

Barts Health and Sectra start digital pathology programme for three million people

A programme to enhance patient diagnoses, speed up turnaround times and modernise pathology services has begun at Barts Health NHS Trust. The initiative will improve clinical collaboration and access to specialists, build foundations for the introduction of AI, and harness data to support life sciences and important clinical research.

Barts Health NHS Trust has started to deploy a digital pathology network spanning multiple hospitals that will transform pathology services, improve patient care, and support ground-breaking research.

Microscopes will no longer be relied on, professionals will be equipped with advanced imaging technology analysis tools and the means to better collaborate, and the initiative will allow faster, safer and improved reporting of important examinations for a population of more than three million people.

The programme, being delivered in collaboration with medical imaging IT and cybersecurity company Sectra, is being deployed across four hospitals within Barts Health with the help of funding provided by Barts Charity. The scalable imaging technology platform underpinning the initiative will also provide potential for future expansion of the programme to additional trusts.

Dr Hasan Rizvi, a consultant histopathologist at Barts Health, and clinical lead for the digital pathology programme, said: “We are creating a connected network of pathologists. People will no longer be chained to microscopes. It will be much easier for pathologists to collaborate with colleagues and to instantly share a link to images with other specialists for their input, potentially bringing expertise from across London, the UK, or even from around the world, to our patients.

“Removing analogue workflow processes will remove unnecessary delay in diagnoses, which in the case of acute tumours, could mean the difference between life and death. Staff will no longer need to prepare slides to be sent via courier, where they might be broken or go missing. Scarce specialists will save hours of their time traditionally spent screening slides. We will be better positioned to produce the next generation of pathologists. And patients themselves will have access to their pathology images allowing them to easily move between hospitals or seek second opinions without their pathology lagging behind.”

The digital programme will support strategic trust ambitions around patient care and life sciences and will address pathology workforce challenges currently faced in the NHS.

Sarah Jensen, chief information officer at Barts Health NHS Trust, said: “Digitising pathology is fundamental to Barts Health making great strides towards preventative care, to solving problems for the people who need it the most, to removing geography constraints for our workforce and to opening research potential for one of the largest trusts in the NHS.

“This programme is hugely important to connecting the dots for life sciences – a central focus for the future of our health services. Codified data will contribute to developing longitudinal health records for patients. And researchers will be able to inform research and back up findings with links to slides.

“For patients with cancer and other rare diseases, this is a high priority, allowing us to bring together pockets of clinical information, to build the infrastructure needed for genomic sequencing and to build a data core that includes pathology.”

The programme is expected to help with recruitment and retention. It will create a modern workplace, will enable flexible virtual training and will allow professionals to carry out more work from home, which could help to retain professionals currently approaching retirement, for example.

It will also transform how multi-disciplinary teams function. “A cancer MDT might have a radiologist, a histopathologist and an oncologist or clinician in the room, deciding a treatment plan, diagnosis, or therapy,” added Jensen. “Currently there is still a microscope, and a radiology workstation in the room. In the Sectra system, professionals can pull up radiology images and pathology images simultaneously, allowing better comparisons and more objective clinical decisions, whilst saving significant preparation time that would be otherwise required ahead of meetings.”

Specifically, pathologists will interact with a platform known as a picture archiving and communication system or PACS, provided by Sectra, which will display high resolution images of slides on screen. The enterprise platform is already used in the trust by radiologists to examine patient images including x-rays, CT scans, and MRIs.

Jane Rendall, UK managing director at Sectra, said: “Barts Health is our longest established partner in the NHS. The team at the trust has shown remarkable commitment to using the radiology module of our imaging technology to innovate in streamlining workflows and in delivering patient care. We are privileged to be working with the trust to deliver the digitisation of another crucial discipline as part of its strategic vision. We look forward to seeing the results for pathologists, other healthcare professionals and patients from the implementation, and to sharing our experiences from working with other parts of the NHS in the digital pathology domain.”

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Barts Health NHS Trust

With a turnover of £1.7billion and a workforce of around 17,000, Barts Health is a leading healthcare provider in Britain and one of the largest NHS trusts in the country. The Trust’s five hospitals – St Bartholomew’s Hospital in the City, including the Barts Heart Centre, The Royal London Hospital in Whitechapel, Newham Hospital in Plaistow, Whipps Cross Hospital in Leytonstone and Mile End Hospital – deliver high quality compassionate care to the 2.5 million people of east London and beyond.

About Barts Charity

Barts Charity funds exceptional healthcare for the people of East London and beyond. We fund ground-breaking medical research, state-of-the-art equipment, and innovative healthcare projects which go above and beyond what the NHS can provide. Our work supports staff and patients at the five hospitals within Barts Health Trust, as well as clinicians and researchers at Barts and the London School of Medicine and Dentistry (part of Queen Mary University London).

About Sectra

With more than 30 years of innovation and approaching 2,000 installations worldwide, Sectra is a leading global provider of imaging IT solutions that support healthcare in achieving patient-centric care. Sectra offers an enterprise imaging solution comprising PACS for imaging-intense departments (radiology, pathology, cardiology, orthopaedics), VNA, and share and collaborate solutions. Read more about Sectra and why Sectra PACS is “Best in KLAS” at

<https://medical.sectra.com/>.