

Royal Brompton & Harefield NHS NHS Foundation Trust





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Introduction from the chair and chief executive

It is once again a privilege to present the Trust's annual review. Reflecting on the achievements of our expert teams and their many successes, is a rewarding and enjoyable task each year.

It is easy to become blasé about the statistics that are included in these reports, and pausing to consider the implications behind the numbers is a valuable exercise.

Teams at the Trust produced a remarkable **886 peer-reviewed**

publications with our academic partners during 2019-20. For a leading centre for cardiovascular, critical care and respiratory research an impressive research portfolio could be expected. But these published papers reflect no fewer than 886 different breakthroughs in the understanding and treatment of heart and lung disease, each one of which has the potential to improve patient care.

The same teams recruited over **2,300** patients onto over **100** research programmes, giving them the opportunity to contribute towards breaking new ground in cardiovascular and respiratory treatment.

Our frontline staff saw **216,000** patients in outpatient clinics during 2019-20 and cared for nearly **40,000** patients of all ages on our wards. A striking **96 per cent** recommendation score in the annual Friends and Family Test shows just how much they were appreciated.

As a specialist Trust our hospitals do not provide emergency departments but our heart attack centre at Harefield delivers a vital emergency service for a wide area of the home counties. During 2019-20 our cardiology teams maintained one of the fastest arrival to treatment times for UK heart attack patients, at **just 23 minutes**. The UK average is almost double that.

Similarly impressive results were recorded by the Trust's Day of Surgery pilot scheme, with **70 per cent** of cardiac surgery patients admitted on the day of surgery by the end of the scheme; the figure was just **four per cent** at the start.

The year has seen the launch of a number of innovative programmes.

Teams at the Trust were awarded a Health Service Journal Partnership Award for their work to improve the lives of people with cystic fibrosis (CF). Working in partnership with NuvoAir, the CF team designed a patient platform to be used to self-monitor lung function, archive data and share this with clinical teams during virtual consultations. The platform and virtual service were developed following patient surveys of adults with CF which highlighted the impact of having to attend regular face-to-face appointments.

Our paediatric colleagues were delighted to welcome Harley Baby II to their team. This lifelike mannequin allows clinicians to simulate emergency cardiac procedures in infants in a more realistic way than ever before. Harley Baby II includes a replica of a toddler's heart, reinforced skin and fat layers, a chest incision, a metal chest opening mechanism and three chest drains, to enable the simulation to be as close to clinical practice as possible.

Patients with atrial fibrillation, the most common form of irregular heartbeat affecting around a million people in the UK, now have access to a new heart implant at the Trust. The ground-breaking 'Watchman FLX' can help reduce the risk of stroke by up to 80 per cent and offers a permanent alternative to blood-thinning medication.



Investing in our facilities

As part of our commitment to improving patient care, work started on a new state-of-the-art imaging centre at Royal Brompton Hospital in April 2019. Our current imaging facilities already offer patients some of the most cutting-edge services to diagnose cases of suspected heart and lung disease in the UK. The new centre will allow us to expand clinical services, increase research and education programmes and create the type of sophisticated environment patients expect from a leading specialist heart and lung hospital Trust. It will also improve access to our imaging services, including CT (Computerised Tomography), MRI (Magnetic Resonance Imaging) and X-ray for both children and adults in a bigger, better space. Plans for the centre have been co-designed with clinical teams and patients to ensure that we provide the best care in a suitable environment. The centre should open in late 2021 and represents an investment of £47 million.

Closer working with Guy's and St Thomas' NHS Foundation Trust

On January 31st 2020, our discussions with Guy's and St Thomas' NHS Foundation Trust moved forward with the announcement that full integration of our services, to include the creation of a hub for highly specialised clinical academic cardio-respiratory services at the St Thomas' site, was the best and most positive way of securing a sustainable future for the Trust.

Say Ma

Sally Morgan Baroness Morgan of Huyton Chair

1st November 2020



We have been working with Guy's and St Thomas' and with colleagues across King's Health Partners since 2017 to develop plans to transform care for people with heart and lung disease.

The Boards of both Trusts are confident that by formally bringing together our respective organisations and the shared expertise of our clinical and academic teams, in effect an agreed merger, we can significantly improve care and outcomes for people with cardiovascular and respiratory disease. This ambitious venture will create a centre of national excellence for the care of adults and children, which will sit at the heart of a population health system working together to significantly reduce the burden of these conditions.

Our plans protect and maintain the provision of high-quality services to the population of north west London and continued cardio-respiratory research excellence across London, and our historic relationship with our main academic partner Imperial College, London.

Our staff and patients have already been involved in developing these proposals, and we will continue to work closely with them as we take forward our plans which will also be subject to any engagement, consultation and regulatory approval required.

Patients are at the heart of our proposals and our commitment to them will continue to guide everything that we do.

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Bob Bell Chief executive 1st November 2020



COVID-19 update

As the period covered by this review ended, the first patient with COVID-19 was admitted to our hospitals (in mid-March 2020).

As part of a London-wide and national response, teams at our hospitals nearly tripled their critical care capacity to accommodate patients most seriously affected by the virus.

The Trust is one of five adult ECMO (extracorporeal membrane oxygenation) centres in England, and our cumulative ECMO caseload was one of the highest in Europe.

Our talented, skilled and committed teams responded to the pandemic with exceptional courage and resilience. Their stories, and their exceptional response, will be documented in full in our next annual review.



About us

Royal Brompton & Harefield NHS Foundation Trust is the largest specialist heart and lung centre in the UK and one of the largest in Europe.

The Trust is a partnership of two hospitals – Royal Brompton in Chelsea, West London, and Harefield, near Uxbridge – which are each known throughout the world for their expertise, standard of care, and influential research.

As we are a specialist trust, we only provide treatment for people with heart and lung conditions. This means our doctors, nurses and other healthcare staff are experts in their chosen field, with many of them moving to us from around the globe so that they can develop their skills even further.

Over the years our experts have been responsible for major medical breakthroughs including performing the first successful heart/lung transplant in Britain, implanting the first coronary stent, founding the largest centre for cystic fibrosis in the UK, and pioneering intricate heart surgery for newborn infants.

We carry out some of the most complex surgery and offer some of the most sophisticated treatment that is available anywhere in the world. We treat patients from all over the UK and other countries, many of whom are unique in their medical needs, and demand for our services continues to grow year-on-year.

Our fetal cardiologists can perform scans at just 12 weeks, when a baby's heart valve is just over a millimetre in size, and our clinical teams regularly treat patients well into their 90s and help them maintain a good quality of life.

By recruiting the best clinical and non-clinical staff and investing in their development, we maintain our position as the leading UK provider of respiratory care and a national leader in the specialist areas of paediatric

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cardiorespiratory care, congenital heart disease and cystic fibrosis.

We work closely with academic and industry partners to play a leading role in pushing forward the boundaries of medicine through research, and by sharing what we know through teaching, we can help patients everywhere.

Our values (page 7) guide and support every decision we make to ensure our care is safe, of the highest quality and – crucially – available to everyone who needs it.

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Our vision and values

Our vision is to be the UK's leading specialist centre for heart and lung disease, developing services through research and clinical practice to improve the health of people across the world.

The Trust will achieve this vision by:

- improving patient safety and satisfaction
- providing world class specialist treatments that others cannot offer
- bringing innovation to clinical practice through our research partnerships
- attracting, developing and retaining world class clinical leaders
- investing in services, technologies and facilities to support new service models at both sites.

We are supported in this by active patient and community groups that enthusiastically encourage and challenge us to deliver our goals.

Our values

At the heart of any organisation are its values: belief systems that are reflected in thought and behaviour. When values are successfully integrated throughout an organisation, the result is a shared outlook and consequent strength, from performance through the style of communications to the behaviour of employees.

Our values were developed by staff for staff. We have three core patient-facing values and four others which support them.

