

Altered Images

By Mark Ayears, Radiology Sales Manager, Change Healthcare

The development of an enterprise-wide imaging strategy is now a major priority for senior management within the NHS. As organisations battle to reduce diagnostic waiting times and accelerate patient access to treatment against a backdrop of ever-increasing demand, UK radiology once again finds itself burdened with escalating pressures. Recent figures from the [Royal College of Radiologists](#) (RCR) show that senior radiologists around the UK have seen a 30% increase in their workload of reading and interpreting studies between 2012 and 2017. However, figures also show that the number of consultant radiologists in England has gone up by just 15% in that time – figures which just don't match. Additionally, according to the annual workforce report released by the [Royal College of Radiologists](#), a shortage of at least 1,600 radiologists is anticipated by 2022. This is having, and will continue to have, a detrimental impact on costs, as to cope with the shortage of radiologists, NHS hospitals spent 116 million pounds on outsourcing patient scans in 2017.

The combination of increased demand and insufficient specialist resource is, in itself, having major implications for workflow and patient pathways in individual NHS organisations – and as RCR President Dr. Nicola Strickland [said](#), urgent action is vital to cut the current and predicted spending. But the wider impact on the cost, efficiency and quality of patient care is being felt across the care continuum throughout local health economies. It's little wonder that the issue is focusing the minds of the executive office.

With the NHS already struggling to deliver 5-day services, the prospect of delivering 7-day services is only bringing added anxiety - not least because the limited availability of diagnostic imaging at weekends has been flagged by government as a key area for improvement. Yet despite the gathering storm clouds, there may be sunshine on the horizon. New technologies could provide a simple solution to the staffing, workflow and quality issues that are creating radiology bottlenecks and stifling patient care. And so, as current contracts come up for renewal and NHS organisations embark on a wave of imaging procurements, senior healthcare leaders are sensing the opportunity to impact meaningful change right across their local health economies. The most progressive are recognising the important role that enterprise imaging solutions can play in helping them meet the challenges of delivering integrated care beyond the boundaries of their local organisations.

The key drivers for radiology procurements have evolved considerably since the days of the more traditional imaging projects. Historically, implementations were focused at the departmental level,

with radiologists, cardiologists and associated clinicians given budgetary autonomy to choose the systems they wanted. This naturally contributed to the NHS-wide problem of having disparate IT systems that did not talk to each other, and it created a silo culture that Trust leadership teams are, in reality, still trying to dismantle. Alongside this, CEOs are also under intense pressure to increase operational productivity and efficiency while lower operating costs. Interoperable systems and indeed organisations, sharing integrated data can be a vital mechanism in achieving these goals.

There is now widespread recognition that technology procurements can no longer remain a departmental decision. Therefore, as it becomes clear that connecting data across departmental boundaries can drive improvements to patient care, systems procurement has become firmly established as a Board-level strategic decision with enterprise-wide considerations.

Gateway to a wider world

This is certainly the case with diagnostic imaging. Radiology is so often the patient gateway to the right treatment pathways, particularly in life-changing disease areas such as cancer, cardiac and musculoskeletal disorders. But flaws in traditional methodologies have meant that vital radiology data may not follow the patient as they journey along the care pathway and across organisational boundaries. In many cases even access to images and reports within NHS organisations is constrained by departmental walls. The impact on patient flow, escalation, diagnosis and treatment can be severe. Managed poorly, radiology can regress from being a gateway to the appropriate pathway to being an inadvertent barrier to it.

Moreover, as GDE and STP sites take up their mandate to explore innovative models of integrated care, the focus on service delivery across organisational boundaries is increasing. It's no longer enough to know what's going on inside your organisation, there's a need to understand and connect with what's happening outside of it. This is forcing senior management to develop an enterprise-wide view of their operations and patient populations, where the 'enterprise' stretches across entire local health economies.

Aboard the enterprise

So how can organisations remove historical obstacles that undermine radiology's position as the gateway to critical care? The answer may well depend on making the move to an enterprise imaging solution. Enterprise imaging solutions are not only aligned with national directives to develop integrated services, but they can also help individual organisations address the many pressures on radiology.

Solving the staff shortage

At present, the most common approach to the chronic shortage of radiologists is to outsource services to a private provider, which is evident by the high costs spent by NHS hospitals in 2017. The cost implications of outsourcing alone are significant – but the approach also carries additional risks around quality of service. NHS organisations have little arbitration over the processes, capabilities and quality of private providers, nor the standards of clinical reporting being supplied. However, next generation enterprise imaging systems could offer a solution to the workforce problem. Not only can they provide real-time access to images and reports to professionals across the health economy, irrespective of their clinical setting, they also enable a

platform for collaborative working across sites. This means that organisations can optimise resources across multiple settings, providing speedy access to available radiologists and helping to balance workload.

Such collaborative working can help maximise bandwidth. What's more, it helps accelerate care whilst at the same time maintaining quality control. The most effective enterprise systems include workflow tools that support the management of resources across organisational boundaries, providing a safe and reliable foundation for collaborative working. Moreover, the collaborative approach offers benefits of scale including greater bargaining power across the local health economy.

Driving quality gains and patient satisfaction

Although the journey towards collaborative working may well be an incremental one, proactive organisations are already exploring the opportunity of creating regional enterprise imaging environments. However, for Trusts that aren't yet ready to take this route, enterprise imaging solutions still provide significant benefits for clinicians and patients alike. The best offer interoperability with existing systems to empower clinicians across the enterprise with ready access to key patient data. This not only supports clinical decision-making with up-to-date imaging and reports but it helps improve patient/clinician interaction and accelerate treatment. Real-time access to data can help remove unnecessary delays, reduce the administrative burden on the NHS and improve operational efficiency. Moreover, the associated gains free up clinicians to see more patients, further clearing the system. The impact on patient satisfaction and health outcomes can be profound.

In health economies that have already embraced the enterprise concept, the results – like the images – are there for all to see. For example, in Ireland, the National Integrated Medical Imaging System (NIMIS) now connects 63 facilities and over 40 hospitals, across the whole country using a single PACS and RIS solution. It has revolutionised healthcare delivery and means that, irrespective of where they touch the health service, patients and clinicians have instant access to all their diagnostic images. The approach can easily translate to the NHS.

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The development of an enterprise-wide imaging strategy could help transform NHS organisations as they battle to adapt to a changing healthcare environment. To get there, healthcare leaders should consider collaborating with stakeholders from across their local health economy to develop a long-term approach that aligns with collective challenges, needs and aspirations. Crucially, the best collaborations will be multi-disciplinary and build on input from clinicians, technicians and departmental leads, as well as trusted technology partners that have the experience and capability to custom-design solutions at scale and pace.

As health and care expectations change in line with societal and technological evolution, it is time for the NHS to alter its approach to imaging; echoing [the words](#) of Dr. Strickland, the current approach really is unsustainable. With the landscape set to be redrawn by the emergence of new integrated care models and a wave of radiology procurements, the opportunity to be enterprising is right in front of us.