

Healthcare transformation, we'll take you...

AGFA 
HealthCare

THERE

Edition 8, 2010

05 **UZA (UNIVERSITY HOSPITAL),
ANTWERP, BELGIUM**
Boosting the heartbeat of the cardiology workflow

14 **ALZEY GROUP PRACTICE, ALZEY-WORMS, GERMANY**
New CR mammography solution helps private
practice thrive

28 **DR. ROUAS' RADIOLOGY SURGERY, CHELLES, FRANCE**
DX-M and DX-G solutions herald a new era in private
practice radiology



INTERVIEWS INSIDE WITH:

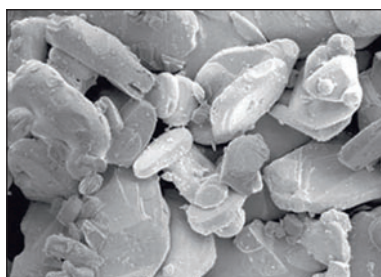
- » **Prof. Dr. Johan S. Laméris and Dr. Hein J. Verberne:** "Quality reporting requires 'trans'-disciplinary knowledge to benefit from multimodality results"
- » **Dirk De Langhe and Stephan Fierens:** Agfa HealthCare's new product portfolio
- » **Dirk Debusscher and Luc Thijs:** Supporting China's Healthcare reform

Who is offering needle-based image quality in both CR and DR?

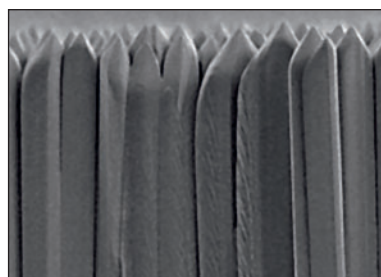
We R

Enjoy the highest possible image quality in both CR and DR

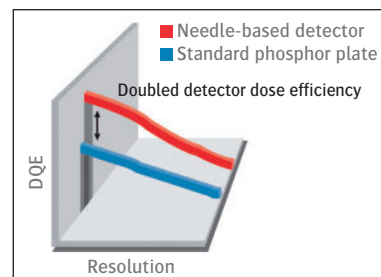
Radiography has many applications. But one constant remains: the demand for superb image quality. Agfa HealthCare offers needle-based technology in both CR and DR. This ensures the highest quality images with outstanding consistency and lower dose potential. It is part of a commitment to provide the world's best digital imaging across broad needs, from desktop systems to integrated radiography rooms. Only Agfa HealthCare includes the NX user station for an intuitive experience across CR and DR. And MUSICA², body part independent software that optimizes processing parameters for exceptional images across general radiography, neonatal or paediatrics. Transforming to digital radiography? **We'll take you there.**



■ Standard CR



■ Needle-based detector



Performance comparison

www.agfahealthcare.com



AGFA HEALTHCARE EDITORIAL TEAM Eric Maurincombe, Editor-in-Chief • Frederique Depraetere, Managing Editor • Birgitte Baten, Senior Editor
CONTENT & DISTRIBUTION Agfa HealthCare NV • Septestraat 27 • 2640 Mortsel • Belgium
CONCEPT, CONTENT & DESIGN www.livingstone.eu • **PRINTING** Artoos • Oudestraat 19 • 1910 Kampenhout • Belgium
 The Agfa HealthCare editorial team would like to thank its customers, staff members and interview partners for their contribution to this publication.

Agfa and the Agfa rhombus are trademarks of Agfa-Gevaert N.V., Belgium, or its affiliates. DX-G, DX-M, IMPAX, MUSICA, ORBIS and SEPARIO are trademarks of Agfa HealthCare NV, Belgium. All other trademarks are held by their respective owners and are used in an editorial fashion with no intention of infringement. The data in this publication are for illustration purposes only and do not necessarily represent standards or specifications, which must be met by Agfa HealthCare. All information contained herein is intended for guidance purposes only, and characteristics of the products and services described in this publication can be changed at any time without notice. Products and services may not be available for your local area. Please contact your local sales representative for availability information. Agfa HealthCare diligently strives to provide as accurate information as possible, but shall not be responsible for any typographical error.

- 5 UZA (UNIVERSITY HOSPITAL), ANTWERP, BELGIUM**
Boosting the heartbeat of the cardiology workflow
- 8 GRENOBLE UNIVERSITY HOSPITAL CENTER (CHU), GRENOBLE, FRANCE**
Grenoble CHU digitizes all medical imaging
- 11 WESTERN MARYLAND HEALTH SYSTEM, CUMBERLAND, UNITED STATES**
Maryland Medical Center streamlines workflow, generates cost savings with 15-lead ECG system
- 14 ALZEY GROUP PRACTICE, ALZEY-WORMS, GERMANY**
New CR mammography solution helps private practice thrive
- 16 LINED UP: AGFA HEALTHCARE'S NEW PRODUCT PORTFOLIO**
- 18 AMC, AMSTERDAM, THE NETHERLANDS**
Quality reporting requires 'trans'-disciplinary knowledge to benefit from multimodality results
- 22 JESSAZIEKENHUIS, HASSELT, BELGIUM**
IMPAX puts the Radiologist at the center of medicine
- 25 JACQUES LACARIN HOSPITAL CENTER, VICHY, FRANCE**
The Jacques Lacarin Hospital Center enhances its Information System
- 28 DR. ROUAS' RADIOLOGY SURGERY, CHELLES, FRANCE**
DX-M and DX-G solutions herald a new era in private practice radiology
- 30 BRUSSELS UNIVERSITY HOSPITAL, BRUSSELS, BELGIUM**
The full power of IMPAX at home
- 32 SUPPORTING CHINA'S HEALTHCARE REFORM**
Agfa HealthCare and the world's largest healthcare economy
- 35 NEWS FROM AGFA HEALTHCARE**

Dear reader,

This eighth issue of THERE magazine marks our two year anniversary. Since first launching this global customer publication, we have distributed over 25,000 copies in more than 50 markets worldwide. The positive feedback from our readers has encouraged us to continue our efforts, as we report on exciting new case studies from across the globe, and which you will find in this latest edition. To ensure we offer you the broadest possible perspective, we have complemented these studies with interviews from our discipline's thought leaders and our own experts, whose daily work contributes to the ongoing transformation of healthcare.

Despite the global financial crisis and its impact on governmental budgets worldwide, we have not stood still. This is perhaps best illustrated by the fact that over 80 percent of Agfa HealthCare's current portfolio is less than a year old. These latest innovations, delivered to enable tomorrow's healthcare to function in line with ever changing expectations, is what we are all about, and this magazine represents only a fraction of the successes that our users and customers have achieved. The accomplishments, published in the next pages have been built on the basis of our extensive experience in healthcare – experience that ensures that we not only continue to monitor the needs of



a global market, but also your specific regional and local expectations and requirements. We embrace this effort because we know that you are defining the future of healthcare, and that we are here to help you realize this.

HAPPY READING

ERIC MAURINCOMME
Chief Strategy and Marketing Officer
Editor-in-Chief THERE, Agfa HealthCare

Stockholm's Underground Art



Not a counter culture movement or radical art scene, underground art in Stockholm refers to the interior of its marvelous metro, or 'tunnelbana' as it's called by the city's 829,471 residents. On the cover is the modern facade of Stockholm's Central Station, the largest in Sweden and the most heavily used travel center in the Nordic region with over 250,000 visitors daily.

In 1958, an underground pedestrian passage was opened to connect it with T-Centralen, the station at the heart of Stockholm's underground system opened in 1957. Many of the metro's passageways and platforms are fully adorned with elaborate painting and sculpture – not just framed art on the walls like a museum, but huge frescos or adorned bedrock encompassing the entire chamber from floor to ceiling.

This edition of THERE magazine showcases a representative selection of the more inspiring decorations found throughout this system, certainly among the longest art galleries in the world.



T-CENTRALEN STATION

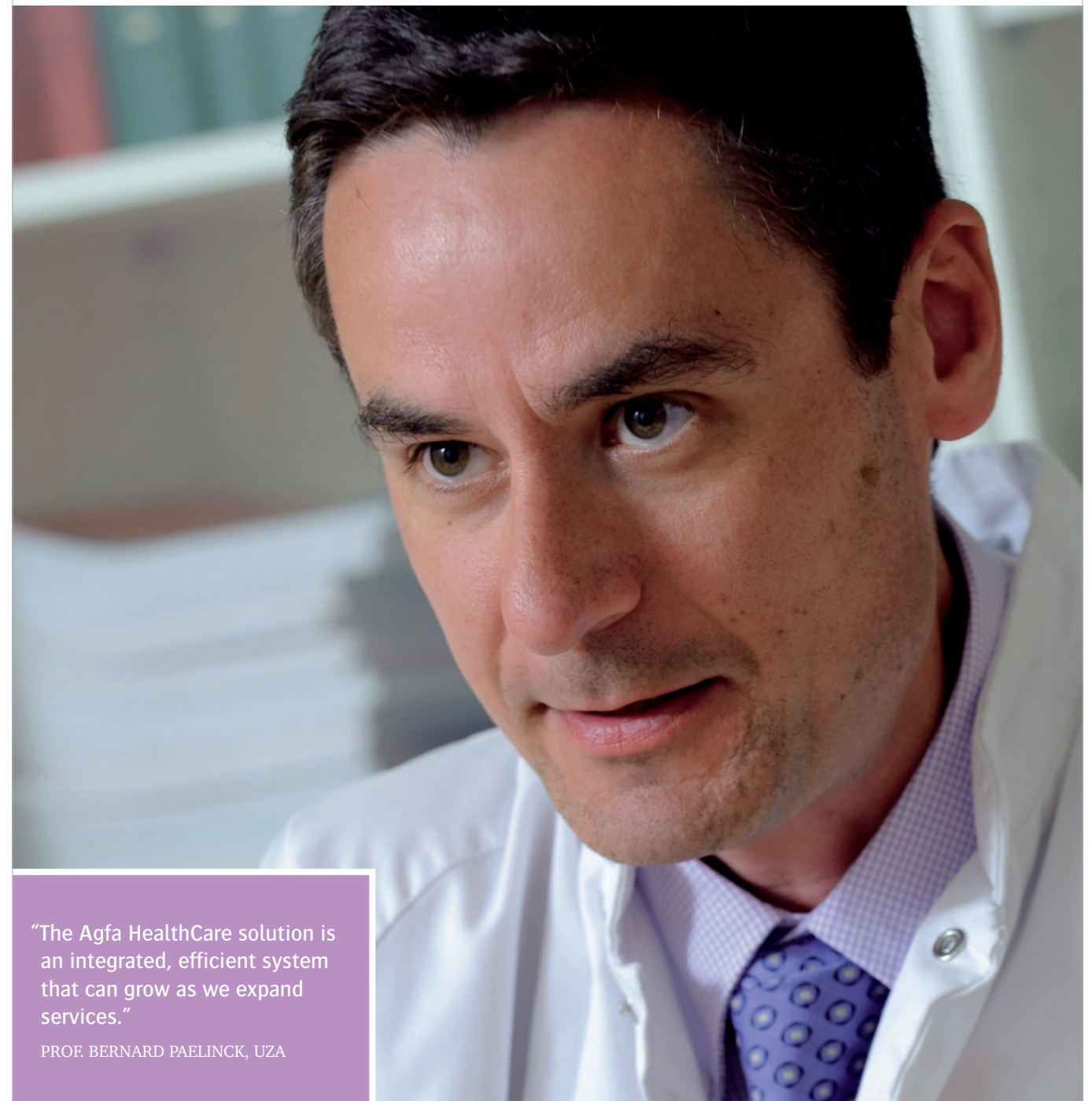
This station forms the heart of Stockholm's 'tunnelbana', the Swedish word for underground or subway. It's the only location where the system's three lines (Red, Blue and Green) come together. Tube 3 walls and ceilings are colored blue featuring artistic treatments. This one depicts silhouettes of the workers who built the station's hall. Others show undersea scenes. Most of Stockholm's 100 subway stations are artistically sculpted or painted.

UZA (UNIVERSITY HOSPITAL), ANTWERP, BELGIUM

Boosting the heartbeat of the cardiology workflow

Adult Echocardiography IMPAX CVIS allows for time savings at the University Hospital of Antwerp

INTERVIEWEE Prof. Dr. Bernard Paelinck, Cardiologist Echocardiography department



"The Agfa HealthCare solution is an integrated, efficient system that can grow as we expand services."

PROF. BERNARD PAELINCK, UZA

Until recently, the echocardiography department at the University Hospital of Antwerp (UZA) had separate image review and reporting systems which were not integrated. This posed workflow problems and decreased the streamlining of reporting. In 2009 Agfa HealthCare proposed a solution that addressed these concerns, and installed its Cardiovascular Information System (IMPAX CVIS) for echocardiography, using a single workstation for image reviewing and structured reporting, along with integration with other cardiology subdisciplines and dedicated tools for the various clinical quantifications, data query and data graphical display.

