

University
Hospitals
Southampton
NHS Foundation
Trust (UK)

University Hospital
Southampton

A case study in
improvement
of service delivery

Siemens Healthineers enables care provider to improve quality of service delivery and financial planning

This strategic partnership with Siemens Healthineers enables University Hospital Southampton NHS Foundation Trust (UHS) to deliver services more efficiently and improve patient and staff satisfaction, delivered using an Asset Management Program based on Siemens Healthineers' successful Managed Equipment Services (MES) model.



What is an MES?

University Hospitals Southampton NHS Foundation Trust's MES contract was developed from Siemens Healthineers' Asset Management portfolio. This tailored program provides a flexible and specialized partnership to provide hospitals with access to innovative medical technology and services. This healthcare partnership typically covers a period of 10 to 25 years (sometimes longer), for a fixed annual fee.

University Hospital Southampton NHS Foundation Trust (UHS)

UHS provides general care to some 1.9 million people living in Southampton and South Hampshire, in addition to specialist services such as neurosciences, cardiac services, and children's intensive care to more than 3.7 million people in central southern England and the Channel Islands. It is a Level 1 Major Trauma Centre.

The Trust is also a major center for teaching and research in association with the University of Southampton and their partners including the Medical Research Council and the Wellcome Trust.

UHS gained Foundation Trust status in 2012. Every year its 10,550 staff treat around 145,000 in-patients and day patients, including about 50,000 emergency admissions. They furthermore see over 550,000 out-patients and they deal with around 116,000 cases in the emergency department. It is the eighth-largest Trust in the UK.



Aaron Hutchison, the Project Lead and Program Manager,
University Hospitals Southampton NHS Foundation Trust

“The need for transparent and secure financial planning and the ability to accommodate flexibility in managing the investment program made us think of Managed Equipment Services.”

The decision to move to an AMS in Southampton

The challenge for an organization such as UHS is multi-faceted. Historically, investment planning and the procurement for equipment were difficult and piecemeal. “There was no certainty regarding finance, so we couldn’t be sure if we would be able to replace a CT scanner or not,” says Dr. Madeleine Sampson, UHS Clinical Lead. “We needed a flexible program of investment in medical imaging to accommodate changes in need year on year.”

“The preceding equipment management solution at UHS had caused serious issues with a risk of prolonged downtime, particularly of imaging systems approaching or beyond the end of their life cycle. The level of support in terms of servicing and repairs provided did not fit our needs,” says Stewart Tough, Lead Superintendent Radiographer.

UHS was looking for a strategic partner, which they found in Siemens Healthineers

Aaron has previous experience in a Public Private Partnership. He states: “Diagnostic imaging is at the heart of what UHS does and diagnostic examinations are becoming more and more essential. If we don’t have an efficiently functioning radiology department the rest of our services will be severely affected or fail. Interventional radiology is also becoming increasingly important in terms of service provision.”

“Our brief was to engage with a strategic partner who would understand modern healthcare, where patient needs are becoming more dynamic and complex, and work with the Trust for the longer term.” “From a project management perspective, you want the operation to run seamlessly – which takes a lot of time, effort and resources from both parties.”

UHS selected Siemens Healthineers as a partner in 2012 – following a robust procurement. “Siemens Healthineers’ offer needed to combine budgetary certainty, flexible financial modelling, services level deliverables and an equipment program which in turn offered a comprehensive turnkey solution – all in an affordable package,” explains Aaron.



**Stewart Tough, Lead Superintendent Radiographer,
NHS Foundation Trust**

“What helps a lot is that there is a Siemens Healthineers Office readily accessible on-site. The staff is competent and very responsive.”

UHS experience of Siemens Healthineers’ AMS

The partnership is now running at its fifth year of a 13 year contract. The real estate and equipment in 2012 were in need of major updating. Old unreliable equipment broke down frequently leading to capacity challenges.

“We needed a solution which would deliver more than the sum of the parts – all the direct and non-direct components from the Trust side and from Siemens Healthineers need to perform in an integrated way. Co-developing the image service strategy, defining the equipment replacement and refresh program along with the provision of comprehensive maintenance was to be part of the partnership with Siemens Healthineers,” comments Aaron.

“It is as much about ensuring that existing outdated equipment is replaced as it is about meeting the requirements of new imaging services, which may result in the need for additional or alternative equipment. “An MES therefore has to be flexible to accommodate this changing need. “It can bring consistency to this volatile environment”, agrees John Beamer, Head of Radiography.

“With the MES, we have definitely seen many benefits already,” continues John. “New state of the art equipment is rolling in. And with the latest technology, this speeds up patient flow and increases productivity.”

One core benefit of the MES is guaranteed uptime. “We need absolute certainty that, when equipment is down, it will be fixed within a given period of time. If the uptime requirements set out in the contract are not met, our partner is faced with fines. Siemens Healthineers has been highly successful in delivering uptime and ensuring equipment is available when needed.”



**John Beamer, Chair of the Regional Managers Group,
University Hospitals Southampton NHS Foundation Trust**

"If you haven't got an MES, get one."



Regular servicing mitigates the risk of equipment breaking and causing downtime. When machines do break down, UHS gets an immediate response from Siemens Healthineers. This is underpinned by a performance management regime and a payment mechanism which have been built into the contract, based on KPIs (key performance indicators). These include timely response, good communication, and keeping the maintenance plan running.