Our three core values are:

We care

We believe our patients deserve the best possible specialist treatment for their heart and lung condition in a clean, safe place.

We respect

We believe that patients should be treated with respect, dignity and courtesy, and that they should be well informed and involved in decisions about their care. We always have time to listen.

We are inclusive

We believe in making sure our specialist services can be used by everyone who needs them, and we will act on any comments and suggestions which can help us improve the care we offer.



And the following values support us in achieving them:

We believe in our staff

We believe our staff should feel valued and proud of their work and know that we will attract and keep the best people by understanding and supporting them.

We are responsible

We believe in being open about where our money goes, and in making our hospitals environmentally sustainable.

We discover

We believe it is our duty to find and develop new treatments for heart and lung disease, both for today's patients and for future generations.

We share our knowledge

We believe in sharing what we know through teaching, so that what we learn can help patients everywhere.

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Performance and achievements

During 2019/20 we:

Cared for more than **216,000 patients** in our outpatient clinics. Cared for nearly **40,000 patients** of all ages on our wards.

Received a 96%

recommendation

score in the annual

Friends and Family Test.

Launched Rainbow badges showing that the Trust offers **open, non-judgemental** and **inclusive** care for patients and their families and friends, who identify as **LGBT+**.



Built on our Day of Surgery pilot scheme with **70%** of Harefield **cardiac surgery** patients admitted on the day of surgery, **up from 3-4%** when the pilot started.

Improved our communication to patients with the introduction of digital appointment letters and text reminders. Reported an average 18-week referral to treatment time (RTT) of 93%,

exceeding the national target.

Produced **886 peer-reviewed publications** with our academic partners, strengthening the Trust's position as a **leading centre** for cardiovascular, critical care and respiratory research.



Maintained one of the fastest arrival to treatment times for UK heart attack patients – 23 minutes compared with a national average of 41.



Introduced sunflower lanyards which, when worn discreetly, indicate to staff that **wearers** have a hidden disability and **may require additional support** or assistance.

Recruited over 2,300 patients onto over 100 research programmes

that will contribute towards better patient care and outcomes.

Improved our environmental responsibility by reducing our carbon emissions by 9% and our energy consumption by 2.7%.

The evolution of Darwin

The Trust-wide Darwin transformation programme continued to evolve in 2019/20 with a new set of priorities focused on innovating clinical services to make them fit for the future.

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Particular gains have been made in limiting unnecessary stays in hospital. More patients than ever before are now admitted into hospital on the day of their operation and discharged without needing to stay in a bed overnight. We also use our theatre and catheterisation laboratory capacity more efficiently, so more patients can be treated.

At Royal Brompton, we identified a problem with late confirmation of admissions. In response, we developed new processes to provide at least 24-48 hours' notice to patients of their admission allowing them enough time to plan their stay and arrival time with us. By March, we were seeing patients coming into and then leaving hospital earlier in the day.

We have also been investing time and effort planning for the future.

Technology offers immense potential to radically change the nature of care



delivery, and patients expect us to exploit these opportunities. We have therefore been developing our vision for non-admitted specialist care (care that does not involve an overnight stay), both as a Trust but also as part of our partnership with Kings Health Partners (KHP). Through this work we have outlined a strategy to improve:

- Outcomes, access to care, convenience and experience of services.
- The ability of staff to make informed decisions, and create job satisfaction, and promote their productivity and collaboration with peers.
- The Trust's sustainability, research potential and partnerships with other KHP providers.

To do this, we will work on all aspects of non-admitted care, from those patients first experiencing our

Particular gains have been made in limiting unnecessary stays in hospital. More patients than ever before are now admitted into hospital on the day of their operation and discharged without needing to stay in a bed overnight.





services, to those who have been under our care for decades. Progress includes:

- Piloting and planning the wider rollout of video consultations.
- Identifying paper processes (such as patient questionnaires) that we can digitise.
- Exploring the use of home devices (such as spirometers) and wearable technologies to better monitor patients and reduce the number of hospital visits they have to make for tests.
- Improving our communication to patients through digital appointment letters and text reminders.

With a clear, ambitious and exciting vision of where we want to get to, we are confident we can quickly realise further meaningful improvements.

Staff working in Harefield's Day of Surgery unit which was introduced under the Darwin programme



The Darwin team works with teams across the Trust to devise new or improved models of patient care



Our specialist heart services

Clinical teams at Royal Brompton and Harefield hospitals care for patients with a wide range of complex cardiac conditions, both congenital (present at birth), inherited and acquired. These include congenital heart disease, arrhythmias (irregular heart rhythms), heart failure, pulmonary hypertension, coronary heart disease and structural heart disease.

The adult congenital heart disease (ACHD) unit at Royal Brompton is one of the largest specialist centres in the world.

We have one of the fastest primary angioplasty services in the UK at Harefield's Heart Attack Centre, and offer the largest implantable cardiac device (ICD) service in the UK (including pacemakers and debrillators).

Our transcatheter aortic valve implantation (TAVI) service enjoys an international reputation. TAVI is a nonsurgical alternative to open-heart surgery for patients with a narrowed aortic valve and is carried out in the Trust's ground-breaking hybrid theatre.

Our pulmonary hypertension service is one of only seven designated in the country that form the National Pulmonary Hypertension Service (NPHS) for England.

Royal Brompton team complete **five beating heart mitral valve repairs in three days**



Ms Rashmi Yadav, consultant cardiac surgeon (centre, front row) and the team performing neoChord procedures

A surgical team at Royal Brompton Hospital successfully completed five 'beating heart' mitral valve repair operations in one week, using a pioneering treatment not offered anywhere else in England, Scotland or Wales.

The 'NeoChord' procedure means surgeons can repair a leaking mitral valve on a patient's beating heart, avoiding the need for them to be put on a heart-lung bypass machine.

This makes the procedure suitable for patients with a high risk of developing complications, or who are too unwell to have their heart stopped and restarted with cardiopulmonary bypass.

The five patients were aged between 50 and 80, and included people with previous heart surgery, severely impaired lung function and / or severe calcification in the heart (where calcium deposits form around valves and arteries).

Ms Rashmi Yadav, the consultant cardiac surgeon who led the team performing the procedures, said: "As the procedure is significantly less invasive than conventional surgery, it offers a new treatment option to patients who may otherwise be denied surgery or who risk complications from the procedure. Patients can expect to go home within three to four days.

"Planning and teamwork are imperative for the success of these innovative procedures and the input of dedicated surgical, anaesthetic and operating theatre colleagues is absolutely critical, especially when working on new techniques. I feel extremely fortunate to have such a committed and talented team here at Royal Brompton."

The team has welcomed visiting cardiac surgeons and cardiologists from other centres such as University Hospital Galway, Ireland, and King's College Hospital, London, keen to learn about the procedure.



Caroline Dinenage meets clinical nurse specialist Gemma Edwards

Minister for Care visits Harefield transplant unit

Minister of State for Care, Rt. Hon. Caroline Dinenage MP, was given a behind the scenes look at the transplant unit when she spent a morning at Harefield Hospital, ahead of World Heart Day.

The Minister met Harefield patients and staff, and learned about some of the pioneering transplant techniques used at the Trust. She said: "It was such a privilege to meet the wonderful staff and patients at Harefield Hospital. It is 40 years since the UK's first heart transplant, and many, including some of the brave people I met, are still waiting for the gift of life."

As the procedure is significantly less invasive than conventional surgery, it offers a new treatment option to patients who may otherwise be denied surgery or who risk complications from the procedure.

New heart implant **reduces risk** of stroke

A new heart implant called 'Watchman FLX' that can help reduce the risk of stroke by up to 80 per cent is now available to Trust patients.

The device sits inside the pouch in the left chamber of the heart where blood

clots typically form and is an updated version of an older system with the same name. It is offered to patients with atrial fibrillation, the most common form of irregular heartbeat affecting around one million people in the UK, and was introduced in August 2019.



