The Trust’s problem
Our client was a large English acute, three star hospital, which is actively seeking to become a Foundation Trust. In support of this, it had a significant financial recovery plan. Part of the plan identified the desire to make savings in operating theatres and anaesthetic staffing. To this end the decision had been taken to close 2 operating tables in an old theatre suite.

The Trust had 20 operating theatres in 4 theatre suites on the main hospital site and 3 theatres on two separate community hospitals. The management of theatres had been centralised earlier in the year within a clinical support services division, with surgical specialties managed within a surgical division. The client requested us to carry out a strategic scoping review to identify improvement opportunities in operating theatres and anaesthetics.

Approach and Key Findings
Two tricordant consultants worked with the Theatre Manager, theatre staff and relevant surgeons and anaesthetists to understand the current system and challenges.

This work started by mapping the primary patient flow processes at the first level of system. The question was asked “are the boundaries and handovers between whole work teams in the right place at the moment?” This revealed the need to clarify and tidy up the boundary of responsibility and point of patient handover coming into the theatre group’s remit. This was to create a neat ‘unit of whole work’ for each theatre team. Separate whole work units are likely to be identified around outpatients and associated diagnostic processes, and around inpatient recovery processes.
The management processes at the system level above that of the primary patient flows was then analysed and the cycles of whole work were identified. At this the speciality level, (system level 2), the analysis identified the main need was for each speciality to create a theatre resource management unit. This would require collaborative management between surgical specialities and theatres management as illustrated below.

The Level 2 Whole Work Unit For Each Speciality

- The patient/medical whole work unit
- The theatres/resource management whole work unit

Patients

- Plan
- Do
- Learn

The whole work cycle

It was thus proposed that theatre management teams were set up for each specialty. These should also, where possible, be allocated ownership and responsibility for a physical territory (e.g. theatres, reception desk, storage room, rest room). These specialty theatre teams would meet monthly and include a:

- Theatre clinical lead
- Clinical director of surgical specialty
- Anaesthetics clinical lead
- Theatre materials manager [for high prosthesis or consumables users]
- Surgical specialty operational manager
- Local planning and admin support

There was an urgent need to improve the collection of data from a local home-grown IT system and critically to start using this information to activate a cycle of evaluation, improvement planning and learning. The theatre management teams would be encouraged to chart improvement progress and actions against key issues such as prompt starts, utilization, cancelled lists and late finishes. This should be allied to open, two-way communication with the rest of affected staff.
These speciality theatre management meetings at level 2 should be structured to consider the whole planning cycle e.g.

| Plan/Initiate | • Patient list management  
|              | • Theatre session planning  
|              | • Theatre staff allocation  
|              | • Longer term theatre staffing plan  
|              | • Materials requirements plan  
|              | • Initiate local improvement projects |

| Do/Deliver | • Responsible for achieving the operation lists  
|            | • Implement local improvement projects |

| Check/Learn | • Measure, review and learn from  
|            | • Surgical problems  
|            | • Adherence to Budget  
|            | • Timeliness  
|            | • Theatre utilisation  
|            | • Cancellations  
|            | • Staff development, flexibility and training  
|            | • Standards adherence  
|            | • Infections, etc. |

At the next higher level of system (level 3), the overall management of theatres within the hospital, was then analysed. It was clear that here there was a higher level strategic whole work cycle. The need here is to concentrate on an appropriate range of issues higher level cross-specialty issues across all theatres e.g.

- Theatres Strategy  
- Overall theatres budget  
- Major facilities/resources plan  
- Overall theatre staffing and development plan  
- Trust initiative coordination  
- Major theatres improvement plan coordination and implementation  
- Overall delivery of theatres to targets and plan  
- Measure and review consolidated performance information
The proposals therefore clarified which issues should be addressed and owned at three different system levels:

- Level 1: the primary operating teams
- Level 2: the speciality theatre teams
- Level 3: the overall hospital theatre management team.

By having the right management tasks done at the right level, and by ensuring that each level is responsible for a whole work cycle (plan, implement learn), then theatres within the hospital should run as a balanced whole system.

**Benefits**

The review work thus identified a number of key strategic improvement opportunities in clinical and support areas. These included:

- introducing specialty and overall theatre level management processes including improving links from waiting list offices to theatre capacity planning and scheduling
- review of organisation structures and roles
- improved use of information systems
- zero-based budgeting including using an agreed staffing model
- workforce development strategy
- procurement and stock strategy
- clear operational policy for theatres re starts, ends, cross-theatre working etc
improved organisation of emergency care

and significantly culture change process to create the sense of “big theatre team” to facilitate flexibility alongside more local specialty theatre teams.

A conservative estimate of the benefits available indicated that over £1.5M worth of efficiency savings could be achieved initially, with further improvements through the continuous improvement processes expected. Some of these expected impacts identified from the analysis of benefits are shown below. Theses gains could be taken as cash-releasing gains or as capacity increase.

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Less patient DNAs and cancellations. (Tighter pre-op processes etc)</td>
<td>600 more operations per year £276k p.a. of semi-fixed costs.</td>
</tr>
<tr>
<td>More cases completed on average per list. (Start on time and fill list capacity.)</td>
<td>1500 more operations per year £690k p.a. of semi-fixed costs.</td>
</tr>
<tr>
<td>Less late-notice cancelled or vacant lists. (Tight management of vacant lists)</td>
<td>400 more operations per year £188k p.a. of semi-fixed costs.</td>
</tr>
<tr>
<td>Reduce stock of prosthetics, instruments and consumables</td>
<td>Release cash? To be quantified.</td>
</tr>
<tr>
<td>Reduce usage of non-payroll costs e.g. consumables and prosthetics.</td>
<td>Reduce costs? To be quantified.</td>
</tr>
</tbody>
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Significant steps towards achieving the cash-releasing savings came from the Trust’s decision to close 2 operating tables in an old theatre suite. Tricordant supported implementation planning for this change which facilitated some of the immediately apparent efficiency gains and reduced the locum/agency bill by £250K alone without a reduction in surgical capacity.

Conclusion

The strategic scoping review of theatres helped the Trust ensure that immediate financial savings and efficient improvements of c. £1.5m could be implemented sustainably. The review developed a strategic plan for the ongoing development of theatres. By implementing collaborative continuous improvement management processes across surgery, anaesthetics and theatres, the Theatre Manager could ensure ongoing delivery of significant benefits in terms of patient quality, staff satisfaction and improved productivity as well as delivery of this plan.

Contact Us

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