"When a system breaks down, the imaging service we deliver is compromised," agrees Stewart Tough. "The impact is that patients may wait longer for their x-rays and potentially experience delay in treatment or increased length of stay in hospital."

Vendor independence

Central to the ethos of the MES at UHS is vendor independence which means that users are not tied in to selecting Siemens Healthineers equipment. Having the freedom to select equipment is very important to the Trust.

Siemens Healthineers manages a transparent procurement process, so user involvement is required where it matters, freeing up time for clinical activity. Full engagement in the evaluation process is paramount to user satisfaction – they have the confidence in knowing the equipment choices are based on defined technology deliverables, rather than compromises.

According to Stewart Tough it is paramount that UHS is free to choose the equipment which best suits the organizations clinical needs – irrespective of who the manufacturer is. With Siemens Healthineers manufacturer-independent purchases are "totally fair and open."

Positive feedback

Staff surveys indicate that provision of latest technology into modern facilities help contribute to improved staff retention and morale. "The MES provides a sound foundation to moving forward in an NHS world where we are expected to do more for less," states John Beamer.

Department design and infrastructure development: Specifically tailored to suit needs

Design and build solutions interfaced with technology planning expertise has enabled the Trust to reorganize the entire radiology department. As current and future demands on the imaging service change, UHS has to modernize existing departments, and install new modalities into reconfigured rooms - all against the backdrop of simultaneously maintain an operational imaging service.

"We could see that there was significant opportunity to create a better environment for patients and staff at UHS. By bringing best-practice design and workflow concepts together with our proven construction solutions and the insight to equipment needs, we continue to transform radiology with minimum disruption to clinical services," said Clive West.



Madeleine Sampson, Clinical Lead,
University Hospitals Southampton NHS Foundation

"The working environment is much more attractive. The whole feel of the area has been transformed for patients and staff."

"Siemens Healthineers has robust processes in place that ensure selected contractors are thoughtful and considerate to the fact that they are working in or adjacent to patient areas," confirms Clive West.

"The turnkey installation service is fantastic," adds Madeleine Sampson. "We wouldn't want to go back to the previous contracting system to get rooms redesigned after this."

"As part of our imaging strategy we wanted to increase on site provision of MRI," explains Madeleine Sampson. "Siemens Healthineers helped us to install new scanning suites in an area previously used for offices, which involved initially providing a purpose built reporting office suite solution." "The process was extremely flexible. For example, we realized part way into the planning process that our earlier estimate of demand was too low, requiring the bringing forward of a third MRI scanner sooner than envisaged. Siemens Healthineers was keen to help and redesigned the area to accommodate three new MR scanners in a dedicated MR suite. The design was creative and original with maximum use of the available space." This was the first time three MRIs had been installed in a fully operational radiology department.

"We have achieved the flexibility we aimed for with the MES contract," agrees John Beamer. "As a result, we were able to do something that we could not have envisaged doing outside the MES model – to move from a very outdated estate and old equipment to three MRI systems in a refurbished building. Without the MES, UHS would probably have had to procure and install one MRI at a time, and would not have been able to realize the capacity gains at the pace we have."

MES – the basis for moving forward

By means of Siemens Healthineers safeguarding that systems are available, UHS does not lose income as a result of downtime. According to Stewart Tough, "by ensuring equipment is well maintained, system downtime is kept to a minimum and we can therefore meet our performance targets."

The project has been running very well since its inception. "There is very strong tangible buy-in from our clinical users," explains Aaron Hutchison. The equipment, the rooms and indeed the entire environment they are working in has been getting progressively better. "Staff can see that, and patients can see that and all of this is great for the organization and its public profile. The redeveloped imaging service is a strong tool in our catalogue of measures to attract, maintain and develop good staff."

The MES contract has helped UHS to:

- improve patient satisfaction
 - improve staff retention
 - create financial transparency and stability
 - realize its long-term clinical service strategy
 - keep their medical equipment up to date
 - develop a technological partnership flexible enough to allow future needs to be met
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We have a good relationship with the Siemens Healthineers team – they understand what our strategic objectives are and are keen to see the new equipment is achieving its potential.” “It’s all about working with a partner and engaging – which helps you to improve over time in a changing environment – which can sometimes involve frank and open discussions.”

“The whole package from Siemens Healthineers is a lot more responsive and flexible,” summarizes Stewart Tough. “Today we have regular servicing for our equipment. When a machine is broken, there is an instant response from the Siemens team on site. From that point, our MES partner takes care of the issue and gets the system fixed, providing us with a seamless experience. We even receive detailed feedback on the fault from the engineer. We also have the option to call Siemens for an out-of-hours service.”

“We are certainly in a better place since we chose the MES with Siemens Healthineers. With this partnership model the Trust is better equipped to face the challenges and fluidity of modern healthcare. We are able to concentrate on the things that we as an organization should be concentrating on – which is providing care, and we leave all issues and risks regarding the equipment to Siemens Healthineers who is best placed to deal with that. An MES arrangement is undoubtedly a good model to go with, but it is highly individual - requiring a bespoke solution – one size does not fit all,” concludes Aaron.

At a glance: MES at University Hospitals Southampton NHS Foundation Trust

The partnership has helped this large acute care provider maintain and replace its imaging equipment, facilitate financial transparency and stability, and realize its long-term clinical imaging strategy. As the program continues to unfold, benefits continue to be realized for patients and staff alike.

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The statements by Siemens Healthineers customers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

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