



briefing

May 2010

FTN Benchmarking

Driving performance improvement in **operating theatres**

Operating theatres are a key component and a major cost element of delivering acute care, but have never before been subjected to a focused, cross-hospital benchmarking as far as we are aware. Our first operating theatres benchmarking project, delivered with support from McKinsey & Company and including a survey of team effectiveness, enabled 12 Foundation Trust Network (FTN) member trusts to identify how they could improve their performance. This was done by analysing costs and comparing performance across the three dimensions of quality, productivity and workforce.

Summary of findings

The results showed significant variation in performance across quality, productivity and workforce as well as examples of best practice that all participants can learn from.

In the area of **quality**, the work showed that 'never' events are still occurring and many dimensions of quality performance are not consistently tracked and reported across all trusts. However, theatre staff highlighted the introduction of the WHO Surgical Safety Checklist (SSC) as a particularly powerful recent initiative to improve quality in theatres.

On **productivity**, a 100 per cent variation in the average number of hours scheduled per theatre per week was observed, ranging from fewer than 30 to over 50 hours. The transition to more intensive use of these valuable assets is not easy, but can be achieved with determination and a collaborative, iterative approach between theatre managers and clinicians. Similarly, a disciplined approach is required to ensure on-time starts and full use of scheduled theatre time, an area that all participants felt could be improved.

The **workforce** area also showed significant variation – in staffing numbers and seniority across trusts, highlighting the risks of both under and over-staffing and the need for clear processes for staffing appropriately according to need. Where trusts are able to create consistent theatre teams this was seen as improving both quality of care and the working environment.

Background

FTN Benchmarking brings together clinicians, services managers and data leads to agree a template of metrics that can be collected consistently across trusts to compare performance.

Projects compare cost and efficiency, set against quality measures, to help participants identify the underlying reasons for performance differences and the improvement opportunities for each trust. Additionally for this project, a survey of trust theatre staff assessed perceptions of team effectiveness and clinical quality.

The benchmarking process

Each participant trust established a project team with a clinical, data and service manager lead, and a board-level sponsor to oversee the project.

Following an initial scoping phase, trusts attended a workshop where the template for collecting data was discussed in detail. During

the data collection period, and subsequent data validation stage, support was provided by the FTN Benchmarking team, with regular contact to ensure trusts were collecting comparable data. Participants collected cost, staffing and quality metrics from April to September 2009 and detailed theatre activity for two weeks in November 2009.

A findings workshop provided an opportunity to discuss data findings as a group, share learning resulting from different practices, and identify improvement opportunities. Trusts presented on aspects of their services that the benchmarking study identified as high performing. Individual trusts developed their own six-month action plans which will be revisited in a follow-up workshop to support further improvements.

Benchmarking results: quality

Key findings

Staff most frequently cited implementation of the **WHO SSC** as a positive recent initiative to improve quality.

There remains work to do to eliminate 'never events' and improve other elements of quality (see Figure 1).

Clinical quality processes could be tracked and reported more effectively. This will be crucial with the compulsory reporting of quality accounts.

Most staff groups, apart from managers, reported that trusts do not communicate internally and **share progress** on quality effectively.

Actions

Trusts identified the following areas for investigation:

1. Meeting the quality agenda challenge:
 - planning on how to meet CQUIN goals
 - achieving surgical 'best practice' tariffs
 - establishing incentives and recognition schemes to ensure commitment to sustainable change.
2. Quality metrics:
 - ensuring that quality metrics are understood by all staff at the right level of detail so that resulting information is used effectively. Important safety metrics include near misses, adherence to the WHO SSC, and rates of surgical site infections
 - following robust definitions that are consistent across trusts.
3. Patient experience and cancellations:
 - reducing same-day procedure cancellations by timing the pre-assessment checks appropriately and ensuring that all relevant information is available.

