

Community Diagnostic Centres

# Partnering to deliver your vision

[siemens-healthineers.co.uk/CDC](https://siemens-healthineers.co.uk/CDC)





---

**Peter Harrison**

Managing Director of Siemens Healthineers GB&I

---

**Contents**

<a href="#">Introduction</a>	2-3
<a href="#">Diagnostic workflow design</a>	4-5
<a href="#">Diagnostic facility design</a>	6-7
<a href="#">Digitally-enabled community diagnostics</a>	8-9
<a href="#">Mapping the journey: patient and data</a>	10-11
<a href="#">Siemens Healthineers: Value Partnerships</a>	12-13
<a href="#">Key equipment: Imaging and point-of-care</a>	14-15

# Welcome

**In a landmark report, *Diagnostics: Recovery and Renewal*, Prof. Sir Mike Richards articulated a vision for the delivery of diagnostics and elective care within community settings. The need to transform diagnostic pathways is the focal point.**

With diagnostic demand rising and a health service so focused on maximising its utility, now is the time to embrace change and reduce pressure on acute healthcare in the context of COVID-19. We have an opportunity to transform services and improve patient outcomes.

The government's national investment strategy will support this. As outlined in the Long Term Plan for Integrated Care Systems (ICSs), NHS England and ICSs are moving rapidly to establish scalable, digitally-enabled community diagnostic centres (CDCs).

Working in partnership, we can support organisations in realising the whole-system benefits of the CDC. In addition to diagnostic equipment and digital solutions, we have facility design and workflow transformation expertise. We can also combine our products and services in financially innovative and flexible-term **Value Partnerships**.

**See how we can partner  
to deliver your vision**



**Rapid diagnosis enables early access to treatment, improved patient outcomes and more cost-effective care.**

Patients are understandably frustrated by delays in diagnosis and treatment, which can increase the risk of disease severity. With a backlog of examinations exacerbated by COVID-19, CDCs will need to work in close alignment with imaging, pathology, cancer and other speciality networks, in the context of integrated care.

**There is an opportunity to reduce pressure on hospital services by establishing COVID-19 minimal, highly productive elective diagnostic centres.**

We've actively listened to health system stakeholders planning for a CDC and understand that pathways must be driven by local population needs. The requirement is to increase capacity, with a local system resource, that provides equal access to primary and secondary care.

**Siemens Healthineers has demonstrable experience in supporting the NHS to implement accessible diagnostic facilities in diverse settings.**

We're ideally placed as a CDC project partner, with the experience to scale solutions as required. We work in partnership with NHS organisations across Great Britain and Ireland to transform care delivery, redefine the patient experience and build digital maturity.

We understand that an ICS may need to support phased CDC commissioning and the ongoing transfer of diagnostic equipment into community settings.

We support a range of approaches, whether to adapt existing estate, implement a modular solution, develop a new facility at scale, or incrementally build a hybrid solution over time, starting with mobile and relocatable facilities.

**Our facility design and transformation teams can support from the outset. A strong business case avoids costly architectural redesign whilst ensuring optimised performance and patient flow.**

Our relationships with the construction industry, mobile and modular healthcare manufacturers, operational service delivery and real estate partners can be leveraged to develop a CDC in line with local requirements.

With a Siemens Healthineers **Value Partnership**, it is possible to combine all the equipment required in a CDC, with added value offerings such as facility or workflow design, in a bespoke and financially flexible solution. With multi-vendor capability, we can even incorporate existing NHS and new third-party equipment and services.



## Contact us

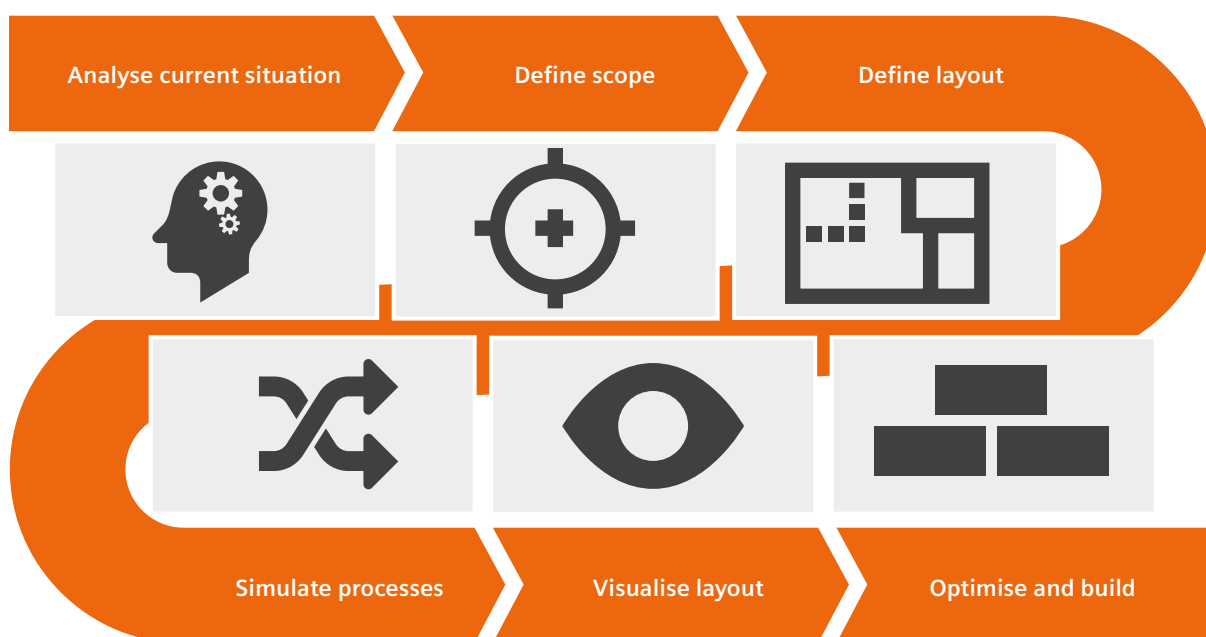
[communitydiagnostics@siemens-healthineers.com](mailto:communitydiagnostics@siemens-healthineers.com)

# Diagnostic Workflow Design

## From planning to operational delivery

Siemens Healthineers is a leader in designing and installing accessible diagnostic imaging and pathology solutions, from single imaging modality rooms to large multi-modality imaging and laboratory facilities.

