
A robust solution for enterprise archiving of DICOM and non-DICOM data with information lifecycle management tools and maximum interoperability



Agfa HealthCare
Enterprise Imaging
VNA

As part of the Enterprise Imaging solution,
the VNA **consolidates all your imaging data**, from multiple
systems, departments, facilities and vendors,
into a central clinical data foundation.
Your data ownership, migration and storage costs are
reduced, while **management is simplified**.

Store images in a single archive

Take control of your images and costs

- Is there any healthcare enterprise that wouldn't want to have all images available in the patient's health record? The benefits are clear: **fast image retrieval, optimized efficiency and performance, greater support** of patient care and safety goals, greater depth of clinical information for decision making, and enhanced collaboration across departments, hospitals or regions, to name only a few.
- But the challenges are also clear. Healthcare enterprises today have a patchwork of systems, vendors and storage solutions. Multiple applications each contain a piece of the patient's data, and there is little connectivity between PACS, workstations, departments and data repositories – all making data access extremely difficult.

And that's where Agfa HealthCare's VNA comes in. As part of the Enterprise Imaging solution, the VNA consolidates all your imaging data, from multiple systems, departments, facilities and vendors, into a central clinical data foundation. Patient images are in one archive, and you can access them with the Agfa HealthCare Enterprise Imaging XERO Viewer. Your data ownership, migration and storage costs are reduced, while management is simplified.

