



Building the healthcare of the future



Building the
Leeds Way

May 2022

Stakeholder briefing



The building of two new hospitals in Leeds is one of the most important developments in the city for a generation – and will bring positive improvements in healthcare for the region as well as being a catalyst for the regeneration of the city centre.

Our plans to build a new home for Leeds Children's Hospital and an adults' hospital as well as the largest single-site maternity centre in the UK at Leeds General Infirmary - is making great progress with our latest concept designs by appointed architects Perkins&Will currently being road-tested through engagement sessions with patients, staff and clinicians.

The new hospitals are a major part of our wider programme of healthcare improvement that includes developing a new state-of-the-art pathology laboratory at St James's Hospital to serve hospitals across Leeds, West Yorkshire and Harrogate. Contractors are already on site there and the new facility will be ready for use by the autumn of 2023.

There's no doubt this is set to be a crucial year for our Hospitals of the Future project and we are determined to keep the project moving forward. These new hospital facilities will not just be for patients in Leeds but will have a far-reaching positive effect on the specialist services we provide for people in Yorkshire and beyond. These will be hospitals for everyone which is why we're keen to engage a wide range of audiences in supporting them.

This isn't just about healthcare. Our new hospitals will also create the opportunity for us to redevelop our old hospital estate as a world-class hub for research, innovation and technology in life sciences,

and bring about direct and wider economic benefits of up to £11.2bn in net present value terms and 3,000 jobs. The new hospital development also fits squarely into the Government's "levelling-up" agenda and without the new hospitals this exciting regeneration plan cannot happen.

I am proud of the fantastic progress we've already made which is a credit to everyone working on the project. Over the coming months we will continue working in collaboration with the Department of Health and Social Care (DHSC) and the New Hospital Programme (NHP) team to ensure that our proposals adopt the national design standards and ambitions in connection with sustainability, digital and other hospital design principles - and continue the momentum.

We're keen to have your support and would welcome your views along with any comments on this important and exciting development for Leeds and the wider region.

Dame Linda Pollard DBE DL Hon. LLD
Chair, Leeds Teaching Hospitals NHS Trust





New hospitals for everyone

As one of the largest providers of specialist hospital services in the country, our new hospitals will go beyond the delivery of excellent patient care for the people of Leeds and will improve the lives of those both regionally and nationally.



A new adults' hospital

The new adults' hospital will support patients across the care pathway, from those attending for an outpatient appointment or a day case surgical procedure to those needing our most advanced care and support to recover from critical illness or injury. New theatres for day case surgery will reduce the number of inpatient hospital stays and there will be extra capacity to the critical care unit allowing us to treat the most complex and ill patients. A new flexible theatre and procedure unit will support a complex range of day case and urgent patient procedures.

A new home for Leeds Children's Hospital

Leeds Children's Hospital is currently one of the largest specialist hospitals for children and young people in the country. Over 80% of the services it delivers are specialist and it provides one of the most comprehensive ranges of paediatric services in the country including cancer treatment, transplantation and congenital heart surgery. Currently, these services are spilt across multiple sites in buildings not designed for children and young people, but our new children's hospital will put the needs of our patients and their families first – by bringing all these services under one purpose-built roof for the first time.



A centralised maternity centre

For the first time, a new maternity centre will incorporate a midwifery-led unit and co-locate all inpatient maternity and specialist neonatal services on one site and become the largest single-site maternity unit in the UK. The new centre will see 10,500 babies a year from across Leeds and Yorkshire with all facilities in one place which will prevent the need for mothers and ill babies being transferred or being separated at a crucial time when they need each other most.

“It’s fantastic to see a maternity centre joined up with a neonatal unit in the new hospital.”

Monica Saikia
from Leeds, whose daughter Ria was cared for after being born 23 weeks premature.



“Thanks to the specialist treatment and care I received in Leeds I have been able to get on with my life and follow my dreams.”

Tommy Frank
from Sheffield, a champion boxer whose hole-in-the-heart surgery at Leeds Teaching Hospitals enabled him to become a British and Commonwealth champion.