Benchmarking results: productivity

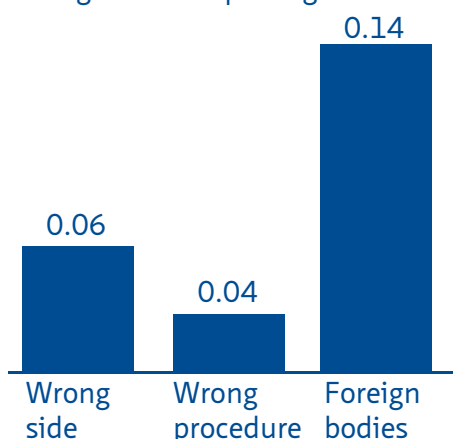
Key findings

When considering both general and day case units (DCUs) theatres across all trusts, only 34 hours on average are **scheduled per week** per theatre (range 26–52), showing that theatres are an under-used resource.

For general theatres, 66 per cent of the total used theatre hours was **active theatre time**, with only 47 per

Figure 1. Never events

Rate per thousand procedures, average across reporting trusts



cent of this time being procedure time (see Figure 2). The remaining 34 per cent of time was made up of late starts, early finishes and turnaround, which offering good opportunities for productivity improvements. This picture is mirrored in DCU theatres.

Trusts indicated that they found the **time stamps** proposed by the FTN (see Figure 3) effective, and plan to maintain them for tracking productivity.

The average patient theatre journey in general theatres was 145 minutes. Procedure time averaged 47 min, (32 per cent) and showed the least variation across trusts while recovery showed the greatest variation and averaged 60 min, (41 per cent).

Staff cited scheduling as an area for improvement, followed by staff roles, team time and bed management.

Actions

Trusts identified the following actions to improve productivity.

1. Scheduling more time:

- increase the number of scheduled hours, for example by moving to all-day lists which are regarded as more efficient
- ensure directorate engagement in the scheduling process, resulting in increased accountability for the use of scheduled time.

2. Reducing list cancellations:

- adopt a clear policy in cancellations and rebooking for example, penalties for short notice cancellations and on-going monitoring to ensure cancellations due to holidays are avoided
- period for cancellation notice so that rebooking can take place
- ensure that theatre availability matches demand.

3. Minimising late starts and early finishes:

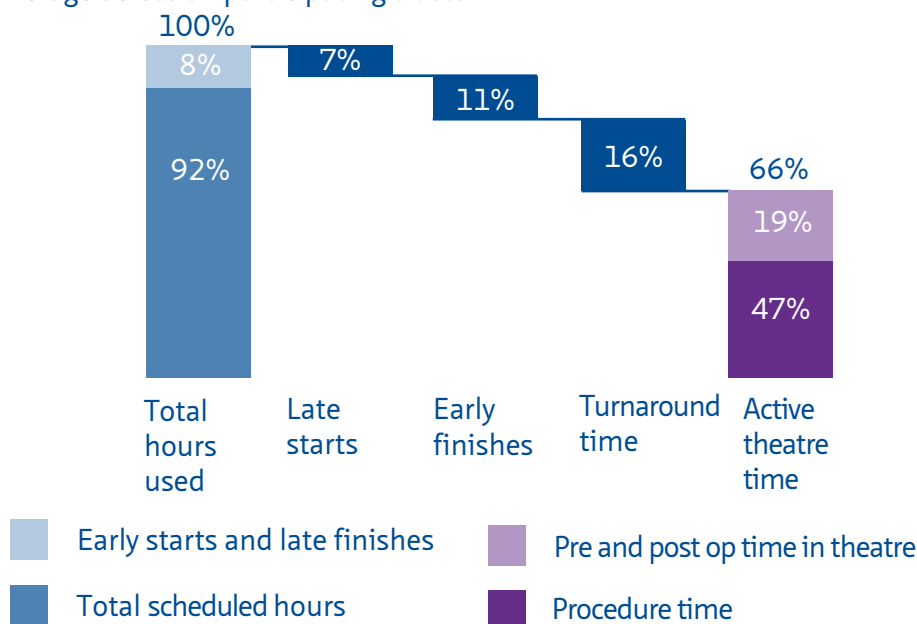
- ensure that lists start on time by communicating performance targets within the department and to senior management
- ensure that the reason for a late start is recorded to help avoid similar situations
- in many cases, additional procedures could be scheduled to fill unnecessary early finishes, although some trusts were considering using early finishes as a staff incentive to work efficiently.