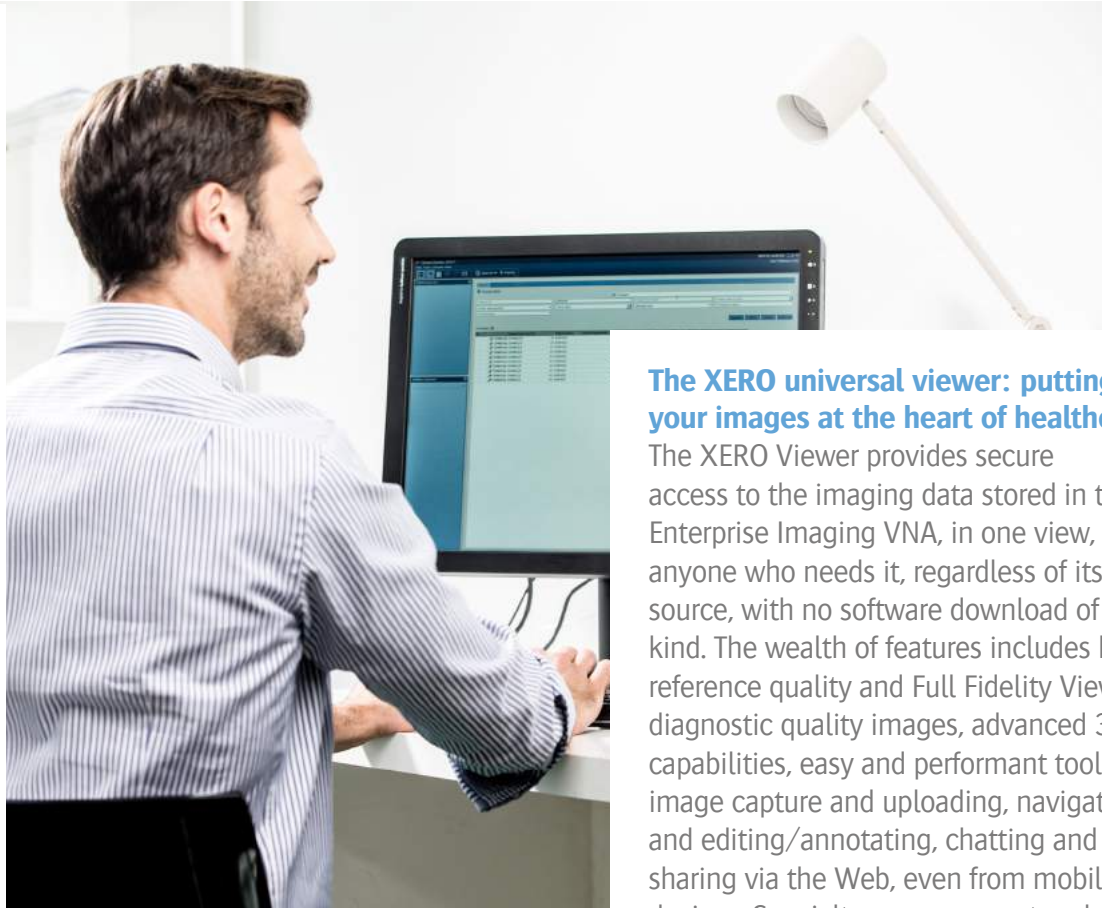


An end to information silos

Where are your images? For most healthcare enterprises, the answer is “here and there.” But that’s not good enough. You need tools that help you meet today’s twin challenges of simultaneously reducing the costs of healthcare delivery while improving the delivery of patient care. And that requires fast, easy access to the patients’ images, no matter where they come from, for clinicians, referring physicians and the patients themselves.

One consolidated image data repository

Images aren't only acquired in "traditional" departments anymore. Beyond radiology, cardiology and the other "big" image producing departments and specialties, key imaging information is now being captured anywhere, inside and outside the hospital. Enterprise Imaging VNA facilitates your data aggregation and provides a single source of longitudinal patient imaging information. You can store and display any file format, images or multimedia content, DICOM or non-DICOM... And you can return data in its native format: whether digital photography, ECGs, tiff, jpeg, png, bmp, etc. So no image is left behind: the photo taken with a smartphone by the dermatologist is stored and retrieved just as easily as the latest chest X-ray.



The XERO universal viewer: putting your images at the heart of healthcare

The XERO Viewer provides secure access to the imaging data stored in the Enterprise Imaging VNA, in one view, to anyone who needs it, regardless of its source, with no software download of any kind. The wealth of features includes both reference quality and Full Fidelity View diagnostic quality images, advanced 3D capabilities, easy and performant tools for image capture and uploading, navigating and editing/annotating, chatting and sharing via the Web, even from mobile devices. Specialty measurement and sub-specialty tools are available, as well, and everything comes together on the intuitive patient timeline, with its thumbnail-enabled, study-by-study, unified view of the patient's images.



Manage IT infrastructure and costs

A fragmented IT infrastructure creates unnecessary costs. If each PACS needs a specific storage system, it results in excess capacity, **multiple disaster recovery strategies** and complex end-of-life management. The consolidated Enterprise Imaging VNA, **can support a long-term strategy**, while **eliminating unnecessary costs** and giving you more control.

“Vendor neutral”

One of the biggest challenges in choosing an enterprise image storage system and archive is finding a solution that is truly interoperable with multiple products and vendors. The Enterprise Imaging VNA works with any storage system using industry-standard interfaces. You can add capacity without any disruption or downtime, so you can continuously and easily adapt to your load requirements. Data formats and database indexing mechanisms are transparent, supporting both current and future storage technologies. So both your costs and risks are reduced over time.

The Enterprise Imaging VNA also integrates with PACS from many vendors and imaging systems from many departments, consolidating patient images into a single repository. And you have the peace of mind of knowing that it will be able to integrate imaging and information systems you acquire in the future.