STAND-ALONE TECHNOLOGY A BARRIER TO COORDINATED WORKFLOWS

UZA is a leading Belgian university hospital providing first class treatment and top level medical education and research. Performing around 14,000 echocardiograms a year, the medical and technical staff of the echocardiography department face demanding challenges. A swift, efficient workflow is critical to the job performance of the ten cardiologists and five echocardiographers who strive to produce accurate, highly detailed images and reports.

AGFA HEALTHCARE CONTRIBUTION

- » Integration architecture
- » Data consolidation
- » Clinical depth
- » Support
- » Accessibility
- » Real partnership and readiness to refine the system



Says Prof. Paelinck, “We were working with a stand-alone image viewing application and a separate reporting system. This multivendor solution had merits, but also limitations, such as limited integration with other multimodal data systems within our department or the hospital network. As a result, making final reports was labor intensive, as images and reports had to be retrieved from various sources. Accessing a patient’s historical data also was time consuming.”

SOLUTION SUPPORTS PRE-INSTALLED CATH LAB IT SYSTEM FOR GREATER EFFICIENCY

A tender was issued for an integrated solution, and according to Prof. Paelinck, Agfa HealthCare had the best solution to meet the needs of UZA’s echocardiography department.

The implementation of Agfa HealthCare’s IMPAX CVIS solution included the management of departmental data (images and reports), as well as the support of echocardiography workflow, such as procedure ordering and planning, image acquisition and archiving, report-image integration, measurements import, report elaboration, exchange of billing codes, hospital-wide report and image distribution. The modular solution easily interfaced with an already installed Agfa HealthCare IMPAX CVIS CathLab module in UZA’s Hemodynamics department. As such, the two combined solutions provide a unified, digital platform for managing both interventional and non-interventional cardiology procedures, including the more advanced image and data management clinical contexts such as shunt closure (ASD, PFO) or percutaneous valve interventions (TAVI, mitral valve clipping).

IMPROVED REPORT TURNOVER EXPEDITES CARE

Prof. Paelinck says, “Agfa HealthCare’s solution is an integrated, efficient system that can grow as we expand our services.



“The new system has increased the speed of providing Physician reports.”

PROF. BERNARD PAELINCK, UZA

It enables us to make multimodality imaging available within the cardiology department and the entire hospital, including the operating room and intensive care unit. We now have a single workstation providing a good overview of all activities and their progression. Patient registration, patient list and planning, image viewing and reporting are all displayed on one screen, including graphs and all levels of quantitative data. Cardiology studies typically involve lots of figures - measurements, calculations and so forth - so it’s important that the system can accommodate this. It also allows for quick, uniform and customized reporting. It has increased the speed of providing Physician

reports. As a rule, we try to deliver final supervised reports the same day or even the same half-day, and that works. Another advantage is the introduction of passwords and the traceability system which monitors who does what, which is important for security and legal issues.”

IMPAX CVIS HELPS NEW CARDIOLOGISTS PROVIDE BETTER CARE

Agfa HealthCare implemented the IMPAX CVIS in two steps starting with the image viewing application. Prof. Paelinck finds the software to be very stable and robust. Secondly, the IMPAX CVIS Echocardiography reporting system was introduced. Staff became acquainted with the new way of working relatively quickly, and now see its many advantages, especially the cardiologists in training. The system’s intuitive graphical interface is a great help to them. Also, the system encourages them to examine all parameters, so the quality of service is improved.

“The IMPAX CVIS allows for better interaction among colleagues, supervisors and cardiologists in training, since all relevant material is readily at hand. The integration with other cardio subdisciplines, like invasive cardiology and electrophysiology, is a real step forward for us”, says Prof. Paelinck.

CLOSE COLLABORATION RESULTS IN A MORE POWERFUL SOLUTION

Prof. Paelinck appreciates the support and accessibility of the Agfa HealthCare team. He looks at this cooperation as a real partnership with one goal: obtaining an efficient, powerful, state-of-the-art system for structured reporting, archiving and distribution of echocardiographic images and information. The digital consolidation of patient records and integration with existing networks was a first important step. Now, Prof. Paelinck wants to focus on further expanding and fine-tuning the system in close collaboration with Agfa HealthCare. •

DID YOU KNOW...

- » The UZA totals 25,000 admissions and 500,000 ambulant consultations per year.
- » The echocardiography department performs more than 70 exams per day.
- » The UZA cardiology department performs pioneering interventions such as Transcatheter Aortic Valve Implementation (TAVI) and Mitral Valve Clipping.

SOLUTIONS

- » Adult Echocardiography IMPAX CVIS
- » Integrated image viewing with archiving and reporting systems
- » Integration with HIS
- » Billing system
- » Quantification, data display and data query tools
- » Graphs
- » Integration with existing Agfa HealthCare IMPAX CVIS CathLab module



GRENOBLE UNIVERSITY HOSPITAL CENTER (CHU), GRENOBLE, FRANCE

Grenoble CHU digitizes all medical imaging

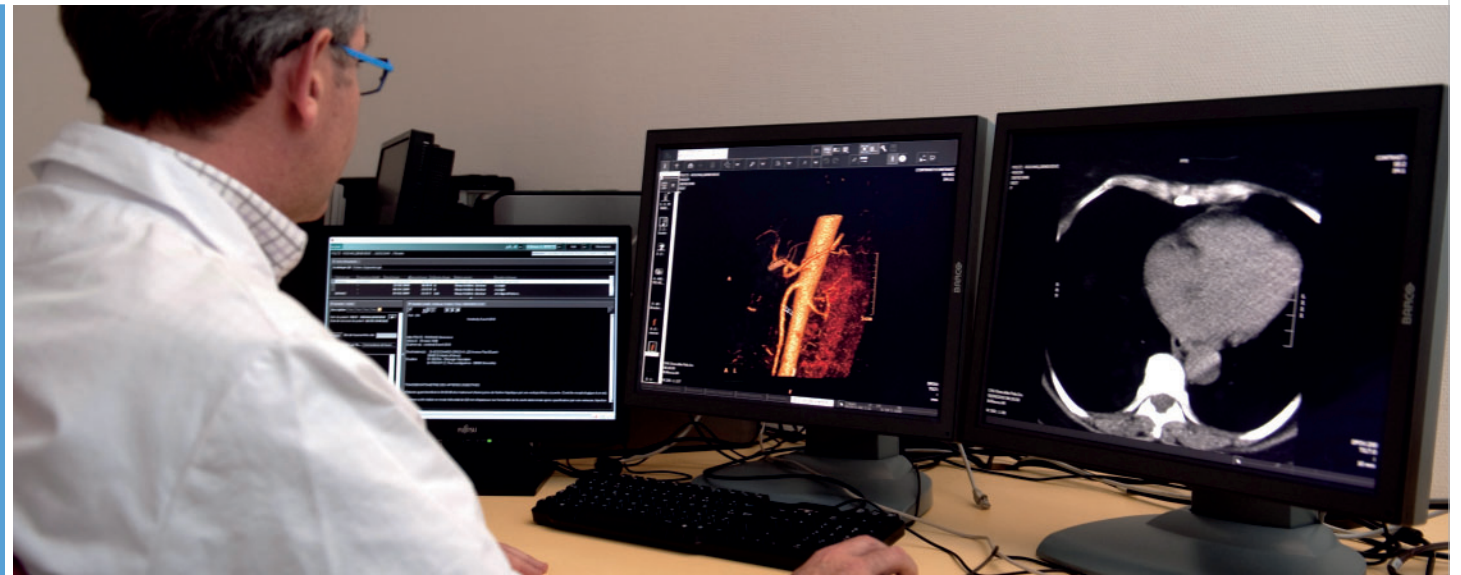
With IMPAX, Grenoble CHU improves the quality of patient care while increasing its medical imaging productivity

INTERVIEWEES Professor Gilbert Ferreti, Radiologist, Head of Service • Pierre Wicart, Biomedical Engineer • Eric Pierard, RIS-PACS Coordinator

In order to optimize the management and distribution of all medical imaging, Grenoble CHU has developed an evolutionary strategy to digitize and electronically archive all its medical images, and at the same time, electronically distribute them. Agfa HealthCare, one of the only suppliers to offer complete RIS/PACS integration, was chosen to be the engine powering this effort.

“IMPAX has revolutionized the Radiologists’ daily work. They can now dynamically view examinations in progress, access previous ones, and view patient reports at the same time, thanks to the double screen.”

PROFESSOR GILBERT FERRETI, Radiologist,
Head of Service, CHU Grenoble



ON THE WAY TO AN ELECTRONIC PATIENT RECORD

Grenoble is among the world’s most popular skiing destinations, which as a consequence, makes Grenoble University Hospital Center France’s second largest trauma center. The hospital has 30 Radiologists spread over six medical imaging areas. In 2001, it launched a PACS project intended to improve its medical imaging activities. This large-scale project involved improving CHU’s storage and archiving of medical images, as well as installing high-performance data processing support, and computerizing all patient data.

Agfa HealthCare won the 2002 tender with its IMPAX solution, which allows a contextual RIS/PACS integration and a level of ergonomics and storage capacity that met the highest expectations of Grenoble CHU. The solution is integrated

with Cristal Net, a software developed by the Regional Center for Hospital IT in Grenoble to support all hospital-based patient records.

Initial efforts focused on the university’s Clinic of Radiology and Medical Imaging (CRMI), which performs about half the institution’s imaging. In August 2005, the system was fully functional and allowed Radiologists to produce, distribute and archive images electronically, and to interpret them in this format as well. All doctors consult the examination reports with their associated images using Cristal Net.

COMBINE PATIENT CARE QUALITY WITH TEAM PRODUCTIVITY

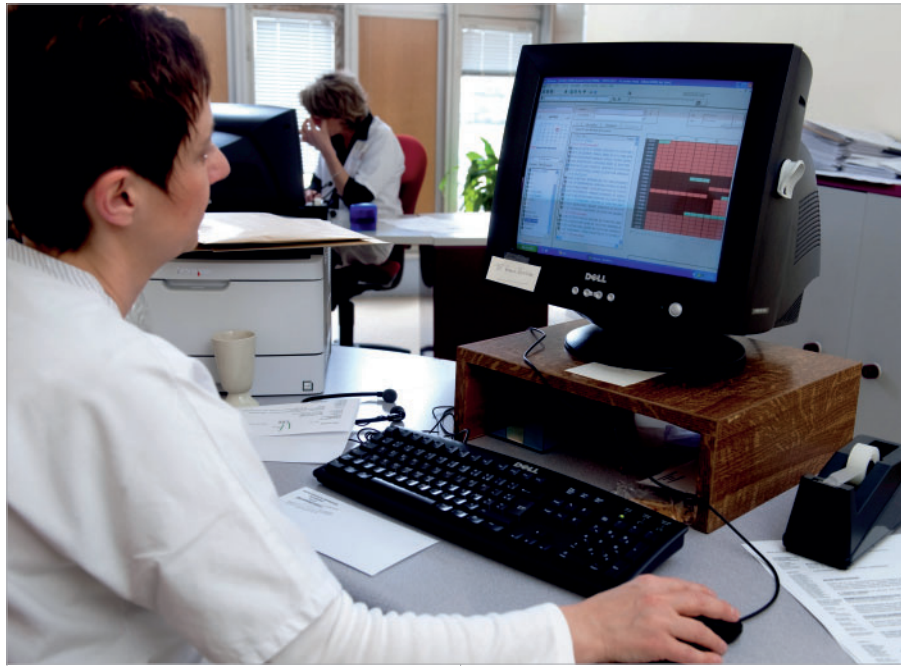
In May 2007, Agfa HealthCare’s RIS was extended to other imaging platforms, while CRMI’s PACS architecture was modified to interface with CHU’s

shared SAN (Storage Area Network), an enterprise-wide infrastructure that contains all the organization’s data.

In January 2010, workstations were installed in CHU’s medical imaging clinics where IMPAX was not yet implemented, allowing Radiologists, interns and assistants to access the PACS from their offices or other remote locations.

AGFA HEALTHCARE CONTRIBUTION

» Agfa HealthCare clearly demonstrated the benefits and value of its IMPAX solution. It also convinced Grenoble CHU of its ability to deploy and support the solution, and instilled confidence it could respond to all expectations of such an imaging network.



IMPAX V6.3

- » Simple and quick access to data
- » User-friendly and secure system
- » Unique and optimized user interface
- » Application deployable via Web

“The PACS from Agfa HealthCare was an opportunity to digitize and integrate biomedical data, and prepare our facility for the electronic patient record.”

