



James Paget
University Hospitals
NHS Foundation Trust

The James Paget Orthopaedic Centre and Oulton Suite

January 2025



'FANTASTIC PROJECT'

When Sunil Garg performs his first operation in the new James Paget Orthopaedic Centre (JPOC), it will be an exciting and proud moment.

Mr Garg, who is the James Paget's Clinical Lead for Trauma and Orthopaedics, has been closely involved in the project to deliver the JPOC over a period of more than 18 months.

His input has helped shape a facility which boasts two modern 'laminar flow' operating theatres which means they have the latest ventilation system to ensure a continuous flow of clean air. The theatres can be used for all orthopaedic operations including joint replacement and keyhole surgery – and, in the future, robotic surgery.

"It has been a fantastic project to be involved in," said Mr Garg, who has worked at the James Paget as a Consultant Orthopaedic Surgeon since 2010. "The first day will be really exciting. I'll be nervous too – but it will be enormously satisfying to see the facility in operation for the first time.

"It's a state-of the art building with modern facilities – and it's open and spacious with lots of light so will be a pleasant environment in which to work."

The JPOC will be treating patients seven days per week, performing a total of 1400 theatre sessions per year. These sessions will allow the hospital to conduct orthopaedic operations on more than 3000 patients per year. Once functioning at full capacity, it will help reduce waiting lists in a specialty which continues to see an increase in demand due to an ageing population.

Importantly, it has a new 28-bed ward immediately next door where patients needing an overnight stay can recuperate following their operations.

Together, the JPOC and ward provide the James Paget with a dedicated elective orthopaedic facility for the first time. This will enable surgery to continue even at times of peak demand, especially in the winter,



when previously elective orthopaedic procedures had to be postponed due to more beds being needed by patients requiring emergency care.

Looking ahead, there are plans to further consolidate orthopaedic services in one area of the James Paget site, with a new outpatients' unit due to be constructed adjacent to the JPOC early in 2025.

"It's positive news for our patients," said Mr Garg. "Not only will there be more surgical capacity, and fewer postponements but we're also effectively bringing all our services under one roof rather than have them in different parts of the site."

For Mr Garg, the opening of the JPOC is the highlight of his Orthopaedic career which started in 1995 but continues to bring him such satisfaction every day.

"I enjoy my job so much that I never feel like I am going to 'work.' The biggest reward you can have is when a patient who has had an operation comes to see you, and says with a smile 'I am pain free'. It really makes your day," he added.



STAFF INPUT

The input of clinical staff at the design stage of the JPOC has been instrumental in creating a building that will provide a high-quality working environment.

As Deputy Lead Nurse for the Division of Surgery, Women's and Children's Services, Sarah Burroughs played a key role in helping influence the design of the building to benefit both patients and staff.



"The fact that clinical teams have been involved right from the start has meant they really 'owned' the project," said Sarah, who has worked at the James Paget for 23 years.

"As a result, there has been a focus on seeing the new building as an opportunity to introduce improvements and do things differently. So, our theatres team have looked at ways of improving the flow of patients through the building, while there has been engagement with staff over designing the facilities they would require."

Sarah is the matron of the ward immediately next door to the new facilities, where patients will recuperate after their operations.

"The ward gives us a new ways of nursing, with mainly single ensuite side rooms and more technology, to make delivering care easier. For patients, they will experience modern accommodation, improving privacy and dignity and infection control, as well as features not seen on other wards in the hospital, including, specifically, outside space."

As Clinical Lead for the Anaesthetics Department during the project, Dr Veena Naik was able to provide valuable input drawn from 20 years of experience working at the James Paget.



Dr Naik said she was excited that the new Centre would offer the latest orthopaedic surgical facilities for patients on the east coast.

"I am extremely proud to have worked on this major project," said Dr Naik. "It will provide a spacious modern environment which will be great for patients - and staff wellbeing has been factored into the design too."

"Importantly, the facilities are self-contained: whether a patient is a day case or requiring overnight stay, they will not need to go into the main hospital - their admission, treatment and aftercare will all be in the same place."

"It has been a great experience being involved with the project from an early stage, and seeing all the teams - surgical, anaesthetics and nursing - working so well together," she added.



FROM PLAN TO DELIVERY – IN

The James Paget's Estates team have worked closely with constructors Darwin Group throughout the project – and a good working relationship has been crucial in helping it progress at pace.

"When you look at the timescales, it's quite an achievement," said Head of Capital Planning, Richard Varvel.

"The first design meeting took place in autumn last year – so we have effectively gone from a blank piece of paper to delivery of a modern healthcare building within the space of 14 months.

