

**Medtronic**

Integrated Health Solutions<sup>SM</sup>

Case study: Cost savings.  
Capital investment.  
Increased on time starts.

Imperial College Healthcare NHS Trust



# The challenge

Imperial College Healthcare NHS Trust is a major teaching hospital recognised as a centre of excellence in cardiology and cardiothoracic surgery, treating more than 20,000 patients with a variety of heart conditions annually. Dealing with growing demand driven by changing demographics, the hospital faced the stark reality that it needed to accomplish more with the same resources to minimise a funding gap. Short-term cuts were not going to address this challenge.

In that context, the Trust was eager to:



## Renew

ageing CathLab equipment with the most innovative medical technology



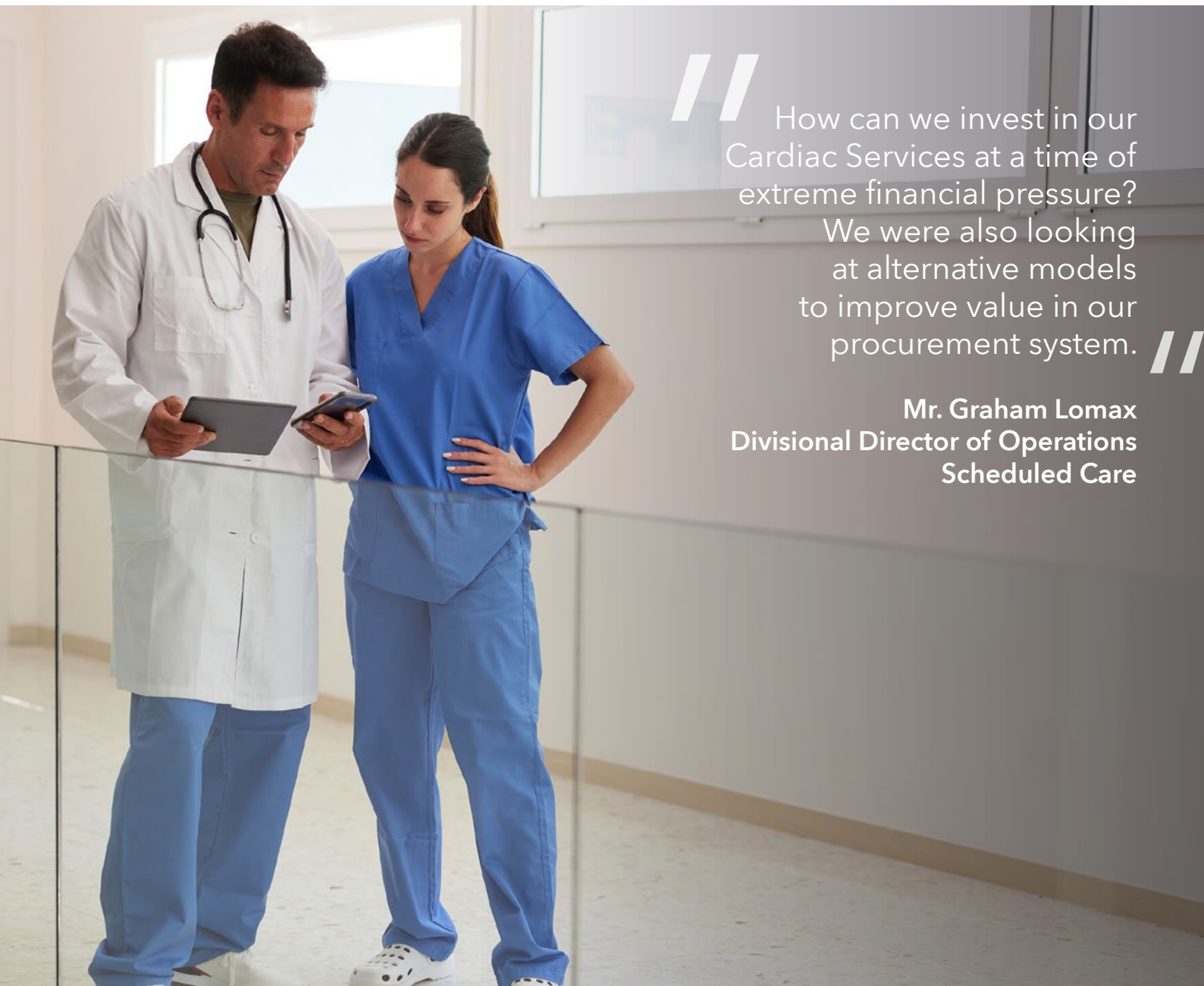
## Optimise

daily operations, improve capacity, and reduce waiting lists while improving the focus on core clinical activities



## Increase

their appeal versus the competition



How can we invest in our Cardiac Services at a time of extreme financial pressure? We were also looking at alternative models to improve value in our procurement system.



**Mr. Graham Lomax**  
Divisional Director of Operations  
Scheduled Care

# The solution

To address Imperial College's needs, **Integrated Health Solutions<sup>SM</sup>** created a tailored solution to bring them the latest in cardiac technologies and to optimise non-clinical operations, aimed at closing the gap between cost and patient access.

Our seven-year partnership with the Imperial team started in November 2013 and included a **cardiology transformation program** identifying **£1.5 million of efficiency savings**.

## How we did it

### State-of-the-art CathLab refurbishment and equipment maintenance

- Took full responsibility for the capital equipment in five CathLabs (funding, provisioning, commissioning and maintenance)
- Determined appropriate equipment needs and coverage levels
- Developed a Quality Framework for CathLab operations management
- Began refurbishing the third lab and will continue this process until the fifth lab refurbishment is complete

### Vendor-independent material and supply chain management

- Took responsibility for 2,942 stock lines and 12,436 items
- Reorganised processes and workplace using Lean Six Sigma principles
- Assumed responsibility for provisions of directly sourced stock through a single supplier
- Developed a dashboard to easily monitor performance
- Implemented a Quality Framework to standardise and maintain best practices

