



**Case study: Guy's and St Thomas', United Kingdom**

# **Strategic Transformation in the radiology department**

How a thriving London hospital is creating  
more than \$1 million in additional value per year.

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

# 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.

### Value creation

|  Patients                    |  Staff                           |  Trust                         |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|  Waiting times               |  Pathway standardization         |  Equipment utilization         |
|  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 \$1.2m (full year effect)



#### 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 \$2 billion

# The objective

## Strategic Transformation 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 optimize processes and care delivery so that everyone benefits: patients, staff, and the trust.

# The challenge

## Creating new efficiencies in radiology processes and care delivery

One of the key requirements for an enhanced radiology department was that optimization 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 to transform radiology processes

GSTT chose Value Advisory Services as its partner in this critical initiative. Why? Because they have 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 Value Advisory Services entered into a 4-year program with ambitious goals.

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### Goals of the Value Partnership:

- Greater transparency of key performance indicators
  - Proactive planning rather than reactive responses
  - Smarter processes to improve efficiencies
  - Improved patient and staff satisfaction
  - Help the trust meet a substantial share of its target of \$1.9 million annual cost saving
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# The partnership

## Working together in a Performance Improvement program

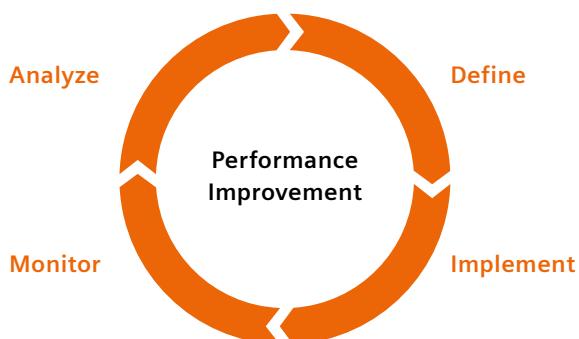
Value Advisory Services offers clinical advisory services for healthcare providers looking for ways to transform their healthcare enterprise and create value through an enduring partnership.

The Performance Improvement key practice is a suite of consultancy services specifically for imaging departments. It puts Lean principles to work and focuses especially on developing systems for ongoing improvement.

One key component of the program is the integrated KPI-dashboard that helps provide visibility to challenges while recognizing staff contributions toward meeting those challenges.

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

Also for them the Performance Improvement program including the dashboard was an important tool for empowering and motivating their radiology department staff.



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### Performance Improvement program: Proven approach, tangible results

- Goes beyond technology and equipment
  - Puts the imaging team center stage
  - Adds value from referral to report
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*“Using lean principles, all members of the organization, 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

Value Advisory Services conducted a series of Rapid Improvement Events (RIEs) with the radiology team 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 optimization 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 initial RIEs. To date, through the Performance Excellence program the trust has achieved total financial and efficiency benefits of \$1.2m (full year effect) across various modalities and operations, representing a return on investment of 5:1.



**Simpler Consulting –  
our trusted partner in Lean consulting:**

For the execution of Improvement Events Siemens Healthineers collaborates with Simpler Consulting, an IBM Company.



*"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**, Guy's and St Thomas', 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 energizing as the whole team worked together collaboratively."*

**Paulomi Vyas**, Guy's and St Thomas', Service Improvement Manager, Radiology Department



# Partnership results at a glance

Strategic Transformation with rapid, sustainable outcomes

RIEs e.g. on:



Vetting & Scheduling



Nuclear Medicine



Interventional Radiology



Acute reporting



Ultrasound



Computer Tomography

- Accelerated scheduling
- Improved safety of care
- Faster results

- Clearer, simpler processes
- More effective teamwork
- Improved working environment

- Standardized pathways
- Greater operational efficiency
- Higher visibility of performance



Optimized diagnostic experience for patients



Expanded job satisfaction and increased workforce productivity



Improved quality and access to care at the trust



## Clinical and operational impacts, e. g.



**-17%** in routine booking turnaround time



**+48%** in acute plain film reporting productivity



**-23%** in 'did not attend' (DNA) rates in US



**-20%** of plain film report turnaround time



**-21%** DNA rates in CT



**-70%** in paper usage in Nuclear Medicine



**-13%** DNA rates in MRI



**+31%** of referrals vetted on day of referral



**-16%** DNA rates in Nuclear Medicine



**+X%** increased activity in multiple other areas



## Financial and efficiency benefits



**\$1.2m (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 optimization through its Value Partnership with Siemens Healthineers.

The program developed with Value Advisory Services has generated a 5:1 return on investment for the trust.

Do you want to collaborate with Value Advisory Services to optimize your operations?

**Get in contact:**



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



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



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

**Bernadette Cronin**, Guy's and St Thomas', 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**, Guy's and St Thomas', Transformation Program Manager, Radiology Department

## About Value Partnerships

Siemens Healthineers Value Partnerships are long-term, performance-oriented, collaborative engagements. We bring a combination of clinical insight, medical technology innovation, strategic vision, implementation expertise, and operational excellence to the table for you. As trusted partners, we help you formulate and achieve your strategic goals, increasing enterprise-wide value.

Value Partnerships drive value across your entire enterprise with focus on four domains: Technology, Operations, Workforce and Facility. Furthermore, together we enable breakthroughs through holistic and transformative initiatives such as Strategic Transformation and Digital Innovation.

### Disclaimer

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 organization for more details.

The results described herein by customers of Siemens Healthineers 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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### Siemens Healthineers Headquarters

Siemens Healthineers AG  
Siemensstr. 3  
91301 Forchheim, Germany  
Phone: +49 9191 18-0  
[siemens-healthineers.com](https://www.siemens-healthineers.com)