PIERRE WICART, Biomedical Engineer, CHU Grenoble

With this user-friendly, secure system, Radiologists saw their daily work optimized thanks to the solution’s ergonomics that provide dynamic viewing functionalities for current and archival exams. For specialties like cancerology, where comparison of current and previous examinations is critical, Agfa HealthCare’s IMPAX makes it possible to create more complete reports (dictated or transcribed by voice recognition) to improve the quality of patient care.

In addition to improved productivity for Radiologists, IMPAX also allows the Group’s 700 doctors to access patient information and images more quickly via the Agfa HealthCare Viewer available from Cristal Net. IMPAX also ensures easy access to a patient’s medical history and comparison of images.

MANAGING THE COURSE OF CHANGE

Despite the preference for film by some doctors, the various healthcare players at Grenoble CHU have readily accepted the workflow changes since their

productivity has increased thanks to the interactive data exchanges made possible by IMPAX.

To achieve total implementation, Grenoble CHU is now enhancing the already solid performance of IMPAX with additional backup architecture to ensure redundancy and service continuity in the event of a system failure. All personnel utilize on-line, self-teaching videos to learn how to operate the system, which improves their use of the solution.

The next challenge facing Grenoble CHU is to further eliminate use of CDs or printed hardcopies within the organization. IMPAX has played a large role in decreasing these expenses from 800,000 to 350,000 Euros per year. Beyond this financial aspect,

Grenoble CHU also runs a project to integrate images produced by other intra-hospital services (ophthalmology, gastroenterology, etc.) into the IMPAX, and offer other healthcare providers (office-based practices, hospital centers, etc.) access to all patient records. •

“The Agfa HealthCare solution allows us to access a patient’s complete medical record, integrating the reports and RIS clinical information with images from the PACS.”

ERIC PIERARD, RIS-PACS Coordinator, CHU Grenoble

DID YOU KNOW...

- » Grenoble CHU has three different sites, with a total capacity of more than 2,200 beds.
- » The group performs 260,000 imaging examinations each year.
- » The doctors connect 1,400 times every day (IMPAX Diffusion).



WESTERN MARYLAND HEALTH SYSTEM, CUMBERLAND, UNITED STATES

Maryland Medical Center streamlines workflow, generates cost savings with 15-lead ECG system

Hospitals and health systems face a common challenge: patients are ill, the victims of heart attacks, strokes and other cardiovascular emergencies, and time to diagnosis is precious. Technicians, nurses and allied health professionals need timely, accurate, convenient ECG data and comparison studies they can quickly transmit to fellow Clinicians and care team members

INTERVIEWEE Christopher Haas, D.O., Interventional Cardiologist, Western Maryland Health System





The benefits of innovative ECG technologies are especially evident in busy hospital emergency departments (ED). The demand for emergency services in the U.S. has risen steadily in the past 15 years, increasing the total annual number of emergency visits, according to the National Center for Health Statistics. However, the number of emergency departments has declined, generating higher patient volumes, overcrowding, delays and increased wait times across the nation.

A TALE OF TRANSITION

Before opening the newly constructed Western Regional Medical Center in November 2009, which included a redesigned emergency department, Western Maryland Health System operated on two hospital campuses. A patient might have heart surgery on one campus and receive follow-up care on another. With no system to view scans electronically, Clinicians shuffled and shuttled paper-based records and CDs between the two facilities. The process often added a full day to diagnosis and treatment decision making.

Now, however, the Heart Institute at the Western Maryland Health System offers diagnostic cardiology services, open-heart surgery and interventional cardiology procedures at the new medical center complemented by the use of Agfa HealthCare's IMPAX® HeartStation® ECG Management System.

Clinicians no longer need to navigate through the cardiology department or rifle through paper-based records to get the images they need. Instead, they can access and review images from home or from any of the medical center's 500 PC's and seven Agfa HealthCare reference review stations. Clinicians, from PCPs, nurse practitioners, and Physician assistants, to anesthesiologists, surgeons and neurosurgeons, now have complete access to the medical center's ECG system.

MULTIPLE BENEFITS

Western Maryland has generated multiple positive outcomes since it first automated the processing and storage of ECGs in 2009. In reviewing potential ECG system features and functions, it is important to consider how a system will deliver on promised benefits, exemplified by the following issues:

Fulfillment of HITECH goals and Meaningful Use requirements: Among the goals of a national information infrastructure outlined in the health IT sections of the American Recovery and Reinvestment Act (ARRA) are to improve quality, safety, and efficiency, to reduce health disparities, engage patients and families, improve care coordination, ensure adequate privacy and security protections for personal health information, and improve population and public health. Through its newly installed IMPAX HeartStation, Western Medical can already point to advances in

quality and improved care coordination efficiency.

The issue: How effectively will an ECG system address broad HITECH goals and meet specific meaningful use requirements for 2011, 2013 and 2015?

More time for patients: Clinicians - especially Physicians - invest a significant amount of time simply gathering information in the form of ECGs, lab results and x-rays. Western Maryland Regional Medical Center's ECG system has already reduced Clinicians' record searches, increasing the time they can spend at the bedside providing care for patients.

The issue: How likely is it that the ECG system will liberate Clinicians to spend more time with patients, improving the delivery of care and patient and Clinician satisfaction? Will the ECG system improve Clinician workflow by offering a single convenient point of access to current and historical ECGs?

Faster, more timely ED decisions: Previously, an emergency department Physician at Western Maryland might view a patient's x-rays, chart, and labs on three different high-definition video monitors or assign an ED clerk to sort through medical records. By generating rapid results through the medical center's new ECG system, Western Maryland has benefited from decreased ED wait times and increased operational efficiency, and has saved time previously spent printing and disseminating results.

The issue: How will the ECG system enhance ED care, in the form of smoother workflow, increased efficiency, more rapid patient care decision-making and reduced wait times and delays? Will the ECG help enable the ED to care for more patients, provide higher quality of care or help fulfill its mission as a regional trauma center, for example?

Clinician control and rapid information access: The medical center's ECG system generates critical value alerts, which Clinicians can either review and affirm or edit with a quick point-and-click within a familiar, albeit electronic, format. As Clinicians approve an ECG interpretation, the hospital's information system makes the ECG available to all providers. The result: rapid access to the tools needed for diagnosis and treatment, elimination

of traditional transcription, and the potential for greatly improved efficiency and savings in time and money.

The issue: How well does the ECG system allow Clinicians to display, review, edit, confirm, print and archive ECGs through a hospital information system from a single patient-centric point of access?

Improved coordination of team-based care: If a technician performs an ECG in the intensive care unit, it is loaded directly into the medical center's information system. A nurse who spots a critical value alert, such as myocardial infarction, for example, can call a PCP who would recommend a course of treatment. The result: The nurse no longer has to wait for a cardiologist or interventionist to read an ECG before taking action.

The issue: How well does the ECG system promote faster medical decision making, coordination of care and effective use of nurses and allied health professionals?

Billing accuracy and follow-through: The medical center's ECG system offers crisp, clear, easy-to-read results. Instead of asking Clinicians to decipher a Physician's free hand interpretation of an ECG, the ECG provides typed, time-stamped information that improves the clarity of the health record and facilitates charge capture, billing and reimbursement.

The issue: Does the ECG system offer legible, readable information that facilitates billing? Does the ECG system provide patient-centric information that can be captured as part of the electronic medical record?

Innovation: Because Western Maryland had spent 12 months working with the 1.1 version of its ECG system, Agfa HealthCare invited it to become a beta site for version 1.3, which includes support for 15-lead ECGs. The additional leads provide views of the electrical activity of the posterior wall of the heart, which provide additional data to diagnose a heart attack. HeartStation 1.3 gives the Physicians the option of ordering a 12 or 15 lead ECG on patients with chest pain.

The issue: Is the ECG system vendor committed to introducing ongoing innovations and enhancements and allowing facilities to serve as beta sites for new versions of a technology? How

could such innovations contribute to improvements in patient care?

Flexibility and adaptability: Before installing its ECG system, the medical center shopped for a vendor-neutral solution that would mesh with its existing information system from Meditech, as well as equipment from multiple vendors of ECG carts, stress test equipment and Holter monitors. At Western Maryland, the medical center's ECG system is fully integrated with the Cardiovascular Information System (CVIS). If an interventional cardiologist is reading a coronary angiogram or echocardiogram, she or he can easily click on a tab, bring up the patient's current and previous ECGs and compare them to the angiogram or echocardiogram results.

The issue: How fully does the ECG system vendor demonstrate a commitment to multimodality interoperability and open standards? How does the ECG system facilitate clinical correlation? Will the system allow the facility to leverage existing equipment investments and purchase the ECG equipment of its choice?

IDEAS FOR IMPLEMENTATION

No two ECG systems are alike. But hospitals and health systems such as Western Maryland can save time and resources by following some simple implementation steps.

Test, test and test again. Western Maryland worked with Agfa HealthCare engineers for three months to test and verify that its ECG system could easily communicate with other medical center systems. Consequently, ECG results were readily available to Physicians and Clinicians during the "go live" phase, which eased the staff's anxiety related to the conversion to electronic storage and access of ECGs.

Rely on super-users as advisors. Western Maryland identified four staff members who received training on how to trouble-shoot system problems such as reconciliation. Having these staff members available enhanced the implementation process. The staff members made regular rounds on the units, and rotated "oncall" responsibilities during off-duty times as well as for several weekends after the system went "live". This process provided the clinical staff with immediate access

to someone who was familiar with the system and could resolve issues that might have come up.

Invest in training. Two months prior to launch, the medical center's cardiology department joined Agfa HealthCare in conducting training sessions. Prior to system launch, the Information Technology department loaded training programs onto more than 500 medical center PCs.

Insist on the presence of engineers. When the medical center launched its ECG system, two Agfa HealthCare engineers came on site to offer Physicians and nurse practitioners five- to ten-minute tutorials.

Focus on a consistent standard of care. The ECG system allows the medical center to maintain and verify a patient's ECG record through a single system - from the time the patient is admitted through the ED to arrival at a cardiovascular nursing unit or the ICU.

Promote collaboration across departments. Before selecting an ECG system, make sure that IT leadership joins forces with PACS administrators and representatives of specialties such as cardiology and radiology.

Ensure file integration. Be sure to connect a patient's cardiology files into a single record with an electronic patient identifier (EPI). If the patient has an ECG at an outpatient facility in the morning and then presents in the ED the same evening, Clinicians can easily compare the results.

Since Western Maryland implemented its ECG system, nurses who once insisted on printing every ECG have abandoned paper for the efficiency, convenience and control of an automated ECG solution. Physician candidates interested in working at the medical center are impressed with the broad availability of ECG systems, PACS, and electronic patient records. And the hundreds of Clinicians at Western Maryland Medical Center who regularly tap into the power of the ECG system can now look forward to even more significant support toward streamlined workflow, interoperability and accelerated clinical decision making. •

ALZEY GROUP PRACTICE, ALZEY-WORMS, GERMANY

New CR mammography solution helps private practice thrive

DX-M offers excellent image quality and fast availability with up to 30 percent lower doses for more effective patient care

INTERVIEWEE Dr. Andreas Gamroth, Medical Specialist, Diagnostic Radiology



“The first measurements showed we can lower mammography dosage by up to 30 percent without compromising image quality.”

DR. ANDREAS H. GAMROTH,
Medical specialist in diagnostic radiology,
Alzey group practice

This group practice serving Alzey offers patients and their referring Physicians a full range of radiological and nuclear-medicine procedures. In addition to outpatient care in the Rhine-Hesse region, the practice, which includes Dr. Andreas Gamroth, Dr. Andreas Kob and Dr. Adel El-Jamal, also looks after patients from the Rhine-Hesse specialist clinic in Alzey and the CT department of the Alzey DRK hospital.

“In addition to providing sound, specialized advice, we are certainly the regional frontrunners in digitization,” says Dr. Gamroth. “We acquired the first IT systems in 1999 and have been working with computed radiography (CR) in mammography since 2001. We also took part in developing CR, from the first images, which were challenging to evaluate, up to today, with images that are excellent.” He and his colleagues have trusted Agfa HealthCare systems in these efforts for many years.

Mammography is a major offering of the group practice. The Technologists today perform screening studies using Agfa HealthCare’s CR 85-X imaging plate system producing about 7,000 mammograms per year. Since 2007, the practice has also been affiliated with the Rhine-Hesse mammography-screening unit, which Dr. Kob manages as the project-managing Doctor. Approximately 17,000 more mammograms are produced at that site annually. A full-field digital mammography (FFDM) system is used in parallel with CR.

