



A vision for
**community
diagnostics**



Peter Harrison

Managing Director
of Siemens Healthineers

Welcome

At Siemens Healthineers, we are developing solutions to improve diagnostics. Our aim is to enhance the patient experience, boost health outcomes and reduce delivery costs.

Rapid diagnosis of disease enables early access to treatment. This can reduce the burden of an illness and deliver better outcomes for patients. Furthermore, it can reduce the cost of therapy and continued care. Effective use of diagnostic therapies can be a powerful tool for addressing a range of challenges within your local health economy.

We can improve access to diagnostics in a way that delivers value and benefit to patients and healthcare providers alike.

Patients are understandably frustrated by delays in diagnosis. Having presented with symptoms, they often have to wait for referral appointments, diagnostic tests, results and follow-up steps. As well as causing patient anxiety, such delays may allow disease to progress further during the diagnostic process.



Together
we can achieve
better outcomes
at lower cost

Patients and clinicians want quicker disease diagnosis. We do too. So we're seeking to work with like-minded healthcare providers. Together, we will improve on current practice.

Many diagnostic tests are performed in a hospital. This is clearly appropriate for complex conditions being treated on-site. Yet a hospital appointment may not always be the best option. For ambulatory patients, attending a diagnostic facility in the community is often more convenient and more pleasant. This in turn relieves pressure on hospital services and estates struggling with sheer volume of people.

We are looking to partner with provider organisations to establish such community diagnostic facilities.

We offer a range of financed solutions from traditional build through to rapid deployment modular and mobile facilities, and from capital purchase through to revenue-expensed pay-as-you-use services.

We have the resources and credentials for success.

We are uniquely positioned to offer a range of diagnostic imaging solutions (such as MRI, CT, X-ray and ultrasound) plus in-vitro diagnostics ranging from central laboratory through to rapid result point-of-care solutions. We can also supplement workforce and advise on optimal deployment.

Population Health Management is an integral part of our community diagnostics vision. From a screening perspective, the challenge is to identify and target those most at risk, in order to make best use of valuable resources. We are leading the way with digital solutions that enable the smart use of data for more targeted screening.

The NHS Five Year Forward View includes the target to provide access to new 'Community Diagnostic Centres' at least 12 hours a day, seven days a week. We are ready to facilitate flexible, patient-focused operating hours.

We are here to support you. Together we can achieve better outcomes at lower cost.

This brochure sets out our vision for community diagnostic services. Our approach is flexible and collaborative. Our goal is the cost-effective delivery of excellent health outcomes. The patient is at the heart of everything we do.

Contact us for further discussion on communitydiagnostics@siemens-healthineers.com