Dr Sandeep Panikker, honorary consultant cardiologist and electrophysiologist, inserting a Watchman FLX implant

Harefield **transformative heart surgery** featured in TV documentary

Harefield Hospital's transformative heart surgery has been featured in a popular TV documentary series.

The programme followed patient 30-year-old Enzo, who needed an aortic valve replacement, and the life-changing surgery he received from a team led by Mr Toufan Bahrami, consultant cardiac surgeon.

Inside DHL: The World's biggest delivery company followed Enzo as he underwent minimally invasive valve surgery. The replacement valves are sourced from over 350 miles away in the Netherlands. The documentary, on Channel 5, followed the 18-hour journey from Eindhoven to Heathrow via Brussels and Calais, and then to Harefield Hospital where they arrived into the safe hands of Mr Bahrami. Enzo's valve was replaced through a small incision in the middle of his chest, with a replacement made with tissue from a cow.

The team at Harefield was one of the first in the world to implant this type of valve. The new valve provides younger, active patients with an alternative option to mechanical valves that require life-long anticoagulation with blood thinners. It is designed to last up to 30 years.

Commenting on the procedure, Mr Bahrami said: "As one of Europe's leading specialist centres for the Patients with atrial fibrillation often rely on long-term blood-thinning drugs, but these can increase the risk of uncontrollable bleeding. The new Watchman device offers a permanent alternative to medication by sitting within the heart pouch, preventing clots from escaping to cause strokes.

It is available in different widths and is made of a flexible, thin metal that moulds to fit the individual. Royal Brompton's honorary consultant cardiologist and electrophysiologist, Dr Sandeep Panikker, said: "All patients are different and so are their hearts. The previous version of the device couldn't fit smaller, bigger and irregular shapes."

The device is also a good option for people who forget to, or are unable to take medication. Dr Panikker added: "With blood thinners, you have to be committed to taking them for the rest of your life. Lots of people don't want to do this. If you miss a dose, there can be problems. But with this device you don't have to worry."

> This new valve is a game-changer and is ideal for young patients who need an aortic valve replacement.



treatment of heart valve disease we offer some of the most pioneering innovation in minimally invasive surgery. This new valve is a game-changer and is ideal for young patients just like Enzo who need an aortic valve replacement." Harefield Hospital has been at the forefront of minimally invasive cardiac surgery including aortic and mitral valve repair and replacement, and bypass surgery. More than 3,000 procedures have been performed at the hospital through keyhole surgery since 2000.

Transplant **patients reunited** with clinical teams

A group of former patients visited Harefield Hospital more than 30 years after receiving heart transplants.

The visit was organised by patient Willem Bavinck, who had his heart transplant at Harefield 36 years ago. Willem, who travelled from his home in Holland to come to the event, said: "It's very emotional to come back. It was here that I started my second life. When I left here I started to live again, it was a second chance.

"I was expecting one, two, three years maximum. I realise I'm very lucky because 36 years ago a donor was matched to me and I was a young guy, so I was fit, which makes the possibility of living longer after transplant more likely."

Willem was 27-years-old when he was transplanted by Professor Sir Magdi Yacoub. Professor Yacoub carried out Harefield's first heart transplant in 1980 and since then more than 3,000 transplant operations have been carried out at the Trust.

Returning for this special event, Willem was reunited with former Harefield cardiologist Dr Andrew Mitchell, who said: "It was a pleasure to come back to Harefield and to meet former patients and colleagues.

"I last saw Willem 11 years ago in Holland when he was 25 years transplanted. It's wonderful that he decided to come over because it gives the chance to think about what's gone on since his transplant all those years ago.

"Going back to 1983/84, when many of our patients had their surgery, we were saying 'great, we have someone who's lived three years' and none of us thought about 10 years or 20 years. Now we don't bat an eyelid at 20 years or even 30. It really is quite fantastic."



I was expecting one, two, three years maximum. I realise I'm very lucky because 36 years ago a donor was matched to me and I was a young guy, so I was fit, which makes the possibility of living longer after transplant more likely.

Transplant patients including Nick Jennings, right, continue to benefit from the expertise of transplant teams at Harefield today



Our specialist lung services

Teams at Royal Brompton and Harefield hospitals lead the way in diagnosing and treating diseases of the lungs.

Our experts treat respiratory conditions including: asthma and allergy, lung inflammation and cystic fibrosis, lung infection and immunity, lung failure (including transplant, COPD - chronic obstructive pulmonary disease – and sleep and ventilation), and offer lung assessment (including sleep studies, lung function and physiology).

We are the largest centre for the surgical treatment of lung cancer in the UK, run the largest interstitial lung disease clinic, the biggest occupational lung disease service and one of the largest cystic fibrosis centres. Our asthma teams see more patients in London and the south east than any other centre.

Cystic fibrosis virtual services win national award

Teams at the Trust were awarded a Health Service Journal Partnership Award for their work with digital health start-up NuvoAir to improve the lives of people with cystic fibrosis (CF).

Working in partnership with Royal Brompton, NuvoAir designed a patient platform with a clinician-facing portal to be used to self-monitor lung function, archive data and share this with clinical teams during virtual consultations.

Key to this new service is the NuvoAir spirometer, a device that can be used at home to measure lung function (a measure of lung health) and, via Bluetooth, allows the results to be seen on patients' mobile phones or tablets. The results can then be shared with the specialist CF clinical team at Royal Brompton during virtual consultations, which can replace some outpatient appointments.

The platform and virtual service were developed following patient surveys of adults with CF attending the hospital. The research highlighted the impact of attending regular appointments on adults with CF, their family, careers and/or dependants. National guidelines recommend that all children and adults with CF attend their specialist CF centre at least four-six times a year.

Royal Brompton Hospital's consultant nurse in cystic fibrosis, Dr Susan Madge, said:"We're thrilled to receive this award which recognises the important work we've been doing to reduce both financial and time burdens for adults with CF.

"Patients were the driving force for this partnership and were at the centre of the design and build process. We wanted to put adults with CF back in the driving seat, to let them have ownership of their data and deliver virtual consultations to lead the way in changing the care delivered to adults with CF.

"Giving patients the ability to measure their own lung health has reduced the need for them to come to the hospital so often. It means they have a better idea of how stable they are and if new treatments are working. We can then have conversations about their data over the phone or the internet instead of bringing them to clinic, making better use of our time and theirs."

More than 1,000 people with cystic fibrosis are treated by teams at Royal Brompton every year



Experts welcome access to **cystic fibrosis** drugs

Experts at the Trust were delighted when NHS England announced it had agreed funding for the precision medicines Orkambi and Symkevi for people with cystic fibrosis (CF) in October 2019.

Reacting to the news, the directors of the Trust's cystic fibrosis teams, Dr Ian Balfour-Lynn and Dr Susan Madge, said in a joint statement: "This is a breakthrough and will undoubtedly make a significant difference to many of our patients. We will work hard to determine how we can provide these medicines as soon as possible."

Royal Brompton's paediatric and adult CF centres treat almost 1,000 people with the disease each year.

Both medicines have been shown to slow the decline in lung function and reduce hospital admissions. There are 8,200 children and adults with cystic fibrosis living in England and approximately 4,400 will potentially benefit from these drugs.



| OUR SPECIALIST LUNG SERVICES







Rare lung disease event proves a success

Patients with rare lung diseases were invited to a special education day at the Trust.

Organised by Dr Maria Kokosi, respiratory consultant, the aim of the event was to explore the needs of patients and provide them with information to manage their conditions.

The event was the first of its kind and included a busy agenda including talks from senior clinicians who specialise in rare respiratory diseases.

The talks covered the services provided by experts at the Trust, to the interpretation of lung function tests, developments in rare lung diseases and research opportunities.

