

**Guy's and St Thomas' NHS Foundation Trust,  
London, United Kingdom**

# **Transforming care delivery in the Radiology Department**

How a thriving London hospital is creating almost  
£1 million in additional value per year.

[siemens-healthineers.com/value-partnerships](https://www.siemens-healthineers.com/value-partnerships)



# Executive Summary

Value for patients, staff and the healthcare institution

Guy's and St Thomas' NHS Foundation Trust in London is partnering with Siemens Healthineers to improve the performance of its radiology department. After only one year, positive results and success across all relevant dimensions of performance can be reported.

The partnership is set to continue for at least three more years, consolidating the results achieved so far and unlocking further benefits.

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 Patient benefits	 Staff benefits	 Trust benefits
 Waiting times	 Pathway standardisation	 Equipment utilisation
 Safety of care	 Process simplicity	 Activity and productivity
 Patient experience	 Teamwork and job satisfaction	 Return on investment of 5:1
 Faster diagnostic results	 Getting it right first time	 Cost

These outcomes translate into total financial and efficiency benefits of **£930k** (full year effect)

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## Guy's and St Thomas' NHS Foundation Trust

- Located in London, United Kingdom
- Teaching and full service hospital
- Around 1,300 beds and 16,200 staff
- 2.4 million patient contacts per year
- Annual turnover of almost £1.5 billion

## The Objective

Transforming care delivery to create value

Everyone talks about improving performance for the sake of value. While minor tweaks in operations here and there may yield temporary results, true transformation is a larger commitment.

Guy's and St Thomas' NHS Foundation Trust (GSTT) in London is a full-service teaching hospital with 2.4 million patient contacts per year. The hospital's radiology department works hard to deliver the best possible

experience and outcomes for its patients. Staff puts patients first, takes pride in what they do and strives for excellence in each of the 425,000 imaging examinations carried out by the department each year.

In an era of increasing demand and restricted budgets, the strategy of the GSTT radiology department is to look for ways to optimise processes and care delivery so that everyone benefits: patients, staff, and the trust.

## The Challenge

Creating new efficiencies in radiological processes and care delivery

One of the key requirements for an enhanced radiology department was that optimisation had to create value for all stakeholders: patients, staff, and the hospital itself. Empowering the staff to make smart decisions to achieve measurable goals was identified as a critical element in transforming the department.

Of equal importance, any performance improvements had to be sustained over time. The hospital was looking for fundamental transformation, not a quick fix.

## The Solution

A value-creating partnership with experts in transforming and improving radiology processes

GSTT chose the Healthcare Consulting and Transformation team at Siemens Healthineers as its partner in this critical initiative. Why? Because this team has first-hand experience and understanding of radiology challenges and LEAN methodology. Above all, the Siemens Healthineers team shares the same passion and dedication to patient care as the staff at GSTT.

Together, the radiology department and the Healthcare Consulting and Transformation team entered into a 4-year programme with ambitious goals:

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- Greater transparency of key performance indicators
  - Proactive planning rather than reactive responses
  - Smarter processes to improve efficiencies
  - Improved patient satisfaction
  - Improved staff satisfaction
  - Help the trust meet a substantial share of its target of £1.5 million annual cost saving
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# The partnership

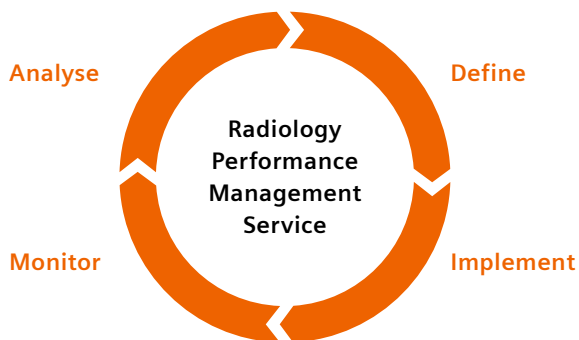
## Working together in a Radiology Performance Management Service programme

Siemens Healthineers offers clinical consultancy services for healthcare providers looking for an enduring value-creating partnership that enables transforming care delivery.

Its Radiology Performance Management Service (RPMS) is a suite of consultancy services specifically for imaging departments. RPMS puts LEAN principles to work, especially its focus on developing systems for ongoing improvement.

The RPMS dashboard helped provide visibility to challenges while recognising staff contributions toward meeting those challenges. It's a key component of RPMS and was an important tool for empowering and motivating the radiology department staff.

GSTT decided to leverage LEAN principles to increase efficiency, decrease non-value add activities, and optimise processes for the benefit of all stake-holders at the hospital.



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### Radiology Performance Management Service: Proven approach, tangible results

- Goes beyond technology and equipment
  - Puts the imaging team centre stage
  - Adds value from referral to report
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*“Using lean principles, all members of the organisation, from clinicians to operations and administration staff, continually strive to identify areas of waste and eliminate anything that does not add value for patients.”*

Massachusetts Medical Society, 2018, <https://catalyst.nejm.org/what-is-lean-healthcare>

## Rapid improvement, sustainable results

The Healthcare Consulting and Transformation team conducted a series of Rapid Improvement Events (RIEs) with the radiology department at GSTT. RIEs are five-day workshops that leverage the knowledge and experience of all staff – managers, administrators, radiographers, radiologists and supporting staff. They accelerate the culture change required for effective LEAN transformation.