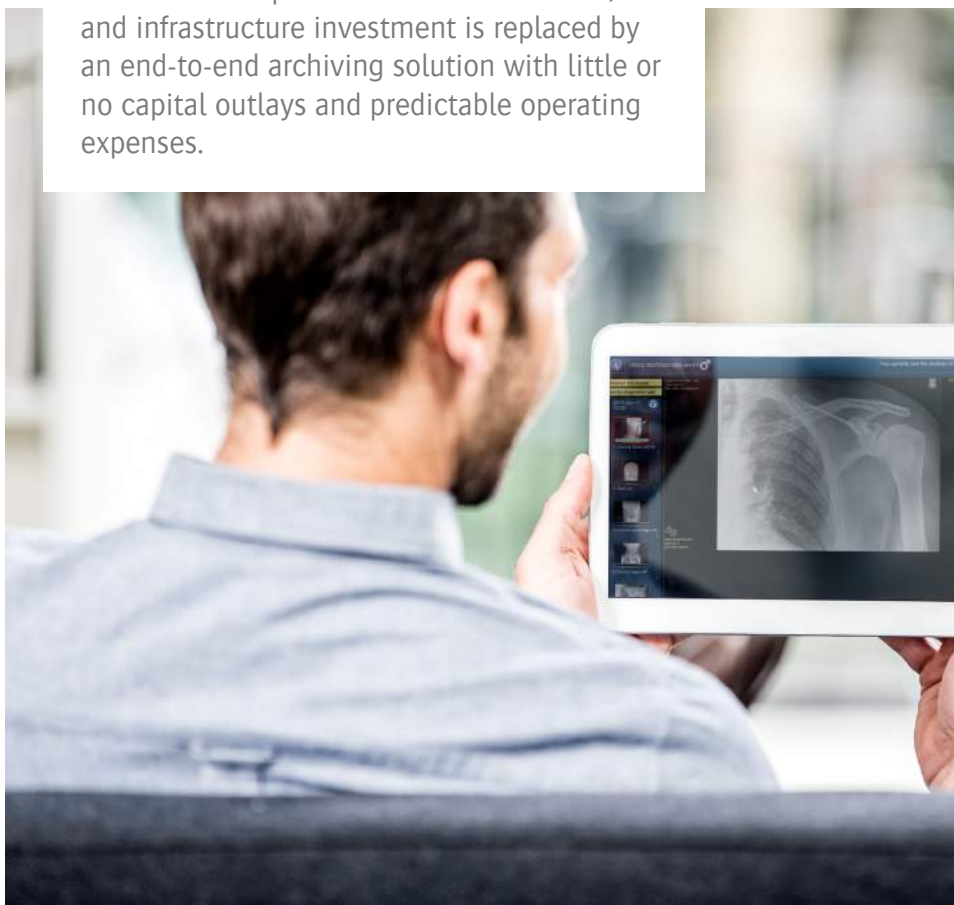


Scalability, availability and disaster recovery

Can your imaging system withstand a natural disaster, major equipment failure – or even your own growth in demand? Enterprise Imaging VNA addresses these concerns by offering fault tolerant high-availability configurations, and massive and incremental scalability. And it supports a dual-sited, mirrored configuration with automated failover and reconciliation, to support your business continuity. The resilient design by industry professionals, coupled with simple yet complete failover procedures, helps give you confidence for disaster recovery planning.