Two patients were also invited to speak and describe how they approach dealing with a rare condition.

Dr Sunita Dhir was invited to speak about her experience of living with pulmonary alveolar proteinosis (PAP), a rare condition that is caused by a build-up of proteins in the lungs.

Afterwards she said: "It's great to know that there's so much research going on to find new treatments for rare lung diseases, to listen to the talks and have the chance to ask questions. It was also particularly nice to meet other patients with the same condition, hear their stories and share my own experience with people who understand."

Sarah Woods was also invited to speak about her experience of living with lymphangioleiomyomatosis (LAM), a rare lung disease that affects mostly women and is caused when muscle cells and blood vessels in the lungs begin to abnormally multiply.

She said: "It was great to attend this event organised by our clinicians. It's always useful to hear up to date information on our conditions. The session explaining lung function results was particularly useful."

Consultant Dr Cliff Morgan, who has been running the pulmonary alveolar proteinosis service for more than 30 years, said: "We learn so much from the people who actually have to put up with the illness and its treatment.

"This has never been more important than today – we are potentially on the brink of new treatment options and will need the help of the patient community to ensure that we make the right decisions about which treatment option is best for each individual at any particular time." 66

This has never been more important than today – we are potentially on the brink of new treatment options and will need the help of the patient community to ensure that we make the right decisions about which treatment option is best for each individual at any particular time.



Royal Brompton **clinical trials team** scores hat trick at **Clinical Research Awards**

The Royal Brompton Cystic Fibrosis (CF) Clinical Trials team celebrated at the North West London Clinical Research Awards, where they were recognised for their outstanding work carrying out ground-breaking CF research.

Professor Jane Davies, honorary consultant in paediatric respiratory medicine, and several multidisciplinary members of the trials team, accepted the award for outstanding collaborative working.

This award recognised the team's outstanding collaborative work delivering better clinical research to patients and the public. In addition, Professor Davies received the award for outstanding principal investigator, and Rebecca Dobra, clinical research fellow, received the 'Rising Star' award.

Nominations were judged by a panel of staff and patient representatives from across North West London, as well as a patient representative.

The team, which has many years' experience running trials of new

medicines, is supported by the Cystic Fibrosis Trust's Clinical Trials Accelerator Platform (CTAP).

The Trials Accelerator has given Royal Brompton Hospital the capacity to scale up on clinical trials in partnership with a network of other London CF Centres, which include King's College, and Great Ormond Street and the St Bartholomew's hospitals.

The partnership was established by Professor Davies, leader of the network, to share expertise and position trials optimally across each of the centres. The network is a flagship of the Trials Accelerator, with trial activity now taking place across the capital and providing valuable opportunities for referrals between teams. This way the London population of around 2,000 people with CF have fairer opportunities to take part in ground-breaking trials.

The Clinical Trials Accelerator Platform is a UK-wide initiative, launched in 2017, to bring together CF centres, to increase participation and improve access to CF clinical trials.



Professor Jane Davies receiving her outstanding principal investigator award

Our Trust is a leading centre in the care of children and adults with cystic fibrosis



A dedicated service for children and young people

The Trust's paediatric unit is a national specialist referral centre for children with heart and lung conditions providing care from before birth, through childhood and into adolescence, before managing a smooth transition to our adult teams.

We are a leading centre for the treatment of paediatric congenital heart disease (CHD), inherited cardiac conditions, fetal cardiology, paediatric cystic fibrosis and severe asthma, as well as rare lung conditions such as primary ciliary dyskinesia (PCD). We are the largest UK centre for children with heart rhythm problems and the third largest for paediatric cardiac surgery.

Our children's and adult teams liaise closely to ensure a seamless

transition between services as a child reaches teenage years. This is increasingly common as survival rates for conditions such as CHD, cystic fibrosis and severe asthma continue to improve year-on-year.

Children's services **praised by CQC**

The Children and Young People's Patient Experience Survey by the Care Quality Commission (CQC), identified Royal Brompton & Harefield NHS Foundation Trust as performing 'much better than expected' when compared to other Trusts, for the experiences of children aged up to seven years old. The Trust's results were also "better than expected" in the eight to 15-year-old category.

The national survey involved 33,179 children and young people, including their parents and carers, across 129 acute and specialist NHS trusts across England. Between February and June 2019, questionnaires were sent out to those who attended hospital in November and December 2018 as inpatients or day-case patients.

Compared to other trusts, Royal Brompton and Harefield hospitals scored particularly well, with ratings that were better than the national average on 31 of the questions, and the rest being in line with the rest of the country. Key areas where the Trust's scores were rated 'better' than most others included:

- the overall experience of parents feeling their child was well looked after
- the availability of staff when a child needed someone to play with, or when privacy was needed
- the approach taken to keeping young people and their families informed and involved in their care
- the level of dignity and respect shown to young patients and their families.

Joy Godden, director of nursing and clinical governance, said: "Involving and listening to children and their families is an important part of our work, and we regularly act on feedback telling us what we're doing well and where we might improve. These encouraging results in the official CQC young people's survey are a very welcome endorsement of our approach, and are a credit to everyone in the Trust who works in children's services."

Joy Godden, director of nursing and clinical governance (centre), in discussion with colleagues



New baby **mannequin** improves training



A new state-of-the-art mannequin has been introduced to Royal Brompton Hospital to help staff prepare for complex clinical scenarios.

The lifelike mannequin, called Harley Baby II, allows clinicians to simulate emergency cardiac (heart) procedures in infants in a more realistic way than ever before.

Harley Baby II is made of high-quality silicone with a replica of a toddler's heart. It has reinforced skin and fat layers, with an incision down the chest, a metal chest opening mechanism and three chest drains (tubes).

Royal Brompton consultant paediatric and adult cardiac surgeon, Mr Andreas Hoschtitzky, said: "Harley Baby II is incredibly lifelike. It allows us to simulate cardiac surgery on an infant in a very realistic way, giving our clinicians confidence in real-life situations. It also enables us to analyse any issues that arise during critical clinical scenario training and take appropriate steps to change the way our teams work, and improve patient safety."

The new mannequin was co-designed with clinicians, the Trust's SPRinT team and Lifecast, and donated by the charity Friends of Royal Brompton. A DEDICATED SERVICE FOR CHILDREN AND YOUNG PEOPLE

UK's **first consultant nurse** for children with inherited heart conditions

A nurse at the Trust has become the UK's first consultant nurse in paediatric electrophysiology and inherited cardiac conditions (ICC).

Cath Renwick (pictured above) has been appointed to drive further improvements in patient care and improve understanding of individual conditions. Nurse consultants are highly experienced nurses, specialising in a particular field of healthcare.

Her role will help to educate other staff, in a field which is still relatively new, and promote important research.

Cath has worked at the hospital for 20 years, and led the paediatric ICC and electrophysiology service, which focuses on electrical activity in the heart, for the last four.

She said: "I'm delighted to take up this position. There is so much potential to develop our knowledge in this field and I'm looking forward to the prospect of driving improvements in the care patients receive on a larger scale."

Her role is being funded by the Ben Williams Trust, which provides funding to support children and young adults with arrhythmias and their families. It was set up by the parents of 14-year-old Ben Williams, who died in 2006, having been diagnosed with the condition.

The charity has already funded two roles at Royal Brompton: a clinical nurse specialist and a clinical psychologist.



I'm delighted to take up this position. There is so much potential to develop our knowledge in this field and I'm looking forward to the prospect of driving improvements in the care patients receive on a larger scale. In her new position, Cath will lead new pieces of research and develop the department's electrophysiology 'transition services', which help and support teenage patients to prepare for adult life with their condition.

Cath will also take a more active role sharing best practice and training other nurses, as well as leading the evaluation of the hospital's services and involving young patients more in their development and design.

