

Connected Patients in Light of Big Data

THE JOURNAL 2022

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Enterprise Imaging



Across the Regions, Agfa HealthCare is Making Image Sharing a Reality

An overview of large-scale, multi-site health IT projects which demonstrate how Agfa HealthCare has strategically and operationally guided clients, who make use of its flagship Enterprise Imaging platform, to fulfill complex requirements and bring to success tangible outcomes.



Key Points

- A well-designed Enterprise Imaging platform enables healthcare networks to leverage technology to support their national or extended-region goals.
- Agfa HealthCare's Enterprise Imaging platform, VNA and XERO Viewer enhance image sharing and collaboration.
- Agfa HealthCare has proven its ability to support large-scale, multi-site health IT projects across states and extended regions.
- These projects enable everyone in the healthcare continuum to benefit from convergence, advanced collaboration and modern image management technology: from patients to radiologists, from clinicians to referring physicians, and from IT to hospital management.

With robust governance, a converged Enterprise Imaging platform, strong clinical workflows and an outcomes-based service approach, Agfa HealthCare has proven its ability to support large-scale, multi-site health IT projects across states and extended regions.

Patient care today has moved far beyond the individual hospital or health organisation. Diagnosis, treatment and follow-up may be in the hands of multiple specialists at multiple healthcare sites, and increasingly across states and extended regions.

This reality requires close collaboration and communication between everyone involved in the patient's care, combined with access to the medical information which they need - irrespective of the time or location. Secure, effective and sustainable data sharing, which includes imaging data, has therefore become a high priority.

For many years, Agfa HealthCare has supported customers in their large-scale goals - whether for a private healthcare network growing and expanding its reach, an independent health provider looking to benefit from collaboration across an extended geographical area, or a national initiative aiming to support an entire healthcare infrastructure.

This article describes some great achievements: real-life projects which demonstrate how Agfa HealthCare has strategically - and operationally - guided clients, who make use of its flagship Enterprise Imaging platform, to fulfill their very different requirements and, ultimately, bring to success tangible outcomes.

Enterprise Imaging Across the Board

A well-designed Enterprise Imaging programme enables healthcare networks to leverage technology to support their national or extended-region goals. Images, data, clinical workflows, automation tools, IT resources and business intelligence become converged. Advantages reach far beyond archive consolidation and viewing, which deliver true clinical, operational, and financial benefits. A clear roadmap turns a countrywide or multi-state vision into reality - leading to increased clinical performance, reduced complexity and improved TCO.

“Our consolidated Enterprise Imaging platform is ideal for countrywide or extended-region projects, delivering the benefits that healthcare providers are looking for across sites, states, and more. Enterprise Imaging seamlessly scales, to support the hospital group's evolution and growth, and enable



it to quickly adapt to changing needs,” says Franz Tiani, Vice President, Agfa HealthCare.

In all, 300 TB of legacy data were migrated, and over 860,000 medical images are archived each year.



Point-of-Care Images and Data Across the Region: Yorkshire Imaging Collaborative, UK

The [Yorkshire Imaging Collaborative](#) (YIC) provides eight different NHS trusts across Yorkshire with a single unified radiology image- and report-sharing network. Using its XERO Exchange Network (XEN), Agfa HealthCare has created a true federated network - without traditional image sharing solutions or even a VNA.

XEN makes every patient’s full set of images, plus associated reports, available at the point of care at any of the YIC hospitals. There are no vast image downloads, rather the solution enables intelligent web-based streaming of images and reports, locatable and retrievable by the healthcare professional, who can find the patient’s regional record and images with just their NHS number.

The XEN network went live in four weeks. The connected hospitals, which collectively cover a patient population of over 3 million, were able to increase turnaround on specialist consultations, speed up turnaround on multidisciplinary teams and diagnose patients transferred between sites at a much quicker rate than was previously possible.