Improving healthcare through co-design

It is important to us that we build the best hospitals that are welcoming and inclusive to all, so it's vital we talk to the people that will use them at every stage in the process.

We are working closely with adults, children, young people, their families and carers, as well as staff and other stakeholders, to make sure we use their expert knowledge and lived experiences to help plan how the hospitals will look and feel, and how we will continue to deliver outstanding care.

Engagement is ongoing, and varies from regular updates at staff meetings, to detailed working groups bringing together staff and patients to share their thoughts and ideas directly with our architects Perkins&Will. Through this kind of collaboration, we ensure that our new hospitals are not only designed

for them, but by them too.

Our first patient workshops generated ideas about how they would want to use the space, what they liked about the new designs and what they would like to see in the new hospital.

Sonny Marshall, aged six, from Morley in Leeds, is one of the young budding architects helping to shape the new home of Leeds Children's Hospital. He said: *"It was so much fun sharing ideas with everyone. We used an app called Mural, which was a bit like sticky notes."*

Anne Claire Winfield from Cookridge, Leeds, is a wheelchair user and joined our adult patient design workshop. She said: *"It's very important to make the hospital buildings wheelchair accessible and the signs in the actual buildings and departments are available at a suitable height for wheelchair users."*

We're continuing to capture feedback and the Perkins&Will team are considering them as they move forward with the design of the hospitals.

Images left to right: illustration from the Children's design workshop, Sonny and Rufus Marshall, and Anne Claire Winfield and participants from the adult design workshop.





A new pathology laboratory



Improving healthcare for hospitals in the region

The new pathology laboratory at St James's University Hospital already has contractors on site building the new facility. This is the first step in our wider development plan.

The laboratory will provide state-of-the-art pathology services for hospitals across Leeds, West Yorkshire and Harrogate, and replace outdated facilities at the Old Medical School and at St James's which currently house some of Leeds Teaching Hospitals NHS Trust's pathology services.

It will improve diagnostics for patients and help to meet the growing regional demand for specialist treatment and care as well as providing important development opportunities for staff.

The new laboratory is due to be completed in the summer of 2023 and be operational in the autumn of that year. It will be built to accommodate cutting edge equipment and specialist technology and will be designed to provide fast, accurate, routine and specialist testing.

The release of the Old Medical School building will also benefit Leeds in the future as part of a wider Innovation Village in the city centre which is expected to create over £11.2 bn in net present value and over 3,000 new jobs.

Pathology plays an integral role across the Leeds Trust in diagnostics, treatment planning and wider research and the new laboratory is an important part of its overarching development plan to revolutionise healthcare across the region through the creation of two new hospitals in one building on the Leeds General Infirmary site.

Despite working in their current outdated building, the Trust's pathology teams have risen to the challenge that the Covid-pandemic has presented them by processing nearly one million samples for the Yorkshire region – over two thirds of them from Leeds. At the peak of the pandemic the Leeds pathology teams were processing over 2,600 Covid samples a day, a tremendous achievement.



“This new state of the art laboratory will offer me a great opportunity to further develop and enhance my skills and expertise to deliver a great pathology service for our patients.”

