

Royal Brompton  
Harefield Hospital  
Guy's Hospital  
St Thomas' Hospital  
Wimpole Street

Heart, Lung and Critical  
Care Clinical Group



Our clinical group treats more than **200,000 outpatients** and nearly **40,000 inpatients** every year.

## Key facts

# World class care

**Welcome to one of the most advanced centres for heart and lung care anywhere in the world today.**

Our expertise is delivered by a unique workforce that includes some of the very best clinicians currently working in the fields of cardiac and respiratory medicine.

Their work is underpinned by foundational research and expansive partnerships across academic and scientific networks that are virtually unrivalled in the UK and globally.

Our vision for world class heart and lung care is driven by an ambition to tackle major global diseases and a determination to improve treatment for hundreds of thousands of patients. This vision was the prime mover behind our 2021 merger that brought together five key locations – Royal Brompton, Harefield, St Thomas', Guy's and Wimpole Street – creating an extraordinary critical mass of knowledge, experience and diversity.

The following year, we opened a new diagnostic centre bringing the very latest in imaging technology to our patients.

They are simply the latest stages in our long history. Our hospitals – stretching from south east and central London to outer north west London – have been responsible for some of the **most significant medical breakthroughs** ever made in our specialist fields.

These include the first ever successful **heart and lung transplant** in Europe, and in the UK the **first closing of a hole in the heart**, the **first coronary angioplasty** and the **first coronary stent**. They include the first ever specialist centres treating polio and treating cystic fibrosis, both set up in the 1960s, and which remain leading centres today.

We carry out **over 40% of all cardiac surgery** in London, and nationally a **third of all tests** for inherited lung conditions and a **quarter of all tests** for inherited heart conditions.

## Key facts

# Our research and education

A significant part of what we do involves research into heart and lung disease so that new treatments can be discovered and developed, and new technologies explored. Over the years we have developed a reputation for pushing the boundaries through our research, working closely with our academic partners. We are international leaders in the treatment of heart and lung illnesses, with large research trials leading to major, life-saving developments. Much of this important work is supported by our own Royal Brompton & Harefield Hospitals Charity.

Some of our recent research successes include:

Discovering the genetic variants that can lead to a more severe, life-threatening reaction to COVID-19

Identifying people most at risk of dying after heart surgery by analysing 16 years of case studies

Using artificial intelligence to improve the diagnosis of a rare genetic disease affecting children's lungs, noses and throats

Discovering new facets of a common disease of the heart muscle, enabling better, more tailored care to be developed



In 2021-2022 we had nearly **300 research studies** under way, involving almost **3,000 participants**.

With our academic partners, we published **987 peer-reviewed articles** on heart, lung and critical care research in 2021.

## Key facts

# Our partners

We could not do our research without the considerable expertise of the vast networks provided by our partners across the NHS, and by academic, charity and industry organisations across London and beyond.

We are leaders and members of a number of clinical networks and work closely with our local Integrated Care Systems in both north west and south east London. Through our work with the King's Health Partners Cardiovascular and Respiratory Partnership, we work closely with King's College – both the hospital and the university which together make up the largest centre for healthcare education in Europe. We also work with Imperial Healthcare Partners, which includes three universities and five other major NHS hospital groups.

Because of these close, highly collaborative links with academia, we comprise one of the largest postgraduate specialist heart and lung centres in the UK.

Through this reach into the medical-academic landscape stretching across half of London, from the north west to the south east, and working within the same Trust as the Evelina London Children's Hospital, we are able to translate bench-to-bedside innovation into a lifetime of better care for tens of millions of patients.

# Innovation and the future

Our clinical group has a particularly strong reputation for innovation and in 2023 all our patient information will become digital. Data and records will be integrated seamlessly across the Trust in a single electronic system so that patients themselves, as well as everyone involved in their care, have access to the information needed to care for them. This will also create new opportunities for research.

This kind of innovation is second nature to us. We have developed particular expertise in home testing, home monitoring, and 'wearable' devices that work with everyday technology like smartphones – transformative for patients who have heart and lung conditions that need managing and tracking over long periods of time.

We have pioneered the use of artificial intelligence to treat lung disease and have been involved in similarly ground-breaking innovation and care as part of the NHS's contribution to fighting the global pandemic. We are the largest of the five UK centres offering the advanced ECMO (Extra Corporeal Membrane Oxygenation) service – re-oxygenating blood outside the body for the most severe cases of COVID-19.

There is no doubt that one of the leading medical fields in the future will be genetic medicine and we have one of the seven UK genomic laboratories, with a specific commission to deliver testing for cardiac and inherited respiratory conditions, available to all patients, NHS, non-NHS, and international.