Cancer pathway access time



from referral to treatment



Access to funding

Today's challenges



Majority of Trusts missing



4 hour

A&E wait times target



Diagnostic

waiting times within



6 weeks*

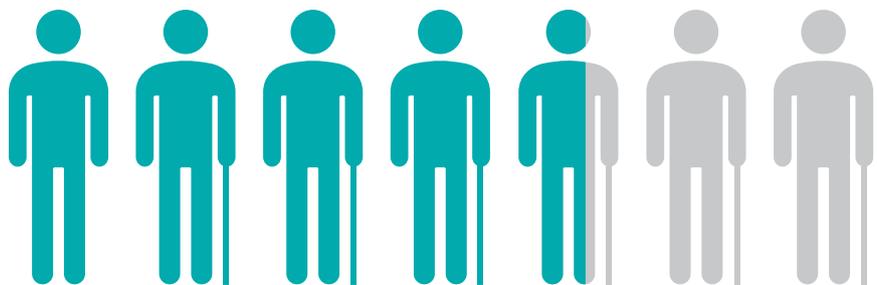
Rising demand for CT and MR at

10 and 12% respectively per annum**

Ageing equipment base



Rise in prevalence of diseases with ageing population



* 2013/14 NHS Constitution

** Dalton Review 2014

Our value to you

Enabler of Community Diagnostic Solutions



Improved
experience for
your patients

Reduced
service delivery
costs for you

Better health
outcomes
for your
community

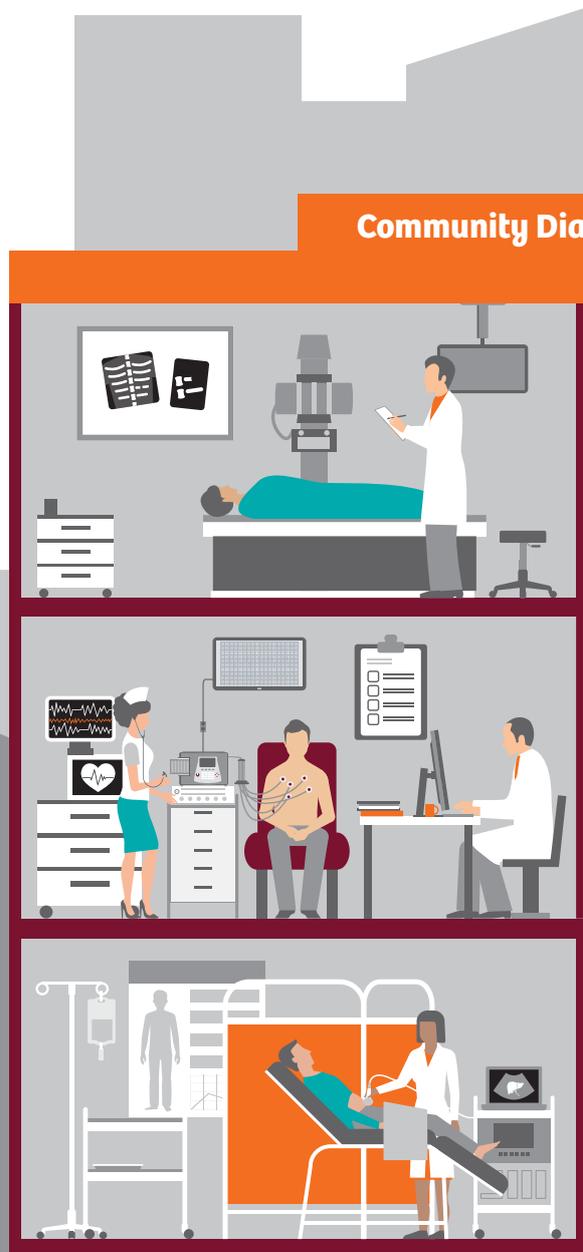
All achieved in a flexible, collaborative and cost-effective way.

At a glance

Community Diagnostic Centre

A Community Diagnostic Centre might exist as or within an Urgent Treatment Centre or GP Hub. It may even take the form of a stand-alone cross-sectional imaging centre. How it looks will depend on the current services and needs within the local community. Essential requirements are easy access for patients and the capacity to operate 12 hours a day, seven days a week if required.

The centre will be networked to local GP surgeries and hospitals to ensure the most efficient handling of patient transfers and referrals. By sharing appointment availability and receiving direct referrals from Integrated Urgent Care Services including NHS 111, the centre will enable greater operational efficiency, reduced costs and better patient outcomes.



Primary Care

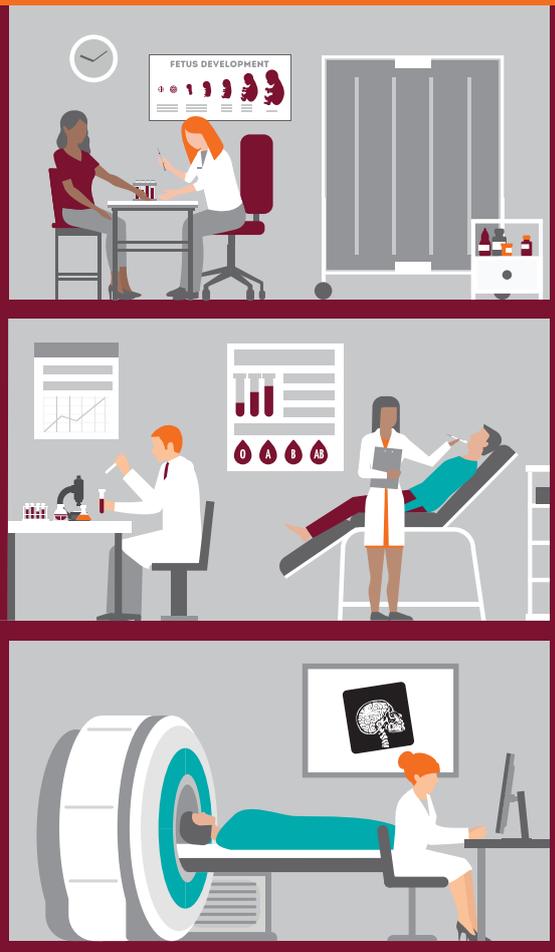
Community Dia

Diagnostic tests and services that could be offered in a Community Diagnostic Centre include*:

- X-ray
- Ultrasound
- Pregnancy tests and automated urine analysis
- Electrocardiography to analyse heart rhythm
- Blood testing for heart attacks, deep vein thrombosis, kidney assessment, diabetes, antibiotic monitoring etc.
- CT scan
- MR scan
- Cancer screening programme diagnostics, e.g. lung, breast and prostate cancer
- Urgent GP cancer referral diagnostics
- Minor interventional procedures

*This is not an exhaustive list

Diagnostic Centre



Diagnostic Centre

Secondary Care

The system leader's story

Jocelyn is chair of the regional Sustainability and Transformation Partnership (STP) and CEO of a local NHS Foundation Trust. She works closely with her local health and care leaders.