Peter Kabuga
a specialist biomedical
scientist in Leeds

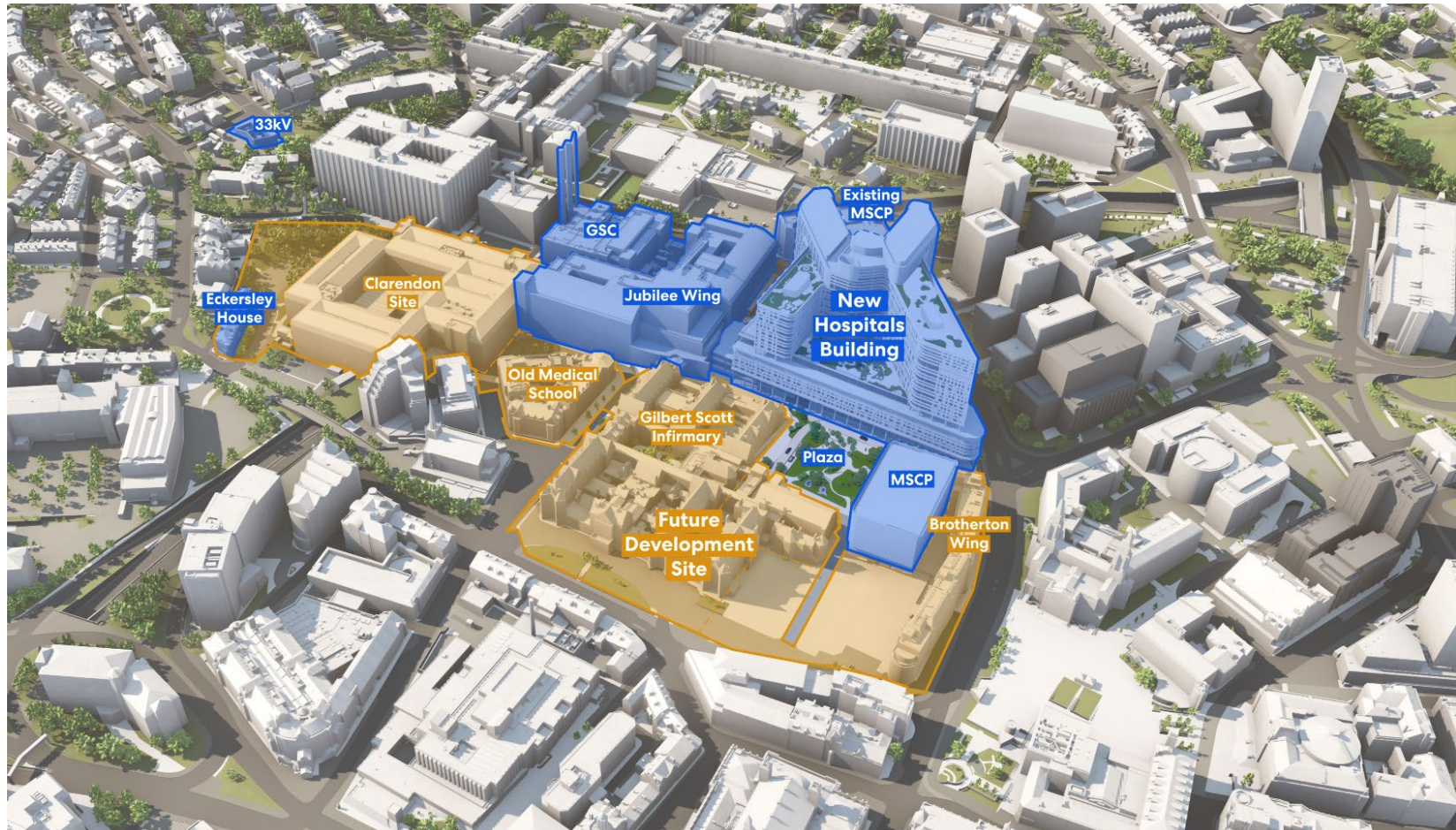




Leeds General Infirmary development site



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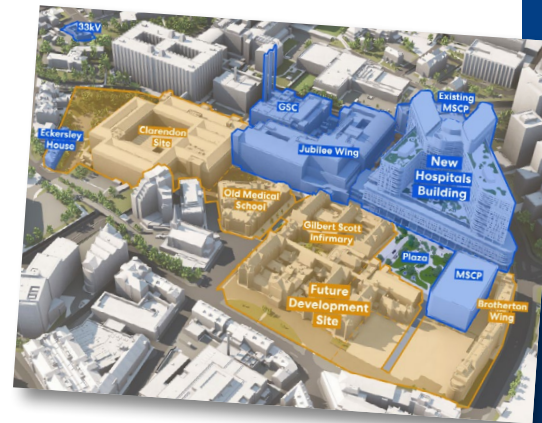


'Levelling up' Leeds through innovation

Looking ahead, the investment in our two new hospitals presents a huge opportunity for the transformation and regeneration of a key city centre site in Leeds.

