Digital diagnostics: A reminder of the human impact

Regional approaches to digital diagnostic imaging are about much more than pooling data or delivering new technology, says Chris Scarisbrick, UK deputy managing director for Sectra. They are a means to help improve patient safety, address inequity and to help ensure patients get access to the care they need.

"People die in the imaging world." This was the message from Rebecca Hilsenrath, the director of external affairs, strategy and communications at the Parliamentary and Health Service Ombudsman, in March this year.

I was privileged to share the stage with her at the first ever clinical imaging conference held at London's Digital Health Rewired, where she gave delegates an important reminder of what happens when digital infrastructure in healthcare is not up to standard.

She spoke about Mary, for whom two months of incomplete and delayed reporting of her MRI scan led to a late diagnosis of liver cancer. By the time her diagnosis was delivered, Mary was too ill to consider chemotherapy or surgery.

Delegates were also told about a three-week delay in reviewing Charlie's x-ray, caused by issues uploading and sharing an image across different trusts, which in turn delayed his melanoma diagnosis. Two months after his eventual diagnosis he died. The ombudsman said he potentially missed the opportunity for chemotherapy which might have increased his life expectancy by several years.

And the conference heard about Emma, whose family lost time to prepare for her death, following a three-month diagnosis delay for the recurrence of her bladder cancer. In part, this was said to be due to reporting delays, and reliance on a poor quality scan that did not show abnormalities.

Each of these cases, and the fact that they were avoidable, were identified as causing additional distress for patients and their loved ones. And importantly, as the NHS moves ahead with new approaches to digital diagnostics, these stories show that getting imaging right is much more than a technology issue – it is a patient safety issue. That was Rebecca's argument, and it is something on which I strongly agree.

The ombudsman published a <u>report</u> in 2021 on how the NHS could learn from failings in imaging such as these, strongly emphasising the importance of effective digital imaging and reporting capabilities. The report, it says, has now been positively received by NHS leadership teams and is leading to change.

Work I see on the ground supports this. I'm personally proud to see widespread and important change in digital imaging every day I speak to NHS organisations; change that brings with it enormous potential to make a big difference to the lives of many patients.

People only need to read the healthcare trade press to see go-live after go-live of digital imaging initiatives. It might sometimes be easy to see these announcements as just the latest technology project. But they are helping to transform how diagnostic disciplines have worked for many decades and break down silos.

Healthcare providers and clinical teams have consequently started to collaborate in entirely new ways, make better use of resources across wide geographies, and address some of the important equity and safety priorities facing the NHS.

It has been some 20 years since I last acquired an image as an NHS radiographer. The diagnostic landscape has changed enormously in that time – and especially in more recent years.

Several regions have of course led the way in regional collaboration for the last decade. But this is no longer the exception, it is fast becoming the norm. Rarely do we now see individual trusts going out to the healthcare technology market for imaging systems. This is happening at much bigger

scale, with digital diagnostic solutions no longer respecting institutional boundaries or even discipline silos.

Regions are combining imaging for millions of patients, so that it can then be reported by the right diagnostician, and at the right time, with a full patient imaging history instantly available, all regardless where in the region that professional works.

The means that capacity in diagnostic disciplines that face huge workforce pressures, is now being applied where it is needed the most, with patients no longer needing to live near a hospital to access the scarce expertise of the specialists who work there in a timely way.

The rapid and continuing evolution of digital maturity of imaging and pathology networks across England, is showing the benefits of ubiquitous access to imaging across multiple institutions. And as radiologist Dr Rizwan Malik, said at the same conference, this is about "putting the t back in MDT". Multidisciplinary teams are able to work much more holistically around the patient's pathway, with imaging from disciplines including radiology, histopathology, breast screening, MRI and much more, all accessible in the same system, enabling an integrated approach to diagnostic workflows.

Faster and better quality informed reporting, shared expertise and collaboration across disciplines, and the prevention of unnecessary delays is now possible – not to mention the potential to use AI to support healthcare professionals in the diagnostic process.

Why is this all important? Well, as the parliamentary ombudsman observed, delays in reading reports can have severe consequences for patients. We know that often delays are caused by information not being available to the right clinician at the right time. And now, access to that information is changing.

Pathologists using digital pathology solutions no longer need to wait days for slides to be packaged and sent by courier to a hospital many miles away in order to get a second opinion. They can quickly share a case with available specialists elsewhere in the region on screen, and collaborate in real time.

Radiologists no longer need to repeat imaging, because they can't access a report from an isolated system in a trust 10 miles down the road. They can instantly see scans that were taken three months ago, or a year ago, so they can see what has changed, and monitor disease progression instantly.

These tools are not just technological gimmicks. They are the mechanisms for safer and timely care that patients deserve.