Cath added: "Research will be key to this role. I would like to develop a research programme investigating the impact on daily life and transition into adolescence, and subsequently adulthood, on children with CPVT (catecholaminergic polymorphic ventricular tachycardia) and other complex inherited conditions.

"Adolescence can be a time when we see a fall in hospital attendance and more cases of young patients not following their treatment plans. They are also more likely to take part in activities that could increase the risk of triggering life threatening arrhythmias so it's vital that we provide them with the support they need."

Coffee morning launched to **support parents** of children with **cardiomyopathy**

A new family coffee morning at Royal Brompton is helping support parents of children with cardiomyopathy, giving them a chance to socialise with other parents, and take a break from the ward.

Paediatric inherited cardiac conditions (ICC) nurse specialists Lucy Green and Louise Parker organised the event following requests from parents wanting to meet others in the same situation, away from the ward environment.

The coffee mornings are aimed at families of young (under fives) Royal Brompton patients who have cardiomyopathy (a disease of the heart muscle that makes it harder to pump blood around the body).

Lucy said: "We wanted to give families the opportunity to socialise with each other in an informal setting, to share experiences and support each other." Louise added: "Many of our families travel long distances to receive care, so spending long periods of time on the ward can be very isolating. We thought the coffee morning would be a good way of bringing them together outside of the hospital to make them feel less alone."

One of the parents who came to the first coffee morning was Maddie Blackwell, mum of one-year-old Albert. She said: "It was really comforting to meet other parents and chat to families who are going through the same thing as we are.

"When you're on the ward, everyone's emotions are heightened, and you focus on your child's condition. The coffee morning gave us a break from that and added a bit of normality into our time here. I found it helpful to share experiences and hear from other parents about how they manage when things get difficult."



When you're on the ward, everyone's emotions are heightened, and you focus on your child's condition. The coffee morning gave us a break from that and added a bit of normality into our time here.



One-year-old Albert at the cardiomyopathy coffee morning



Research highlights

Outstanding research plays a vital role in our mission to provide world class specialist heart and lung patient care.

Our clinicians work closely with universities and industry partners to develop new ways of treating patients with complex cardiovascular and respiratory conditions.

Trust researchers and their collaborators were awarded over £14m of grants by a variety of funding bodies including the National Institute for Health Research (NIHR), British Lung Foundation and British Heart Foundation during 2019/20.

Examples of key research studies currently taking place include testing new cystic fibrosis (CF) drugs on 'mini-intestines' grown from the cells of CF patients. The study aims to help patients with rarer forms of CF by growing microscopic sized versions of their organs ('organoids'). The organoids have the same CF mutations as the patients, allowing the researchers to screen them and see how each patient's organoid responds to new drugs.

The support of patients and volunteers who participate in research like this is vital. More than 2,300 participants were recruited into over 100 research projects in 2019-2020. (This figure would have been higher, but for the outbreak of Coronavirus (COVID-19) towards the end 2019/20.)

We continue to have close research partnerships with Imperial College London, Imperial College Healthcare Trust and the Royal Marsden Hospital on collaborative research and education activities, facilitated through the Imperial College Academic Health Science Centre (AHSC).

A number of clinicians involved in research were recognised for the valuable contribution they make to research this year. Among them were seven who were all awarded professorships by Imperial College London (ICL).

Professor Jane Davies, honorary consultant in paediatric respiratory medicine, was also appointed as a NIHR senior investigator. Senior investigators are among the most prominent researchers funded by the NIHR and the most outstanding leaders of patient-based research within the research community and beyond.

Some of this year's research highlights

During 2019/20, Trust researchers produced **866 peer-reviewed publications**, including

letters and abstracts, with academic partners, making the Trust a leading centre for cardiovascular, critical care and respiratory research.



Members of the **respiratory research team** at Harefield were recognised with several national and international **awards** and **appointments**, for their work on **pulmonary rehabilitation** and **chronic obstructive pulmonary disease**.



A Trust-led study showed that patients with **Interstitial Lung Disease (ILD)** associated scleroderma who

were given the drug nintedanib had a **slower decline** in their lung function compared to a placebo group.

The Trust played a **leading role** in securing funding for a collaboration led by Dr Brijesh Patel, honorary consultant, investigating how to **increase the chance of survival** for patients on life support systems. An international study involving Trust researchers could **fundamentally change** the way patients with **CHD** are managed. They discovered that patients with CHD who undergo invasive interventions (**stents or surgery**) do not do any better than patients who take medications alone.

The **cystic fibrosis** research team celebrated three honours at the North West London Clinical Research Awards, where they were recognised for their **outstanding contribution** to CF research (see page 19).



Dr James Ware, consultant cardiologist, is leading a collaboration to make it **easier for patients** with heart muscle diseases to access and enrol in research through a new online platform called the **Heart Hive**.



Professor Anand Devaraj, consultant thoracic radiologist, is working in collaboration with Oxford University to **improve the outcomes** of patients with **thoracic disease** (lung cancer, for example) using artificial intelligence.

Listening to our patients

One of the Trust's core valves is treating patients with respect, dignity and courtesy, and making sure they are well informed and involved in decisions about their care. We always make time to listen to what patients say and to act on their feedback.

We gather feedback from various sources and use it to continually improve our patient care.

The Trust scored highly in the Care Quality Commission's (CQC's) 2019 Adult Inpatient Survey.

For the survey, which covers different aspects of care and treatment, the CQC looked at the experiences of more than 654 patients who stayed in our hospitals.

The Trust was named **better** than other trusts in **eight of the 11 areas** covered. Each area consists of a number of specific questions, on a variety of subjects such as waiting to get a bed, being informed about the next steps in treatment and being offered emotional support.

Our results showed that:

- 99 per cent of patients felt they were treated with dignity and respect always or most of the time.
- Over 98 per cent of patients had confidence in all the staff who treated them, including nurses, doctors, physiotherapists, dietitians and other allied health professionals.
- 96 per cent of patients felt they were involved in clinical decision making.

Other evaluations also resulted in positive feedback, including NHS England's Friends and Family Test. This mandatory survey asks Trust patients to give their views on their care – **96 per cent** or more of our patients said



they would recommend our services to their friends and family.

In the National Cancer Patient Experience Survey, when asked how they would rate their care on a scale of zero (very poor) to 10 (very good) – our patients gave us an average rating of **nine out of 10**.

Feedback offers extremely helpful insight which helps us improve our services. Examples of our actions in response to feedback include:

- Taking steps to limit noise at night in Royal Brompton's High Dependency Unit after it was highlighted as an issue for patients.
- Refurbishing and redecorating the children's ward – including child-friendly artwork in rooms.
- Reducing the time patients have to wait for lung transplant clinic appointments at Harefield. We achieved this by acquiring an extra clinic consulting room and recruiting an additional consultant. These steps enabled us to increase the number of weekly clinics we offer from two to four.



Views of our patients

Harefield Cherry Tree ward (day case)

"The team who did my biopsy also were first-class and explained very thoroughly what was going to happen and were very compassionate and caring. I could not have been in safer hands."

Royal Brompton Foulis ward (respiratory care)

"The nurses make me feel almost like I'm at home as much as is possible. Always there to air problems and to cheer us up, and they are such good fun. The level of care is just amazing. They know us all nearly as much as we know ourselves and are so professional."

Harefield

Oak, Acorn (acute cardiac care) and Rowan (transplant) wards and the Intensive Therapy Unit (ITU)

"All of the staff cared for me with compassion and dignity. They all worked physically demanding shifts and yet had smiles on their faces at all times. My stay on Oak, ITU, Rowan and Acorn wards was made to feel like a home away from home."

Royal Brompton Paul Wood ward (mixed

cardiology and cardiac surgery)

"Absolutely everyone I dealt with – on the ward, in theatre prep and in recovery was outstanding – totally professional and very caring. I have been attending the Brompton since I was five in 1971. I have lived all over the country but won't change hospital due to the brilliant service here."