We are the **largest service in the UK** to fit artificial hearts in patients, and the leading centre for 'keyhole' heart valve repairing.

## Key facts



# Global reach

Our hospitals have consistently been voted among the best in the world by a global survey of 40,000 medics in 20 countries with Royal Brompton ranking tenth in cardiology, the only UK hospital to appear in the list's top 50, and eighth in lung care.

Not surprisingly, patients come from all over the globe to be treated at our private facilities, which are centred on Wimpole Street in the Harley Street Medical Area, and also include 44 single occupancy rooms in dedicated wards at Harefield and Royal Brompton. We have particularly strong links with the Middle East. Any profits made from our private business are reinvested directly back into our hospitals, our research and our education, helping to improve both NHS and private patient services.

Our international patient service has been recognised as the best 'specialist international patient centre' in the world by the International Medical Travel Journal.

Our private patient division has income of c. **£30m per annum** and looks after more than **25,000 patients**.

## Key facts



# Our organisation

Our clinical group is part of Guy's and St Thomas' NHS Foundation Trust and, working across the four hospital sites – Royal Brompton, Harefield, St Thomas' and Guy's – and our private patient centre at Wimpole Street, it provides cardiovascular, respiratory and critical care services. These services are delivered through six directorates:

- Guy's and St Thomas' Cardiovascular Services
- Royal Brompton Heart
- Harefield Heart and Lung
- Royal Brompton Lung
- Pulmonary, Adult Critical Care and Sleep (based at Guy's and St Thomas')
- Rehab and Therapies

The Guy's and St Thomas' NHS Foundation Trust also has three other clinical groups: Evelina London Women's and Children's, Integrated and Specialist Medicine, and Cancer and Surgery.

Our clinical group employs more than **5,000 staff**, including **2,500 doctors, nurses and allied health professionals**, has **over 700 beds**, and more than **25 operating theatres and cath labs**, and revenue of c. **£500 million a year**.

## Key facts

# Our locations

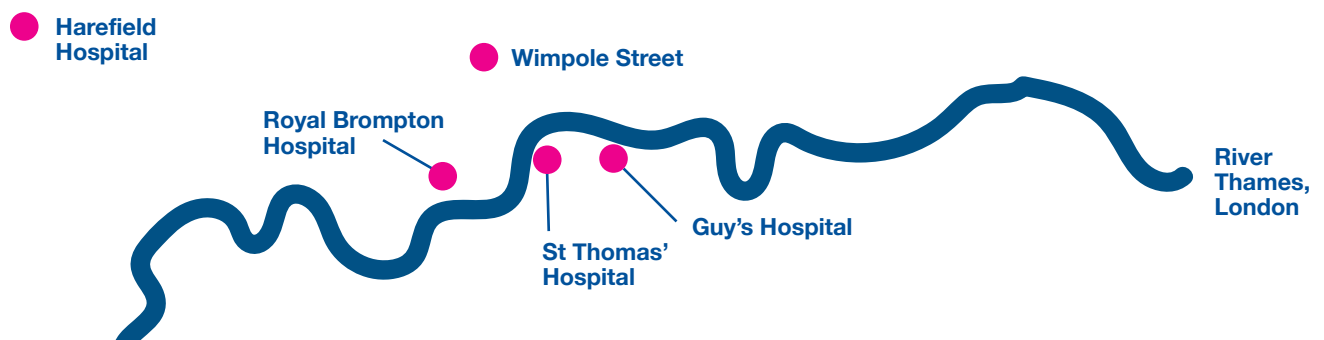
Our main hospital sites stretch from the centre of London to the very outer regions of the capital, where the city turns into countryside:

- **Royal Brompton Hospital** is in the heart of Chelsea, at Sydney Street and Fulham Road, right next to the Royal Marsden Hospital, which partners with us on a number of initiatives
- **Harefield Hospital** is situated in the village of that name in the outer London borough of Hillingdon, and has 45 acres of grounds, several ponds, a helipad and a healing garden
- **Guy's Hospital** near London Bridge is particularly known for its cancer services and for occupying one of the tallest hospital buildings in the world
- **St Thomas' Hospital** primarily occupies a prominent site in Westminster opposite the Houses of Parliament and has been providing healthcare since the 12th century
- **77-79 Wimpole Street** – which deals exclusively with private patient work – is in the heart of the Harley Street Medical Area clustered around the famous medical street of that name.

We are among **fewer than 10 centres** in the UK to:

- undertake **heart transplants and lung transplants**
- offer advanced **ECMO treatment**
- treat **pulmonary hypertension**
- treat **primary ciliary dyskinesia**
- host a **genomic laboratory** service.

## Key facts



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