LOWER DOSES, BETTER IMAGE QUALITY AND SEAMLESS WORKFLOW AID PRACTICE’S REPUTATION

Dr. Gamroth wishes his practice to remain a digital pioneer, and continually supports the use of new technologies. So he quickly evaluated and installed Agfa HealthCare’s new DX-M digitizer optimized for mammography, which went into service in June 2010. “The first impression for everyone is very positive, and acceptance is uniformly high. The system is easy to operate and has reliable operation thanks to the stable cassettes”, the Radiologist says.

AGFA HEALTHCARE CONTRIBUTION

» Agfa HealthCare’s DX technology helps regional radiology practice maintain its long-term, leadership reputation in digital imaging.



DX DIGITIZERS

- » Excellent image quality with potential dose reduction
- » Fast ‘Drop & Go’ cassette buffer speeds workflow
- » Uses both needle-based and standard phosphor plates

He sees the biggest advantage as the reduction in radiation dose with equivalent image quality compared to the original CR system. “The first measurements showed we can lower mammography dosage by up to 30 percent without having to compromise image quality,” says Dr. Gamroth. Instead, he sees improvements. The significant dose reduction is possible by using detectors with a needle-crystal structure instead of powder coated storage plates. The significantly higher detected quantum efficiency (DQE) of these needle-crystal detectors provides high image quality with reduced dosage. So diagnostic confidence is increased further. The number of image retakes is also lowered considerably.

Overall, the DX-M delivers seamless workflows through fast procedures. The unique “Drop & Go” cassette buffer for five cassettes helps avoid waiting time at the digitizer and makes it possible to examine up to ten women per hour. The digital mammogram is displayed

on the system’s NX workstation just thirteen seconds after the needle-crystal detector is placed in the reader unit. It is then forwarded to the practice’s Picture Archiving and Communication System (PACS) for diagnosis.

A further advantage of digital technology emerges here. Dr. Gamroth says, “The image comes to the Doctor, not the Doctor to the image. This saves a huge amount of time. Images can be called up anytime on any monitor throughout the practice, including by several Doctors simultaneously. That immensely simplifies consultations and clarification appointments.”

Examinations from diagnostic and screening mammography are stored separately, as regulations prescribe. Where necessary, previous images can be retrieved for comparison within seconds.

DX-M OFFERS ADVANTAGES OVER FFDM

FFDM continues to be the system of choice for many mammography screening programs as experts believe micro-calcifications can be best visualized with it. “However, more and more Diagnosticians observe that a large number of micro-calcifications increasingly turn out to be falsely positive during clarification. Therefore, whether the heightened sensitivity benefit of FFDM is advantageous to women being studied, compared to

DID YOU KNOW...

- » The DX solution can perform Full Leg Full Spine studies, with three separate exposures digitally assembled and properly aligned.
- » The district of Alzey is represented on its coat of arms by a fiddle.

plate-based mammograms, is yet to be resolved,” Dr. Gamroth concludes.

Additionally, the Doctor feels another benefit supports the use of DX systems in mammography: “Full field systems are simply too cost-intensive to purchase and maintain. As a rule, they are only worthwhile for large practices. Their slightly better image quality and cassette-free workflow do not offset this, and the DX-M system offers a much better price-performance ratio.”

Furthermore, Dr. Gamroth feels the DX digitizer is more flexible. Existing x-ray units can continue to be used without conversion, and also can be used centrally to serve several examination rooms. And the DX-M’s small footprint allows its installation in a very small room or even in narrow corridors.

DX-M ABILITY TO PERFORM CONVENTIONAL STUDIES A BENEFIT

Dr. Gamroth is extremely satisfied with the DX-M digitizer. “A system is only as good as the way the staff uses it. And our staff works very well with the DX-M.” The Radiologists appreciate the excellent image quality and rapid availability of images for quick, unequivocal diagnosis. The Technologists highlight its robust, easy-to-use operation and speed at which procedures are completed with up to 30 percent lower radiation dosage.

Due to the positive experience in mammography, the DX-M digitizer will eventually be used in conventional x-ray diagnosis, especially for bone examinations. The group’s Radiologists also expect better image quality there in terms of resolution with a similar reduction in radiation doses. •



Lined up: Agfa HealthCare's new product portfolio

Agfa HealthCare recently announced it had expanded its existing portfolio of healthcare solutions with two new distinct product lines: contrast media and surgical drapes and gowns. THERE magazine caught up with the respective Business Managers of each product line to find out more.

INSIGHT AGENTS - CONTRAST MEDIA SOLUTIONS

With the recent acquisition of Insight Agents GmbH, Agfa HealthCare has expanded its presence in the diagnostic imaging market with a new offering: contrast media. Contrast media are diagnostic pharmaceuticals inserted in the patient, and designed to improve the visualization of anatomical structures and pathologies or arteries. Although Insight Agents originally focused its activities on the German speaking region of Europe, through Agfa HealthCare, it has already expanded its sales to other European markets and even on a global level.

THERE magazine caught up with Dirk De Langhe, Global Business Unit Manager for this line of products, and asked...

Why has Agfa HealthCare moved into contrast media?

Actually, the reason for moving into this area is very sound, and was something that was thought through in the greatest detail. It is all, and simply, about better serving our customers through growing our current diagnostic imaging portfolio. This extension builds on our existing knowledge in radiology, cardiology.

What are you offering?

We offer two distinct generic product lines, one for Computed Tomography (CT) and x-ray and a second line for Magnetic Resonance Imaging (MRI).

For CT and x-ray we offer both Iopamigita and Iohexagita. These products are generic non-ionic contrast media based on the active ingredients Iopamidol and Iohexol. Since the early 1980s, the active pharmaceutical ingredient Iopamidol has been applied more than 250 million times, and represents 40% of the world market.

For MRI we offer Magnegita – Gadopentetate dimeglumine (Gd-DTPA) which is the first contrast agent for MRI worldwide. This active ingredient has been applied about 90 million times, in over 100 countries.

What is a generic contrast media product and why offer it?

We have moved into generic medicinal products because these have the same qualitative and quantitative composition in active substances and the same pharmaceutical form as the reference (or "branded") medicinal products. Generics also have to meet the same stringent requirements for drug approval by the authorities and production takes place under certified conditions in accordance with worldwide standards and they also have to prove compliance with the same stringent standards in relation to efficacy, safety and quality. In short, they allow us to provide our customers with leading solutions of the highest quality so, from a customer perspective – it's a win-win situation.

What differentiates Agfa HealthCare from other providers of contrast media?

Our extensive history with diagnostic imaging technologies and our long standing experience in distribution of healthcare consumables makes us a strong player on this front. Our new assortment of contrast media solutions has expanded our overall offering and now enables us to serve our customers even better, through a broader range of solutions.

What markets will be focused on? What are the ambitions and why?

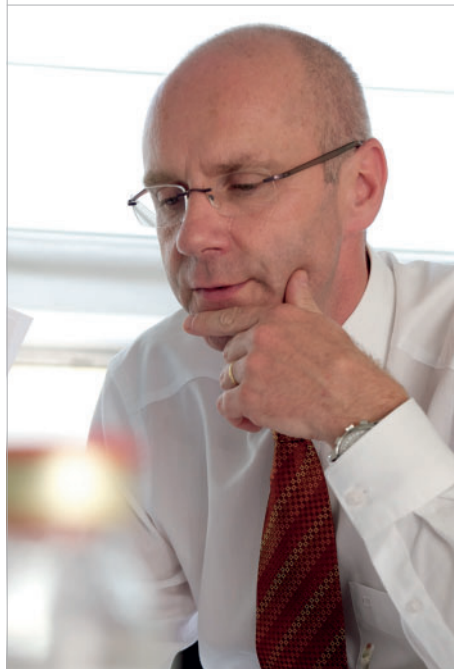
Before the acquisition by Agfa HealthCare, Insight Agents primarily focused its activities on the Germanic markets. However, with Agfa HealthCare's global reach, we are literally opening the solutions up to new markets around the world and have already expanded our offering across Europe.

With the growth of economies in the emerging markets we also see a growth in the demand for diagnostic imaging in those markets. The growing installed base of CT and MRI equipment, together with the increasing number of procedures in emerging markets such as Asia, Russia, LATAM and Middle East, is therefore increasing the demand for contrast media.

We are in the process of registering our contrast media in most of these high potential markets and we expect to be an active player in those markets very soon.

What does the future hold for contrast media solutions at Agfa HealthCare?

Growth and expansion. We will further invest to extend our portfolio with additional and new products. This will enable us to deliver a more complete assortment to our customers and in new geographies. •



Dirk De Langhe, Global Business Unit Manager for Contrast Media

SURGICAL DRAPES & GOWNS

The growing awareness of hospital acquired infections (HAI) has increased the need for better infection control. As a result, new standards and regulations are being enforced in the healthcare sector worldwide, with a strong emphasis on creating improved bacterial barriers, especially during surgery. With recent research showing that textile products have much lower barrier properties against infection – and, therefore, a low likelihood of conforming to European standards – the way forward is single-use gowns and drapes made from laminates and non-woven materials. To meet this demand head-on, Agfa HealthCare has launched a new line of consumables: disposable drapes and gowns (also called surgical procedure sets) under a new brand name: SEPARIO.

THERE magazine caught up with Stephan Fierens, Global Business Unit Manager for Surgical Drapes and Gowns, and asked...

Why has Agfa HealthCare moved into this business?

The move into surgical drapes and gowns was taken as a clear step. Firstly because, through our extensive experience in healthcare, we saw that there was a clear evolution toward and demand for these kinds of solutions, not only in Europe and North America, but globally. The second reason was that we could make use of our global logistics network which has been built up from film. Since non-woven drapes and gowns are multi-layered products, some of them even requiring coating, we also saw some technological synergies. So in short, we had the means, the knowledge and the technological understanding to introduce these solutions to the market fairly quickly.

The introduction of this new portfolio also fits well within the framework of our purpose (or raison d'être if you will) in healthcare namely "to evolve with the needs of our customers".

So the market is moving towards disposables? Why?

Yes, very much so and the reason is also very sound – it has everything to do with patient and Physician/care provider safety. As you will know, there are still a significant number of patient

incidents after surgical procedures, where bacterial infections which appeared during the operation process caused additional issues in the post-operative process. Nonwovens offer a far better impermeability than poly-cotton that provide little or no resistance to microbial penetration, especially when wet. The move towards disposables deals with this issue more effectively as all items of clothing and drapes are removed and disposed of, rather than washed and re-used. It's a significant difference as with disposables where you are effectively able to destroy any potential residue.

What types of products are you offering?

We essentially offer four solution categories – full sets, each individually packed and containing all necessary draping material for a specific type of operation (including C-section set, a shoulder arthroscopy set, hip operation set and so forth and also a universal set), separate gowns, separate accessories needed for specific operations and separate drapes. So in short, an extensive and flexible offering of solutions, pre-packaged per operation type, or in loose format to allow for replacement or separate use. Of course this is something we will be expanding on, ensuring we can deliver sets for each major type of surgery.

What makes Agfa HealthCare's solutions different?

We have simply not compromised on quality in any way. It was decided from the beginning that we would meet the highest European quality standards from the start and across the products and range. Firstly it was decided that we would not only meet European standards on infection control in the critical incision zone, but across the entire product – so the entire drape's surface area meets the critical zone standards. Secondly we have not compromised on comfort. As an example I refer to our gowns. Both standard and re-enforced types are fully compliant to the infection control standards, while at the same time offering a pleasing wear comfort to the surgical staff.

Finally the design of our products is based on the practical experience of users that have worked for years in surgery.

Fluid collection pouches and other accessories are positioned on the

specialty drapes where they offer the most convenience during the procedure.

Are you seeing demand for the product? What is the future?

Yes we certainly are. Today we focus on Europe, but we will soon also drive our business to markets that are now starting to make the active move from non-disposable to fully disposable systems. In short, that means we will, over the coming years, target markets like Latin America, the Middle East and China. Also in these regions, healthcare workers do want to take full ownership of infection control related activities and interact with infection control professionals. These markets are seeing significant transformation in their healthcare provision and, as we have always done, Agfa HealthCare will also be there with this portfolio to support their ongoing transformation. •



Stephan Fierens, Global Business Unit Manager for Surgical Drapes and Gowns

SEPARIO – THE BENEFITS

- » Provides maximum protection for patients and staff
- » Comfortable and easy to use
- » No compromise, sterile environment
- » Fit for the most vigorous handling
- » Strong absorbency and containment of fluids
- » Easily identifiable and long shelf-life
- » Conforms to EN 13795

AMC, AMSTERDAM, THE NETHERLANDS

“Quality reporting requires ‘trans’-disciplinary knowledge to benefit from multimodality results”

INTERVIEWEES Prof. Dr. Johan S. Laméris, Department Head Radiology AMC Amsterdam • Dr. Hein J. Verberne, Chef de Clinique Department of Nuclear Medicine AMC Amsterdam, The Netherlands

AMC Amsterdam annually serves more than 410,000 patients and performs over 210,000 radiological and nuclear medicine procedures. With this volume, the recent Picture Archiving and Communication System (PACS) upgrade to the web deployable IMPAX 6 solution with IMPAX RIS and NIS* brings additional comfort and confidence in managing its department’s growth.

