A SMOOTH MOVE TO ENTERPRISE IMAGING

There's no substitute for experience and expertise to ensure fast, quality data migration

Interview with:
Hervé Wijns | Professional Services Manager, Agfa HealthCare
David Van der Veken | Data Migration Team Lead, Agfa HealthCare
“Garbage in, garbage out”: it’s a truism about data we’ve heard for many years. But in the transition from legacy PACS and other systems to Enterprise Imaging, this tired old phrase takes on a new life. Medical data migration projects can already run into many millions of studies, and this number is only expected to rise. So fast, good-quality data migration is a critical step to the customer’s transformation.

Hervé Wijns, Professional Services Manager, and David Van der Veken, Data Migration Team Lead, explain Agfa HealthCare’s robust experience and approach, and reveal the innovative new ‘DICOM First’ strategy.

A SMOOTH MOVE TO ENTERPRISE IMAGING

There’s no substitute for experience and expertise to ensure fast, quality data migration

‘Garbage in, garbage out’: it’s a truism about data we’ve heard for many years. But in the transition from legacy PACS and other systems to Enterprise Imaging, this tired old phrase takes on a new life. Medical data migration projects can already run into many millions of studies, and this number is only expected to rise. So fast, good-quality data migration is a critical step to the customer’s transformation.

Hervé Wijns, Professional Services Manager, and David Van der Veken, Data Migration Team Lead, explain Agfa HealthCare’s robust experience and approach, and reveal the innovative new ‘DICOM First’ strategy.

Interview

A SMOOTH MOVE TO ENTERPRISE IMAGING

There’s no substitute for experience and expertise to ensure fast, quality data migration

‘Garbage in, garbage out’: it’s a truism about data we’ve heard for many years. But in the transition from legacy PACS and other systems to Enterprise Imaging, this tired old phrase takes on a new life. Medical data migration projects can already run into many millions of studies, and this number is only expected to rise. So fast, good-quality data migration is a critical step to the customer’s transformation.

Hervé Wijns, Professional Services Manager, and David Van der Veken, Data Migration Team Lead, explain Agfa HealthCare’s robust experience and approach, and reveal the innovative new ‘DICOM First’ strategy.

Patient-centric data, supporting patient-centric care

“IMPAX and other PACS systems use a study-centric approach, but Enterprise Imaging uses a patient-centric approach, enabling a more complete and holistic patient-centric record. But this also means that Enterprise Imaging is stricter on the data level.” describes David Van der Veken, Data Migration Team Lead for Agfa HealthCare.

“Imagine you have two studies for the same patient ID, but with slightly varying patient names. The study-centric PACS will simply accept them as separate studies for different individuals. But the patient-centric Enterprise Imaging will flag the entries as ‘suspicious’. Are these two patients, or one patient whose name was spelled incorrectly? You end up with cleaner data and fewer errors.”

“With DICOM First we can migrate RIS and DICOM data in parallel, then reconcile the data before the go-live. It’s a real game-changer in terms of saving time.”

Hervé Wijns

Tailored processes for diverse situations

Each Enterprise Imaging migration is different: it might involve legacy data from a single Agfa HealthCare IMPAX system, or from multiple PACS or VNAs from multiple vendors, or even from multiple sites. Sometimes the customer is reusing its existing storage platform, sometimes it is implementing a new storage platform.

“Depending on the situation, we base the data migration on one of two processes,” David Van der Veken continues. “If the customer is re-using the legacy IMPAX PACS or IDC storage platform, we can do a quicker ‘metadata migration’.

“Only the metadata need to be migrated: the images can stay where they are. If, on the other hand, a new storage platform is being deployed, we do a ‘standard data migration’, where all data is read and copied. This of course takes more time. But we have used our extensive experience to create a new tool that enables a faster yet secure migration strategy – ‘DICOM First’.”
DICOM First: parallel migration

Standard data migrations generally require all RIS data to be migrated before starting on image (i.e. DICOM) data. “Since Enterprise Imaging is patient-centric, we had to be sure that the right patient records and orders were created, before we could migrate studies,” explains Hervé Wijns, Professional Services Manager for Agfa HealthCare. “This meant any issues with the quality and availability of the RIS data could cause delays in the Enterprise Imaging transition.”