Five hectares of land and existing buildings will be unlocked to develop a new Innovation Village - a world-class hub for research, innovation and technology in life sciences. An independent report conducted by accountancy firm PWC estimates that our development will deliver 3,000 new jobs and up to £11.2bn economic boost for the region - positively supporting the Government's "levelling-up" agenda.

The redevelopment of our site forms a crucial part of the Leeds Innovation Arc – a series of innovation neighbourhoods, formed around the universities, major private sector occupiers and our hospitals at Leeds General Infirmary.



The development will:



deliver

3,000 jobs



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Leeds Innovation Arc



The Arc will provide around 100,000m² of innovation space to support start-ups, growing enterprises and major occupiers, together with shared spaces where people can meet and share ideas. There will be over 3,000 new homes in and around the study area, the potential for up to 220,000m² of public realm improvements as well as two new city parks creating four hectares of new, meaningful green space.

As part of Leeds City Council's regeneration framework, the neighbourhoods across the Arc,

and the surrounding areas of Burley and Woodhouse, will see improved links through repaired and enhanced routes for pedestrians and cyclists, with the potential for about 8.5km of new cycle lanes across the area. They will also benefit from the new mass transit system to reduce travel times to and from Leeds Station - increasing connections and collaboration across the city to support inclusive growth.

Visit www.innovationleeds.com for more information.





The Old Medical School

the first step towards
an Innovation Village
for Leeds

The Old Medical School will be the first building in the in LGI development site to become available for redevelopment in the first quarter of 2024 when it is vacated upon the completion of the Trust's new state-of-the-art Pathology Laboratory at St James' University Hospital.



The 7,733m² building currently houses Leeds Teaching Hospitals NHS Trust's pathology department over five floors and still retains many of the features of the original medical school including a lecture theatre and library. Sitting next to the Gilbert Scott Building in Great George Street – it is truly at the heart of the new Innovation Village.

The Old Medical School in Thoresby Place was built in 1894 and is a Grade II* listed building with additions made to it around 1930. After years of producing a long line of eminent physicians the medical school moved to a new purpose-built site in the Worsley Medical and Dental Building at the University of Leeds in 1977 with the building in Thoresby Place being home to the Trust's pathology department ever since.

The pathology department has excelled as a regional testing centre during the Covid pandemic with nearly a million tests completed – over three quarters of them from Leeds. At its height the team were carrying out over 2,600 Covid tests a day.

The future is bright for Old Medical School, located at the epicentre of our site and adjacent to world-class healthcare facilities. It will be the first phase of development in the new health innovation village, offering the opportunity for a partner to build on a rich legacy of innovation through collaboration on the future of healthcare.



Innovation Pop Up



Designed on the advice of Florence Nightingale and completed under the exacting eye of architect Sir George Gilbert Scott in 1869, the Leeds General Infirmary (LGI) was the world's first civic hospital. It delivered national and international breakthroughs, including the UK's first kidney and hand transplants and the birth of modern emergency medicine, but now the Grade I listed Gilbert Scott Building is home to a growing community of high-tech start-ups led by clinicians and entrepreneurs focused on advancing modern medicine once again.

The Innovation Pop Up supports health innovation adoption, translation and ideation from an NHS setting. Since its launch in September 2021, the Innovation Pop Up in the Gilbert Scott Building has worked with 150 companies across 15 countries including Israel, Norway, Spain, Canada, Japan, Switzerland, the USA, and Taiwan. It is the first phase in establishing an Innovation Village at LGI and is a valuable test bed for new innovations, technologies, and ways of working before they are implemented in our new hospitals.



“

I am passionate about supporting the best and brightest ideas of clinicians, academics, and business innovators to make a difference in health and care systems. The gateway with Israel, Nordic countries and the rest of Europe demonstrates a new way of collaborative working across the health innovation network. It's something I hope that can be widened across the whole of northern England and with other international markets.”

Tracy Brabin
The Mayor of
West Yorkshire

Award-winning

The ambitious initiative has won the research and innovation category in the Chief Scientific Officer's Excellence in Healthcare Science Awards, which champions ground-breaking translational scientific work and strong collaborations for innovation and enterprise to make a real difference in patient care.

