

Partnering to drive clinical and service excellence

How Mid and South Essex NHS Foundation Trust partnered with Philips to leverage its expertise in innovative healthcare solutions and data-led decision making, and shape efficient long-term planning of its equipment management strategy.

Executive summary:

In January 2021, Mid and South Essex NHS Foundation Trust selected Philips as its preferred partner under a three-year contract, with a strategic programme of work projects. This has helped the Trust to address key challenges and deliver its vision of achieving clinical and service excellence across its newly merged holistic Radiology service.

The partnership has resulted in several benefits for the Trust. This includes, but isn't limited to, access to expertise and wider services within Philips, relieved pressure on staff who may have otherwise been involved in the projects, increased scanning capacity, cost savings and improved privacy and dignity for patients.

About Mid and South Essex NHS Foundation Trust









Mid and South Essex NHS Foundation Trust comprises of: Basildon and Thurrock University Hospital, Broomfield Hospital, Chelmsford and Southend University Hospital. The Trust provides a wide range of services across its three hospitals, including A&E, emergency medicine and surgery, elective surgery in most specialities, maternity and paediatric services.

Trust by numbers

Founded
1st April 2020

1.2 million people

served by the Trust each year

One of the **biggest NHS Trusts** in the country

Annual revenue over £850 m

Approximately **15,500** members of staff

Around **400,000**

examinations performed each year across Radiology services: comprising X-rays, CT and MRI scanning, Ultrasound, Fluoroscopy and Interventional Radiology

Challenges

The Trust was struggling to develop an encompassing strategic approach to facilitate a future-proofed imaging service across the region. This was due in part to the complexities of merging three unique organisations and cultures, resource constraints, capacity and not having access to the necessary experience or expertise and market innovation.

It recognised that there would be benefits to partnering with a healthcare industry specialist. In December 2019, Philips and a broad spectrum of key clinical, operational and executive stakeholders from the Trust collaborated in a Philips Co-Create workshop to identify key themes/challenges and potential solutions.

- Complexities of merging three unique organisations and cultures.
- Limited access to the necessary experience or expertise and market innovation.
- Ageing equipment, with faults rapidly increasing across radiology department.
- Low staff morale, due to ageing equipment.
- Issues raised regarding patient privacy and dignity.

The key aspirations of the Trust were captured as follows:



Performance management

Collection of timely information to indicate trends and measure performance of services, enabling proactive management of the Trust's operations and accurate internal and external reporting.



Service realignment

Unification of stakeholders across the Trust and local health system, to define and align services that meet their strategic objectives, allowing for effective operations and delivery of quality care.



Financial innovation

Using innovative financial and contractual mechanisms to allow for affordable and flexible delivery against the Trust's operational and strategic requirements.



Estates

The strategic optimisation of estates to allow for delivery of current and future planned services.



Research and innovation

Development of new solutions, services and technology to improve healthcare outcomes, efficiencies and staff and patient experience.

Working in partnership



In August 2020, the Trust went out to Tender for the provision of services from a radiology imaging equipment partner as part of the Trust's radiology equipment replacement programme.

Following a Tender response, in January 2021, the Trust selected Philips as its preferred partner. We agreed a three-year contract, including a strategic programme of work projects, to help address some of the challenges outlined above and ultimately ensure a future-proofed approach to imaging services across the region.

The work packages to date have focused on the design and build associated with the installation of new equipment across the Trust. In addition to design and build capabilities, the Trust has also utilised Philips' procurement function to manage the supplier selection process (with the Trust making the selection), purchasing in the Trust's name, logistics of provision, along with access to professional services.

Margaret Hathaway, Programme Director at Mid and South Essex NHS Foundation Trust commented:

Working with Philips over the last three years has enabled us to make a number of improvements to our services through their support on our equipment replacement programme – this has improved patient flow, design and throughput at each site.

With regular monthly calls to catch-up on project status, it has been a true partnership and we value the expertise and guidance that Philips has been able to offer us.

Core projects:

Cardio Thoracic Centre (CTC) CT, Basildon

(complete Apr 2022)

As part of the national replacement programme led by NHS England, the CTC CT at Basildon University Hospital was identified by the Trust's Radiology department as being a top priority replacement. The system was over 10 years old and did not have the latest imaging software or capabilities. Maintenance downtime and faults were rapidly increasing (35 hours unplanned in the first four months of 2021), and support contracts were increasingly difficult to find as parts were no longer available for the equipment.

Due to the specialist nature of the work undertaken in the CTC, we recognised that an identical replacement would not be suitable. Instead, we supported the Trust to explore more innovative technology. Our hospital design teams used 3D Matterport scanning and industry expertise to optimise the space that the new CT scanner would sit in, enabling a patient-centric, clinician led solution design, including more space in the control room for staff.

We managed the project from Purchase Order to practical completion, including the removal of the existing CT and enabling works to support the installation of the new CT. We also ensured the programme of works was kept to a minimum, to prevent any service disruption.

Xray Room, Southend

(complete Apr 2022)

The Xray machine at Southend University Hospital was installed in 2008 and was the oldest of the digital Xray machines used across the Trust. In 2019 alone, the machine broke down 19 times. Therefore, it was identified as high priority for replacement. As a strategic partner, we helped the Trust

to develop a solution that met the desired objectives within tight time and cost restraints. Our hospital design team worked with clinical staff to create a future-proof room design, decommissioning the existing Xray and enabling works to support installation of a new Xray.

