

A flexible partnership for

sustained provision of services

Philips Managed Technology Services at Royal Victoria Hospital, Belfast



Working in true partnership

Royal Victoria Hospital is the largest hospital complex in Northern Ireland, with four linked hospitals and an international reputation for excellence. It is an acute general hospital with a teaching centre and a Level 1 Trauma Centre.

Who

Royal Victoria Hospital, Belfast, UK&I (The Trust)

Challenge

Royal Victoria Hospital, Belfast, the largest hospital complex in Northern Ireland, was undergoing a major redevelopment program in 2005. Their ambition was to be the most advanced centre for healthcare in the region. To achieve this vision, Royal Victoria Hospital was looking for a partner to take on the management of their medical technology, allowing them to regularly and strategically refresh equipment, without the burden of capital investment.

Solution

A 15-year Managed Technology Services partnership between Royal Victoria Hospital and Philips, focused on creating a centre of excellence for the provision of Imaging, Cardiology, Intensive Care and Theatre Services.

Partnership deliverables include:

- Higher predictability and strategic decision-making to ensure the right technology is available to provide quality care, delivered through an equipment replacement plan
- Improved system availability to ensure continuous patient care, through a dedicated service help desk, performance guarantees, and continuous upgrading and maintenance of technology and software
- Enabling clinicians to stay up-to-date with the latest techniques and deliver excellent care through an ongoing training programme
- Ensuring optimal return on investment with gains and risksharing models

Results from a successful 12-year partnership*



Over £**1.7M** of reinvestment at RVH Belfast



Over **99.9%**

system availability realised in 2018



>9 out of 10

Customer rating



"One of the key successes of the contract has been Philips' willingness to work flexibly with the Trust when making decisions regarding the replacement of equipment or the need for alternative/additional equipment to be introduced to the departments."

Mrs B. Owens. Director of Unscheduled Care

A 15-year Managed Technology Services agreement between the Royal Victoria Hospital and Philips was signed in 2006. The Trust established that to achieve its ambition (to be the most advanced centre for healthcare in the region), more than just technology management would be required. To ensure that new technology is used to its full potential, IT integration, system availability and staff training had to be included. The initial scope included an equipment replacement plan for Radiology, Cardiology, Critical Care and Theatres allowing these departments to regularly and strategically refresh equipment. Philips has taken responsibility for planning and managing the complexity of Royal Victoria Hospital's technology across multiple departments, based on current and future needs, while helping to improve operational performance and patient outcomes. For the past 12 years, the two organisations have been working in true partnership, adapting the scope of the agreement to accommodate changing clinical requirements. To date, Philips continues to deliver successfully on the key objectives set out in the contract.

Annual management reports showing **key performance indicators** are prepared for the Trust management, allowing them to continually assess the success of the partnership:



 System availability routinely maintained above the contracted service level;



Equipment replacement plan is strategically modified around the changing needs of the service and delivered to plan;



Ongoing training supports staff to deliver high-quality clinical service to their patients.



Flexible approach to technology planning ensures continued delivery of high-quality patient care with predictable and protected technology investment

The strategic Equipment Replacement Plan (ERP) is an essential part of every Managed Services partnership. Royal Victoria Hospital had a vendor neutral ERP in place, developed at the time of contract signature. The plan takes into account the holistic needs of the institution, to ensure the Trust has timely access to the latest relevant technology innovation. It defines when equipment is to be replaced, in line with recognized lifecycles. At the start of each Managed Services partnership Philips brings in multiple stakeholders from the hospital, as well as data insights on equipment usage and utilisation, and future demand projections, to inform the creation of the Equipment Replacement Plan*.

The plan remains flexible and is regularly reviewed by Philips and hospital representatives in various Planning Groups, to ensure it continues to meet the needs of the clinical service. The ERP is optimised by leveraging benchmarks to account for current and future clinical demands, as well as insights from clinicians and patients and thereby providing an optimal total cost of ownership. Any required changes to the plan have been managed through the Change Control Process, such as removal of obsolete technology or addition of new equipment to support increased demand. This ensures the equipment provided is best placed to support the clinical needs.

