



PHILIPS

Partnership

Managed Service

Excelling in cardiac care.

Partnering with **Leeds Teaching Hospitals NHS Trust** to drive excellence across cardiac care

Executive summary:

Leeds Teaching Hospitals NHS Trust's vision for cardiac care is to set new standards of excellence for cardiac care in the UK and across the globe. The Trust's cardiology service faced challenges including ageing equipment and outmoded facilities, in combination with limited capital budgets. The Trust agreed a long-term Managed Service strategy partnership with Philips, to deliver six fully featured interventional cardiac suites. The partnership has already overseen the launch of two new cath labs based on the Philips Azurion platform in more modern environments, while optimising workflow and driving improvements to patient and staff experience.



Challenges:

In 2019, Leeds Teaching Hospitals NHS Trust was facing increasing challenges:



Ageing medical equipment and outmoded facilities including two cardiac catheter labs which needed replacement.



Building for the future: Balancing the Centre of Excellence operational status whilst envisioning the Cardiology department of the future.



Limited capital budgets and ambitious cost improvement targets.

“ Whilst our equipment was working, we were experiencing downtime and didn’t want to have to postpone or limit number of patients. We realised that we needed to be able to offer the very latest capabilities and innovative medical equipment in a suitable environment”

Dr Chris Pepper, Clinical Director at Leeds Teaching Hospitals NHS Trust

“ The ability to bring in world-class equipment is something we want for all of our patients, so the opportunity to partner with Philips, and to explore ways to enhance our Cardiology service is of significant benefit”

Julian Hartley, Chief Executive Officer at Leeds Teaching Hospitals NHS Trust

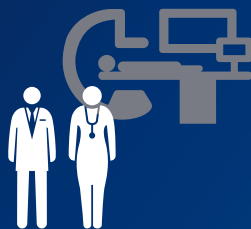
About Leeds Teaching Hospitals NHS Trust:



One of the largest and busiest acute hospital Trusts in the United Kingdom.



Their cardiac clinical services unit admits over 25,000 patients a year.



They provide specialist cardiology services to a regional population of over 5.4 million across West Yorkshire.



The Trust operates an aspirational Centre of Excellence innovation programme. This not only benefits the local population but also the global cardiology community through developing cutting-edge cardiology techniques to meet challenging patient presentations.

“Leeds is one of the largest providers of specialised services in the United Kingdom, so it’s of the utmost importance that we ensure our services incorporate the latest medical technology innovations, to ensure we stay ahead and deliver the very best for our patients.”

Dr Chris Pepper, Clinical Director at Leeds Teaching Hospitals NHS Trust

Our partnership solution:

To meet their aspirations to maintain Yorkshire Heart Centre as a Cardiology leader, the Trust established a 10-year Managed Service strategic partnership with Philips with the joint aim to reduce patient waiting times and costly outsourcing for Ultrasound services across two sites.

Through co-creation, Philips and the Trust identified the need to replace existing medical technologies and redesign the department in combination with designing service improvement and education programmes. Utilising Philips’ hospital integration 3D modelling solution, the Trust and Philips visualised ways to improve patient pathways and workflows, which led to a full Cardiology service redevelopment programme. Additional support with business case development and financial modelling are included within the partnership.

Central to partnership delivery is the dedicated on-site Customer Delivery Manager, who works ‘hand in glove’ with Trust management and the clinical teams. The Customer Delivery Manager is supported by a dedicated Helpdesk solution to ensure immediate access for fault reporting, resolution, and scheduling preventative maintenance. The Customer Delivery Manager ensures the Managed Service partnership key deliverables (such as implementing new equipment, service improvement programmes and training) are completed on time and within budget against the partnership’s roadmap.

“We have received great support from Philips. They have become part of our extended team and have supported us from a clinical, operational, but also a patient and staff experience perspective.”

Gina McGawley, General Manager Cardiology at Leeds Teaching Hospitals NHS Trust

“There has been a palpable sense of excitement. The Cardiology team at Leeds are very proud of the quality of cardiac care we are able to deliver for our patients. We see this partnership as a hugely exciting and positive opportunity to improve this further, with the overall objective to provide state-of-the-art cardiac imaging as part of a highly efficient and forward-looking cardiology service.”

Dr Chris Pepper, Clinical Director at Leeds Teaching Hospitals NHS Trust



Initial fast track technology replacement programme and interim solution:

Ahead of the official partnership commencement, Philips and the Trust agreed a ‘fast-track’ programme which included the replacement and upgrade of the Trust’s existing, outmoded and inefficient ultrasound devices to optimise cardiac ultrasound uptime.

Shortly after the partnership had commenced, one of the Trust’s catheter labs, which was not originally planned for early renewal, ceased functioning. Philips agreed to install an interim solution, immediately replacing existing equipment with a Philips Zenition mobile C-arm system to maintain availability.

“The partnership has enabled the clinical teams and Philips to quickly identify an interim solution for Catheter lab one, which ensured our patients continued to have timely access to our Cardiac Services. The solution provided resilience across our services whilst major building works were carried out to replace our two other Catheter labs.”

Tracy Rennard, Cardiology Service Manager at Leeds Teaching Hospitals NHS Trust.



Maintaining patient throughput throughout the cardiac lab transformation

The partnership includes the refresh of six fully featured interventional cardiac labs incorporating Philips Azurion platforms, two of which are specialised electrophysiology suites, a structural heart suite and advanced patient monitoring.

During the initial co-creation programme, Philips and the Trust had identified ways in which to improve workflow. This included updating the Cardiology service layout to move electrophysiology (EP), currently situated adjacent, to inside the updated catheter labs thus improving staff experience and communication.