New **Patients and Public Engagement** strategy launches

The Trust's patient engagement team launched a new Patient and Public Engagement (PPE) strategy at a launch event for staff and patient representatives.

The strategy aims to **Listen** to patients' experiences of care in our hospitals; **Learn** from their stories and experiences; and act on and **Lead** changes in Trust services. Delivering excellent care requires the experience of patients to be considered at every opportunity and to embed this in the Trust's leadership, culture and operational processes. Collecting, analysing, using and learning from feedback is an essential part of this process.

At the event, Penny Agent, director of allied clinical sciences and patient

engagement, explained the importance of having a PPE strategy.

She said: "Delivering the best patient experience we can across every area of the Trust is paramount to what we do. By fully engaging and listening to our patients we can make meaningful improvements to their care and experience – our Patient and Public Engagement Strategy underpins this."

Janet Hogben, non-executive director of the Trust, who is working with the PPE team on the new strategy, said: "I feel very strongly that we've got to build on the very good feedback we get – which in 90 per cent plus of cases – is excellent, but also balance it with the more effective approach of



responding to cases where patient experience isn't what patients wanted or we want for them."

Pete Laybourne, Harefield heart patient and Patient Advice and Liaison Service (PALS) volunteer, will be helping the PPE team to bring the strategy to life.

He explained: "The key thing is about listening to stories and patients' experiences and learning from them so we can use that feedback to make real change to the services that we have."



Some online **patient feedback**

NHS.uk

"Absolutely phenomenal care from everyone [at Harefield Hospital] from porters, nurses and doctors. Professional and caring. The nurses on Oak Ward were fantastic and we cannot thank them enough. Immediate medical treatment for a heart attack meant I recovered quickly and they treated both my partner and myself like individuals who mattered. Thank you for everything."

"I find it difficult to find the words to express my admiration and thanks to all the staff [at Royal Brompton] that helped me through my operation and aftercare, from catering to cleaning to nurses of all ranks and to surgeons' teams I cannot have asked for more professional, caring, laughing, friendly people with a wonderful work ethic. They all have my undying admiration and thanks."

"At approximately 1.40 a.m. my wife dialled 999 to get help when I awoke with severe chest pains. The ambulance crew were fast and efficient and made the decision to 'blue light' me to the heart attack centre at Harefield Hospital. On arrival, there was a team at the door waiting for me. An angioplasty was performed and completed less than two hours after the original 999 call. My heartfelt thanks goes to those who cared for me on that night and subsequently as an in-patient. I have experienced the NHS at it absolute best." "This hospital [Royal Brompton] is simply magnificent – the NHS at its best. They have never given up keeping me alive!"

Twitter

"The care and attention I received from the surgeon right through to the people who served the meals [at Harefield Hospital] was unbelievable. Thank you so much for looking after me, reassuring me, and explaining what was going on. Could not have been in a better place."

"Without the treatment that I received at Royal Brompton my life would not be as it is today, and I am truly grateful for that. Today, I do not have to take any medication and I lead a normal and active life."

"I am being discharged from Harefield after a successful cardiac ablation. What a great team you have there, from the doctors to the nurses and support staff, who are all superb. Thank you."



To follow the Trust on Twitter, search **@RBandH**



Rehabilitation and therapies

Everyday activities that most of us take for granted can prove challenging for patients with heart and lung conditions. Our expert therapists not only support people with their recovery after a procedure, but also help them manage long-term conditions, cope with symptoms and regain their confidence and independence.

The Trust's rehabilitation and therapies services are designed to provide care for the 'whole' patient, from exercise rehabilitation to psychological therapies and dietetics.

Our experts in recovery and therapy

include physiotherapists, occupational therapists, dietitians, clinical psychologists and speech and language therapists. We also provide specialist supportive and palliative care, chaplaincy, services for older people, safeguarding (adults), complex discharge and psychiatry.

Working together as multiprofessional teams, we consider all the needs of patients as they recover from treatment and start to get on with their lives.

Pulmonary rehabilitation service celebrates 10th anniversary

Harefield Hospital's Pulmonary Rehabilitation service celebrated its 10th anniversary in 2019.

The service is one of the largest and leading rehabilitation programmes in the UK with more than 1,000 referrals per year.

Eight-week exercise and educational programmes are offered to help patients who have respiratory conditions such as COPD (chronic obstructive pulmonary disease).

The aim of pulmonary rehabilitation is to improve exercise tolerance and quality of life and as well as reduce breathlessness.

The programme is run by a dedicated

team of respiratory physiotherapists with classes held in a custom-built gymnasium with state-of-the-art equipment at the hospital and also at sites in the community.

Patients are given individualised exercise programmes suitable for their level of fitness. Alongside the exercises, there are educational sessions encompassing all aspects of respiratory care.

During the course of the programme, the level of exercise is increased as patients become fitter, so by the end of the programme they are less breathless and better able to cope with daily activities.

The service has an expert multidisciplinary team that includes a

chest physician and a wider educational team including a psychologist, social worker, occupational therapist, speech and language therapist, dietitian, respiratory nurse specialist and pharmacist.

It also offers specialist pulmonary rehabilitation for lung transplant recipients and patients recovering from lung cancer surgery.

Dr William Man, who leads the pulmonary rehabilitation service, said: "I am really proud of the dedication and specialist skills of the Harefield pulmonary rehabilitation team. Thousands of patients have benefited from the service in the last 10 years and I'm confident it will continue to benefit many more in years to come."

New campaign to aid quicker recovery

A new campaign encouraging patients to get up, get dressed and be more active, was embraced by patients across the Trust following its launch in summer 2019.

The campaign called – Get up, get dressed, get moving – was rolled out to all non-critical care wards.

Katharine Scott, lead for older people, who leads the initiative, said: "We want to change the current health culture in which patients expect to spend their time in bed and in pyjamas while they are in hospital to one where they get up, dressed and start moving around as soon as they are able to do so."

Research shows that being dressed in their own clothes makes patients feel better and encourages them to maintain their independence and stay mobile, resulting in shorter hospital stays. It also means that patients have fewer falls and are less likely to develop complications such as pressure sores. Katharine added: "We will be evaluating the results of the campaign to see if we can increase the percentage of patients getting up and dressed, while also monitoring for reduction in the length of hospital stays, falls and pressure sores." The initiative ties in with the global **#EndPJParalysis** campaign – an international movement supported by nurses, therapists and other health professionals to encourage inpatients to become more active while recovering in hospital.

Jayne Bullock, assistant practitioner in rehabilitation and therapies, helps a patient to get up and moving at Harefield



The healing arts

The Trust's arts programme rb&hArts delivers a range of vibrant creative arts designed to improve wellbeing and enhance our buildings for patients, visitors and staff.

Research on the impact of arts in healthcare settings shows it can improve clinical outcomes, shorten length of hospital stays, improve mental wellbeing, and support patients to manage long-term conditions.

Working with nearly 150 artists, the rb&hArts team provided almost 5,000 opportunities for participation, offering activities such as singing, beatboxing or learning new crafts designed to cater for all ages.

Musical activities, which are part of the team's core programme, continued to go from strength to strength. Vocal Beats – a project that brings creative music-making skills and beatboxing to younger patients aged up to 25 – was successfully launched online on YouTube.

Two musicians in residence played live music for adult patients six hours a week, and the Trust's much replicated Singing for Breathing project for older adults living with chronic respiratory



A young patient takes part in a Vocal Beats session

conditions (see right) continued to receive excellent feedback from participants.

The Arts team also formed new partnerships to support wellbeing, offering access to London's oldest botanical garden, The Chelsea Physic Garden, to Royal Brompton Hospital's staff and long-stay patients, and working with Groundwork London to create gardens for the intensive care unit and Rowan ward at Harefield Hospital.

rb&hArts also managed over 1,000 artworks around the Trust and supported hospital projects to integrate art into the fabric of our buildings.