4. Turnaround time:

- use an admissions lounge to reduce the amount of time waiting for patients
- consider starting anaesthetic with the following patient while the preceding patient is being readied for recovery. This can be particularly effective in high-volume DCUs
- obtain patient consent as early as possible in the theatre journey.

Figure 2. Breakdown of used time in general theatres

Average across all participating trusts



Benchmarking results: workforce

Key findings

Staff costs make up the largest share (mean of 64 per cent) of theatre costs across trusts.

Whole time equivalents (WTE) per theatre (mean of 12.4) vary by nearly 100 per cent. Nurses and ODPs account for an average of 78 per cent of staff WTEs.

Grade mix of nurses and operating department practitioners (ODPs) also varies greatly across trusts, some trusts relying heavily on bank and agency nurses.

Staff report strong team working within theatre teams, but less effective working with other parts of the hospital.

Actions

Trusts identified the following areas for investigation.

1. Staff configuration:

- building flexibility into staff configuration is key for many trusts. Limited demarcation of roles of nurses and ODPs resulted in more content staff and more flexibility
- the use of dedicated specialty theatre teams where possible is perceived to be more efficient.

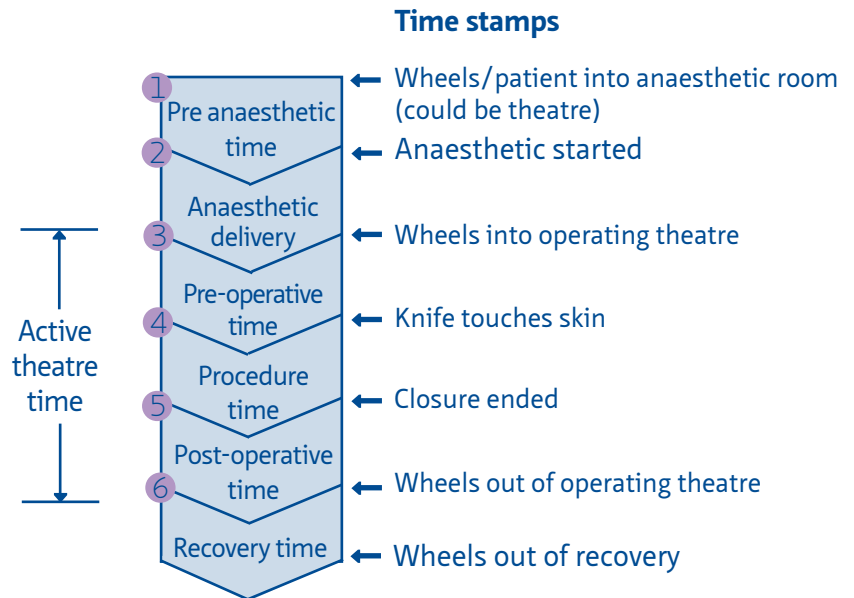
2. Workforce planning:

- capacity planning is critical for future efficiency and cost reductions
- a reduction in waiting list initiative (WLI) lists through more efficient scheduling would lead to significant savings in staffing costs

3. Staff satisfaction:

- develop schemes for recognition of achievement
- an effective communication/ feedback system with all levels of staff is essential for engagement, empowering and harnessing improvement ideas.

Figure 3.



The Foundation Trust Network

The Foundation Trust Network (FTN) was established as part of the NHS Confederation to provide a distinct voice for NHS foundation trusts. We aim to improve the system for the public, patients and staff by raising the profile of the issues facing existing and aspirant foundation trusts and strengthening the influence of FTN members.

The FTN runs a series of benchmarking projects on different topics. For more information, visit www.nhsconfed.org/FTNBenchmarking or contact Liz Smith, Benchmarking Manager, at liz.smith@nhsconfed.org