Prof. Laméris: “We went to great lengths to ensure we were signing up with a healthcare provider that could meet our highest expectations. When we selected Agfa HealthCare after an extensive review process involving five leading vendors and an independent ICT advisory consultancy, we were happy to continue and expand our relationship. Agfa HealthCare’s solutions are key to our quality

approach, as a service-providing Radiology department. Quality is based on knowledge, and we are confident that is what we will achieve with Agfa HealthCare’s assistance with workflow documentation. The Academic Medical Center (AMC) Amsterdam is a large facility and our radiology services extend to many parties, leading to multiple information transfers. We need to document each step of this flow.”



Prof. Dr. J. S. Laméris has been Department Head at AMC Amsterdam’s Radiology Department since 1998. He also teaches radiology at the Amsterdam University’s Faculty of Medicine. He is currently President of the Dutch Association of Radiologists.

Dr. Verberne: “At the same time, we need to close the loop with referring Physicians and Clinicians on the diagnostic value of our reporting. Bridging the information gap between our report and the eventual diagnosis by the Clinician will enhance the quality of reporting. With the help of partners like Agfa HealthCare, we have solutions that allow us to integrate information from different systems, learn about the final diagnostic disparities and take them into account.”

So the point is: how can we achieve a best practice approach in diagnostic imaging and reporting to facilitate an understanding between experts of different medical disciplines?

Dr. Verberne: “In order to enhance our contribution as a service providing imaging department, we must first enable a structured, standardized reporting methodology. This facilitates quality results, but also allows us to meet the expectations of referring Clinicians in a more uniform way.”

Prof. Laméris: “From the first contact, we need to define which examinations are best for the patient’s pathology. That is why multidisciplinary contacts are crucial in the future: we will learn how to come to an accurate diagnosis amidst the rapidly growing volume of clinical image data we are facing. In fact, we will need a ‘trans’-disciplinary methodology to gain insight in the approach of other disciplines towards a pathology.”

Multidisciplinary concepts take up more of the Radiologists and Clinicians time. Is the benefit of diagnostic efficiency not negated by all the time involved?

Prof. Laméris: “Besides from being an important quality improvement, this approach changes the working method, which is today partly required by regulatory authorities. A Clinician assembles a number of specialists around a patient case. It is crucial that all of them hear each other’s opinions. The case reading should be as multidisciplinary as possible to come to a holistic understanding of the patient, and allow for a more comprehensive report.”

Dr. Verberne: “In Nuclear Medicine, the additional time spent on multidisciplinary case reading is more than compensated by the automation of our workflow and the considerable throughput time reduction of reports, following the integration of IMPAX NIS, Reporting and PACS functionalities in the existing workflow software.”

“We need to train medical doctors in group-meeting skills, from both content as well as technical information and communications technology viewpoints. A meeting ends with the chairman suggesting the next steps and wrapping up the arguments leading to a shared conclusion. This implies the ability to combine data from different modalities and interpret their relevance within the patient’s pathology.”

“With about 10 million radiology examinations per year nationwide, we are easily talking about 500 terabytes of information at the Clinician’s fingertips. It is crucial to have the right tools to use this powerful knowledge base intelligently.”

PROF. DR. J. S. LAMÉRIS

Prof. Laméris: “So borders are fading. We currently have other disciplines in our department, such as a Cardiologist and a Nuclear Medicine specialist. All imaging professionals will eventually come together in a single department, which should provide the referring Clinician with a combined and standardized report based on all available examination results. The Radiologist will not be able to handle all of this by himself. Even today, you need specific technical knowledge to look at examination results in the right way. Confronted with a difficult MRI sequence, we often consult a sub-specialized Radiologist to understand the importance of certain images in relation to the pathology.”





Dr. Hein J. Verberne is a registered Nuclear Medicine Physician and works as a staff-member and Chef de Clinique at the department of Nuclear Medicine of AMC Amsterdam, with responsibility for the clinical workflow.

Dr. Verberne: “This is a slow process, inspired by technical evolution and aspects of human competence. The capabilities of RIS/NIS/PACS solutions are already fostering closer cooperation between the radiology and nuclear medicine departments. When faced with hybrid imaging studies, such as PET-CT, SPECT-CT, PET-MR, you need a lot of expertise to integrate all available examination images into a single combined report. Combined examinations require combined reporting, and technology will take us there.”

Prof. Laméris: “In the future, early triage by using imaging will gain importance. The cost-effectiveness of imaging strategies in this regard is not clear, but the results of the recent Optima study at AMC on the optimization of diagnostic imaging in patients with acute abdominal pain are that imaging will determine patient routing, rather than the Clinician’s examination. In fact, Clinicians more and more prefer seeing imaging results first before making their diagnosis.

We know that the use of imaging for a patient with general complaints can lead to lower hospitalization duration and reduced mortality rates.”

The IMPAX Data Center allows hospitals, regional care organizations and national medical archives to share diagnostic images and results. It will allow AMC to assume its role in the Dutch E-Radiology project. The right technology is available.

Prof. Laméris: “The Amsterdam pilot project of the nationwide E-Radiology program aims to allow any medical specialist – Radiologist and others – to have fast, flexible access to all radiology images and reports from anywhere in The Netherlands. With about 10 million radiology examinations per year country-wide, we are easily talking about 500 terabytes of information at the Clinician’s fingertips. IMPAX Data Center is a crucial component in the process of using this powerful knowledge base intelligently.”

“Another example of technology-driven collaboration between disciplines is the Dutch Pancreatitis Study Group.

This Group has over 80 members from all eight university medical centers and 14 large teaching hospitals in The Netherlands. Its purpose is to improve the treatment of patients with acute, chronic pancreatitis by a combination of centralization, consultation and multicenter studies. The participating medical centers determine where a patient can best be treated based on information they share over the Internet. In this way, the patient always has the best available treatment at the most preferable place. You see, when the need is high, creative solutions will surface!” •

“You need a lot of expertise to integrate all available images into a single combined report. Combined examinations require combined reporting and technology will take us there.”

DR. HEIN VERBERNE



RINKEBY STATION

Many of Stockholm’s subway stations have been left as rock caverns offering a unique atmosphere. This one features gold sculptures, paintings and mosaics. Stockholm spends 10 million Swedish kronor in taxes per year for the arts, and most feel the money is well spent.



JESSAZIEKENHUIS, HASSELT, BELGIUM

IMPAX puts the Radiologist at the center of medicine

By introducing an IMPAX solution ten years ago, the hospital became known as an innovator, a reputation it still holds today

INTERVIEWEES Dr. Paul Cleeren, Head of Radiology Department at Jessa Ziekenhuis • Ms. Hilde Goossens, ICT Director • Mr. Dominic Moermans, Head Radiology Nurse at the Virga Jesse Campus



zero, despite a 50 percent increase in the number of patient procedures.

All the ingredients for PACS' success were present in 2000, when many minds were rather skeptical of it, emphasises Dr. Cleeren: "We had solid support from hospital management from the outset. Our IT department also saw the opportunity and supported us, as did Agfa HealthCare's team. Our three 'key users', whom in due course we named our 'three musketeers', provided the training."

"Thanks to the IMPAX solution, we were able to roll out a central electronic patient file (EPF) faster. The Clinicians were asking for this", ICT Director Hilde Goossens remembers. "We obtained approval to install up-to-date structured cabling, which meant creating a hospital-wide network that let us spread information from all corners of the campus." The hospital's IT department evolved from being an administrative support group into a business-critical activity essential to the quality of medical service.

As a PACS pioneer among Belgian hospitals, Limburg-based Jessa Ziekenhuis can now draw upon 10 years of real-world experience in digital image networking and storage. Introducing Agfa HealthCare's IMPAX made the acceptance of central patient files by Clinicians easier, quality of care improved significantly, and the hospital became well-known for innovation. "PACS has repaid itself at least threefold over these ten years", says Dr. Paul Cleeren. "It also contributes to the Radiologist acquiring a more important position in the care and treatment of hospital patients."

Jessa Ziekenhuis was formed by merging three, separate Limburg facilities: Virga Jesse and Salvator campuses in Hasselt, and St.-Ursula campus in Herk-de-Stad. With 1,003 beds and a staff of 3,000, including 372 doctors, Jessa Ziekenhuis is the biggest hospital in Limburg today. This means it's one of the largest non-university hospitals in Flanders and among the top employers in the province of Limburg. Each year, over 37,480 patients are admitted, in addition to handling more than 41,185 outpatients. Tens of thousands of consultations take place annually.

Each year, more than 117,000 patient contacts, and over 157,000 examinations take place in a broad spectrum of disciplines: traditional radiology, mammography, mammotomy, physical breast exam, Doppler echography, CT-Scan (multislice), angiography with interventional radiology, and magnetic resonance (MR).

PACS INTRODUCTION ACCELERATES ACCEPTANCE OF THE EPF

Dr. Paul Cleeren introduced Agfa HealthCare's IMPAX solution into his Radiology Department in 2000. Thanks to his vision and perseverance, he succeeded in expanding PACS into the hospital's Operating Rooms and Intensive Care Unit in barely four years. By 2005 the Radiology Department's use of conventional imaging was reduced to

IMPAX IMPROVES EFFICIENCY AND ADDS MORE CALM TO THE ORGANISATION

Dr. Cleeren believes the introduction of IMPAX produced substantial staff efficiency improvements, which meant that the delivery of care also improved. The fact that Radiologists now enter their reports on screen has become

AGFA HEALTHCARE CONTRIBUTION

- » A permanent presence during the introduction and implementation of the IMPAX solution
- » Accurate decisions, practical guidance and the arrangement of clear escalation agreements
- » Adjustment of the solution to the hospital's growing development

"We succeeded in handling the 50% growth in patients in our department without any problem."

DR. PAUL CLEEREN, Head of Radiology Department at Jessa Ziekenhuis





common place, but in 2000, this represented a genuine organizational revolution, he says. "Because of this, our PACS immediately paid for itself in staff labor costs because they could work faster. The second return on the investment arose from the substantially shorter admission periods. As reports were compiled more quickly on examinations and follow-up procedures, the patient's period in hospital was reduced to less than the legal standard, which brought us a bonus from the government."

But perhaps the most difficult-to-measure yet most visible advantage of digital image recording and distribution is the significant amount of medical and organizational time saved. "The department has now become an oasis of calm," says Dr. Cleeren. "We succeeded in handling the 50% growth in patients without any problem. We saved time organizationally because doctors, nurses and secretaries quickly obtain the right information the first time. Clinically, we save time thanks to the rapid availability of previous examinations, work lists and digital libraries."

The biggest saving for the hospital is that Clinicians no longer have to travel to Radiology to examine images, or wait while duplicates are made. "It seemed they were always standing about waiting for an elevator," Dr. Cleeren says. "So a great number of expensive 'medical hours' were freed up."

Head nurse Dominic Moeremans also says the calmness facilitated by PACS creates confidence in the patient: "He sees that examinations advance efficiently, that he does not have to wait needlessly, and that the information reaches the treating doctor accurately, both inside and outside the hospital."

PACS PUTS THE RADIOLOGIST AT THE CENTER OF MEDICINE

Thanks to PACS, the Radiologist becomes a more central factor in the total clinical process, Dr. Cleeren believes. "We hold multidisciplinary meetings 5 to 6 times per week, sometimes to discuss difficult cases, and sometimes to review interpretations of examinations. Up to 20 Clinicians often participate. This consultation ensures greater clinical insight and better care. For Radiologists, this means we are more involved in the

DID YOU KNOW...

» Virga Jesseziekenhuis, Hasselt, was the first Belgian hospital to acquire NIAZ accreditation. The quality label awarded by the Dutch Institute for the Accreditation of Hospitals (NIAZ) means that a hospital can demonstrably and consistently provide an acceptable level of quality care.

"We have developed a good understanding with Agfa HealthCare over the years. We are listened to, the escalation procedures are effective."

HILDE GOOSSENS, ICT Director at Jessaziekenhuis

clinical process than in the past." The quality of reporting has also risen sharply because, in contrast to the past, we always have the previous digital images quickly available from the electronic archive for comparison.

Dr. Cleeren sees even greater versatility for his department with the latest IMPAX v.6 Enterprise solution. Users can command the full power of IMPAX from virtually every remote location. "We can give referring doctors access to functions that help them acquire greater insight into a file. They can call up digital examination images seamlessly on their screen."