“There are a number of impressive new technologies and innovations coming out of the new Pop Up at Leeds Teaching Hospitals. One of the brilliant things the team have been developing is real-time location services to help track samples in pathology to improve efficiency. This innovative application of tracking technology is testament to the cross fertilisation of ideas that happen by bringing entrepreneurs and clinicians together.”

Professor Dame Susan Hill
Chief Scientific Officer for England

Case studies

WarnerPatch

Health tech entrepreneur Melissa Berthelot, the founder and CEO of medical device company WarnerPatch, is working with the Innovation Pop Up to trial her continuous remote monitoring technology with patients and clinicians at Leeds Teaching Hospitals NHS Trust.

Dr Berthelot has invented a wearable sensing mechanism which monitors the health of soft tissue to provide real-time and near-future indications of disease evolution. It is non-invasive and powered with 5G connectivity, enabling the flow of critical information to clinicians. WarnerPatch uses artificial intelligence to predict likely outcomes and generates alerts if symptoms get worse.



IMedis

Health tech company IMedis is working with the Innovation Pop Up to help scale up the world's first AI-powered quality assurance system for radiology computed tomography (CT) scans.

The company helps radiology departments by automatically analysing CT images and the accompanying report to uncover any failure points. The system aims to enhance radiology performance, improve patient safety, reduce legal risks to providers and improve outcomes for patients.

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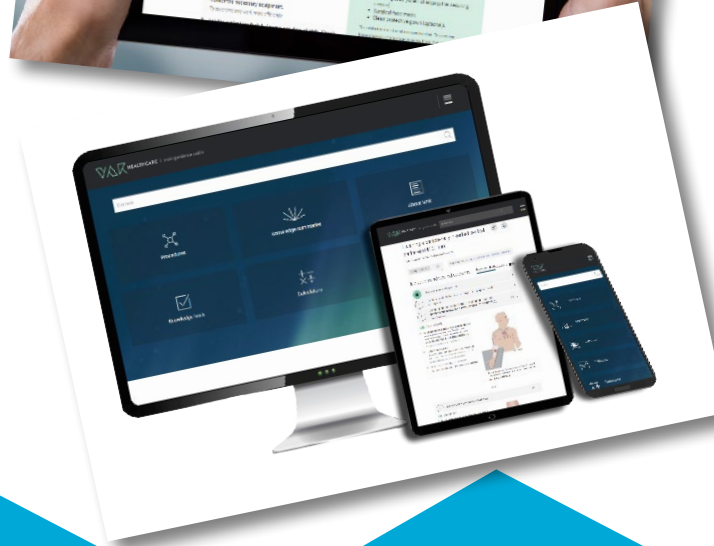


Case studies

VAR Healthcare

Norway's VAR Healthcare is a leading provider of online knowledge and decision support systems for frontline staff across Scandinavia and the company has joined the Innovation Pop Up to expand into the UK.

It offers a database of 400 up-to-date procedures plus useful tools for use in healthcare practice. The procedures are presented to facilitate learning, supplemented with illustrations and videos, and supported by knowledge summaries.



Samantree

Innovation Pop Up member company SamanTree Medical has developed a confocal microscope for real-time, high-resolution imaging of fresh surface tissue. The Histolog® Scanner can help clinicians to confirm diagnoses during operations and make it easier to remove cancerous tissue with confidence, protecting healthy tissue and avoiding the need for invasive follow-up procedures.

Currently, tissue samples are taken and sent for analysis at a pathology lab, which can take up to 90 minutes. The Histolog® technology is based on a breakthrough in confocal microscopy that allows tissue specimens of up to 20 square centimetres to be scanned and accelerates the imaging process to under a minute.

This technology is being evaluated by neurosurgeons and pathologists at the Trust, with interest from pancreatic surgery and interventional radiology groups.





This briefing is the latest update on our exciting Building the Leeds Way programme. Look out for further updates as our work continues.

For further information about the Building the Leeds Way programme and Hospitals of the Future project, visit:

www.leedsth.nhs.uk/about-us/btlw

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To find out more about Building the Leeds Way, please email:

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