Performance optimisation was rapid and resulted in improved clinical operations almost immediately. Workforce productivity and patient satisfaction indicators also increased promptly. Best of all, improvements have been durable – they are still evident one year after the RIEs. To date, through the RPMS programme the trust has achieved total financial and efficiency benefits of almost £1M (full year effect) across various modalities and operations, representing a return on investment of 5:1.



**IBM Watson Health –  
our trusted partner in LEAN consulting:**

For the execution of Improvement Events Siemens Healthineers collaborates with Watson Health Consulting Services, part of the IBM Watson Health group.

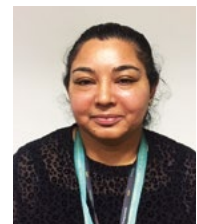
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*“We felt understood and reassured by Siemens Healthineers. It was clear they had walked in our shoes and shared our dedication to patient care.”*

**Bernadette Cronin**, Clinical Director, Radiology Department

*“It was great to work with the Siemens team and drive both qualitative and quantitative benefits. The RIEs were challenging and also energising as the whole team worked together collaboratively.”*

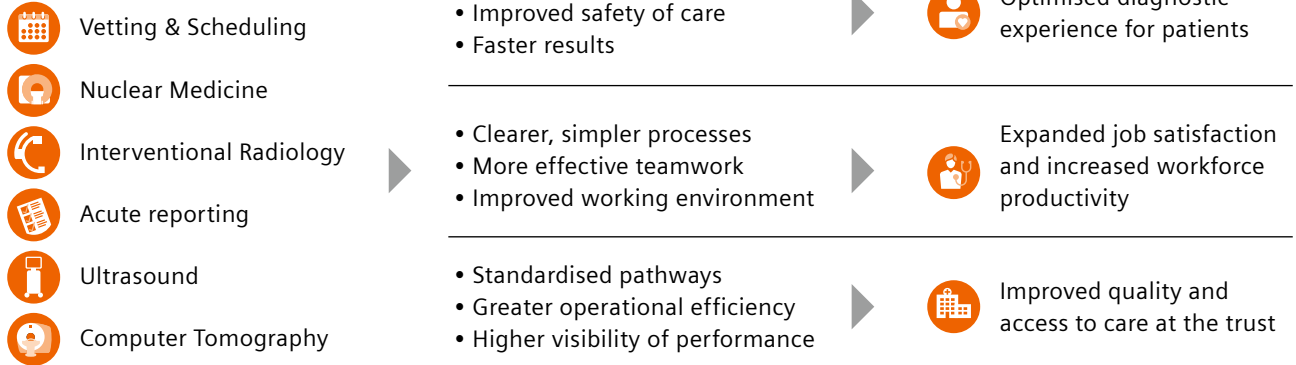


**Paulomi Vyas**, Service Improvement Manager, Radiology Department











# Partnership results at a glance

Rapid, sustainable outcomes transform care delivery

RIEs e.g. on:



## Clinical and operational impacts, e. g.

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|---|---|
| <ul style="list-style-type: none"> <li> <b>+17%</b> in routine booking turnaround time</li> <li> <b>-23%</b> in 'did not attend' (DNA) rates in US</li> <li> <b>-21%</b> DNA rates in CT</li> <li> <b>-13%</b> DNA rates in MRI</li> <li> <b>-16%</b> DNA rates in Nuclear Medicine</li> </ul> | <ul style="list-style-type: none"> <li> <b>+48%</b> in acute plain film reporting productivity</li> <li> <b>-20%</b> of plain film report turnaround time</li> <li> <b>-70%</b> in paper usage in Nuclear Medicine</li> <li> <b>+31%</b> of referrals vetted on day of referral</li> <li> <b>+X%</b> increased activity in multiple other areas</li> </ul> |
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## Financial and efficiency benefits

**£930k (full year effect)**

## A change for the future. A change for the better.



GSTT radiology PATIENTS today have shorter waits for appointments, get their results back quicker and are better informed before and after their examinations.



Radiology STAFF responsibilities are defined more clearly. Staff operates effectively as a team and are more satisfied with their work.



GSTT is gratified that it has been able to achieve the trust's cost-saving targets and expects to continue exploring opportunities for optimisation through its partnership with Siemens.

The programme developed with the Healthcare Consulting and Transformation team has generated a 5:1 return on investment for the trust.

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Is a value-creating partnership in your future?

Find out at:

[siemens-healthineers.com/value-partnerships](https://siemens-healthineers.com/value-partnerships)

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*"I genuinely don't think we could have achieved what we have without the Siemens Healthineers programme."*

**Bernadette Cronin**, Clinical Director, Radiology Department

*"Working with Siemens Healthineers has been a really positive experience for both the service and individual staff. This partnership will deliver a legacy of knowledge, skills and experience in service improvement which will support the design and provision of high value services for patients."*



**Nicholas Bultitude**, Transformation Programme Manager, Radiology Department

The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities. If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens Healthineers organisation for further details.

The results 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.

Siemens Healthineers Consulting & Transformation uniquely combines healthcare-adapted lean methodology with the best practice knowledge distilled from radiology services globally. We put patient value into the centre of every lean transformation project. Rapid improvement Events serve as an excellent tool to deliver measurable results within a short period. Conducted repetitively, they are enabling radiology teams to live a culture of continuous improvement – turning performance into high patient value. Lean Transformation is offered as a standalone service or embedded in a Radiology Performance Management Service.

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