Hilde Goossens follows the development of digital examination techniques closely. "They create substantial quantities of data. All examination images since 2000 are available online for Radiologists today. In the future, we may have to consider operating more selectively; for example, distinguish between the many thousands of very fine sections that Radiologists use in reporting and the somewhat more basic exam images typically available to the Clinicians. The Radiologist is also central to this discussion." •

TODAY AT JESSAZIEKENHUIS

- » IMPAX 6 Enterprise offers full IMPAX power to the referring Clinician.
- » Agfa HealthCare RIS integration provides seamless access to the EPF, digitization of requests for examination, and automatic link to the image file.



"We paid a lot of attention to our colleagues' training. The permanent support from the Agfa HealthCare team was very important to success."

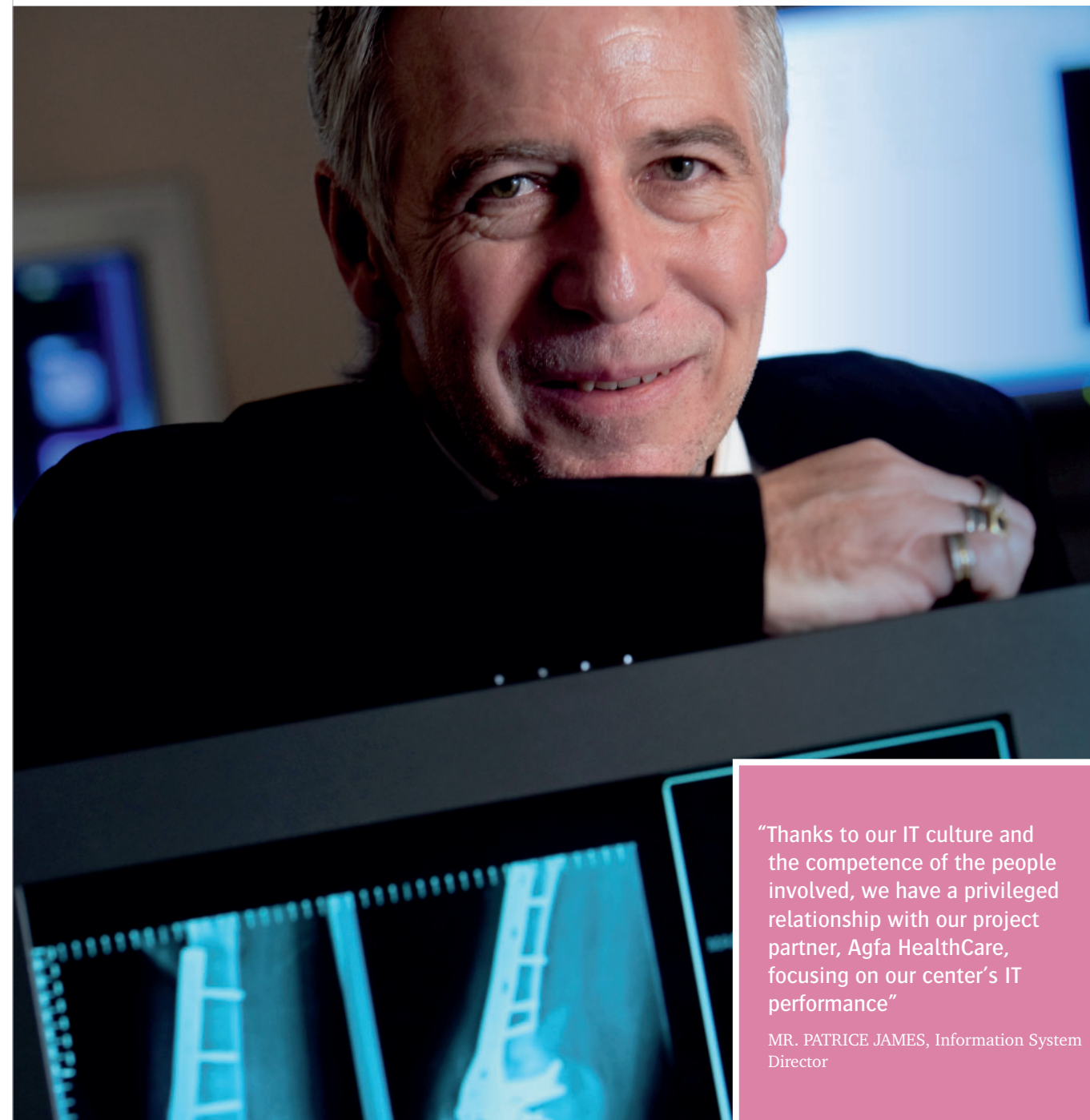
DOMINIC MOEREMANS, Head Radiology nurse at Virga Jesse Campus

JACQUES LACARIN HOSPITAL CENTER, VICHY, FRANCE

The Jacques Lacarin Hospital Center enhances its Information System

With the ORBIS* solution suite, the Jacques Lacarin Hospital Center now has a fully integrated, enterprise-wide healthcare information system

INTERVIEWEE Mr. Patrice James, Information System Director



"Thanks to our IT culture and the competence of the people involved, we have a privileged relationship with our project partner, Agfa HealthCare, focusing on our center's IT performance"

MR. PATRICE JAMES, Information System Director

* Currently available in France, Germany, Austria, Switzerland and Belgium.

In order to improve its organizational effectiveness and increase the quality of patient care, the Jacques Lacarin Hospital Center implemented Agfa HealthCare's ORBIS solution to create a more coherent and integrated information system. With this high-performance and up-to-date healthcare IT solution, the hospital center can now optimize patient treatments while meeting the various requirements of French healthcare system reform.



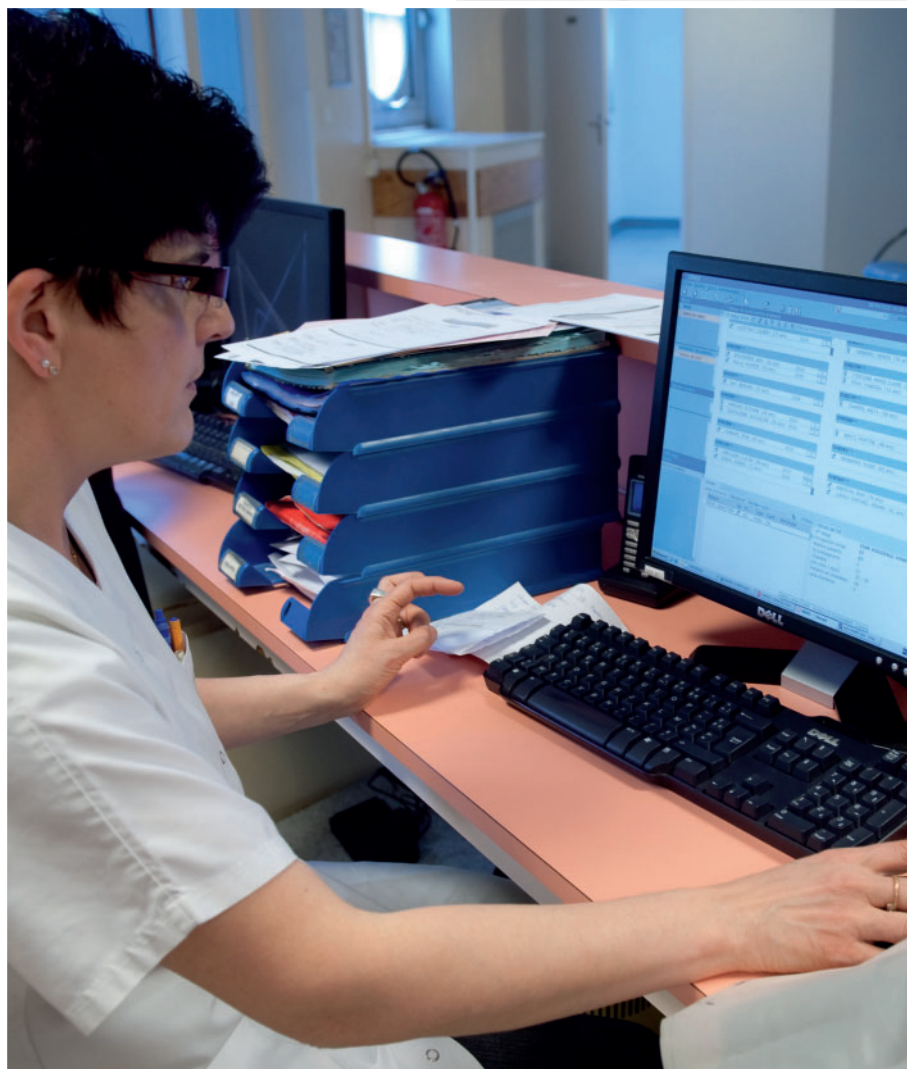
“With ORBIS, we now have an IT system that ensures excellent care quality and regulation compliance, and better control of costs and resources.”

MR. PATRICE JAMES, Information System Director

LEADING THE WAY WITH INTEGRATION

For over 20 years, the Jacques Lacarin Hospital Center has been committed to developing IT within its care units, focusing on the needs of both patients and clinical staff. It was able to further strengthen this commitment thanks to the strong cohesion between management, IT and the Medical Information Department (DIM), who together created an integrated strategy for implementing an enterprise-wide healthcare IT system, in partnership with Agfa HealthCare.

ORBIS Administration is the foundation of this system: it coordinates all the center's administrative applications, including patient administration, financial management, and human resources.



As part of the program for medicalization of the information systems in France (PMSI), the center also implemented ORBIS Electronic Patient Record, which organizes the patient's medical care by integrating the medication circuit (from the doctor's prescription to the center's stock management), examination requests and results, as well as appointment management.

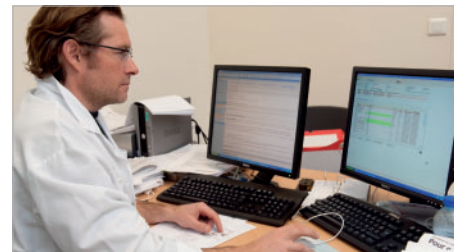
Other tools that complete the solution include ORBIS Catering for meal management and kitchen production, and ORBIS Decision, which structures data in dashboard-type displays to

provide quick overviews of revenues and expenditures.

SEAMLESS PERFORMANCE FOR CLINICIANS AND MANAGERS

The successful deployment of the ORBIS solutions can be directly attributed to the individual training offered to hospital center users, and the thorough review of the center's workflow before organizing the implementation. Thanks to this careful preparation, staff adopted and adapted to the solution very quickly.

ORBIS Administration in particular improves the quality of work for



» With the ORBIS integrated suite from Agfa HealthCare, the Jacques Lacarin Hospital Center has a complete, seamless and coherent healthcare IT solution that helps it optimize treatment and comply with French healthcare system reforms.

administrative personnel, primarily by eliminating redundant data entry to increase productivity.

With patient record and financial management tools, the center has everything needed to meet the diverse requirements of patients and healthcare authorities regarding billing and finance. The center has also shown innovation by being among the first healthcare facilities in France to install a computerized GPMC (Gestion Prévisionnelle des Métiers et des Compétences) system for the personnel department.

ON THE WAY TO A REGIONAL MULTIMEDIA PATIENT RECORD

ORBIS Electronic Patient Record gives direct, electronic access to all patient information in an on-line, structured and seamless format. The record thus becomes the center's backbone,

empowering the medical secretaries, nurses and hospital staff who input medical data.

As a major factor for certification by the Haute Autorité de Santé (HAS), the patient record is of critical importance to the Jacques Lacarin Hospital Center. ORBIS Electronic Patient Record plays an important role, contributing to improvements in care quality, safety, and optimization of resource utilization.

With ORBIS implemented, the center will also soon be able to communicate electronic patient records (EPR) with the regional health network (SIMPA – Système d'Information Médicalisé pour l'Auvergne) through an EAI (Enterprise Application Integration) module.

As a future step, the Hospital Center expects to install a PACS for storing and

sharing images from digital modalities (scanner, MRI, etc.). A system-wide interface (across the EAI) will make it possible to create a complete, multimedia, digital patient record which will improve patient care through faster access to medical information by Physicians and Clinicians. •

DID YOU KNOW...

- » The Jacques Lacarin Hospital Center has one principal site and four, separate psychiatric facilities with a total of 786 beds.
- » Staff numbers have risen to 1765.51, in full-time equivalent (FTE).
- » The center's continuous quality improvement policy led to accreditation by the Haute Autorité de Santé in 2006.