“But with DICOM First we can migrate RIS and DICOM data in parallel, then reconcile the data before the go-live. It’s a real game-changer in terms of saving time.”

In fact, as soon as the Enterprise Imaging production environment is ready to receive images, migration can begin, including from third-party systems. If time is short, this can be done before the RIS data has been migrated.

“For example, if a customer wants their new EHR up and running on a certain date, we can make sure the images are migrated in time, regardless of the status of the RIS migration, so users can view prior images in the EHR.

What’s more, DICOM data can already be stored, and even backed up, on the Enterprise Imaging platform, before it is consolidated with the RIS data. This means that there is no longer a need to keep a legacy PACS up and running just to maintain the DICOM studies after the new system goes live. We can perform the reconciliation of RIS and PACS data later.” David Van der Veken explains.

“This gives Agfa HealthCare a real advantage for migrating data, because we are free from the approach others still have to take: completing the full analysis in advance, ensuring all data matches 100%, and only then moving to the actual migration and reconciliation. DICOM First makes us much faster.”

“Right now, we only do DICOM First for standard data migrations, but we are working on applying it to metadata migrations, too.” says Hervé Wijns.
Agfa HealthCare has a team of 20 experienced data migration specialists worldwide, who handle some 120 projects each year. The largest to-date comprised 12 million studies, but bigger projects are on the horizon. In all cases, Agfa HealthCare’s robust and efficient phased approach ensures a smooth migration:

1. **PLANNING**
   the scope and strategy for the migration project are defined.

2. **MIGRATION PREPARATION**
   the building blocks of the migration are defined and tested.

3. **MIGRATION EXECUTION**
   the production migration is performed using the tested strategy.

4. **CLOSURE**
   once exceptions have been reported, the project is closed

“Transitioning from PACS to Enterprise Imaging is a complex process, that includes workflow analysis, interfacing, training and more.”

“We continue to take concrete actions to ensure we are the best partner for our customers, including by developing tools and processes that enable a fast and accurate data migration. After all, patient safety and outcomes depend on good data. And that is what we are all aiming for.”

Hervé Wijns
When performing migrations, we always need ‘a source of truth’ and we follow the hospital’s data governance responsibility hierarchy. This is usually:

1. the HIS for patient data
2. the RIS for radiology data
3. the PACS for image data

In cases where different RIS need to be merged, for example, when hospitals or networks are merging, we may even need to match data based on the national patient ID.”

“Other challenges arise when RIS and PACS data aren’t fully connected: maybe the RIS is newer and only has data going back 3 years, while the PACS has 20 years of DICOM data. Nevertheless our team has developed ways to link the data to the correct patient, even in these more complicated situations.”

David Van der Veken

“A clean bill of health for your data

“Incorrectly linked studies, data, reports, etc. can create serious safety risks for patients. But the accurate reconciliation of data highly depends on the quality of the legacy data. Our strict data quality specifications support the customer to deliver high-quality legacy data in the correct format. RIS and PACS data can then be reconciled based on our patient matching logic.”

“Some of the data that does not meet the quality requirements is cleansed automatically, based on our data cleansing criteria. The remainder is separated for manual data cleansing by the customer.

“It’s important for a successful process that the customer gives someone ownership of legacy data quality, and designates a data governance representative who can make decisions on what needs to be done whenever data quality issues arise. Together, we can ensure a clean bill of health – for data and patient safety.”

Hervé Wijns

“IMPAX and other PACS systems use a study-centric approach, but Enterprise Imaging uses a patient-centric approach, enabling a more complete and holistic patient-centric record. But this also means that Enterprise Imaging is stricter on the data level.”

David Van der Veken