"Teamwork has been key - not only within the estates department but with our design team and external partners, including constructors Darwin.

"That has been crucial to ensuring construction work remained on budget within the overall £29 million project capital budget."

Darwin Group Deputy CEO Jim Pierce said: "At

Darwin Group, we are incredibly proud to have been part of delivering the new Orthopaedic Centre at James Paget University Hospitals NHS Foundation Trust.

"The close collaboration between our team, the trust, and the clinicians enabled a seamless blend of expertise, vision, and practical execution. Together, we achieved outcomes that truly showcase the power of collective effort. It has been a privilege to contribute to a facility that will have such a meaningful impact."

The project management team have also been mindful of minimising disruption wherever possible.

"Major construction means an increase in vehicle movements to a site and, on occasion, noise from building work – and we would like to thank local residents for their patience and understanding during the year as we have completed this important healthcare project," said Steve McIntosh, Project Manager for project management company Castons.



Staff from the James Paget and constructors Darwin Group at the ground-breaking ceremony held on site in early 2024.

JPOC constructors Darwin Group used the latest virtual reality technology to help give staff a glimpse of their new buildings – even as it rose from the ground.

Darwin Group hosted a number of staff tours of the building as it was under construction. Before each tour, Principal Architect Louis Sullivan hosted a virtual reality session so that staff could visualise how the new centre would look, before they actually stepped inside the building.

Mr Sullivan oversaw the development of the VR presentation – and described it as "effectively the future of design".

"It's so immediate and so visual. It really helps trusts understand that what they see is what they get."

Staff who experienced the VR tour of the building were amazed as they walked through the building, along corridors and into rooms including the operating theatres – and even taking in a bird's eye view above the roof.

Among those taken on the VR tour was Elective Planning Manager, Diane Yallop, who really enjoyed the experience – even though it made her feel 'a bit giddy'.

"To be able to see everything in situ and what it will look like when it is finished, was amazing. And as for the aerial view - I now know what it feels like to be a bird!"

The VR experience was a real 'eye-opener' for Clinical Specialist Physiotherapist in Trauma and Orthopaedics Trudie Rhodes. "It was lovely to see the architect's dream of what the finished rooms would look like – and then actually going round and physically being in the rooms meant I could actually picture the virtual images as I was going round and could see that the project was coming together really nicely."



14 MONTHS

FACTS AND FIGURES

- 253 working day programme
- 57 modules
- 2627m² gross internal floor area
- 2 new theatre suites and recovery area
- 8 treatment rooms
- 6 consultation rooms
- Staff rest rooms, changing rooms, showers and toilets
- Storage areas

GREEN BUILDING



The JPOC's design makes it highly sustainable – so much so that has secured an 'Excellent' rating from the Building Research Establishment Environmental Assessment Method (BREEAM).

BREEAM is the leading environmental assessment method for buildings and communities. It sets the standard for best practice in sustainable design and has become the measure used to describe a building's environmental performance.



Darwin Group Principal Architect Louis Sullivan said:
"There are so many future-proofed aspects of this building which means it's adaptable, reusable. It is going to be a brilliant building for the Trust for decades."

MODERN METHODS

The James Paget Orthopaedic Centre (JPOC) has been constructed using what are known as Modern Methods of Construction (MMC).

MMC are building practices that are more efficient and effective than traditional methods. In the case of the JPOC, this has included using more than 50 pre-fabricated building modules, which were constructed in a factory and then assembled on-site.

This method of construction maximises best use of time, as the modules can be constructed at the same time as groundworks are taking place.



DEC
2024



SEPT
2024



JULY
2024



MAY
2024



MARCH
2024



OULTON SUITE: EXTRA TESTING CAPACITY

The new Oulton Suite is a community diagnostic centre which will provide more than 500 additional diagnostic tests per week for local patients, using the latest tests and medical devices.

Inside the suite are six spacious consultation rooms and eight treatment rooms, where diagnostic tests will be performed.

The tests include:

- Echocardiography, including trans-thoracic echo and Holter tests
- Implantable loop recorders and removals
- Lung function tests including spirometry, fractional expiratory Nitric Oxide (FeNo) and spot check pulse oximetry.
- Sleep studies
- Dermoscopy (imaging)
- Point of Care Testing to support diagnostic tests.

You can read more about these tests on the next two pages.

The Oulton Suite complements the work of the neighbouring Community Diagnostic Centre (CDC), where patients receive CT and MRI scans, and X-Ray and Ultrasound imaging. The CDC opened in summer 2024 and is providing approximately 1000 additional imaging tests for patients every week.