Philips and the Trust faced the challenge of refreshing the first two catheter labs during the COVID-19 pandemic. There was also added difficulty as the first two labs being refreshed were interconnected, meaning they had to be completed simultaneously. Maintaining patient throughput was paramount as Leeds Teaching Hospitals NHS Trust is the primary Percutaneous Coronary Intervention (PCI) centre for the surrounding area and therefore essential to maintain 24/7 availability of the EP labs to ensure PCI services continue without disruption.

With limited access to site and with social distancing protocols, Philips's project managers and Trust operational teams leveraged Philips's 3D technology to visualise each lab, ensuring sufficient space and access for staff and patients. Additionally, Philips and the operational teams worked closely with the Trust's estates and facilities departments to enable site access to ensure building works could commence, technologies could be installed and deliverables could be met.

During the development programme, through leveraging the interim lab solution, The Trust were able **to maintain EP service availability above 90% maintaining patient throughput.**

Service improvement:

A major component within the partnership is Service Improvement programme which focusses on identifying ways to drive clinical and operational improvement.

Led by a Philips Service Improvement Specialist and Sarah Miller, Head of Nursing at Leeds, this includes:



- Reducing wait times



- Identifying efficiency gains and improving patient flow to essentially improve clinical outcomes



- Improved patient and staff experience



- Optimising equipment availability and uptimes



- Value for money.

The partnership will explore ways to drive sustainable education and training programmes, aimed at improving staff capabilities and experience, while both developing and supporting recruitment of Cardiology staff.

“Service and quality improvement for us as an organisation is driven by our people, so the partnership has come at a really crucial time. We have our improvement method and methodology and so it will now be about how the partnership can support further data analysis about how we are working and where our next improvement projects should lay.”

**Sarah Miller, Head of Nursing
at Leeds Teaching Hospitals NHS Trust**

“We have a vision for service improvement and research and innovation together and are looking at ways in which we can leverage technology for real-time feedback on performance, in order to help the Trust make the right decisions for their future.”

**Stephanie Holden,
Managed Services Director at Philips**



Partnership benefits and achievements to date:

Still in its early years, the partnership is already delivering value. The first two catheter labs have been launched, with staff and patients benefiting from improved workflow, modern environments, and integrated medical technologies.

“Having everything in one place and being better integrated, means patient flow is improved. The new labs and equipment have meant we can be far more efficient, completing multiple examinations in one appointment thus reducing the length of exam time, delivering better imaging and more accurate diagnoses, leading to better patient outcomes. It is also now far more comfortable an environment to work in”

Muzahir Tayebjee, Consultant Cardiologist at Leeds Teaching Hospitals NHS Trust

Key partnership benefits to date

- **Two newly refreshed Cath labs** launched
- Interim solution delivered to **optimise availability** of a non-functioning cath lab & maintain PCI services
- Access to the latest technology **improving exam efficiency**
- **> 8/10** overall satisfaction rating
- **> 98%** system availability

Looking to the future:

The partnership now turns its attention to refreshing the next two Catheter labs:

- **The biplane lab** - focusing on structural heart cases.
- **The hybrid lab** - equipped to undertake valve replacement and complex pacemaker procedures.

The new labs will be delivered with objectives to enable more complex cases, improve examination accuracy, increase efficiency and patient throughput, ensuring the Trust can deliver on their Centre of Excellence status aspirations.

New labs will be refreshed with:

- **Philips Azurion 7** technologies
- **Philips Flexvision** - for full table-side control.
- **EchoNavigator** – for live echo and x-ray fusion tool.
- **HeartNavigator** - for live guidance for structural heart disease procedures.
- High-performance **operating lighting** systems.

What are Managed Service strategic partnerships?

Managed Services are our comprehensive, vendor neutral solution designed to guide and support you in achieving optimised business outcomes. Working in close partnership as an extension of your team, we go beyond traditional Managed Equipment Services by treating technology as an enabler for transformation. Our flexible agreements are grounded in actionable data insights, to support you in making confident investment decisions.

Key benefits



Flexible, integrated, future-proof technology

Working in partnership to deliver flexible, right fit, artificial intelligence (AI) enabled technology and service management plans.



Optimised technology maintenance

Managing essential upgrades, streamlining and optimising maintenance and maximising asset utilisation and system availability.



Driving positive change

Leveraging our transformation expertise to deliver cutting-edge facilities through assessment of equipment and service needs, clinical service modelling, infrastructure planning, strategic design and change management programmes.



Defined total cost of ownership

Designed to optimise the total cost of ownership (TCO) by rationalising investments and streamlining over time, providing risk transfer and access to gainshare mechanisms.



Patient and staff experience

Improving patient and staff journeys through workflow optimisation, enabling access to immersive experiential and ergonomic technology, research and training programmes.



Financial Engineering

Our Managed Services are supported through a range of flexible, cost-effective, financing and financial planning models, tailored to meet specific budgetary requirements.



Performance Management

Providing access to real-time metrics through integrated information management systems and comprehensive LEAN training programmes, enabling continuous service improvement.



Working in true partnership

Providing customers with a single point of contact to engage stakeholders, align around shared goals and deliver on agreed KPIs. Our Managed Services go beyond equipment, partnering to solve clinical, patient and staff experiential, operational and financial challenges.

To find out more about Managed Service and Strategic Partnerships:
www.philips.co.uk/managedservice



* Results from case studies are not predictive of results in other cases.
Results in other cases may vary.

** All pictures shown are for illustration purpose only.
Actual product may vary due to product enhancement.

© 2022 Koninklijke Philips N.V. All rights reserved. Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. or their respective owners.

How to reach us

Please visit;
www.philips.com/radiologyinformatics