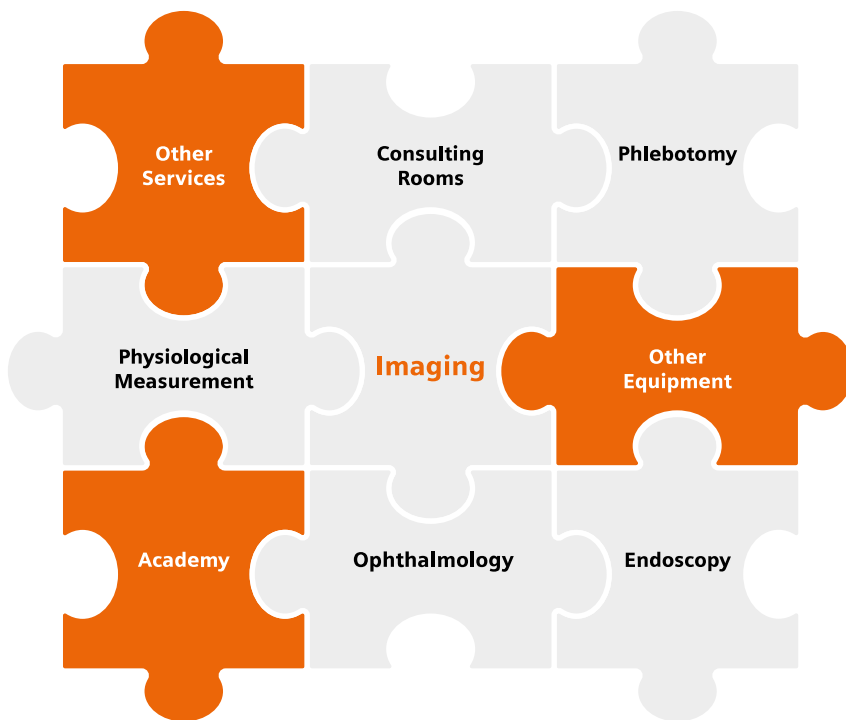
We also understand the challenges of planning a CDC under time constraints, with multiple stakeholders involved. Establishing new processes and workflows is critical to delivering the efficiency and capacity needed to transform diagnostic pathways.



From initial planning through to operational delivery, our team works closely with the NHS to maximise service capacity and productivity. Our multi-disciplinary expertise, combined with NHS operational experience, helps to optimise imaging, pathology and elective pathway services.

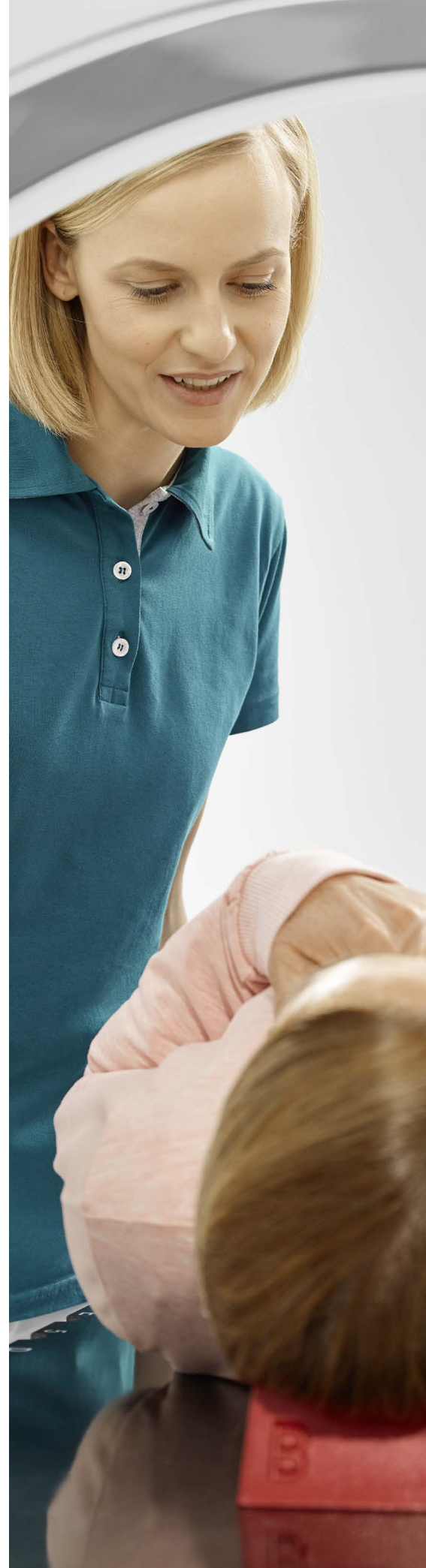


We have proven workflow design expertise in the delivery of complex transformation projects for large-scale NHS partners. Our team can work on a specific project basis, or within the context of a Siemens Healthineers **Value Partnership**, in and beyond diagnostic departments.



