

Should the next big NHS diagnostic technology investment be clinical?

Radiology technology providers have rightly focussed on supporting clinicians for many years. But as services continue to do more for patients against increasing demand, Chris Goldie, chief executive officer for Vertex In Healthcare, explores why investment is also needed in other areas.

Diagnostic services in the NHS have deployed an impressive array of technologies. Radiology, for example, has been digital in the UK for decades, allowing radiologists to interact with scans in increasingly sophisticated ways.

Radiology's trend of being a technologically advanced field continues. The aim: to optimise workflow and support the growing workload of radiologists and medical report writers, whose skills are in increasingly high demand.

For example, NHS imaging networks are continuing to develop the technological maturity and connectivity of radiology services that span multiple trusts.

In more recent years, the discipline is seeing substantial focus from AI developers, who are building algorithms at an astonishing rate to help support the medical interpretation of images, and to support healthcare professionals as they deliver timely reports that play a crucial part in effective diagnoses for patients.

Given ongoing rising demand faced in radiology, sustaining technology investment to support clinical efficacy and efficiency is absolutely the right thing to do.

But as the NHS grapples with backlogs, develops strategies for workforce and sustainability challenges, and works to deliver more equitable access to scarce resources, is now the time to ask how technology in the diagnostic environment could also better serve and engage a wider range of stakeholders?

Is diagnostic tech serving everyone it needs to?

This question is one that has been well received in conversations I have had with NHS radiology teams.

Healthcare technology suppliers have been heavily focussed on supporting clinical teams. As a leader of one of those suppliers, I would argue this is entirely appropriate.

But if we only focus on clinical problems, we will only help providers to address part of the challenge towards timely diagnostic services for patients.

There is an increasing appetite to explore how technology could enhance productivity and timely diagnosis further, by doing more from the very beginning of the imaging journey – from the moment imaging is requested.

That means delivering technology that actively supports the administrative processes around imaging. And it means using technology to better engage patients in their own imaging journey.

Giving patients more control

In working with healthcare providers across the world, one of the biggest opportunities I have seen customers embrace is using technology to empower patients, so that they can play a more active part in their imaging journey.

This has involved giving patients the ability to help to manage or rearrange their own scheduling online, allowing them to have their scan at a time and location that suits them, without the need to contact busy hospital teams.

It can mean proactively giving patients the tools they need to access their own imaging and reports from radiologists, giving them context on discussions they have had with a doctor, or potentially the ability to seek second opinions when needed.

And it can mean providing patients with the technology to have conversations with clinicians around their imaging – through two-way communication, sometimes without the need to go into hospital.

Systems must be built around user needs in order to make this happen effectively, both from a user interface and healthcare process design perspective.

Resulting opportunities for engagement can help to make diagnostics more accessible, convenient, and meaningful for patients. That can then also help to ease the burden on busy administration teams within trusts.

Removing administrative bottlenecks

Removing bottlenecks in the administrative process, should be an equally important focus for technology suppliers. The administrative process is important in ensuring diagnostic efficiency, but it is an area sometimes overlooked by technology providers.

Where technology has been designed to address administrative inefficiency, analysis has revealed substantial increases in throughput for radiology departments.

In these instances, algorithms have been used to automate manual activity. This has helped to guide user input, reducing the time staff need to spend on activities relating to scheduling, for example. It has also released time that would be spent manually sharing reports with referring clinicians, or tracking patient progress in the imaging journey.

Administrative processes for radiologists can also be better refined when technology can help them to review historical clinical and radiological patient information more easily, or support efficiencies in the report creation process.

Intelligence on services generated through technology that has been deployed to streamline administration, has also been used to better understand demand and to highlight when additional resources or support might be needed, before delays start to build. This can help inform how services are configured and designed within an organisation, or across multiple providers, to best meet patient needs at-scale.

Serving multiple stakeholders

Delivering on the needs of more stakeholders can only have a positive impact when it comes to addressing some of the challenges faced in diagnostic services. Technological innovation to support clinical teams in this space is accelerating. If developers focus on supporting patients and administrative teams, the impact technology can have will become even greater.