DR. ROUAS' RADIOLOGY SURGERY, CHELLES, FRANCE

DX-M and DX-G solutions herald a new era in private practice radiology

By acquiring Agfa HealthCare's DX-M and DX-G solutions plus a DX-D 300 flat panel detector, Dr. Rouas is now offering a fully digital service for his radiology practice

INTERVIEWEE Dr. Lucien Rouas, Radiologist



"The DXD-300 allows a 30% time saving."

DR. ROUAS, Radiologist, Chelles, France

Since taking over and renovating the facility in 1998, the Doctor has continually modernized his equipment in order to enhance medical imaging performance and quality. As a result, what was once known as the oldest radiology practice in Chelles has today become among the most advanced of its kind in the region. This is in large part thanks to numerous Agfa HealthCare solutions and technologies that revolutionize the medical staff's day-to-day work.

PRACTICE BENEFITS FROM A DECADE OF GROWTH WITH AGFA HEALTHCARE

Located in Chelles, in the Seine-et-Marne region twenty minutes from the center of Paris, Dr. Rouas' surgery performs a wide range of general radiology, arthrography, mammography, and osteodensitometry exams, among other procedures. The practice sees more than 1,500 patients per month.

As a longstanding Agfa HealthCare customer, Dr. Rouas has always opted

for quality products and has regularly upgraded his imaging equipment to stay at technology's cutting edge.

A pioneer among his colleagues, the Doctor originally installed an ADC Compact system in the 1990s, which at the time was unique in its ability to manage 10 cassettes. Dr. Rouas has again renewed his confidence in Agfa HealthCare through his acquiring new digital imaging solutions as they come to market.



DID YOU KNOW...

- » Dr. Rouas' practice performs approximately 560 echocardiographies per month.
- » The practice employs 8 people (3 Technologists, 3 Secretaries, Dr. Rouas and a part-time Doctor).
- » Various types of radiology examinations are performed daily.

In 2009, Dr. Rouas crossed a major threshold by installing Agfa HealthCare's latest digital imaging innovations. In 2010, the center became the first private French radiology practice to link the DX-D 300 flat panel detector with the new DX-G and DX-M digitizers based on needle technology.

INSTANT IMAGE ACQUISITION SPEEDS PATIENT/STAFF WORKFLOWS

Upgrading to these digital radiology solutions improves the practices' image quality, helps reduce x-ray doses and speeds staff productivity. By combining these advantages in a single piece of equipment, the DX-D 300 flat panel detector system is a perfect illustration of such an advance.

With its state-of-the-art technology, unique detector and fully-motorized, remotely-controlled positioning system, the DX-D 300 is an easy-to-use, ergonomic solution providing excellent image quality at lower radiation doses.

While its flexibility pleases its operators, who can now record and automatically select all angles of incidence, it is an essential solution for optimized image acquisition.

SOLUTIONS

- » DX-G
 - NX interface, for intuitive browsing
 - "drop & go" buffer and high-speed throughput
 - needle-based detector for reduced dosage
- » DX-M
 - needle-based detector for mammography
 - dedicated or mixed use
 - MUSICA² Mammo image processing for excellent image quality
- » DX-D 300
 - fully-motorized remote control positioning system
 - flat panel detector with caesium iodide, for reduced dosage
 - MUSICA² image processing and reduced dosage

"Image display is instantaneous, resulting in about a 30 percent time savings in our workflows," Dr. Rouas explains.

MUSICA² OPTIMIZES IMAGE QUALITY - HELPS LOWER X-RAY DOSE

Thanks to the DX-G's novel ability to read standard plates as well as needle-based detectors, and supported by its unique MUSICA² image processing software, the solution offers image quality equivalent to flat panel detectors and one that is noticeably higher than standard plates.

"Whether using flat panel or needle-based detectors, we estimate that x-ray emissions are cut by at least half," Dr. Rouas comments.

This sizeable x-ray reduction benefit is also a significant factor in performing screening mammography. With about fifteen examinations per day, Dr. Rouas sought a dedicated mammography digitizer. The DX-M, equipped with a high-performing reading capacity and needle-based detectors, raises the level of performance by providing breast imaging with improved definition.

BOTH SOLUTIONS NETWORK WITH PACS FOR QUICK, SECURE IMAGE/DATA SHARING

Because these Agfa HealthCare solutions are easy to use, they significantly improve staff productivity. In fact, the DX-M and DX-G complement each other in allowing all information to be centralized on a PACS, allowing quick, secure access by numerous referring Physicians and Clinicians.

Such information can eventually be shared with other medical establishments to achieve even greater efficiency in processing diagnostic images and medical information.

"Having a single, reliable and credible contact partner was a real advantage for justifying the purchase of this equipment," Dr. Rouas concludes.

"Needle-based detector technology offers noticeably higher image quality."

DR. ROUAS, Radiologist, Chelles, France

AGFA HEALTHCARE CONTRIBUTION

- » Thanks to the high performance of the digital imaging solutions and the professionalism of Agfa HealthCare, Dr. Rouas has regularly renewed his confidence in the brand and opted for quality at each stage of his surgery's development.



The full power of IMPAX at home

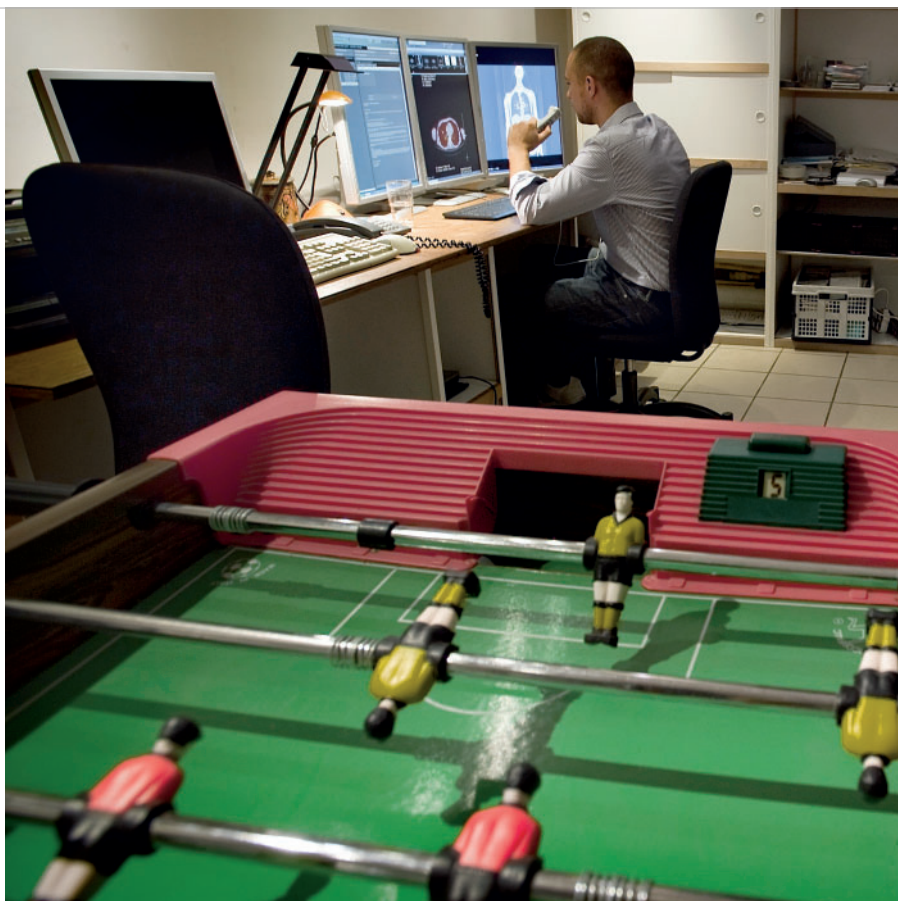
The web deployable Agfa HealthCare IMPAX 6 Enterprise system, with its integrated reporting solution, allows the hospital's Radiology Department to roll out its vision of teleradiology and offer the full power of IMPAX to the Radiologist working at home.

INTERVIEWEES Prof. Dr. Johan De Mey, Department Head Radiology • Filip Verhelle, System Manager PACS • Peter Goossens, Assistant System Manager PACS

"With the IMPAX Integrated Reporting Solution, a Radiologist has fast and easy access to all relevant information stored in Agfa HealthCare's RIS and PACS solutions across different modalities like CR, DR, CT, MRI and Ultrasound. Even the speech module opens when the Radiologist accesses a study. This integration of information, images and reporting tools is unique in today's market," says Prof. Dr. Johan De Mey, Head of Radiology at the Brussels University Hospital. Though not one to indulge in success, he is clear on one thing: the web deployable IMPAX 6 Enterprise with its integrated reporting solution brings exceptional added value to his department.

"Agfa HealthCare's IMPAX solution supports us in all aspects of our mission: medical care, research and education. That's why I know we made the right choice."

PROF. DR. JOHAN DE MEY,
Head of Radiology



it speeds up report turnaround times, which facilitates multidisciplinary case discussion. It also supports our scientific research mission, with tools like the Case Box, in which we store relevant cases for academic examination, clinical studies and publication. Finally, it enhances the interactivity of our educational program, allowing remote assessments and coaching of assistant Radiologists in training."

Prof. De Mey is satisfied with the current IMPAX 6 configuration at Brussels University Hospital, which he feels is almost completely fine-tuned to his

Department's needs. With 70% Dutch-speaking and 30% French-speaking patients, reports are dictated in one of 2 languages, which is seamlessly accepted by the speech recognition facilities. More than other vendors, Agfa HealthCare strongly supports connectivity, says

AGFA HEALTHCARE CONTRIBUTION

» Based on its IMPAX 6 Enterprise viewer, Agfa HealthCare allows Radiologists at UZ Brussels to work at home, enjoying the same integrated information, images and reporting tools as in the hospital's Radiology Department.



"Radiologists at home are actually working on the IMPAX server, accessing full DICOM images. Their work is available to their colleagues as they push the button. This is a real efficiency gain."

FILIP VERHELLE, System Manager PACS

Prof. De Mey. The integration of sub-specialized third party software and information sources within the IMPAX interface offers high added value to his Radiologists, he claims.

The hospital's Radiology Department currently has some 200,000 patient contacts yearly. Its image volume has been doubling every two years. "We see growing volume and higher image size," says the hospital's System Manager, Filip Verhelle. "Even with the current low cost of storage media, the real challenge is to keep up with the crunching capacity of the hardware." He continues, "All medical images at the hospital are integrated in our IMPAX system, and we currently have 95 million images or 25 Terabytes of data on our PACS, available for anyone who needs them. Clinicians view images straight off the PACS. Some 200 workstations access the PACS, but 40 diagnostic workstations from Agfa HealthCare are available to our Radiologists. Six Radiologists also have a workstation at home. We have 40 Radiologists to make 28 full time equivalents. Taking into account the normal flexibility and activity in the Department, we can have between one and three of them dictate from home."

FULL-FEATURED AT-HOME WORKSTATION ENHANCES DEPARTMENT PRODUCTIVITY

Prof. De Mey believes teleradiology will not surpass 20% of the reporting workload of studies done in the hospital

in the next years, but he knows a generous allocation of working from home will bring added value to the team. "We clearly define the workload that represents a day of work at home, which is about 30 CT reports."

To achieve this, the Radiologists have a full workstation with a high-end graphic card and three screens in their home calibrated to closely match the DICOM image curves. Connecting through a virtual private network (VPN) channel with the Department's IMPAX server, they find themselves using the same, complete interface as their colleagues working in the hospital.

Adds Filip Verhelle, "They are actually working on the IMPAX server, accessing full DICOM images, which easily makes for 500 Mb of data per study. Comparing two studies makes for 1 Gigabyte of data, so they need enough bandwidth to support active use of these images, such as scrolling through a CT examination fluidly. That is why we provide a 20 to 30 Mbps connection to the homes of our Radiologists. Luckily, although the study size is growing rapidly, the internet bandwidth seems to be increasing even more rapidly."

What it boils down to is that Radiologists at home work straight off the Department's infrastructure. "There lies the real benefit of our approach," concludes Peter Goossens, Assistant System Manager PACS.



"A Radiologist at home has all the usual tools at hand. He therefore can provide the same type of reporting, enjoying the reliability of the Department's infrastructure."

PETER GOOSSENS, Assistant System Manager PACS

DID YOU KNOW...

- » The Centre for Heart and Vascular Diseases (CHVZ) of the Brussels University Hospital has extensive experience of ablation treatment. It is the third in Europe to perform electromagnetic navigation ablation.
- » The Reproduction Health Center (RHC) of the Brussels University Hospital was instrumental in the development of ICSI, the revolutionary fertilization technique, which involves one sperm being injected into the egg cell. With more than 4,000 IVF cycles per year, the RHC is the second largest in Europe.

"This integration of information, images and reporting tools is unique in today's market."