As experienced NHS project partners, Siemens Healthineers understands that a partnership should support every step of the journey, from strategic outline case to operational commencement of the new facility. We can support the development of strategies to create effective models of working – addressing common themes and challenges to ensure long-term success.

The early involvement of our teams in CDC projects can support the development of strategic outline business cases, and inform critical decisions to optimise performance and patient flow, and avoid architectural redesign.



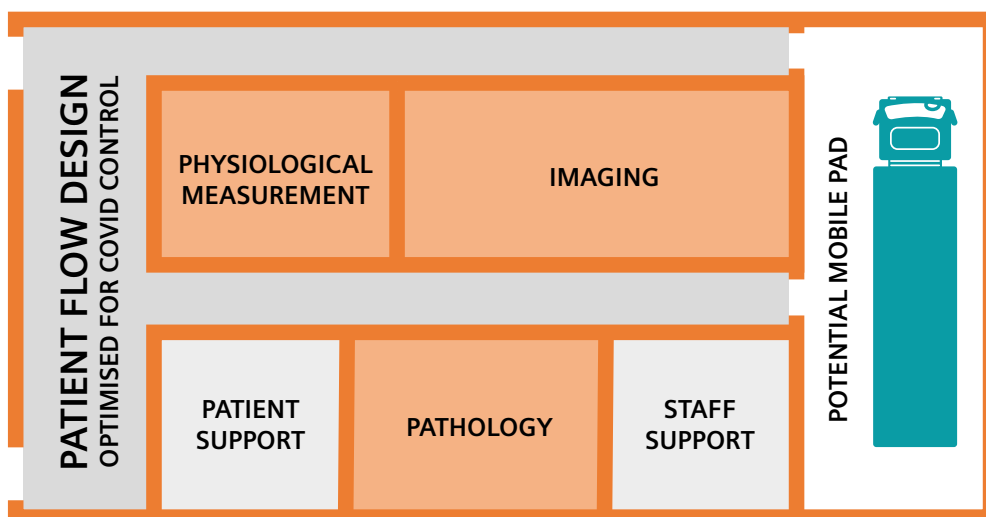
# Diagnostic Facility Design

## Scaling to community requirements

CDCs are being developed by ICSs on a scale spectrum ranging from a standard to a large model, based around local pathway priorities. An ICS may choose to adapt existing estate, develop a new facility, or take an incremental hybrid approach starting with modular, relocatable or mobile scanning and support trailer solutions.

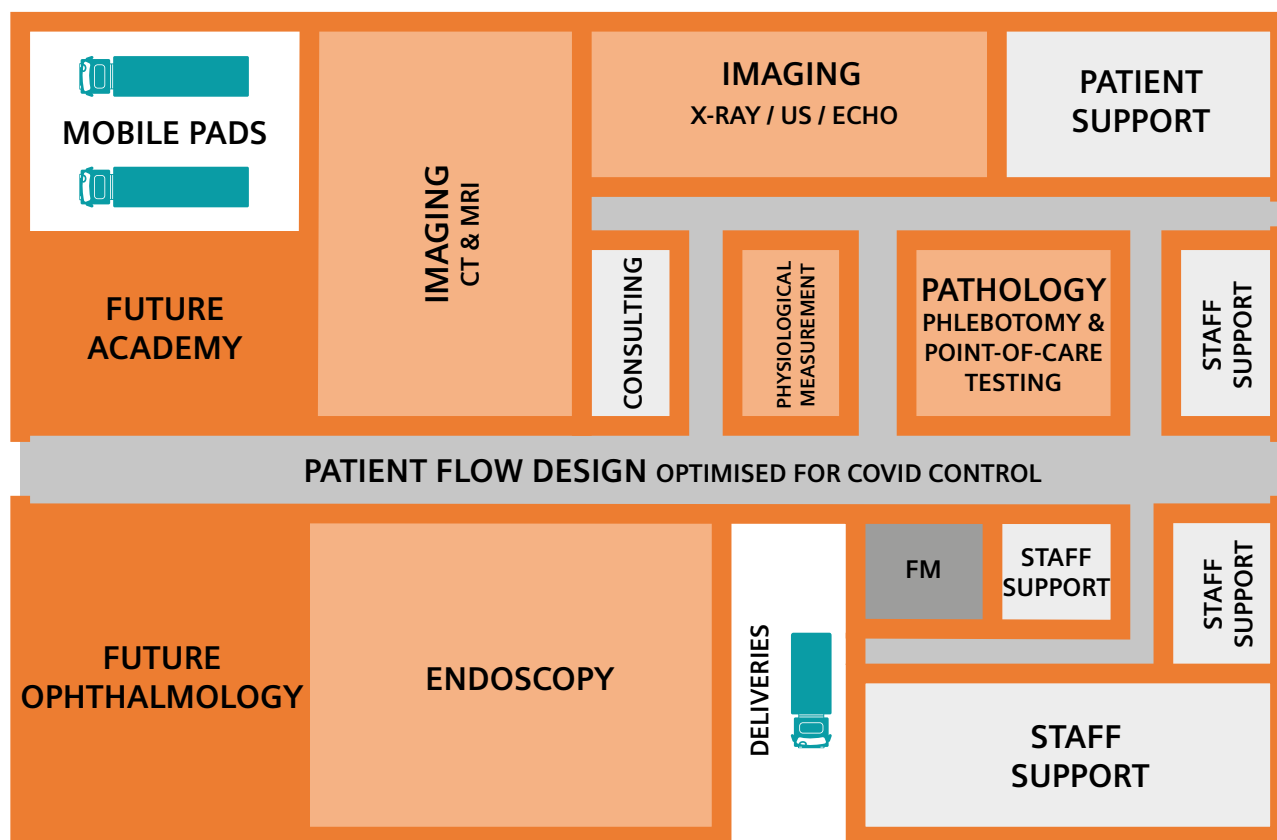
With established industry relationships, Siemens Healthineers can facilitate a range of approaches to establishing a CDC. We connect with partners in healthcare construction, diagnostic construction, architects, quantity surveyors, SMART infrastructure, healthcare mobile / modular building manufacturers and real estate.

