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### Driving Operational Efficiency: How to make 'IT' work

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**It has long been an axiom that IT systems, and their efficient use, can help control escalating healthcare costs. An industry expert who has worked on a variety of projects for the National Health Service (NHS) in the UK offers his insights.**

#### Pressures

The information necessary to drive operational improvement within the health sector is already stored in one or more system within healthcare organisations. However, extracting and analysing the key information can be instrumental in yielding the necessary savings.

The recent budget announcement in the UK by Chancellor George Osborne highlighted that GBP 20 billion over the next four years must be saved. The NHS now has to deliver more for less. The successful use of IT can contribute significantly to this challenge.

#### A Rich Legacy of Projects

There is no lack of IT systems available to the healthcare industry, and I have worked on more than 60 successful improvement projects for the NHS in the last three years alone, all primarily focused on improving the efficiency of operating theatres and clinics in which the development of new systems has played a key supporting role in the success.

Projects using these customised tools can quickly and sustainably deliver productivity increases of 10 – 20 percent over two to four month timescales, with a corresponding improvement to the quality of care delivered.

Typical financial benefits can range from GBP 750,000 to GBP 2 million per year per Trust, and can be generated through a number of routes including increased case volume, decreased volume being outsourced, cost reductions, and decreased length of stay.

#### Making it Simple

One of our recurring key findings is the importance of displaying data visually in order to impart the maximum information to the user in the minimum amount of time.

All standard systems will produce lists of patients, procedures, key performance measures or whatever data is requested. But very few will analyse, prioritise and present it in a way that instructs the necessary action to take in a simplified manner.

Highly-customised information systems are emerging to play an increasingly important role in the project because they bring to light – in visual terms – information including theatres not in use, consultants' timetables, lost time causes and length of stay opportunities.

This allows areas for improvement to be identified and addressed as well as subsequent improvements to be measured in an accessible and uncomplicated manner – in a way no other systems are currently capable.

Using a core suite of components, it is possible to combine and adapt them to create a unique system designed to meet a specific Trust's needs. Recent examples of such work focus on utilisation, consultant performance and causes of lost time; live theatre input; session planning and booking; simple, clear planning and management of Consultants' PAs.

Three core principles are rigorously applied fundamentally to each project in order for significant positive results to be quickly achieved.

1. Solutions must be simple and focused. Enter data once, and stored only in one place and intuitive;
2. All data must be live or nearly live – reviewing data that is not up-to-date will not drive improvement, and
3. If you give the right people the right information about losses, they will improve.

#### **Making IT Work**

Every NHS Trust has a different mix of standard systems. This is why highly customised solutions tend to work much better than an off-the-shelf package that must be configurable to cope with every possible permutation.

Typically, 30 percent of a project will be understanding and agreeing the metrics and identifying where the data to calculate them will come from.

Half of the time will be spent actually doing the customisation, and 20 percent will be used for implementation and sustainability. Minimal user training is normally required as the systems are designed to be simple and intuitive to navigate.

#### **Case Studies**

A comprehensive suite of IT tools was recently created for Northwest London Hospitals NHS Trust. At the start of the project the Trust was maintaining theatre records using a paper-based system.

This made it very difficult to work out how well the theatres were running and generally took two weeks to get even simple measures such as daily utilisation. The new system allowed for touch screen entry of operating progress in theatres which feeds straight into a tracker to show live progress and performance – a real cornerstone of the Trust-wide programme to deliver actual improvements where it matters.

A speciality within a Northampton NHS Trust was experiencing difficulty meeting the 18-week patient pathway given the existing capacity of its operating theatres. In other words, this meant that an increase in utilisation of eight percent was required to both meet government targets and to reach sufficient capacity to perform the necessary additional operations and make cost savings resulting in GBP 243,000 additional profit to the Trust.

The eight-week project focused on operating theatres, ensuring theatre lists started on time and delays were minimised. Working closely with clinicians, theatre staff and nurses from the day surgery unit and wards, the main causes of lost time were identified and measured.

The systems supported the implementation of new processes that minimised delays between patients by ensuring the next patient was checked and brought to the anaesthetic room in a well co-ordinated manner.

Working collectively with the management team, secretaries and booking clerks, the team focused on ensuring that operating theatre lists were appropriately booked and reduced cancellations.

To ensure lists were appropriately booked, the original method of list booking was revised and a new system was implemented. The list booking was reviewed every other day by members of senior management to ensure that every list was booked with an optimum number of suitable cases.

The target 8 percent increase in theatre utilisation was achieved, as well as a 33 percent reduction in lost time due to theatres starting late.

The systems have consistently delivered between 10 and 50 percent improvement in the key performance measures, on average representing around a six-month return on investment.

Equally as important, the standards of care received by patients can be shown to be improved as a result of better information available, more predictable waiting times, less cancellations and shorter waiting lists.

We are already seeing evidence that cost pressures are leading to salami-slicing of services and staff, which invariably has a negative impact on an NHS organisation, reducing income or leaving remaining staff to do more.

However from our experience in working with NHS Trusts throughout the country, blindly applying cuts will not allow the NHS to cope with increased demand without an increasing in funding.

The NHS should now be intelligently targeting areas to improve quality and efficiency.

Having the proper management systems in place will provide a visible picture of capacity and demand and will drive the required efficiencies which are now being realised across the private sector. Newton's work has demonstrated that well designed, well developed, well implemented IT systems can be used to deliver real measurable savings to key areas of all NHS Trusts.

This strategy will build on the record investment of the last decade and help deliver a better, more responsive NHS that will fully meet the demands of the 21st century.

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