“The XERO Exchange Network allows Yorkshire NHS Trusts to collectively access radiology reports and view all images across our entire region, completing the clinical history and helping us to write a more accurate report,” says Dr Daniel Fascia, Clinical Lead for YIC.

A National Medical Imaging Archive: LUXITH, Luxembourg

Luxembourg’s [National Medical Imaging Archive](#) (ANIM) provides all 15 sites of the country’s four hospital groups with easy and secure access to images, through a ‘shared medical file’ (Dossier de Soins Partagé/DSP). Delivered as a managed services model, the single medical imaging archive, which is built on Agfa HealthCare’s Enterprise Imaging platform, VNA and XERO Viewer, enhances image sharing and collaboration.

Agfa HealthCare collaborated closely with the agency responsible for the project, LUXITH G.I.E. With careful planning and robust programme management from all players, implementation only took a few months, despite the ongoing COVID-19 pandemic. The national VNA now supports integrated care across the entire healthcare sector in Luxembourg, and enables image sharing across all specialties.

“Doctors and patients can access the patients’ images easily and securely, without any extra effort from the hospital. In addition, the hospitals have freed up archiving infrastructure in their own systems, which they can use for other, value-added purposes,” says Christophe Nardin, director of LUXITH.



Country-Wide PACS: Estonia

Estonia’s [Pildipank](#) provides a nationwide platform for image transmission, archiving and access for all of the country’s healthcare institutions. Together, these healthcare facilities produce some 1.6 million studies each year: a number that grows about 10% annually.

Agfa HealthCare acted as a partner to help establish the nation-wide PACS, which was set up with Tartu University Hospital (TUC) and North Estonia Medical Centre (NEMC). Agfa HealthCare designed an IT system that met the defined KPIs targeted at leveraging the customer’s existing investments,

especially the VNA. Furthermore, the Agfa HealthCare PACS was able to integrate with the existing RIS of the different hospitals. Advanced tools, including XERO Xtend viewing capabilities, Business Intelligence, and dose monitoring software further support Pildipank to meet its end users' expectations.

During the 20 year relationship, Agfa HealthCare has continued to support the customer, to scale up the existing Agfa HealthCare IMPAX® solution to the current volume of 1.6 million studies each year by gradually transitioning from the entry level solution to a nation-wide platform. The recent upgrade to Enterprise Imaging brings new functionality for the clinicians, advanced administration tools and business intelligence with high availability of the platform.



“From the beginning, Agfa HealthCare was able to support an IT design that met our KPIs and leveraged our other investments,” says Andrus Paats, the CEO of Pildipank. “They showed us they could meet our functional requirements without issues during the evaluation sessions. And the XERO Xtend functionality with advanced viewing capabilities in particular has been very well received by our end users. But equally as important as the technology, is Agfa HealthCare’s strong commitment to service and partnership. We are confident we can rely on both the solution and on Agfa HealthCare as a vendor and look forward to continuing our relationship.”



“Large-scale, national-level projects such as these examples enable everyone involved in the healthcare continuum to benefit from convergence, advanced collaboration and modern image management technology: from patients to radiologists, from clinicians to referring physicians, from IT to hospital management. As an example, clinicians gain fast, simplified access to a single and comprehensive imaging health record, while automated workflows improve the performance of radiologists helping them to focus on the tasks which require their attention the most. IT departments experience reduced complexity and duplication, and easier resource and infrastructure management. For hospital management, the advantages include support for strategic growth across broad geographical areas, improved productivity, increased clinical satisfaction and integrated care across the continuum. For the patients, who are at the heart of healthcare, these projects can play a role in enabling faster diagnoses and informed treatment decisions, thanks to enhanced multidisciplinary cooperation and access to the expertise of specialists - wherever they are. I am delighted that these projects so clearly and concretely demonstrate how we are transforming the delivery of care by supporting healthcare professionals across the globe with secure, effective and sustainable imaging data management,” comments Franz Tiani, Vice President, Agfa HealthCare. ■



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