### CDC: The standard model



Our Facility Design Team collaborates with key stakeholders to ensure facilities are fit for purpose. We actively work with clinicians to finalise design and ensure cohesion with healthcare construction regulations, whilst maximising space for clinical efficiency.

## CDC: The large model



Siemens Healthineers unlocks the complex requirements of CDC design. Using modern, scalable, cost-optimised construction methods and a standard design platform, we are able to deliver a facility that provides flexible working space. This satisfies current needs while identifying opportunities for future expansion.

Siemens Healthineers can provide the necessary facility design support to take a CDC project from conceptual thinking to patient footfall.

A **Value Partnership** can also provide support for the lifetime of the facility, offering innovative financing models and equipment refresh cycles as required.

### Our planning solutions include:

- Modality-specific layout and implementation solutions.
- Layout design solutions for clinical departments.
- Process and workflow visualisation, simulation and optimisation.
- Layout and workflow visualisation in 3D, 4D and virtual reality.
- CAD planning solutions in Building Information Modelling (BIM) format.

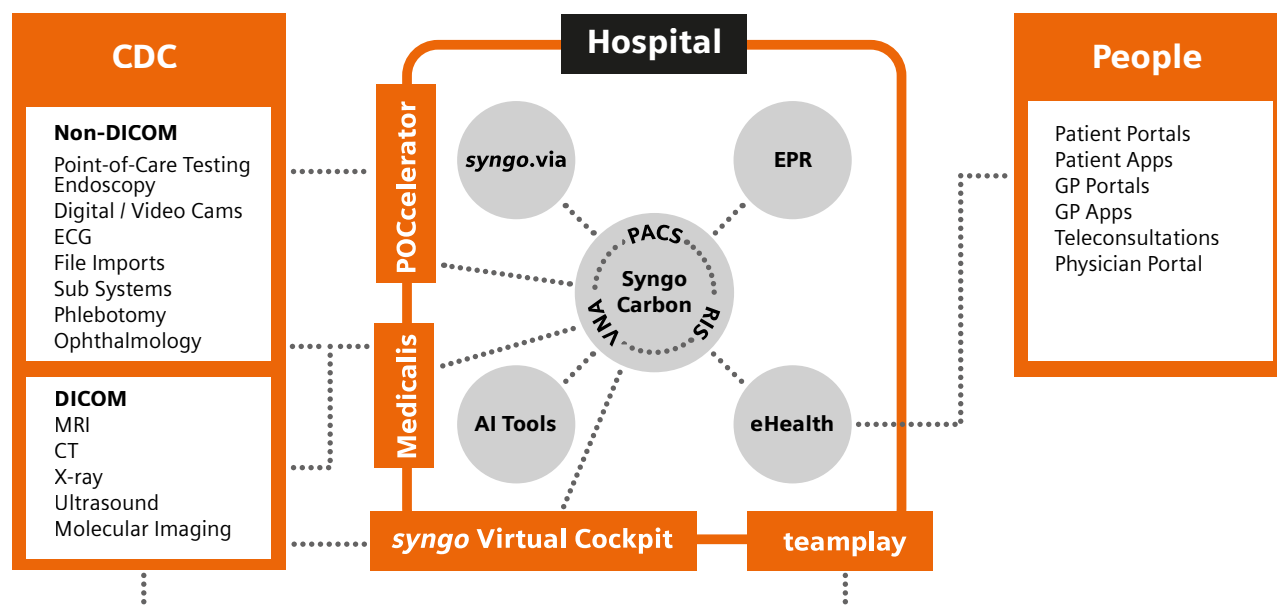
**Take a virtual tour**

# Digitally-Enabled Community Diagnostics

## Enabling local health systems and networks

CDCs must be digitally enabled to optimise processes and workflow, promote timely reporting and provide continuity of care. Our modular system digital CDC model integrates DICOM and non-DICOM modalities, overcoming interoperability issues whilst consolidating and managing data flow. Fully scalable, this end-to-end patient-focussed model integrates with existing infrastructure.

**Syngo Carbon** – Operates an open patient data model, rather than an image driven model, bringing all diagnostic patient data into a single interface. This removes departmental silos, shares knowledge and can integrate additional patient data into image interpretation. It also incorporates AI tools and gives access to innovative platforms and third party functionality.



**Intelligent workflow infrastructure:**  
Facilitating right study, right report,  
right time

**Beyond RIS and PACS:**  
All patient diagnostic data  
managed by a single interface



**Medicalis** – A single platform for imaging service workflow orchestration. Complex, multi-site, multi-vendor and multi-format environments are transformed into an integrated imaging service. From order comms to report, intelligent workflow infrastructure ensures ‘right study, right radiologist, right time’.

