

Small Size, Big Vision.

Partnering with **Wye Valley NHS Trust** to increase diagnostic imaging capacity, improve productivity, support staff, and deliver high-quality patient experience.

Executive summary:

Wye Valley NHS Trust was facing significant and increasing diagnostic imaging demand, exacerbated by aged equipment and staff shortages. The Trust agreed a long-term Managed Service strategic partnership with Philips, to drive clinical transformation. The partnership has overseen a major £2 million Radiology service redevelopment programme. Post Radiology service re-launch, patient throughput has increased by 15%, with reductions to diagnostic backlogs, while delivering an improved patient service.



Challenges:

In 2018, the Trust's imaging department was facing mounting challenges:



A steady increase in demand for imaging modalities through an increase in patients with long term chronic conditions such as diabetes, obesity, COPD and cancer.



A high variability in turnaround times across all of its imaging modalities, especially across MR and Ultrasound.



The Trust had seen a **10% rise** in annual demand for most of its imaging services, including a **50%-60% rise** in demand for CT.



Complex workflows had placed inordinate pressure on the existing infrastructure.



Staff shortages enhanced by the national shortage of Radiographers.



Aged equipment: The radiology department had relied on both aged equipment to manage its patient data alongside aged PACS and Radiology Information Systems.

About Wye Valley NHS Trust



One of the smallest NHS Trusts in the UK.



Located in rural part of South West England where it provides services via Hereford County Hospital and three community hospitals.



Services provided for Herefordshire with population of over 190,000 and also for 40,000 patients in Mid Wales.



80% of the population live more than 5 miles from a market town or Hereford.



The Trust employs around 3,000 staff.

Our partnership solution:

It was clear from discussions between Philips and the Trust that just changing equipment wasn't going to solve their mounting issues. Instead, transformational change was needed.

Small in size, yet big in vision, Wye Valley NHS Trust knew that it needed to optimise its radiology department but simutaneousy lay the foundations for the radiology department of the future.

To meet its objectives, Wye Valley established a **long-term strategic Managed Service partnership with Philips**, to work together to drive excellence across the radiology service and improve clinical outcomes for the population of Herefordshire.

Through **CoCreate**, Philips and the Trust identified several improvement and education projects and inside the first twelve months, delivered an initial 'fast-track' programme to replace essential imaging equipment, optimising capacity.

"Our partnership with Philips was agreed to partly replace our aged radiology equipment and to improve capacity, but also to engage our staff in ways of improving efficiency."

Jane Ives, Managing Director, Wye Valley NHS Trust

"The challenges that Wye Valley NHS Trust faced are challenges that permeate all health providers — staffing issues, ageing equipment and related productivity concerns are all issues which affect the ability of radiology departments to deliver high quality care and dignity. Our goal as a trusted partner is to work closely with Wye Valley and build a lasting partnership to support its patients, staff and community into the future."

Stephanie Holden, Philips Managed Services Director, Solutions UK&I

What is CoCreate?

CoCreate is a flexible, scalable and collaborative approach that is specifically designed to help the Trust to transform the delivery of health and build a sustainable business by creating smart, value-creating solutions.

To bring better solutions to the table, you need to get inside people's hearts and heads. CoCreate helps Philips to gain an in-depth understanding of people in their context. It helps articulate the Trust's challenges and what you really value.

It's all about doing, learning and adapting the solutions as you go.

For more information click here



Service improvement, resource and training:

The ability of Wye Valley to support its staff through education and resource management was vital to address productivity and meet the rising patient demand. The partnership looked at how to optimise staff resources through an initial **Service Improvement programme**, designed to address productivity and performance.

A foundation level training course gave Wye Valley staff the skills to improve efficiency and patient flows.

The training covered:

- The people aspects of change.
- The principles of lean thinking.
- The tools of quality improvement for healthcare organisations.

The MR team at the Trust completed six 'learn-do' training cycles across a 12-week period which focused on mapping value streams, understanding capacity and demand, and improving the working and patient environment.