SaaS: Software as a Service

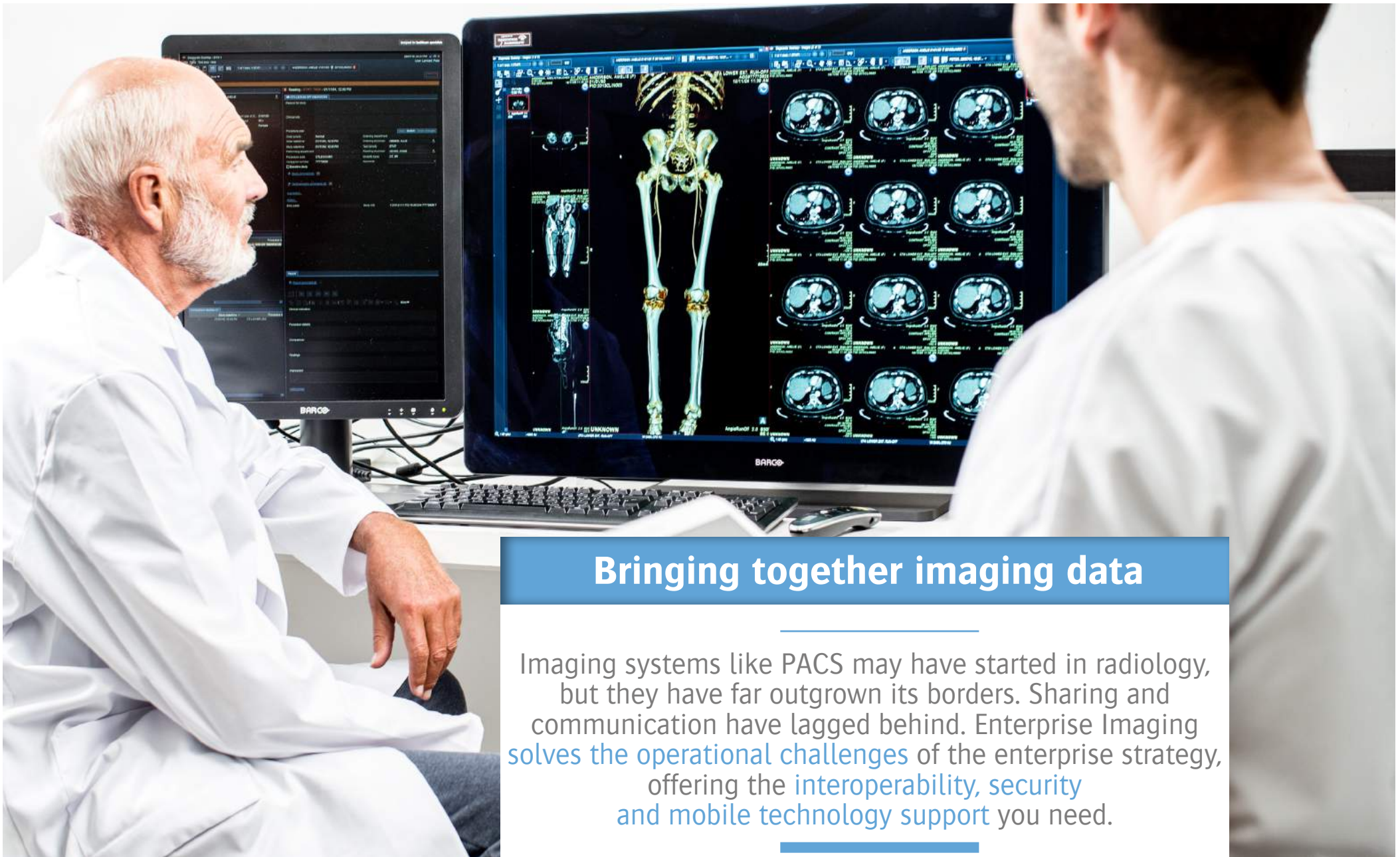
You can choose to maintain your primary and disaster recovery imaging archives in the cloud. Your on-premises management and viewing systems are optimized for retrieval from either on-premises or cloud archives, and infrastructure investment is replaced by an end-to-end archiving solution with little or no capital outlays and predictable operating expenses.



Healthcheck for your VNA

With our GRIP Monitoring service, you can enjoy the peace of mind of continuous monitoring and management of your Enterprise Imaging VNA, to help maximize uptime and productivity. Over 50 healthchecks are contained in a permanent monitoring system, including:

- **Optimal System Health** – Is the Enterprise Imaging VNA system performing at full capacity?
- **System Outage** – Are there outages in the Enterprise Imaging VNA system?
- **Data Availability** – Is Enterprise Imaging VNA available to return the most up to date information?
- **Data Integrity** – Have there been any data integrity violations in the Enterprise Imaging VNA?
- **Storage** – Do you have enough remaining storage capacity?



Bringing together imaging data

Imaging systems like PACS may have started in radiology, but they have far outgrown its borders. Sharing and communication have lagged behind. Enterprise Imaging solves the operational challenges of the enterprise strategy, offering the interoperability, security and mobile technology support you need.

Standards-based for true interoperability

Agfa HealthCare has a long tradition of interoperability and implementing healthcare standards in its solutions, and the Enterprise Imaging VNA is no exception. It strictly adheres to DICOM and HL7 standards, as well as the IHE Framework. With no data or vendor lock-in, it maximizes “out of the box” interoperability, and works with multi-vendor IHE compliant systems, so you don’t need any high-cost integration projects. And it’s easy to integrate new applications and modalities, without making major changes.