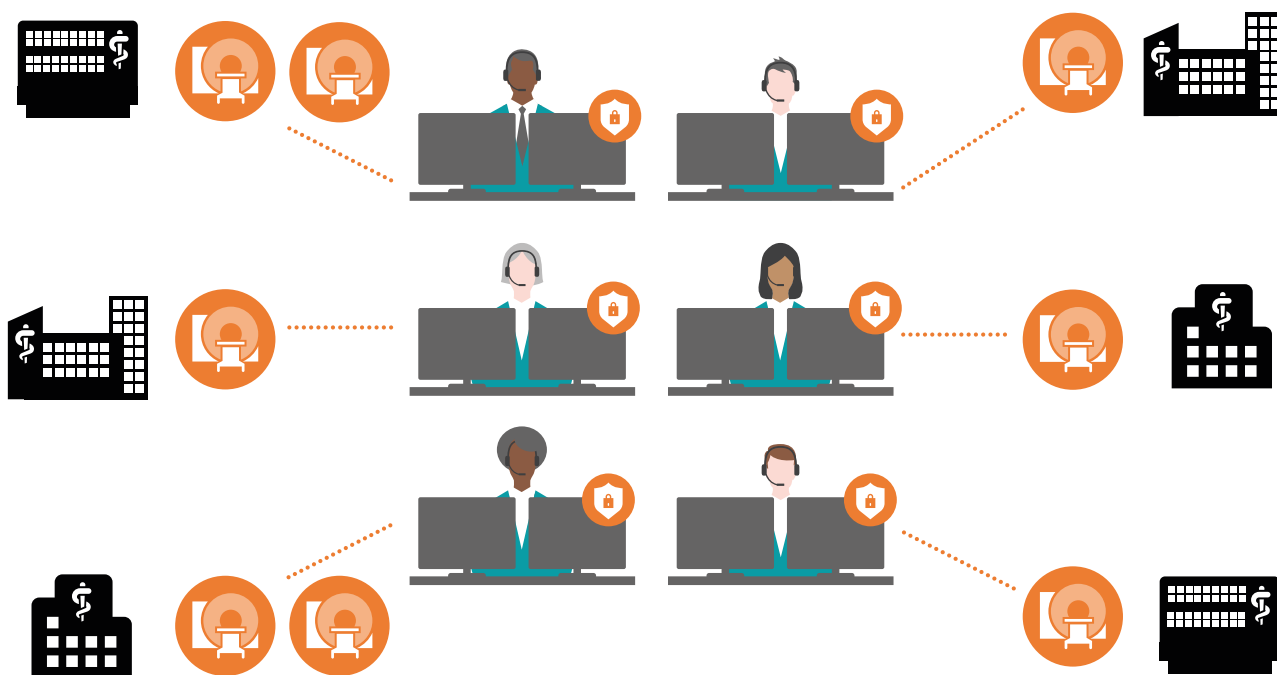
**teamplay** – Healthcare providers can exchange data with peers and analyse data with Siemens Healthineers and third-party solution partner applications. Facilitates rapid and informed decisions, via an intelligent overview of performance data from the whole imaging asset base.

**eHealth** – An infrastructure solution suite for patient data access across diverse systems. This provides interactive portals for GPs, clinicians and patients to drive patient-centred healthcare.

**syngo Virtual Cockpit** – A remote scanning assistance tool addressing cross-sectional imaging workforce capacity and supervision challenges. It allows a high level of standardisation via remote monitoring and control of imaging modalities from a single command centre. An ideal support to CDC and wider network imaging.

## syngo Virtual Cockpit

Move knowledge, not staff



**AI-Rad Companion** – A family of cloud-based AI solutions across a range of imaging modalities, reducing repetitive task burden and enhancing diagnostic precision and standardisation.

**AI-Pathway Companion** – An intelligent decision-support solution mapped to the patient pathway. This enables personalised and standardised care along pathways in oncology, cardiology and infectious diseases. An ideal support to MDT meeting efficiency.

**POCcelerator** – A single platform for primary, CDC and secondary care to manage all point-of-care testing and physiological measurement device data and enhance workflow. Independent of device manufacturer, POCcelerator is compatible with all European HIS and LIS.

**See the digital journey**

# The Functional CDC

## Connecting the patient journey

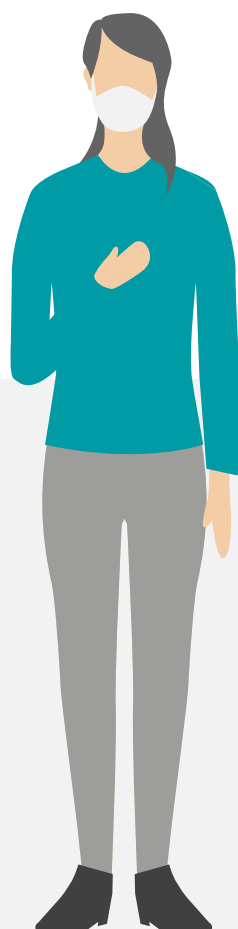
### The patient

Mary experiences concerning cardiopulmonary symptoms, attends a healthcare appointment and is advised she needs a series of tests.