Provision of CT, Southend

(complete Oct 2022)

To support the expansion of the emergency pathway at Southend University Hospital and help the Emergency Department provide quicker diagnosis and treatment, we worked with the Trust to redesign the administration space in this building and create a new CT suite. The provision of an additional CT has:

- Increased scanning capacity by over 50%, resulting in a positive impact on waiting lists.
- Reduced third-party expenditure on short-term capacity solutions, saving MSE approximately £500,000 per annum on third party providers.
- Improved patient flow throughout the hospital by eliminating any backlog of scanning and providing additional capacity in excess of demand.
- Supported the Emergency Department (ED) in providing quicker diagnosis and treatment.

We played a key role in the options appraisal and business case development to repurpose a vacant courtyard space at Basildon University Hospital and design, build and install a new CT and MRI modular singlestorey building facility. Multiple designs and budgetary costs were provided for other options that helped inform the options

appraisal and ultimate decision to develop a business case for the Courtyard location. This bespoke and innovative solution created space for equipment that was otherwise sat in storage and helped create additional MRI capacity without affecting continuity of service; enhancing the patient and staff experience.





Philips has been a key contributor to supporting the business case development for the Courtyard scheme, evaluating the location and the final building solution. The partnership with Philips has provided access to expertise to develop an innovative and bespoke solution, delivering a real-world improvement to imaging facilities. Working with Philips has and continues to be a beneficial collaboration to delivering an ambitious program of works across Mid and South Essex NHS Foundation Trust.

Brian Green, General Manager and Deputy Head of Radiology Department at Mid and South Essex NHS Foundation Trust

Innovative designs support with enhancing patient and staff experience



Following the Courtyard Suite go-live at Basildon, there is now work in progress to redesign the main MR / CT facility, which will include replacing one of the oldest MRI scanners in the UK. Allowing for continuity of service, the Philips team created a clinical and operationally approved design that accommodated the installation of a new MRI and removal of an existing CT scanner. The vacated space left by the CT removal will be repurposed to provide a patient bedhold area with adjacent changing rooms, providing an enhanced patient experience with a focus on privacy and dignity.

There has been much focus on Southend, where Philips has provided professional consultancy services. This includes input from Philips Design, based in Eindhoven, Netherlands, who have developed a masterplan for the redesign of the first floor Radiology department. This offers a phased approach that ensures the available footprint accommodates equipment replacement, including Fluoroscopy and an IR suite, whilst having a patient and staff centric focus.

Philips Design have also contributed to a clinically and operationally approved concept design for the potential addition of a third

CT scanner at Broomfield. The design utilises an adjacent department to an existing CT scanner to allow the space for the third CT and again provides a patient and staff centric offering. The design was developed in collaboration with the clinical staff and features a dual control room to ensure best use of available resources.

Finally, Philips facilitated a Co-Create workshop with key Trust and ICS stakeholders early in the Community Diagnostic Centre programme planning. Much of the data established in the lead up to the Co-Create and outputs from the workshop have been key to the approval of the Business Cases submitted to date for the region.



3D image of department overview in new main MRI/CT suite

At Philips, we're passionate about driving transformation for our customers. Our partnership with Mid and South Essex has enabled us to leverage our expertise and find creative, high impact solutions to support the Trust and its patients; working together to deliver its vision of achieving clinical and service excellence across its newly merged holistic Radiology service. Over the past 3 years, our collaboration has created additional efficiency for the radiology team, provided better service for patients and resulted in more timely diagnosis and treatment. We hope to build on this success in the coming years and continue working together to solve key challenges and improve outcomes."

Stephen McMillan, Solutions Leader, Philips UK&I and Europe

Results - Key benefits:

- A more **strategic approach** by combining projects into a set **programme of work over** a **number of years**, rather than on an ad-hoc basis.
- Access to expertise and wider specialist services within Philips, such as space redesign, from the outset of the project, ensuring the optimum solution was quickly identified and developed.
- More flexibility for the Trust through the vendor neutral service, with single accountability for the delivery of projects.
- Relieved pressure and increased capacity for the Trust teams, with Philips' ownership of the project meaning less support was **needed from estates**, **procurement and clinical teams**.
- Aided the development of **9 business cases**, making them clearer, more accurate and timelier, ensuring there is a proactive approach to equipment replacement; resulting in **greater clinical**, **operational and financial efficiencies**.
- Replaced 2 pieces of ageing equipment, and enabled works for the new Courtyard Suite at Basildon and the additional CT in Southend, which has increased scanning capacity by 50%, all enabling the Trust to make more timely diagnosis and treatment.
- Saved the Trust approximately £500,000 per annum on third party expenditure for short-term capacity solutions, with the addition of the third CT Scanner in Southend.
- Improved privacy and dignity for patients by designing new private areas for patients to change before and after scans in both the CT Scanner Suite at Southend and the Courtyard Suite at Basildon.
- **Benefits for staff** through the new CT Scanner Suite at Southend, offering a separate calmer environment to **support radiographer teaching and learning**, as well as an ideal space for specialist procedures.

Looking to the future

We are excited to further **develop our**partnership and use our creative, high impact solutions to support the Trust and its patients, as it works towards its vision of achieving clinical and service excellence.

Interested to learn more?

Let's talk. Even better, let's collaborate.

Strategic partnerships are long-term collaborations, delivered through a shared accountability model with joint commitment to goals, risk and performance. Through co-creation, we deliver future-proof solutions that solve your key challenges, improve outcomes and contribute to the long-term success of your organisation.

To find out more about Strategic Partnerships: www.philips.co.uk/healthcare/medical-products/partnerships