Supporting security in line with hospital policy

IT security is a continuous challenge in healthcare, which deals with private and sensitive information. Maintaining tight security and privacy controls, while still providing access to the patient’s relevant diagnostic data, is key. The Enterprise Imaging VNA’s inherent IHE Audit Trail and Node Authentication (ATNA) repository stores audit records of all the transactional activities between sending and receiving application entities. In addition, Agfa HealthCare has a lot of experience with reducing security issues and can provide services to assist in identifying potential security weaknesses, designing an improved security plan, and remediating vulnerabilities including server hardening and patching.

Information Lifecycle Management: data retention policies

With the wealth of medical imaging data available, you need policies to manage all the information, from the start of the “record” to its end. To support you in creating data retention policies, Enterprise Imaging VNA provides you with a graphical, intuitive rules engine that can be set on different study metadata attributes, including modality type, age of study, current patient age, patient age at time of image capture, and more.

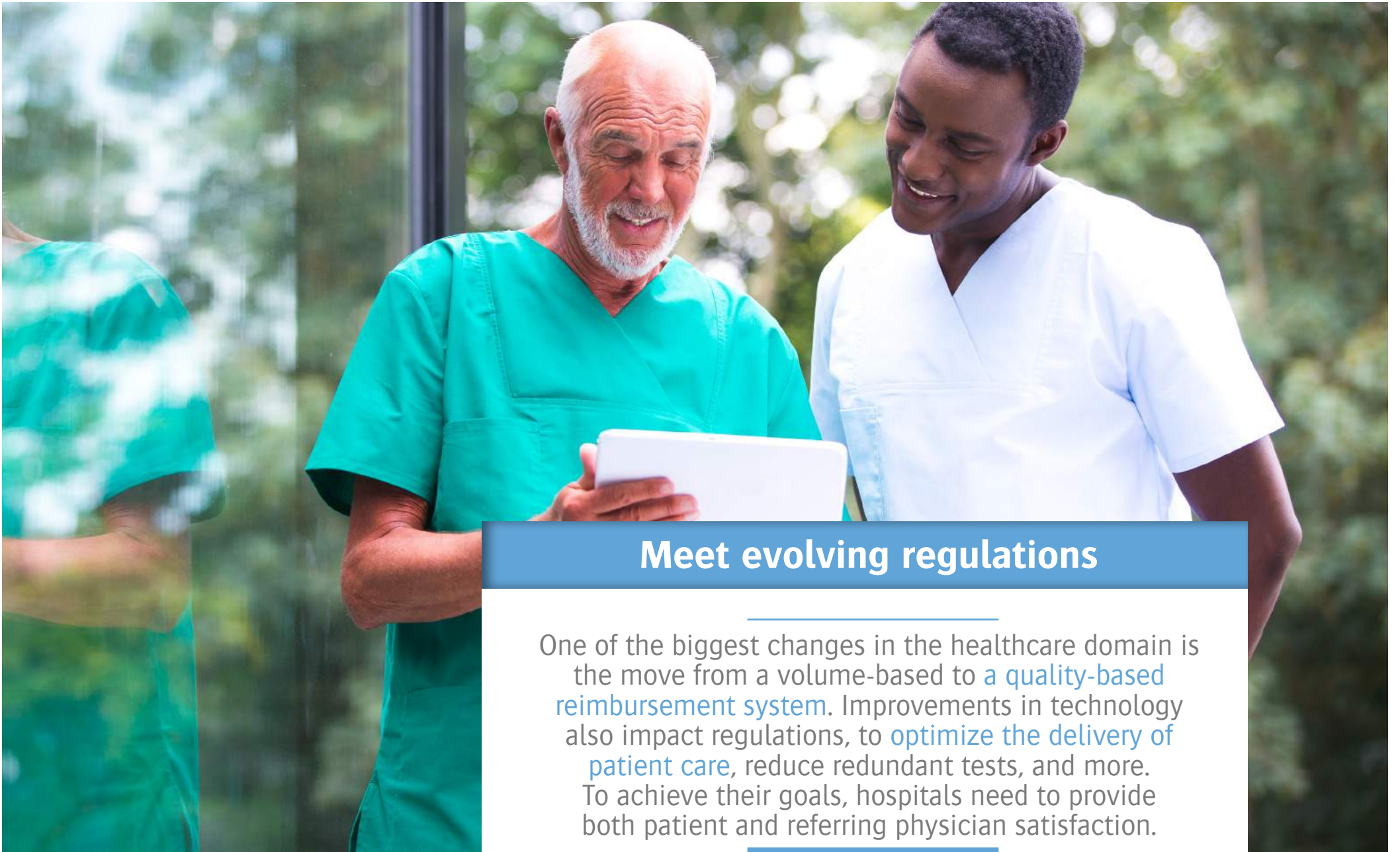
Data synchronization, supporting data integrity