The rb&hArts team ran monthly arts and craft workshops called Crafternoons that gave patients and staff the chance to learn new skills, and offered craft kits prepared by artists working with volunteers to patients on wards.



A youth-centred music programme Vocal Beats was short-listed for both the Youth Music Social Action Award and the Royal Society of Public Health Arts & Health Award 2019.



Singing for Breathing musical premiere at Royal College of Physicians

The premiere of a vocal composition called The Singing Hospital – performed by patients from the Trust's Singing for Breathing groups – won a standing ovation from a packed audience at the Royal College of Physicians.

Singing for Breathing supports people living with chronic lung and heart conditions or who experience breathlessness.

Composer and former Trust arts manager, Victoria Hume, was commissioned to revisit the project which she established and to co-create a choral work to celebrate Singing for Breathing's 10th anniversary. She was inspired by interviews and audio recordings of people experiencing breathlessness. Victoria said: "I asked people what they felt was important about the groups. I wanted to get across the sense of community each group has – there is such a strong sense of coming together on a joint project. That's unusual when it comes to medical care which is about what happens to you as an individual."

The Singing for Breathing groups at the Trust are now the longest continually running hospital-based workshops in Britain for people with respiratory conditions.

Feedback from those taking part is continually monitored. One of the participants, Sharon Alexander, said: "The health benefits from Singing for Breathing have been remarkable. Before I started, I had severe asthma When I first started Singing for Breathing my lungs felt very tight and closed, but when I came out of the first session they felt very relaxed and open, and from that moment to this I've never used my inhaler.

66



which was really debilitating, and I was using my inhaler 15-20 times a day.

"When I first started Singing for Breathing my lungs felt very tight and closed, but when I came out of the first session they felt very relaxed and open, and from that moment to this I've never used my inhaler."

Our charity

Royal Brompton & Harefield Hospitals Charity raises significant funds to support innovative treatment, equipment and research across the Trust. The charity funds initiatives across both hospital sites that lie outside NHS budgets, but are often essential to enhancing patients' health, wellbeing and experience.

Transforming your care digital observations appeal

Raising £200,000 to implement an electronic observation system to record patients' vital signs

The charity's fundraising is helping revolutionise the way doctors and nurses deliver care at both hospitals. It is raising **£200,000** to enable the Trust to implement an electronic observation system to record patients' vital signs. Until the new system is introduced, nurses record each patient's vital signs, such as oxygen saturation and pulse rate, on paper.

Each vital sign is allocated a score – the higher the total score, the more

abnormal the vital sign. Scores are then manually calculated.

With the new system staff will use a mobile device to collect patient observations. The system will then automatically calculate the scores to help staff make clinical judgements. An alert is sent directly to the member of staff looking after a patient if the score is too high.

For patients, this means a more consistent and accurate process of recording assessments, with care plans being communicated across both sites with ease, ultimately resulting in



timelier treatment and improved patient outcomes.

The new system will also enable clinical teams to access early warning technology for sepsis – a potentially life-threatening condition. The technology uses algorithms and track-and-trigger systems alongside nurses' own expertise to enable them to identify early signs of patient deterioration, so they can escalate treatment.

Charity fundraising will help enable the Trust to implement an electronic observation system to record patients' vital signs





#MoreTimeMoreLives ECMO appeal

Helping to buy extracorporeal membrane oxygenation (ECMO) units for Royal Brompton Hospital

The fundraising campaign to raise **£150,000** for life-saving ECMO equipment resonated with the Charity's donors.

ECMO supports recovery after life-threatening surgery or illness by oxygenating blood outside the body and returning it – effectively doing the work of a patient's lungs, or both heart and lungs, until theirs can resume normal functioning.

For many patients, ECMO is used as a last resort treatment where all other options have been exhausted. Fortunately, after treatment many return to their everyday lives.

Royal Brompton is one of only five adult ECMO centres in the UK and treats patients from across the country, from London to Avon and Gloucester, and even Wales. ECMO patients are of different ages, from babies to adults in their 70s – from people with cystic fibrosis who have a life-threatening respiratory infection, as a bridge to transplant, to those who have been unwell with severe influenza.

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Visit Royal Brompton & Harefield Hospitals Charity's website to find out more: www.rbhcharity.org

The Patients' Fund

Projects to improve the lives of patients and visitors at Royal Brompton and Harefield Hospitals

The Charity provides **£100,000** to support a wide variety of projects around the Trust each year. Staff submit ideas for projects that they believe will significantly improve the experiences of patients and visitors.

In 2019/20 the Patients' Fund awarded grants to projects that included musicians in residence, fans to make patients more comfortable during hot weather, and portable screens to provide privacy in emergency situations. Musicians in residence are funded by the Patients' Fund



Our profile in the media

The Royal Brompton & Harefield brand features across a wide range of media channels each month. From fundraising sponsored walks to exciting new clinical procedures and research trials, our hospitals are celebrated for their ground-breaking work and commitment to patient care. Here are some examples from 2019-20.

April/May 2019

The Lancet and London Live TV

celebrated 10 years of the Trust's Singing for Breathing programme, describing Royal Brompton & Harefield's role as being instrumental in the programme becoming established in 70 groups across the UK.

July 2019

The Daily Mail focused on Royal Brompton's 'specialist respiratory clinic,' in relation to the diagnosis of irritant-induced laryngeal obstruction. The paper noted that the condition is estimated to affect about 250,000 people in Britain, and is a disorder of the voice box rather than the lungs, although its symptoms resemble asthma. "We think that nerve endings in the larynx may become over-sensitised to certain scents and irritants," explained Dr James Hull, consultant respiratory physician, "it triggers a process where the voice box closes as a defence mechanism; trying to protect the airway inappropriately."





A Singing for Breathing group in action

August 2019

The Mail on Sunday covered Royal Brompton's use of the new NeoChord device, which allows surgeons to mend failing heart valves while the heart is still beating – saving the lives of people deemed too frail for open-heart surgery. When interviewed about the benefits of using the device, Royal Brompton consultant cardiac surgeon Rashmi Yadav explained: "Patients have a shorter hospital stay, they have a faster recovery and they don't have a big cut in their breastbone'.

September 2019

Harefield patient David Webb was interviewed for a **Daily Mirror** feature as one of two brothers who both had heart transplants after being born with the same hereditary heart condition (atrial fibrillation). David and his brother Stuart discussed the life-changing impact of their surgeries. "There isn't a day that Stuart and I don't think we're the luckiest brothers on earth", said David.

October 2019

Under the headline '£2.5m trial of Al system to help patients at risk of fatal lung failure', the **Evening Standard** and **BBC London** covered an Imperial College London study, led by Dr Brijesh Patel, honorary consultant at Royal Brompton, to investigate how to increase the chance of survival for patients on life support systems. The trial assesses critically ill patients in the UK, France and Austria who need a ventilator.

Actor and former footballer, Vinnie Jones appeared on **ITV's Good Morning Britain**, talking about his late wife. As part of the interview, Vinnie discussed her heart transplant at the age of 21 at Harefield Hospital. Vinnie spoke passionately about the fantastic care that his wife, Tanya, received from the entire transplant team. A significant number of national media outlets carried his comments including **The Metro**, **Daily Mirror, Scottish Sun**, and **Mail Online**.

November 2019

Following publication of a report linking a life-threatening lung condition to vaping, Royal Brompton's consultant paediatric chest physician Professor Andrew Bush was interviewed on **Sky News**, **ITV News** and **BBC Scotland's Good Morning Scotland** about the dangers of vaping. Professor Bush said: "We simply do not know the long-term consequences of vaping. We don't know what is in these devices and liquids, therefore, how can we possibly say they are safe to inhale into our lungs? They should be kept out of the hands of young people."

Meanwhile Royal Brompton nursing staff were interviewed for the **Nursing Standard** about the role of clinical practice educators and how they can help nurses achieve their career goals.