Jocelyn recognised a need for earlier access to cross-sectional imaging in a range of cancer pathways to meet access standards and achieve earlier diagnosis. With her system partners, she recognised the benefit of optimising diagnostics to appropriately stream patients to services and release hospital capacity to address increasing emergency workload. Her aim was to create a long-term Diagnostic Imaging Strategy. Jocelyn was looking for the support of an expert strategic partner in an advisory and implementation capacity to enable her success.



- Jocelyn is chair of the regional STP and CEO of a local NHS Foundation Trust
- She works closely with her local health and care leaders



- Jocelyn recognises that current diagnostic scanning services are insufficient to meet the growing demands of the local health economy
- A partnership with Siemens Healthineers enables the establishment of a new, accessible, fully equipped diagnostic facility





- Funding is via flexible Siemens 'pay-per-use' plan – 'off balance sheet'
- Patients enjoy quicker, easier access to diagnostic imaging
- Cancers are diagnosed earlier
- Clinical outcomes are improved



The challenge

Diagnostic scanning capacity was insufficient to meet growing demand. As referrals for suspected cancer increased, many patients were waiting too long for a diagnosis. Timely, accessible, high quality imaging services for primary care were needed to reduce referrals into secondary care and ensure a better service for patients. Yet how could this be achieved with the existing estate restrictions and limited access to capital funds?