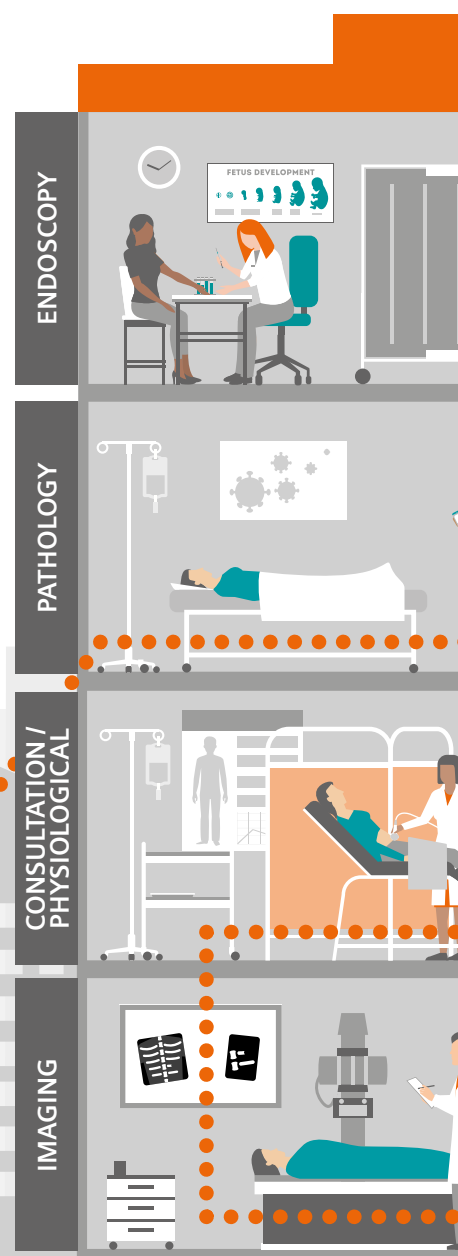
Mary is pleased to be advised that all her tests can be carried out at her local CDC. The booking service is easy, offering a range of appointment times and accommodates her tests in a minimal number of visits.

Mary arrives at the CDC and has an initial clinical consultation. She is reminded of the imaging, physiological and blood tests she is about to receive and is reassured by clear advice about the process after her test results are available.

All of Mary's tests are carried out and when she sees her clinician again, all of the test results are available. Mary's clinician then advises her about options and provides an onward referral to start treatment.



Primary Care



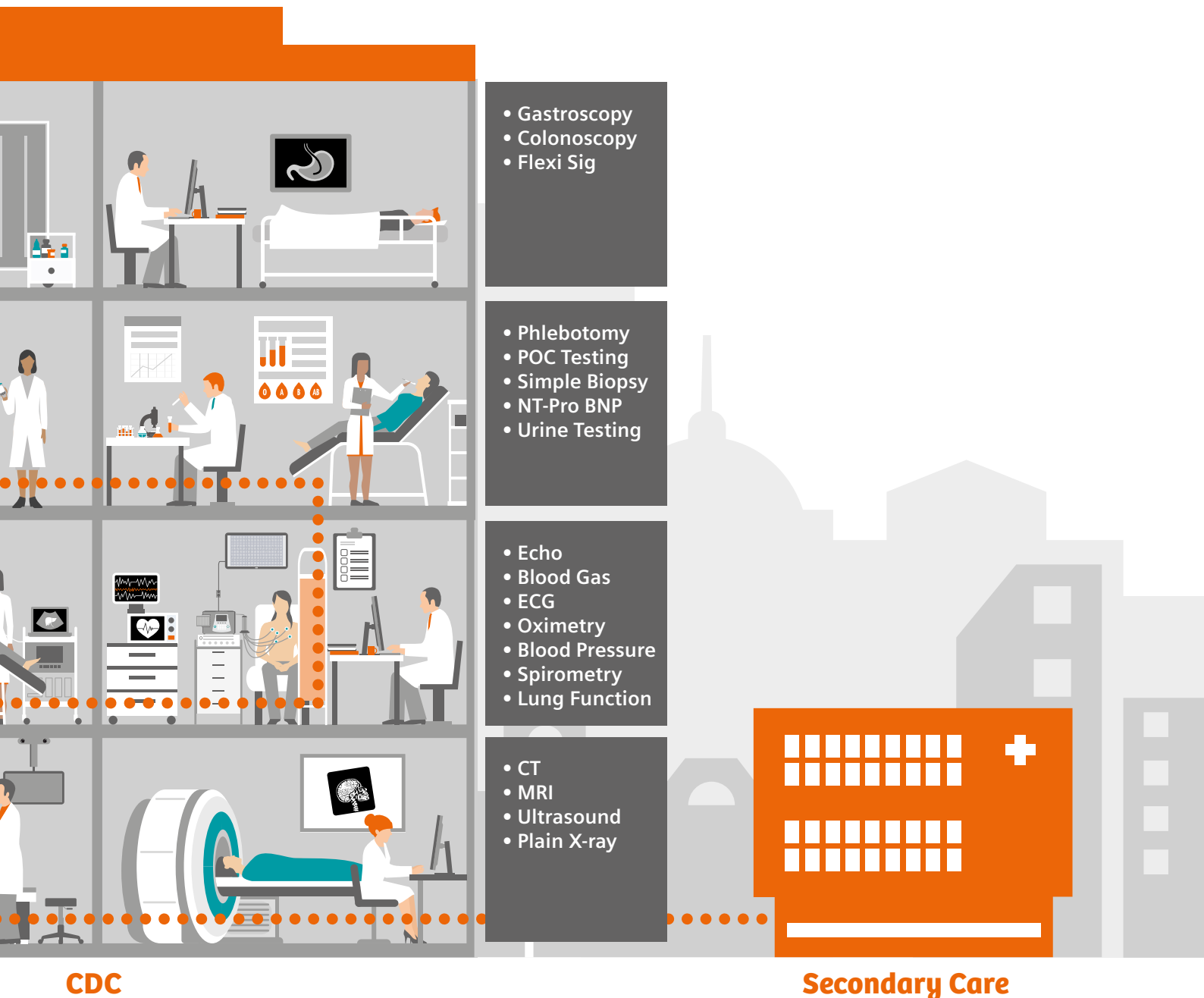
## The patient data

Mary has received the kind of experience that a CDC is intended to deliver. How did the complex patient data flow allow her test results to arrive at the right place at the right time?

The CDC, supported by a modular digital solution from Siemens Healthineers, employs intelligent and customised workflow orchestration to control data flow.