### Ongoing training and support

- **Lean Academy training.** Through our Lean Academy programme, we are empowering staff and embedding a culture of continuous improvement. We are providing training and on-the-ground support to staff identified by the Trust to deploy selected projects that drive efficiency gains. Our courses have international accreditation from the Lean Enterprise Research Centre of Cardiff University.
- **Collaboration and teamwork.** An advisory board composed of Trust managerial and clinical staff as well as Integrated Health Solutions<sup>SM</sup> representatives meets regularly to drive this partnership forward. Hospital clinicians and staff contribute valuable knowledge and insights into the transformational efforts. They also serve as key change agents to communicate, monitor progress and gain additional peer involvement.

### Operational excellence

- Implemented a structured morning preparation meeting for cardiac ward representatives, consultants, registrars, bed managers and the lab coordinating nurse
- Identified and proposed a structured process for advance booking and scheduling of procedures. This helped:
  - avoid cancellations, low utilisation of the labs, and poor patient experience
  - provide a planning template to book procedures against fixed slots support clinical staff through regular meetings

"Shared risk, shared incentive, having aligned goals, was core to the discussions. We have the consulting services included to drive increased productivity and we would both share the gains."

**Mr. Graham Lomax**  
Divisional Director of Operations, Scheduled Care



Every second of every CathLab is worth  
**\$1 in revenue\***

## The impact

**One year into the partnership**, the identified value creation - including efficiency savings - is estimated at **£840,000**.

## The solution has



**Refurbished two CathLabs** with state-of-the-art technologies and equipment without the burden of high capital costs for the Trust. The remaining three labs are to be refurbished over the next two years.



**Saved on supplies** by leveraging buying power (reduced prices and bulk deals) for estimated savings of £138,000.



**Saved on staffing costs** by redistributing one full-time equivalent from material management, worth £69,000 (effective from November 2013 over three years).



**Increased on-time starts** from 58% to 93%. Initiation of daily planning meetings at 8.15 a.m. Restructure of the coordinator role with specified actions of the day and authority to delegate. Redistribution of lab management responsibilities from external contractor to the in-house team, worth £158,000 (effective from April 2015 over 3 years).