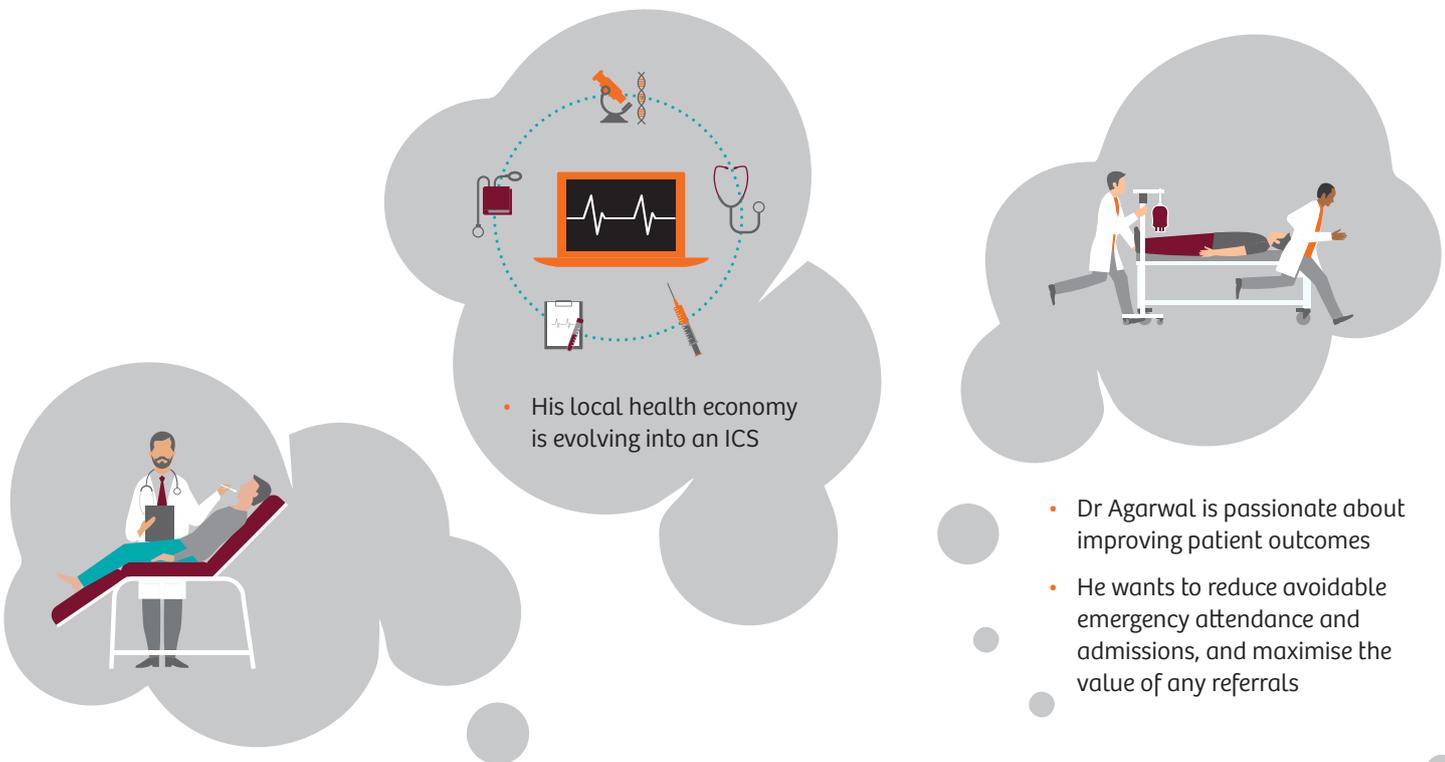
The solution

The challenge was overcome by formation of a partnership with Siemens Healthineers. This collaborative approach enabled the establishment of a new, fully equipped diagnostic facility in an accessible location, funded through a flexible Siemens 'pay-per-use' plan.

To complement its offering, Siemens Healthineers delivered clinical consultancy via its Radiology Performance Management Service across the local health economy's combined radiology services. This created leaner workflows, cut costs, streamlined the patient pathway from referral to report and boosted staff morale. Additionally, Siemens Healthineers had a unique offering that provided kidney function screening (creatinine testing) at the point of care and ahead of contrast media injections, which increased the efficiency of the CT and MR patient flow, reduced appointment delays, and improved patient satisfaction.

The outcome

The STP now provides early access to cross-sectional imaging in a range of cancer pathways. It meets access standards and achieves earlier diagnosis in line with the national cancer strategy. Up-to-date equipment ensures low dose CT and MRI scanning for greater patient and staff safety. This new, accessible multi-scanner facility has future-proofed the STP with sustainable and scalable capacity. Jocelyn has achieved her vision of a long-term Diagnostic Imaging Strategy.



- His local health economy is evolving into an ICS

- Dr Agarwal is passionate about improving patient outcomes
- He wants to reduce avoidable emergency attendance and admissions, and maximise the value of any referrals

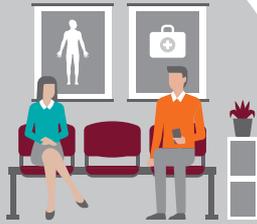
- Meet Dr Agarwal
- He is chair of his local CCG

The commissioner's story

Dr Agarwal has been in General Practice for 20 years. He is the chair of his local Clinical Commissioning Group (CCG). He works in an urban location with a diverse population in excess of 250,000. His local health economy is evolving into an Integrated Care System (ICS).

In collaboration with local provider organisations, Dr Agarwal has led the CCG to establish networked Urgent Treatment Centres in accessible locations. These operate 12 hours a day, seven days a week. The centres currently offer some minor surgical procedures and/or satellite secondary care services. With the move towards ICS status, Dr Agarwal now feels the centres need to offer more in the way of diagnostic imaging and testing.





- Dr Agarwal believes this can be achieved by increased delivery of care, particularly diagnostics, in the community



- The existing Urgent Treatment Centres are developed to incorporate diagnostic imaging and testing facilities
- The local health economy benefits from earlier disease diagnosis, reduced demand for emergency care and improved health outcomes, all at lower cost

The challenge

The local health economy is evolving into an ICS against a backdrop of significant financial pressure. In particular, secondary care has seen rising demand for both emergency and planned care.

The solution

Siemens Healthineers enables development of the Urgent Treatment Centres to incorporate diagnostic imaging facilities. These include a general X-ray room and an ultrasound machine, along with a mobile imaging intensifier to support consultant-led pain clinics. Beyond imaging, Siemens Healthineers provides a range of further diagnostic facilities including testing devices for blood gas, cardiac, point-of-care diabetes, coagulation and urine.