December 2019

Royal Brompton Hospital consultant allergy dietician Dr Isabel Skypala contributed to an article about the allergy-inducing properties hidden in some products containing pea proteins, to which many children who suffer from peanut allergies are also allergic to. Dr Skypala discussed a phenomenon called 'cross reactivity', where allergies to one food make a person more likely to have problems with other similar ones, as in peanuts and pea protein. The story was covered in the Mail Online UK, the Mail on Sunday and the Irish Daily Mail on Sunday.



Dr Isabel Skypala



Dr Alexander Lyon

January 2020

Royal Brompton's consultant cardiologist Dr Alexander Lyon was interviewed on **BBC 2's Victoria Derbyshire** programme about research that concluded hardcore football fans are at greater risk of heart attacks. Dr Lyon recounted the 1998 World Cup quarter-final game that went to penalties and resulted in a surge in heart attacks in the UK. Dr Lyon explained: "As well as heart attacks, there are other forms of 'heart emergencies' caused by massive surges in heart stress hormones like adrenalin."

February 2020

Royal Brompton Hospital's consultant respiratory physician Dr Jennifer Quint appeared on **BBC Radio 4's Inside Health** programme, to discuss air pollution and how it affects health. As part of the piece, Dr Quint discussed a world-first study where the individual air pollution exposure of COPD (chronic obstructive pulmonary disease) patients was tracked in real time to find out how toxic air can make their condition worse.



IRISH ON SUNDAY

Governance

Royal Brompton & Harefield NHS Foundation Trust is the largest specialist heart and lung centre in the UK and one of the largest in Europe.

As a public benefit corporation, Royal Brompton & Harefield NHS Foundation Trust has been an independent legal entity since 1 June 2009. The powers of the Trust are set out in the National Health Service Act 2006, as amended by the Health and Social Care Act 2012. The Trust governance arrangements are set out in the constitution of Royal Brompton & Harefield NHS Foundation Trust and include the Trust's membership, the Council of Governors and the Board of Directors

The Trust has around 10,750 members, which are made up of the public, patients, carers and staff constituencies. From these members, governors are elected to our council of governors to represent their interests and influence the Trust's future plans.

The Trust board is responsible for all aspects of operation and performance,

strategic direction, and for effective governance of the Trust. Board members are responsible for assuring that risks to the Trust and the public are managed and mitigated effectively. Led by an independent chair, and composed of a mixture of both executive and independent non-executive directors, the board has a collective responsibility for the performance of the organisation. The council of governors, which comprises both elected and appointed governors, challenges the board and holds the non-executive directors, who they appoint, to account for the board's performance. The council of governors also appoints the Trust's external auditor.

There are four committees of the Trust board: the audit committee, the risk and safety committee, the finance committee, and the nominations and remuneration committee.

Annual report and accounts – policy and performance

Visit our website to read the Trust's full annual report and accounts for 2019/20 - www.rbht.nhs.uk/ about-us/annualpublications – and for more information about our policy and performance www.rbht.nhs.uk/ about-us/ourperformance

than 400 people welcomed to Harefield's theatres and catheter laboratories at an open day

Trust Governor Rt Hon Michael Mates and his wife Christine were among more

Our board

Executive directors Full year

Mr Robert J Bell Chief executive

Dr Mark Mason Medical director/senior responsible officer (part year)

Mr Robert Craig Director of development and partnerships

Ms Jan McGuinness Chief operating officer

Mr Richard Guest Chief financial officer (from 1 February 2020)

Ms Joy Godden Director of nursing and clinical governance Mr Nicholas Hunt Director of commissioning and service development

Executive directors Part year

Dr Richard Grocott-Mason Medical director/senior responsible officer (to 14 July 2019)

Mr Richard Paterson Associate chief executive – finance (to 31 January 2020)

Non-executive directors Full year

Sally Morgan, Baroness Morgan of Huyton Chair **Mr Simon Friend** Deputy chair

Mr Luc Bardin Senior independent director

Mr Mark Batten

Dr Javed Khan

Ms Janet Hogben

Professor Peter Hutton

Mr Richard Jones

Professor Bernard Keavney (from 2 June 2019)

Non-executive directors Part year

Professor Kim Fox (to 31 May 2019)

Our council of governors

Public governors Full year

Mr George Doughty (lead governor from February 2018 to February 2020) North London

Rt Hon Michael Mates (lead governor from February 2020) South London and South-East England

Revd. Patrick Davies Rest of England and Wales

Pravinchandra Shah Bedfordshire, Hertfordshire and Essex

Patient and carer governors Full year

Mr Jeremy Stern North London

Lady Victoria Borwick North London

Mr Sean O' Reilly Bedfordshire, Hertfordshire and Essex **Mr Paul Murray** South London and South-East England

Ms Helena Bridgman Rest of the United Kingdom and Overseas

Ms Caroline Karlsen Representing Carers

Part year

Mrs Julie Bartlett (from January 2020 to May 2020) Bedfordshire, Hertfordshire and Essex

Mr Ryan Fletcher (from 23 January 2020) South London and South-East England

Dr Ejikeme Uzoalor (to 30 November 2019) Rest of the United Kingdom and Overseas

Mrs Brenda Davies (to 30 November 2019) Bedfordshire, Hertfordshire and Essex

Staff governors Full year

Mrs Elizabeth Henderson

Mr Steve Caddick

Ms Maxine Ovens

Mr Stephen Palmer

Part year

Dr Claire Hogg (to 26 February 2020)

Dr Rishi Pabary (from 27 February 2020)

Appointed governors Full year

Mr Tim Ahern Royal Borough of Kensington and Chelsea

Cllr John Hensley London Borough of Hillingdon

Professor Jadwiga Wedzicha Imperial College London

Professor Ajay Shah King's College London

Royal Brompton & Harefield NHS Foundation Trust accounts for year ended 31 March 2020

Statement of comprehensive income as at 31 March 2020

	2019/20 £000	2018/19 £000
Operating income from patient		
care activities	399,637	358,236
Other operating income	54,841	38,181
Operating expenses	(447,217)	(411,712)
Operating surplus / (deficit from continuing operations	7,260	(15,295)
Finance income	138	173
Financial expenses	(1,184)	(1,313)
PDC dividends payable	(8,378)	(7,663)
Net finance costs	(9,424)	(8,803)
Other gains / (losses)	1,119	(7,609)
Deficit for the year from continuing operations	(1,045)	(31,708)
Deficit for the year	(1,045)	(31,708)
Other comprehensive income will not be reclassified to income and expenditure:		
Revaluations	16,782	2,818
Total other comprehensive income	16,782	2,818
Total comprehensive income / (expense) for the period	15,737	(28,890)

Statement of financial position as at 31 March 2020

	As at 31.03.20 £000	As at 31.03.19 £000
Non-current assets		
Intangible assets	11,847	12,209
Property, plant and equipment	207,308	189,967
Investment properties	94,846	93,653
Receivables	536	_
Total non-current assets	314,536	295,829
Current assets		
Inventories	12,631	10,182
Receivables	70,852	49,916
Cash and cash equivalents	7,315	20,818
Total current assets	90,798	80,916
Current liabilities		
Trade and other payables	(62,558)	(47,318)
Borrowings	(6,205)	(11,115)
Provisions	(389)	(3,270)
Total current liabilities	(69,152)	(61,703)
Total assets less current liabilities	336,182	315,042
Non-current liabilities		
Borrowings	(47,745)	(43,596)
Provisions	(1,257)	(374)
Total non-current liabilities	(49,002)	(43,971)
Total assets employed	287,179	271,072
Financed by		
Public dividend capital	109,429	109,069
Revaluation reserve	74,187	57,405
Income and expenditure reserve	103,554	104,599
Total taxpayers' equity	287,179	271,072



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Harefield Hospital

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