Alongside the Equipment Replacement Plan is the Financial Model. The Model includes agreed upon equipment prices (model prices), set at contract signature. By agreeing to prices at the outset of the Managed Services partnership, Royal Victoria Hospital was able to transfer the risks associated with any escalation in equipment market prices to Philips, as the Managed Services provider.

At each replacement, there are three possible scenarios:

- 1. Market price is lower than the ERP price a shared/mutual benefit for Philips and the Trust
- 2. Market price and ERP price stay the same no net benefit to either party
- 3. Market price higher than the ERP price Philips takes the risk

All three scenarios allow the Royal Victoria Hospital to benefit from a predictable, protected and unchanged unitary payment. In addition, Philips is able to share the net benefit with the Trust when equipment is supplied at a lower market price. Financial benefits are delivered to the Trust through a Reinvestment Fund. This is an innovative way of ensuring the financial solution is as cost-effective as possible, while demonstrating good procurement practices. The Fund is built up by a number of gain and risk-sharing activities, set out in the contract. Throughout the 12 years of the partnership, Royal Victoria Hospital has received over £1.7M in reinvestments from Philips.

*This is part of Philips current approach.



Meeting the need for increased CT capacity within existing financial parameters

The Philips Management Team ensures the Equipment Replacement Plan is reviewed and regularly optimized. In 2015, due to increased demand for CT services, Royal Victoria Hospital and Philips identified the need for an additional CT scanner. In the original Equipment Replacement Plan only two CT scanners were requested. 10 years later, changing clinical practices and an aging and growing population with increasingly complex needs, meant that the Trust's CT referrals exceeded their original forecasts. Two CT scanners were no longer enough to meet clinical demand.

To make the third CT scanner affordable, Philips worked with the Trust, using the Change Control Process, to identify savings from the existing Financial Model. This meant that the cost of the new CT scanner, its annual maintenance and enabling works could be accommodated within the fixed unitary payment. Philips worked with the Royal Victoria team to ensure that their additional CT scanner complemented their existing capacity and workflow to meet patient and staff needs, without any additional cost.

The Royal Victoria Equipment Replacement Plan included a conventional high-end CT, as Spectral technology did not exist in 2006. The transition to a Spectral CT system involved a step-up in capital and maintenance costs, which would have exceeded the normal equivalency boundaries of the Managed Services agreement and may have led to an increased unitary payment. As Managed Services partner, Philips understands the need to maintain flexibility and adapt to changes in technology. Our preference is to design the Equipment Replacement Plan based on Equipment Banding and Specifications which focus on output, rather than technology features, to allow optimal future proofing. When a step-up in technology, which may not have been predictable at the outset of the agreement happens, we work collaboratively with our clinical partners to find a way forward.

To allow patients and staff at the Royal Victoria Hospital to benefit from the new Spectral CT technology, Philips worked with the Trust to identify savings and utilized the Change Control Process to accommodate the system within the existing unitary payment..

"Working in partnership, Philips has been creative in proposing possible solutions for the Trust within the financial limits of the contract."

Mrs B. Owens, Director of Unscheduled Care

Accessing the latest technology

to improve healthcare outcomes

The rapid evolution of medical technology has enabled new procedures and ways of working that bring faster, more accurate diagnoses to patients and improve departmental workflow and efficiency. In 2018 Royal Victoria Hospital wanted to become one of the first clinical providers in the UK to use the new Philips IQon Spectral CT Scan .

The Philips IQon Spectral CT.

- Reduces time and costs by decreasing the number of patient findings that are indeterminate, providing the opportunity to positively impact patient care;
- Reduces workflow complexity;
- **Reduces the need for additional tests** through the ability to create angiograms from routine or low injected contrast volume studies, transforming a sub-optimal CTA exam into an optimal diagnostic CTA.