Later this year, another CDC is due to open at the Northgate Hospital site in Great Yarmouth.

The additional capacity of both the Oulton Suite and two CDCs means that patients will be offered tests more quickly, resulting in swifter diagnoses, which are so important for treating many conditions.

DIAGNOSTICS: HEART CONDITIONS

Senior Chief Cardiac Physiologist Ruth Mixer is looking forward to working in the brand new Oulton Suite – and says its modern environment will make a big difference for both patients and staff.

"It's a big building, with fantastic facilities for staff and more space to work," she said. "Also, because it is a dedicated, standalone facility away from the main hospital, it will mean fewer interruptions to schedules, helping us see patients promptly, at their appointment time."

Ruth will be overseeing the delivery of cardiac tests to diagnose heart conditions.

Among the tests available at the Oulton Suite will be ambulatory monitoring, where a patient is fitted with a wallet-sized monitor for up to a week, to record the heart's rhythm; and echocardiography, using echo machines, similar to ultrasound used in maternity departments, which provide images of the heart's structure.

Brand new this year is the introduction of implantable 'loop recorders' - no bigger than a paper clip – that are inserted under the skin to record the heart's rhythm over a number of months, with results that can be sent direct from the patient's phone via Bluetooth.



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Lung Function

DIAGNOSTICS: LUNG FUNCTION/SLEEP

The new Oulton Suite will offer a range of diagnostic tests for patient's lung function.

These tests include spirometry, which is measured to assess how clear your airways are, gas transfer measurements, which can determine how efficiently the lungs transfer oxygen into your bloodstream; and lung volumes which measures your total lung size and capacity.

Also available for patients will be several new diagnostics tests, one of which includes the fractional exhaled nitric oxide (FeNO) test. This test measures the amount of nitric oxide in your breath to determine the level of inflammation in your airways, and is particularly useful when assessing for Asthma.

These different tests can help towards the diagnosis and management of a range of conditions, from asthma and chronic obstructive pulmonary disease (COPD) to lung fibrosis and asbestosis.

Chief Respiratory Physiologist Matt Scott will be overseeing the team conducting the tests at the suite, as well as providing diagnostics for sleep-related breathing disorders including obstructive sleep apnea hypopnea (OSAH).

Patients who are suspected of having OSAH sleep disorder will be issued with a respiratory polygraphy test (home sleep study device). "The device provides a range of channel markers used to help diagnose obstructive sleep apnoea and other sleep related breathing disorders – and it can all be done within the comfort of the patient's own home environment rather than a hospital bed," said Matt.



DIAGNOSTICS: HAND-HELD TESTING

The latest 'Point of Care Testing' (POCT) machines will be used in the new Oulton Suite, to carry out 'blood gas' tests, which measure levels of oxygen and carbon dioxide in a patient's blood, to evaluate respiratory and circulatory disorders.

A small sample of blood is placed in a cartridge, which is then inserted into a hand-held POCT device (see photograph), which analyses it and displays the results on its screen.

The use of POCT machines in hospitals has grown in the last few years, particularly since the Covid pandemic; there are now 17 different types of POCT machines at the James Paget, testing and analysing to help diagnose and manage a range of conditions.





OUR COMMITMENT

By Jo Segasby
Chief Executive

The opening of the James Paget Orthopaedic Centre and Oulton Suite marks another significant step on our journey to creating a new healthcare campus for our community.

Both of these new facilities, housed in one state-of-the-art building, will bring significant benefits for our patients by expanding our diagnostic capacity, and help us reduce waiting lists for high demand operations such as hip and knee replacements.

As the first patients step inside, they will be welcomed into a modern healthcare building that will stand us in good stead for decades to come.

Its opening comes just months after we cut a ribbon to open our Community Diagnostic Centre, which sits just yards away on a plot of land that is also home to our award-winning Concept Ward, which has now been caring for patients since the summer of 2023.

The development of these new facilities has therefore been 'at pace', reflecting the need to create more capacity now to treat and care for our patients.

Together, these new building symbolise our commitment as a Trust to provide modern healthcare facilities that will benefit our community not just today but for decades to come.

And it's just the start. The Orthopaedic Centre, Diagnostic Centre and Concept Ward are the first developments on our new healthcare campus, which ultimately will include a brand new hospital building.

Our plans for the new hospital are progressing well. We've just submitted our strategic outline case to the Department of Health and Social Care. The next step will be engaging with local people over our plans in 2025. Exciting times!

