One of the U.K.'s Largest NHS Trusts Uses InteleOne to Create a Cross-Enterprise Imaging Workflow



In 2014, InteleOne's cross-enterprise workflow allowed two NHS trusts to merge without either of them having to replace legacy systems or migrate data. The result has seen radiology departments from multiple hospitals unified, leading to increases in both quality and productivity.

About University Hospitals of North Midlands

Formed in November 2014, University Hospitals of North Midlands (UHNM) is an NHS trust located in Stoke-On-Trent and Stafford, UK. Focused on becoming a leading centre in healthcare, the trust was established following the University Hospitals of North Staffordshire's (UHNS) integration of the neighbouring Mid Staffordshire Foundation Trust, which managed two hospitals in Staffordshire and served a population of 320,000.

Today, UHNM is one of the country's largest NHS Trusts, providing primary and secondary care to a population of 940,000 people and managing nearly 200,000 accident and emergency visits per year. In addition, the trust serves three million people as a tertiary referral centre, specialising in a number of fields, including trauma, orthopaedics, neurology, neurosurgery and more.

Made up of a staff of nearly 11,500 full-time staff, UHNM's medical imaging department is comprised of 500 people, including 40 radiologists who, together, cover all specialties.

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Phil Williams UHNM's Divisional IT Lead





Enabling multiple sites to work together as one

When UHNM was formed, the staff at UHNS essentially took on 50% of Mid Staffordshire NHS Foundation Trust's overall workload. For their radiology staff, this meant a considerable increase in study volume – from 390,000 to 650,000 studies per year. With this increase, and new staff joining from the dissolved trust, the trust became focused on having their various sites operate as a single entity in order to increase productivity and deliver better patient care.

For the trust's radiology department, it appeared that unifying sites would be a complex issue, as each of the former trusts had a different PACS in place. Merging systems was an option, however the staff at UHNM had concerns about the amount of time and energy it would take to migrate all of the data into a single system. Instead, they began searching for a solution that would provide unified access to their existing systems and allow radiologists to read any study from any location.

"Effectively, we needed a technological solution that was going to provide us with a single user interface with the ability to report on any case within the trust," said Phil Williams, UHNM's Divisional IT Lead. "In doing so, the radiologist providing the report wouldn't need to know if they were reporting on a case from County Hospital or from Royal Stoke."

Seamless access to all images a viable alternative to merging systems

As UHNM began evaluating solutions, they discovered InteleOne™ – Intelerad's cross-enterprise workflow solution. Through its ability to provide seamless image access across disparate EPR, PAS, RIS, PACS and VNA solutions, InteleOne would be capable of providing an alternative to replacing or merging the trust's legacy systems. In addition, the solution would provide UHNM's radiologists with a single, unified worklist and viewer.

After choosing to deploy InteleOne, UHNM and Intelerad worked in a close and collaborative manner with the trust to ensure their unique set of requirements were satisfied with the solution.

"We found that Intelerad, as a company, were very open to discussing our needs," said Williams. "They didn't come along to us and say, 'This is our solution. You need to take it as it is.' Instead, they provided the solution that we wanted."

With the solution customised to meet UHNM's needs, Intelerad managed a smooth deployment of the solution across the trust's sites, essentially unifying the radiology department.

"It was a good deployment," said Williams. "It was very process driven and we always knew where we stood with the project."

Enhancing productivity and quality of reports

Since going live with InteleOne, UNHM has seen a great deal of improvements to their radiology workflow, as the solution's unified viewer and worklist have facilitated clinical pathways and enhanced reporting flexibility across sites.

"Originally, the intention was to focus on the reporting of scans from County Hospital and Royal Stoke Hospital," said Williams. "Quite quickly we realised an opportunity to actually report on our own scans from other locations, which is what we started to do."

In addition to improving image transfer, which is quite important for a tertiary trust, InteleOne's remote reading capabilities is also providing numerous benefits.

"InteleOne enables our radiologists to report from different locations, which gives us flexibility across the clinical business operation, and also gives the radiologists a good work life balance," said Williams. "It also enables us to employ or contract our output, so we can get radiologists working for us from other parts of the UK, which has a huge clinical benefit for us."

Service and support that matches the quality of the solution

While deploying enterprise systems can be a stressful endeavor, InteleOne's smooth deployment and reliability have instilled confidence in the staff at UHNM, along with the 24/7 support and proactive monitoring of systems that Intelerad provides.

"Support has been great," said Martin Dale, UHNM PACS manager. "It's really reassuring to know that support's there in the background working away and pre-empting issues and solving them as they occur."

For Williams, working with Intelerad has been a positive experience that he sees expanding in the future.

"Overall, our relationship with Intelerad is very good," said Williams. "It's a positive one, really collaborative. They're keen to work with us and we're keen to work with them, so it works well."

About Intelerad Medical Systems

Intelerad is a recognized leader in medical imaging PACS and workflow solutions. IntelePACS® relies on a scalable, flexible, and fault-tolerant architecture. Intelerad solutions, like InteleOne®, have a strong reputation for reliability and performance in complex, multi-site environments with challenging workflows.