More than **75 clinical staff trained in LEAN principles** to optimise patient flows and efficiency improvements.

Workflow optimisation at Wye Valley has pushed productivity up by **5% - 10% per year**.

Staff are also more engaged in the improvement process as a result of the programme.

The Trust will appoint a lead to support ongoing quality improvement for modalities across the imaging department.

Remodelling and redesigning the Radiology Department:

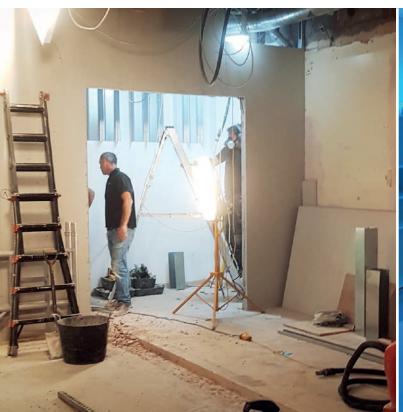
Following on from the 'Fast-track' programme, a major £2 million Radiology service redevelopment programme commenced. Philips and the Trust identified solutions to create new workflows to coincide with the replacement equipment in the new department and capitalise on the efficiencies of combining technology, layout and process improvement.

During an extensive five-month programme, the redevelopment project was completed in stages to ensure continuity of service, with major additional services including MRI and a dedicated interventional suite.

The interventional suite was reconfigured and installed into what had previously been several small outmoded and outdated rooms, creating a bespoke clinical area with separate control and generator rooms, as well as building and refurbishing existing ultrasound rooms. The whole refurbishment project was completed on schedule and within budget in mid-March 2020, despite the COVID-19 pandemic.

"I've seen the impact of all the changes on both patients and staff. The whole environment is much more pleasant, bright and airy. The equipment is brand new, so the staff have the opportunity to work on modern, up-to-date technology that is top of the range in certain areas."

Leah Hughes, Radiology Services Manager, Wye Valley NHS Trust





Continuity of service despite unforeseen challenges:

COVID-19 also created a high strain on hospital resources and exacerbated backlogs in diagnostic services and treatment. The partnership adapted to enable the Trust to grow further

CT capacity through refreshing equipment and adopting out-of-hospital mobile CT solutions, optimising uptime and minimising clinical downtime.



Partnership benefits and achievements:

Open dialogue, positive sharing and innovative governance created a 'one team' partnership with a long-term goal.

Still in its early years, the partnership has already transformed the radiology department both in its physical appearance and service provision. Change has been achieved by Philips and Wye Valley colleagues reviewing the department's performance in a more longitudinal fashion, finding pain points and unmet needs, and, by examining where existing inefficiencies inhibited productivity.

Central to the partnership is the dedicated on-site Customer Delivery Manager, who works 'hand in glove' with Wye Valley management. The Customer Delivery Manager ensures the agreed objectives of the Managed Service partnership (such as department redesigns and the implementation of new equipment and training programmes) are delivered on time and within budget against the partnership's roadmap.

"Philips' flexibility and willingness to work together with the Trust to fulfil our needs and benefit patients has been paramount...they have brought in creative solutions to help us meet the immense demand for diagnostic services in a challenging COVID environment.

Collaboratively we have developed new ways of working and plan to continue to look at financial and operational solutions."

Dan Harding, General Manager Diagnostics, Wye Valley NHS Trust

Key partnership benefits to date

- MRI Patient throughput increased by minimum
 4 patients per day
- Enhanced patient flows in the radiology department
- 60% equipment replaced inside first two years
- >98 % System availability achieved across modalities
- 9/10 overall satisfaction rating

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.

Philips Managed Service addresses your quadruple aim goals:









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

"Any partnership is about both parties working collaboratively towards a mutual set of goals. Working with Wye Valley NHS Trust we built flexibility into the partnership to allow us to think outside the box and respond to new needs and challenges. This can only work with a relationship built on trust, which is ingrained into every aspect of this programme."

Stephanie Holden, Philips Managed Services Director, Solutions UK&I





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