The Enterprise Imaging VNA supports data integrity through constant data synchronization with sources of metadata updates. So patient changes, study changes and even structural study changes like splits, merges and deletions are included in the data.



Workflow engine

To improve the delivery of patient care and minimize operational costs, your healthcare applications need to offer a method for organizing work, allowing efficient work scheduling, improving communication, etc. A workflow engine makes an organization more agile. The Enterprise Imaging VNA, like other Agfa HealthCare solutions, includes a solid workflow engine, which is at the heart of a successful enterprise imaging strategy and workflow efficiencies. It can create a worklist for a modality, route and prefetch, send notifications and more.



Meet evolving regulations

One of the biggest changes in the healthcare domain is the move from a volume-based to a **quality-based reimbursement system**. Improvements in technology also impact regulations, to **optimize the delivery of patient care**, reduce redundant tests, and more. To achieve their goals, hospitals need to provide both patient and referring physician satisfaction.

Analytics and cross enterprise document sharing

Things move fast in the healthcare environment, and you need up-to-date and reliable data to keep up. The IT-driven business intelligence technologies in the Enterprise Imaging VNA provide historical, current and predictive views of overall operations, in easy-to-read reports that offer you key insights. And the Cross Enterprise Document Sharing (XDS) makes Enterprise Imaging VNA suitable for storing and exchanging patient records originating with different healthcare organizations or enterprises.

Empowered patients, satisfied staff

Today's healthcare model involves both caregivers and patients. With easier access and exchange of multi-specialty images, all providers in the patient's care are empowered and involved. And that means everything goes faster: turnaround time, data exchange... Patients have reduced risk of repeat exams and hospital stays are potentially shorter. Overall, your staff and patients are more satisfied with their care experience.