Sourcing the right technology,

irrespective of manufacturer

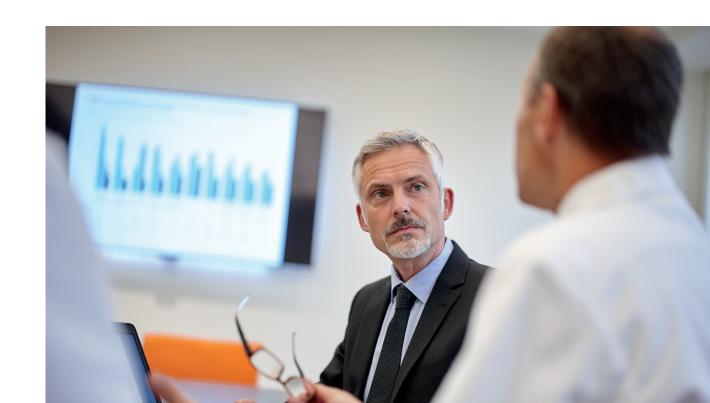
Providing new technology to enhance patient care is one of the key deliverables for Managed Services. In the agreement with Royal Victoria Hospital, Philips works with hospital representatives in various Planning Groups, to oversee the vendor–neutral equipment selection process and ensure that any new or replacement systems meets clinical and operational needs.

In 2018 there was a major equipment replacement project in the Nuclear Medicine Department. The Trust decided to use the Investment Funds to enhance the equipment outline specifications of the old gamma cameras. They also carried out some major building renovations to accommodate the new systems and improve the departmental environment for patients and staff.

The procurement process determined that the equipment that best met the Trust's needs were two SPECT/CT cameras from a different manufacturer. Philips organised a complete turnkey programme to ensure the new systems were in place with minimal interruption to patient care and that they provided the desired care improvements.

"Essentially we now have a department that is constantly stocked with upto-date, functional equipment. It is a complete change from the situation that existed before 2006."

Dr Peter K. Ellis, Consultant Radiologist, Royal Victoria Hospital, Belfast



Working as one team to deliver predictable, high-quality patient care

Continuity of clinical service is a joined goal of Philips and Royal Victoria Hospital. To help the hospital minimize its administrative burden and allow clinical and management staff to focus on clinical care delivery, Philips takes on the responsibility of dealing with equipment suppliers to ensure clinical systems are available when needed.

For the Trust, Philips has continuously met and exceeded its contractual obligation of 98% system availability, ensuring minimal disruptions to patient care. In 2018, the system availability levels reached 99.9%. To ensure this high level of system availability Philips provides the Royal Victoria Hospital with direct access to a dedicated Managed Services Team. The team handles all maintenance queries, irrespective of the manufacturer, until their successful resolution.

Reporting on system availability is one of the regular management reports that the Philips Operations Manager prepares for review each month. This helps the Philips and the Royal Victoria Hospital teams monitor trends in asset performance and take timely action on any concerns, before they have adverse effects on service continuity and patient care. Annually, the Philips team provides the Trust Investment Committee with a full report, covering all aspects of the Contract.

Looking ahead

For the remainder of the contract Philips and Royal Victoria Hospital Planning Groups will continue to work together to ensure the Trust can continue to meet their goal of being the most advanced centre for healthcare in its region. Currently there is a project underway to consider investment in the Cardiology Informatics infrastructure by upgrading to a new technology platform. This is expected to bring workflow benefits across the Trust.

"Philips has added value in a number of areas through their knowledge of the latest technological developments and expertise in healthcare solutions."

Mrs B. Owens, Director of Unscheduled Care

Philips is committed to building sustainable partnerships addressing the quadruple aim



Simplifyingdata and insight
gathering



Removing excess costs



Driving improved treatment and outcomes



Giving patients and staff a better experience



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