Imaging is supported by remote scanning assistance and image interpretation by AI Tools. All of Mary's data is then aggregated into a common interface and accessible to all clinicians involved in her care.

Using intelligent access portals, the CDC is connected to the wider healthcare network, optimising the care pathway.

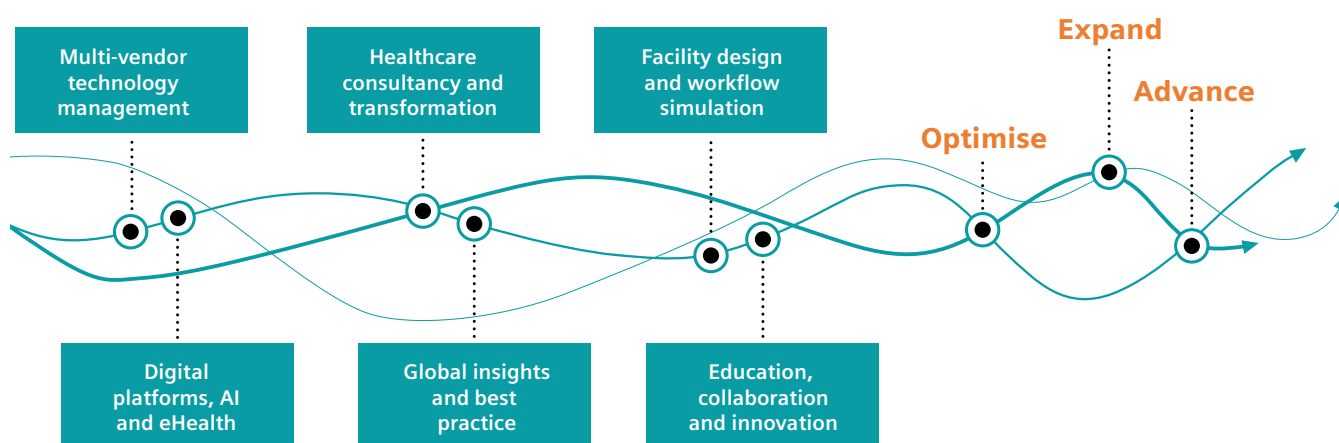


# Value Partnerships

## Impactful strategies for more value

Every **Value Partnership** is unique. A Siemens Healthineers **Value Partnership** is a collaborative relationship in which we work with our partner to **Optimise** operations, **Expand** capabilities and **Advance** innovation.

Our bespoke proposals are built from the shared vision, collaboration and trust we develop with our partners. We draw upon our Six Partnership Modules and tailor the solution to each individual partner's requirements.



We pioneered this field in the 1990s, taking care of assets at every stage of their lifecycle, and have a wealth of know-how and best practice. Today we have multiple successful **Value Partnerships** in the UK that demonstrate the efficiency and service quality we deliver.

We understand that a functional CDC will require a wide range of technological equipment beyond imaging, to include point-of-care and physiological measurement devices.

Our most widely recognised forms of **Value Partnership** have multi-vendor technological equipment management at their core. This supports the need for clinical choice and ensures the full range of equipment needs are addressed.

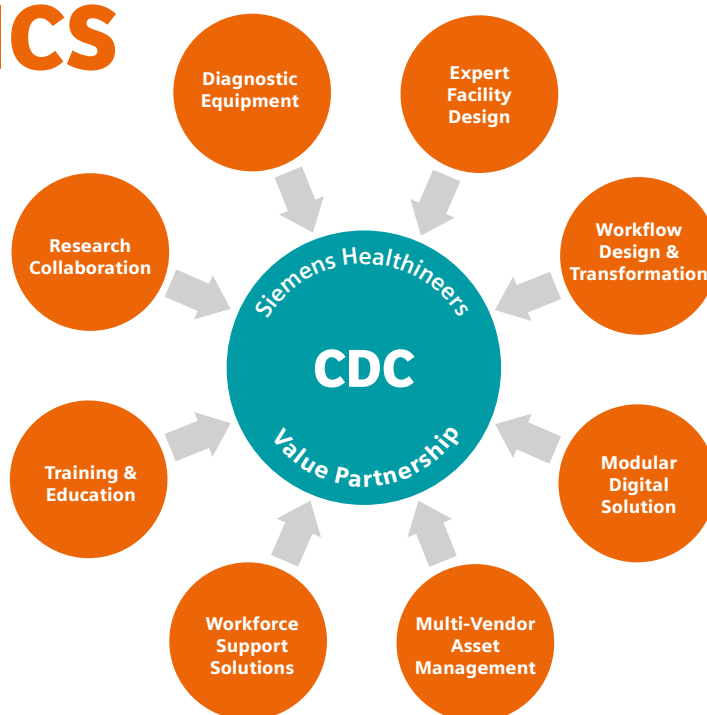


# Realising the ICS vision

Siemens Healthineers optimises patient pathways and designs the ideal layouts in which to deliver them.

Working in partnership with the NHS, we can plan, design, construct, equip and digitalise the CDC, helping to perfect processes throughout.

