (FTs) and NHS trusts on the way to becoming FTs. We speak on behalf of over 200 members delivering acute, specialist, mental health, ambulance, and community services in hospitals, in the community and at home.

Our role is to ensure the voice of public providers of healthcare in the NHS is heard loud and clear, to support our members to deliver excellent patient care and to forge relationships across the whole of the health and social care system.

Over the last seven years the FTN Benchmarking programme, has facilitated significant cost savings, quality improvements and efficiency gains for over 100 member trusts. For more information visit <http://www.foundationtrustnetwork.org/members/benchmarking/> or contact Isabel.Lobo@foundationtrustnetwork.org