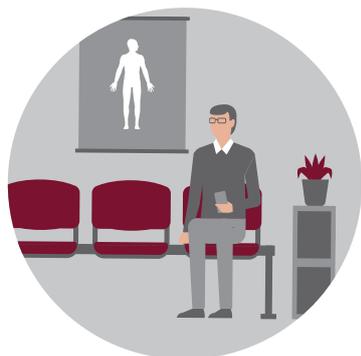
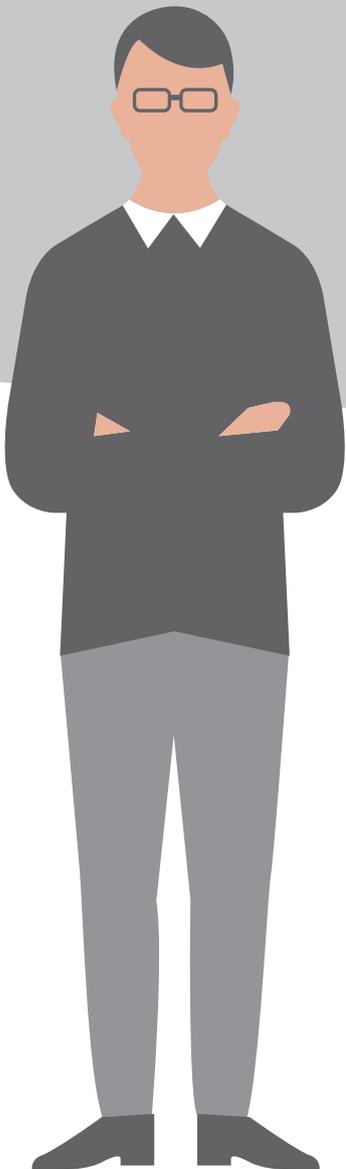
The outcome

Dr Agarwal is delighted to see the local health economy benefit from earlier disease diagnosis, reduced emergency attendance and admissions, increased patient satisfaction and improved health outcomes. All at a lower cost.

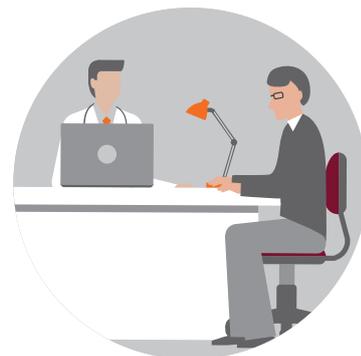
The patient's story

Malcolm smoked for 30 years before breaking the habit. He is invited to take part in an early detection lung cancer screening programme at the new Community Diagnostic Centre. He is pleasantly surprised as he has never enjoyed going to his local hospital. The new centre has plenty of parking and doesn't even look like a hospital.

The centre has been equipped to offer a range of diagnostic tests. It is already reducing pressure on local hospitals and supporting a 'straight to diagnostic test' approach in patient pathways.



- Meet 57 year old Malcolm
- Malcolm was a smoker for 30 years before giving up
- He is increasingly aware of a persistent cough



- Malcolm is invited onto an early detection lung cancer screening programme run by his local health service

The challenge

Due to the nature of the local health economy, funding and construction of the new Diagnostic Centre proved significant obstacles to overcome.

The solution

Siemens Healthineers offered an innovative modular build and pay-per-use solution that flexes around activity volume. For the healthcare provider, this removes any concern about fluctuations in demand while ensuring access to up-to-date diagnostic equipment, staff and other resources when needed.

The outcome

The local community now benefits from an all-new lung cancer screening programme, supported by Population Health Management intelligence provided by Siemens Healthineers. The service offers low dose CT scanning and reporting within 48 hours by a specialist radiologist. Malcolm receives an early diagnosis of lung cancer that significantly enhances his survival probability.



- Malcolm attends an appointment at the new Community Diagnostic Centre close to where he lives
- He has a low dose computed tomography (LDCT) scan



- The scan is analysed by a specialist radiologist within 48 hours
- Malcolm receives a diagnosis of stage one lung cancer



- Thanks to early detection, Malcolm is promptly treated
- Malcolm is impressed with the convenience, speed and efficiency of the service
- He is also relieved because the service has significantly enhanced his survival probability

Enabling your success



We provide
the **support,**
equipment and
infrastructure

so **you** can **focus**
on **delivering** and
developing
clinical **services**

our **combined**
strengths are a
recipe for **SUCCESS**

Value, efficiency and excellent patient care

Our service:

- Offers flexible financial solutions including 'off balance sheet' options
- Removes the need for capital investment
- Flattens payments and facilitates budgeting
- Gives you value for money and peace of mind

This enables:

- Improved workflow efficiency
- Earlier disease diagnosis
- Better clinical outcomes
- Improved staff and patient satisfaction

**Expanding
precision
medicine**

**Transforming
care
delivery**

**Improving
patient
experience**

**Digitalising
healthcare**