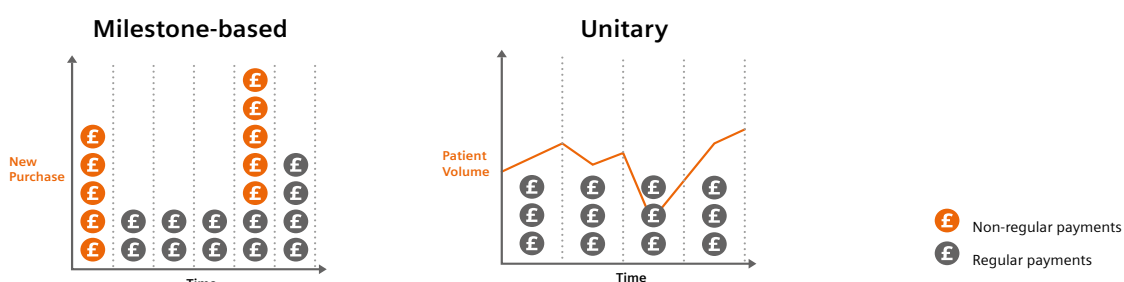
We can wrap all required equipment and services in a financially innovative **Value Partnership** that's tailored to unique community and NHS requirements.



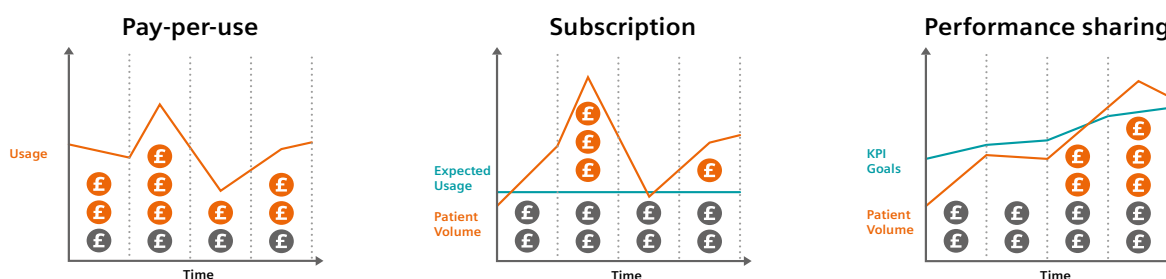
[Find out more](#)

## A choice of business model

### Fixed payments only



### Fixed & variable payments





# Imaging & Point-of-Care Testing Equipment

## Effective community diagnostic delivery

### CT

Siemens Healthineers has been an innovative leader in CT for decades. We have pioneered developments focussing on AI, radiation dose reduction, workflow and the optimisation of image quality. Our wide range of CT systems affords the choice needed to meet CDC requirements.

The SOMATOM go.Top, a 128-slice system with a 70 cm bore, is an ideal selection for the CDC setting. This system has established benefit in lung screening with unique Tin Filter offering CT imaging at exceptionally low dose, complemented by advanced cardiac and interventional radiology capability, enhanced acquisition speeds and a COVID-resilient pedigree.



**SOMATOM go.Top**

### MRI

Our innovative MRI technologies offer exceptional image quality, efficiency and speed, delivering excellent patient experience and investment protection.

The MAGNETOM Free.Max is a compact and lightweight whole-body MRI system that breaks barriers to expand the reach of MRI. The world's first 80 cm bore sets a new paradigm in patient comfort and with a field strength of 0.55T, the MAGNETOM Free.Max has excellent contrast-to-noise ratio for respiratory exams.

With no need for a quench pipe, MAGNETOM Free.Max easily slots into existing or new build helium-free infrastructure. This system overcomes field strength conventions to explore new clinical opportunities in MRI.

The MAGNETOM Altea, our 1.5T introductory Biomatrix 70 cm bore system, is well suited to the CDC. This system is capable of all routine diagnostic imaging, with options including advanced 3D cardiac imaging and static acceleration techniques.



**MAGNETOM Free.Max**



**MAGNETOM Altea**



## Ultrasound

Siemens Healthineers has developed a robust range of ultrasound solutions. The ACUSON Redwood fits into the CDC environment, delivering premium image quality and exceptional shared service performance, all within the constraints of tight capital budgets.

This system meets the demand for early detection, diagnosis and timely treatment of a variety of chronic diseases. The ACUSON Redwood offers a comprehensive suite of advanced applications, including Point Shear Wave, 2D Shear Wave, Strain Elastography, Contrast-Enhanced Ultrasound, *syngo* Velocity Vector Imaging, Stress Echo and Left Ventricular Opacification.

## Point-of-Care Testing

Point-of-care testing (POCT) will play a key role in the fast turnaround of near patient diagnostics in the CDC setting. Siemens Healthineers has a wide range of POCT devices supporting one-stop decision making including; handheld blood gas analysis, urine profile / pregnancy testing, cardiac care and diabetes.

The epoc® Blood Analysis System provides comprehensive blood analysis testing at the patient's side, on a single room temperature test card, with results in less than a minute.

The Atellica® VTLi Patient-side Immunoassay Analyser provides high-sensitivity troponin testing with accurate results in just eight minutes.

## The Digital Connection

Beyond providing market-leading diagnostic scanning and testing equipment, we stand ready to support workforce challenges and data management requirements, through digital CDC enablement:

***syngo* Virtual Cockpit** – Scanning assistance addressing cross-sectional imaging workforce capacity and supervision challenges, allowing remote monitoring and control of imaging modalities from a single command centre.

**POCcelerator** – A single platform for primary, CDC and secondary care to manage all POCT data, independent of device manufacturer, greatly enhancing efficiency.



## POCcelerator™ Data Management System



## *syngo* Virtual Cockpit

Move knowledge, not staff



**See a typical CDC configuration**

**Expanding  
precision  
medicine**

**Transforming  
care  
delivery**

**Improving  
patient  
experience**

**Digitalising  
healthcare**

---

**Siemens Healthineers**  
Sir William Siemens Square  
Frimley  
Camberley  
Surrey, GU16 8QD  
United Kingdom  
[siemens-healthineers.co.uk](https://www.siemens-healthineers.co.uk)

---