**Increased throughout** during the week so the planned Saturday list could be discontinued, bringing a £260,000 recurring saving for the Trust over three years.



**Increased procurement efficiencies** through use of a smart software solution.



**Increased lab uptime to 100%** due to consistent stock availability, increased maintenance levels, and weekend preventive visits.



**Improved retention** of junior staff by developing and implementing an induction and competency pack.



**Reduced waste** 10-fold reduction in expired stock. Decreased time looking for items by 75 minutes per day. Resterilisation of cables, worth £376,000 over three years. Reorganisation of storage spaces, putting the most frequently used items in front.

\* Based on "NHS Payment by Results. Guidance for 2013-14"

# Why partner with us?

With more than 65 years of experience in the medical technology industry, combined with our global in-hospital presence and long-standing relationships with health providers and physicians, we have an in-depth understanding of your needs and challenges.

**Partnering with us brings you:**

## Benchmarks

Our broad hospital footprint allows you to compare with other world-class institutions and gauge variability in patient outcomes, length of stay, workforce productivity, and asset utilisation.

## Resources

Our access to capital resources enables you to equip your cardiac departments with the latest technology.

## Unique mix of skills

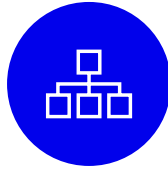
Our 200+ experts in consulting, hospital management, biomedical engineering, clinical experience, and building and managing cardiac departments can complement your own organisation's competencies.

## Tailored solutions based on four pillars



### Turnkey set-up

Provide affordable access to state-of-the-art technologies and infrastructure



### Manage

Manage non-clinical operations so you can focus on patient care



### Optimise

Deliver best-in-class cost efficiency and patient outcomes



### Develop

Accelerate patient recruitment and referrals, and enhance your services and reputation

## Shared risk and reward

We aim to be the leading company to support hospitals, physicians, payers and health systems to deliver high quality care in a cost-effective way. Our business model is therefore based on taking an active role with long-term partnerships that hinge on risk and value-sharing schemes as well as on predictable 'fee-per-procedure' models.

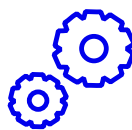
**In short, we have a larger stake in your success than ever before.**

## Best possible outcomes

Working together, we can help you move toward value-based healthcare by designing tailored solutions that optimise your outcomes - enabling you to:



Improve  
quality  
of care



Enhance  
operational  
performance



Boost  
financial  
returns

"I think one of the key benefits of having a commercial partner is thinking about new options. If we wonder about how to bring more technology to the community, how to be better at our marketing, how to engage better with patients, we have a partner here on-site for the long term that we can engage with, and this partner has a different skillset than our own."



"There was a strong focus on on-time start and on-time finish to optimise CathLab utilisation, and we were able to reduce some weekend elective lists - which enabled a reduction of overtime cost of staff."

**Mr. Graham Lomax**  
**Divisional Director of Operations, Scheduled Care**

"The new system and structure is a vast improvement. Nursing staff find what they need much faster."

**Ms. Jane Sheppard**  
**Health Care Assistant**

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Medtronic brought expertise in Lean Processing. By reviewing our lab practices, their transformation work has yielded significant improvements during difficult times. //

**Dr. Kevin Fox**  
**Consultant Cardiologist and**  
**Head of Cardiology ICHT**



## About Medtronic IHS

Integrated Health Solutions<sup>SM</sup> builds on Medtronic's unique combination of capital resources, process optimization expertise and therapy knowledge. In cooperation with medical institutions, IHS develops innovative services and solutions to improve efficiency, reduce costs, facilitate patients' access to different types of treatment, and improve outcomes.

Interested in balancing access and cost of treatment, with high quality of care? We are here to help.

**Learn more about our solutions by visiting our [website](#), reaching out to your Medtronic contact or emailing us at: [integratedhealthsolutions@medtronic.com](mailto:integratedhealthsolutions@medtronic.com)**

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