Step by step to Enterprise Imaging

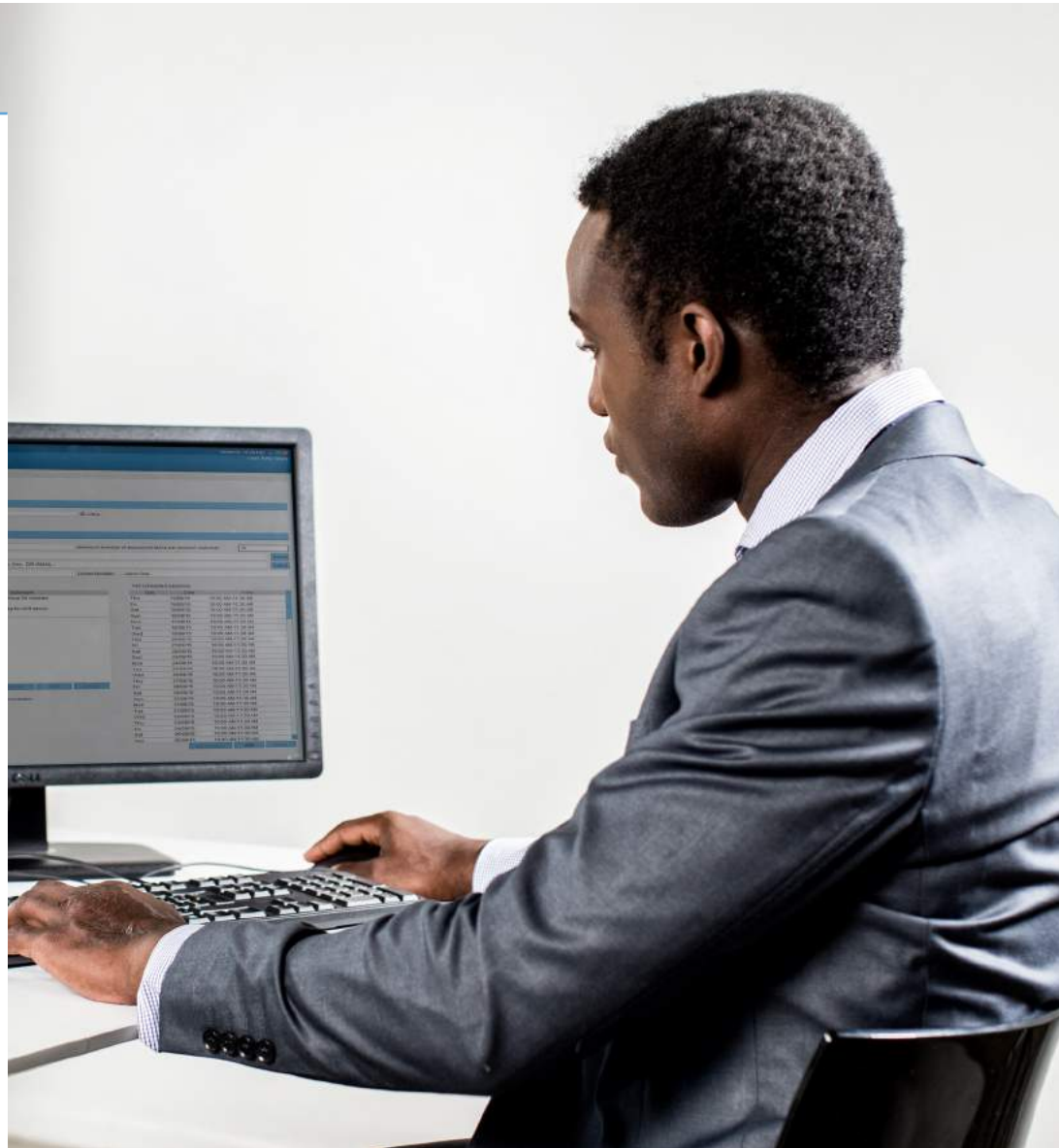
Not all paths to an enterprise-wide imaging solution need to be the same: yours has to fit **your own situation and needs**.
Agfa HealthCare's Enterprise Imaging can be **introduced in phases, and expanded over time** as your needs grow and your situation evolves.
It's **your solution** – to deploy and grow with you!

A phased approach

Not all paths to an enterprise-wide imaging solution need to be the same: yours has to fit your own situation and needs. But here are a few things to consider:

- Consolidating your storage of multimedia data in a VNA can be a good first step. Be sure to create a joint high availability and business continuity strategy with a failover and Disaster Recovery Plan and shared IT resources. The Enterprise Imaging VNA is designed with this in mind.
- Agfa HealthCare's Enterprise Imaging can be introduced in phases, and expanded over time as your needs grow and your situation evolves.
- You can start with a single department, and then extend into others, or start with a few, simple use cases and then expand into more complex workflows.

It's your solution – to deploy and grow with you!



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Why Agfa HealthCare

Agfa HealthCare is a global leader in the fast growing market of integrated IT and imaging systems, offering healthcare facilities like yours a seamless flow of information and a clinically rich visual infographic of patient records. We have a unique, holistic approach that enables us to provide in-depth clinical know-how and fully integrated hospital-wide solutions, while our long experience in radiology demonstrates our knowledge in handling images. We have “deconstructed” the PACS to eliminate vendor lock-in and costly and timely migrations. And our strengths in image management, workflow and IT make us adaptable to today's and tomorrow's healthcare IT challenges. We offer solutions that consolidate archiving and image data communication across the enterprise, with an intelligent workflow solution that offers you the business reporting and analytics you need. By mining and leveraging the data in your Enterprise imaging platform, you can provide more efficient care, in a more cost-effective way.

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