PROF. DR. JOHAN DE MEY,
Head of Radiology

"When a Radiologist at home intervenes in a case, his work is seamlessly available to his colleagues in the hospital. He has all the usual tools at hand. He therefore can provide the same type of reporting, with the same confidence while enjoying the reliability and exceptional performance of the Department's infrastructure." •

IMPAX 6 WITH INTEGRATED REPORTING SOLUTION

- » Allows teleradiology in a client/server model
- » Offers fast and easy access to information, images and reporting tools from a single desktop
- » Shortens report turnaround time
- » Supports clinical care, academic research and student training and coaching
- » IMPAX for remote usage:
 - Leverage single, scalable infrastructure with customized, role-based views to serve all types of users: from General Practitioners to Clinicians and Radiologists
 - Secure: the IMPAX client uses a HTTPS protocol to communicate with the server
 - Web-deployable: the IMPAX application can be deployed to virtually any type of client for all types of usage: from a simple client running in a Web-browser to a full-featured Radiology client with Interactive Voice Recognition
 - Intelligent usage of network bandwidth: only pixel data requested by the display monitor is sent to the IMPAX client via progressive download

Supporting China's healthcare reform

Agfa HealthCare and the world's largest healthcare economy

INTERVIEWEES Luc Thijs, Vice President Growth Markets • Dirk Debusscher, Vice President Imaging



China's healthcare reform has made global headlines since it was first announced in January 2009. Since that time, the eyes of the world have been closely following how a massive US\$124 billion is being pumped into improving care for one of the world's largest population groups, some 1.3 billion people. China's immense healthcare investments are jointly funded by both central and local governments, with the former contributing around 40% of the total cost. Reforms will focus on the introduction of a new type of healthcare insurance and improving availability and quality of care in the countryside, enabling China's extensive rural population (some 720 million people) to have access to, and receive, improved care.

The reform is an impressive undertaking. Today China counts some 64,000 hospitals. The recently launched healthcare reform will add 2,000 county level hospitals and some 29,000 local or township clinics to that number over a three year period.

THERE magazine caught up with Dirk Debusscher, Vice President Imaging and Luc Thijs, Vice President Growth Markets and responsible for China to understand the challenges and opportunities facing that market, and Agfa HealthCare.

What will be the impact of healthcare reform in China on medical equipment companies?

Luc Thijs: We cannot deny that China's healthcare reforms have given the global healthcare industry a major boost. The investments will drive even more demand for medical equipment from an economy that is already one of the fastest growing markets for such systems.

Although state managed hospital and facilities will continue to provide China's acute care services, more priority will be given to the development of grassroots-level clinics for primary care. It is these clinics which will need to have medical equipment delivered or upgraded to more recent technologies as well as solutions which enable them to communicate internally, and with other facilities in their region. If you then know that China's central government will fund the construction of a massive 2,000 county hospitals and some 29,000 local or township clinics, upgrade and renovate 5,000 township hospitals and establish or renovate 11,000 community health stations and 3,700 community health centers, you get an idea of how impressive this operation really is.

What is Agfa HealthCare's position on the Chinese market?

Luc Thijs: Agfa HealthCare has had a presence in China since the early 1990s. Today the company employs over 150 people, spread across a global R&D center developing both Chinese and global products, a sales, services and support organization. That business is supported by an efficient network of distributors and sub-dealers in the market, as when operating in China, these organizations are critical to a firm's success. They not only enable you to cover a wide geographical area, but also ensure solid contacts and an all important understanding of local culture, values and expectations. This successful model means that today, Agfa HealthCare is considered to be a leading healthcare brand in China, and we have a significant market share of the analog and digital markets.

Why is China making these massive investments?

Luc Thijs: Like with any growing economy, China needs to find a balance between economic strength and the welfare of its people. The people's welfare, which includes good health as a primary focus, will enable China to grow further, expand its economy and ensure



Luc Thijs, Vice President Growth Markets

a happy population in general. It's a solid plan, one which has been thought out to the smallest detail. A good part of the US\$124 billion investment will go towards a type of national health insurance, something new for many people in China, who today, save a significant part of their disposable income for such emergencies.

A core focus of China's healthcare reform will relate to image capture, digitization and printing – a role for Agfa HealthCare?

Dirk Debusscher: Absolutely, with our years of experience and established market presence, we are now poised to drive our leading image capture (DR), digitization (CR) and print solutions to that market – directly supporting the markets care reforms. With approximately US\$2 billion of medical devices sold in China overall each year, we expect this figure to grow significantly due to the reforms, we anticipate a major growth in demand for Direct Radiography (DR) solutions like our DX-D 300 U-arm units. With a strong focus on rural care center development, we also expect to see growth in the use of hardcopy film and printers during this process. Printing and hardcopy solutions will, in many cases, support the availability of diagnostic imaging in rural regions until a fully digital transformation is possible.

Is Agfa HealthCare's role in China to provide medical equipment?

Luc Thijs: Our primary role is to support the Chinese drive for improved healthcare, and to ensure we provide reliable solutions to enable this. It is our core strength and we will apply our nearly 100 years of healthcare knowledge, our ability to tailor solutions to Chinese needs and our technological capabilities to ensure we deliver on this promise over the coming years. It is what we do best.

What makes Agfa HealthCare so strong on the market is the fact that we offer them three different technological levels: analog, digital and IT. That means that we allow different parts of their healthcare system to grow at their own pace, and are ready to support their transition to the next when they are ready. It makes us relatively unique!

So you localize your solutions?

Dirk Debusscher: To a certain degree, you would not expect a Chinese

Physician to work on an English language system, for example. In terms of workflow and solutions, however, we do apply many of the same approaches we have worldwide – after all they have proven their worth in over 100 markets worldwide – and that includes China. In short, we have solid global solutions which we tailor to local needs – it's a key strength.

What are the key challenges – from a business perspective?

Luc Thijs: There are a significant number of challenges for companies working in the Chinese market, and even more so for healthcare and health related companies. The first major challenge is the sheer size of the country, some 9,800,000 km². With healthcare reform focusing on rural areas, the second key challenge is that you need a significant understanding of Chinese culture and methods. China quite rightly has its own way of doing business, its own social culture and its own expectations; after all, they have the world's largest population and one of the world's largest economies. Understanding that doing business in China has to be done the Chinese way is why we work closely with our local partners and why we are successful.

You recently announced a new agreement with your Chinese partners for US\$500 million, is this part of the success story you refer to?

Dirk Debusscher: Yes, the agreement is a direct result of China's massive healthcare investments and covers the supply of Computed Radiography systems, Diagnostic Imaging Printers, Direct Radiography solutions and film, as well as the expertise and tools to ensure the proper interfaces to modalities and connectivity to PACS solutions. Like everything in China, the order is very big, and is an integral part of our contribution to enabling China's healthcare reform to be a success.

How big is big?

Dirk Debusscher: As an example, part of US\$500 million order covers the purchase of hardcopy film, which will be used as the staple in many rural community care centers for the coming years. To give you an idea, the yearly hardcopy film consumption in Shanghai alone (just the city) is at the same level as in the entire DACH region (Germany, Austria, Switzerland). That's big!

So film is a growth product in China?

Dirk Debusscher: Yes, at least for the next five years we are confident that it will play a critical role in China's rural healthcare needs. But we remain conscious of the fact that China will jump over a number of technologies over time, taking them into direct digital environments much faster. That is why our DR offering is important and an integral part of our China strategy, as are our digitizers, PACS solutions, Data Centers and so forth.

The same is true for our contrast media offering. We are currently passing through a registration process to enable us to market our contrast media solutions on the Chinese market.

Will private healthcare have a role in China?

Luc Thijs: I don't think we should rule out this reality. Although it still is relatively small, compared to what the state has to offer. It is a possible development we continue to monitor.

What is Agfa HealthCare's future in China?

Luc Thijs: I think we all agree that China's future is looking very bright. The new healthcare reforms are a major step for this market as a whole and China will be, and remain, an integral part of our success in the region. We look forward to building on our 20 years of commitment and engagement to the Chinese healthcare system and we will continue to provide our healthcare expertise and experience to support the country's goals. •



Dirk Debusscher, Vice President Imaging



KUNGSTRÄDGÅRDEN STATION

Known as King's Garden station, Kungsträdgården is a most remarkable metro stop. It features relics and statues from buildings demolished during central Stockholm's 1950s and 60s renovation. The artist found inspiration from the palaces around Kungsträdgården. The station platform is 35 meters below ground dug through hard bedrock.

News from Agfa HealthCare

25-site installation agreement signed with leading Brazilian diagnostic imaging group



Agfa HealthCare recently signed an agreement with Brazil's Fundação Instituto de Pesquisa e Estudo de Diagnóstico por Imagem (FIDI) for installation of its digital imaging and healthcare IT solutions across the facility's 25 sites. The agreement was

signed in the presence of His Royal Highness, Prince Filip of Belgium, who was on an economic mission in the region.

In total, the agreement includes multiple Computed Radiography (CR) systems



for converting analog diagnostic images to digital formats, the company's IMPAX Picture Archiving and Communication System (PACS) for managing and distributing diagnostic images and information, a Radiology Information System (RIS) and a digital, central imaging repository to centralize all image-related information across the 25 sites.

FIDI is one of Brazil's largest diagnostic imaging groups. The facility's 25 locations throughout São Paulo manage around 3 million diagnostic imaging exams from 90 modalities (CT, MRI, UltraSound and Nuclear Medicine) each year. The foundation is recognized as a Public Utility, private, philanthropic and non-profit organization. FIDI employs around 200 Radiologists and 1000 staff members, including administrative workers, IT and Radiology Technologists. It is also a key service provider to the Departments of Health of both the State and City of São Paulo. •

Agfa HealthCare expands multi-site agreement with Basque Healthcare Service

Agfa HealthCare has expanded its agreement with the Basque Healthcare Service's Osakidetza facilities in Spain to extend its IMPAX Picture Archiving and Communication System (PACS) to a further 15 sites, in addition to the 28 facilities it currently serves. To enable all facilities to easily access and share diagnostic images and related data, Osakidetza will also install Agfa HealthCare's IMPAX Data Center, a solution which manages diagnostic image access and distribution across the enterprise.

Osakidetza, an organization belonging to the Basque Healthcare Department of the Basque Government, manages 18 hospitals, over 300 primary care centers,

and employs around 5,300 healthcare professionals including 25,000 non-medical staff. Combined, they support a population over 2 million. It is the region's leading care provider. Agfa HealthCare was originally selected in late 2007 to install its IMPAX 6, a centralized RIS, 59 CR solutions, and 52 hardcopy imagers across 5 Hospitals and 23 Primary Care Centers in northern Spain's Basque Country.

The expansion of IMPAX to an additional 15 small and medium sites will account for a 20% growth in Osakidetza's total annual digital studies. Today, over 75% of its Radiologists actively use IMPAX, and this number is expected to grow in the near future.

Central to enabling the availability and sharing of diagnostic images will be the company's IMPAX Data Center, which creates a longitudinal patient imaging record by integrating and linking multi-facility, multi-departmental, and multi-specialty imaging data. IMPAX Data Center is a massively scalable imaging management solution designed to capture, manage, archive, and visualize a wide range of imaging and image-related patient information. The IMPAX Data Center's use will, over time, be expanded across the Basque Country to form the backbone for a regional image repository. •



IMPAX Digital Cardiology

your fingertips

Agfa HealthCare is a global leader in cardiovascular image, information and process management. Installed at nearly 600 leading cardiology centers across the world, the company's leading IMPAX Cardiovascular solutions provide rapid access to patient information and diagnostic images from multiple modalities along with the ability to create advanced structured clinical reports. Hospitals, healthcare facilities, imaging centers and office practices of all sizes find the right solution in our leading cardiovascular portfolio. Whether a healthcare enterprise has a single catheterization lab, echocardiography cart or ECG machine, or multiple devices from a variety of vendors, Agfa HealthCare's suite of standards-based, vendor neutral solutions enable Physicians to seamlessly connect to the complete cardiovascular patient record. From a single screen on any cardiovascular workstation, users can access images, data, and reports, stored in IMPAX Cardiovascular system. The solution helps Cardiology departments save time, promotes the efficiency of the diagnostic process and improves their own departmental workflow. **Cardiology IT. We'll take you there.**

Learn more about our solutions via <http://www.agfahealthcare.com>

Agfa and the Agfa rhombus are trademarks of Agfa-Gevaert N.V., Belgium, or its affiliates.
IMPAX is a trademark of Agfa HealthCare N.V., Belgium, or its affiliates. All rights reserved.

Copyright 2010 Agfa HealthCare NV
All rights reserved

Printed in Belgium

Published by Agfa HealthCare NV

B-2640 Mortsel – Belgium

5PZ4C GB 00201008

www.agfahealthcare.com

AGFA 
HealthCare