Retrofit DR brings faster patient care for busy radiology and diagnostic imaging unit

With two Agfa HealthCare DX-D Retrofit solutions and the DX-M CR system, the University Hospital San Ignacio is improving image quality and reducing exam times.

With our previous equipment, each exam took five minutes; now, with the DX-D Retrofit, an exam is complete in just one minute. When you multiply that time savings by 200 daily exams, the improvement is considerable.

DR. LUIS FELIPE URIZA CARRASCO
Head Director of Radiology, University Hospital San Ignacio, Bogotá, Colombia
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Interview with DR. LUIS FELIPE URIZA CARRASCO, Head Director of Radiology, University Hospital San Ignacio, Bogotá, Colombia

As one of the longest-standing departments of the University Hospital San Ignacio in Colombia, the radiology and diagnostic imaging department is committed to offering patients fast and top-quality imaging. But with its high patient throughput, the department faced regular backlog for carrying out exams, and patient wait times were growing too long.

“With our previous equipment, each exam took five minutes; now, with the DX-D Retrofit, an exam is complete in just one minute. When you multiply that time savings by 200 daily exams, the improvement is considerable.” The time saved means faster workflow and quicker patient treatment, which is especially important in a busy emergency department.

The University Hospital San Ignacio was founded in 1942 in Bogotá, Colombia as a hospital and a research center for doctors and students. It is one of the most important hospital centers in Colombia, and one of the most respected in Latin America.

In 2013 the hospital decided to update its imaging equipment, in order to speed up its diagnostic imaging services. With Agfa HealthCare’s DX-D Retrofit solutions, as well as a DX-M computed radiography (CR) system for mammography and more, the department was able to achieve its goals, while maximizing the value of its existing imaging investment and enhancing image quality.

Competitive testing reveals advantages
The radiology and diagnostic imaging department provides a wide range of services, from conventional radiology, through ultrasound and scanning, to nuclear medicine, and MRI. Two years ago, the department carried out a competitive evaluation of the digital radiography offers of multiple vendors. The objective was to find a solution that would support it in achieving its overall goal of offering faster diagnostic service to patients and doctors alike.

Over several weeks, systems from different manufacturers were tested for speed of image acquisition. Based on the results, the radiology department chose to implement two DX-D Retrofit solutions with DX-D 10G digital detectors and the DX-M CR system with needle detectors.

With DX-D Retrofit, healthcare facilities using either analog or computed radiography (CR) can upgrade to the benefits of direct radiography (DR), without replacing their existing equipment. The non-invasive, connection-only installation is quick and easy.

The DX-M, for mammography and general radiography, combines excellent image quality with high throughput, delivered by a unique five cassette drop-and-go buffer, and a very fast preview.

Faster emergency unit workflow
Two DX-D Retrofit systems were installed in the hospital’s emergency department. According to Dr. Luis Felipe Uriza, Head Director of Radiology, “The emergency unit handles a large number of patients, carrying out around 200 exams each day. Before, we would get patient queues for imaging, which affects care quality. We added another person to register data, but the backlogs continued.”

Our time and movement study showed that the Agfa HealthCare solutions are cost-effective and reduced our patient wait times. Image quality also improved significantly.

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DX-M with needle detectors
- For digital mammography and general radiography
- State-of-the-art image quality, with potential dose reduction when using Cesium Bromide needle-based imaging plates
- Intelligent MUSICA image processing
- Choice of needle-based imaging plates and standard phosphor plates
- Drop-and-go cassette buffer
- Broad range of applications

DX-D Retrofit
- All the workflow and image quality benefits of direct radiography
- Maximizes your existing imaging investment
- Easy installation, quickly up and running
- Choice of Cesium Iodide (CsI) or Gadolinium Oxy-Sulphide (GOS) detector conversion screens
- Potential dose reduction when using CsI detectors
- Specially-tuned MUSICA software, for gold-standard image processing, and NX workstation for smoother workflow
- Connectivity to PACS, HIS/RIS and imagers

Customer Benefits
- Improved productivity
- Enhanced image quality
- Shorter patient wait times
- Improved delivery of patient care

“... The DX-M provides notable advantages in terms of time, productivity and image quality, and has allowed us to optimize patient care. ”

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Did you know?

- Bogotá is the largest city in Colombia, and one of the biggest in Latin America. It figures among the 30 largest cities of the world, and is the third-highest capital city in South America at 2,640 meters (8,660 ft) above sea level.
- 16 of the best 40 hospitals in Latin America are located in Colombia according to a recent report by the economic journal, América Economía. This country of 44 million people also has some 50 medical faculties.
- The Hospital Universitario San Ignacio was ranked among the top three Colombian hospitals in the high-complexity category by the Ministry of Social Protection and the National University.

High-quality mammograms, quickly

The hospital also installed a DX-M with needle detectors, which is used for mammograms and other radiography exams. “The tests carried out with the DX-M show that it provides notable advantages in terms of time, productivity and image quality, and again has allowed us to optimize patient care,” Dr. Uriza notes. Furthermore, the DX-M fulfilled a fundamental requirement by easily integrating with the radiology department’s existing systems. “We absolutely needed a solution that was compatible with our existing systems from different manufacturers, and the DX-M delivered,” continues Dr. Uriza.

Smooth implementation

“The installation of the Agfa HealthCare solutions was simple and took little time. The integration with our existing equipment went fine,” says Dr. Uriza. “One difficulty with temperature was handled quickly by the Agfa HealthCare services team,” he says. “Given the complexity of the systems used in radiology, incidents sometimes occur and must be resolved as soon as possible.”

Since the implementation, the hospital carried out a time and movement study of the Agfa HealthCare solutions. “Our study showed that they are cost-effective and reduced our patient wait times. Image quality also improved significantly.”

Constant technical innovation

Dr. Uriza has experienced the evolution of diagnostic images first-hand. With the arrival of digital systems, radiology and diagnostic imaging departments have experienced a host of advantages, he says: “Image acquisition time is shortened, the workflow is better controlled, and productivity, security and delivery of patient care are improved.”

The implementation of the DX-D Retrofit and DX-M systems is only the start for the University Hospital San Ignacio. In fact, the radiology unit is planning to update its mammography equipment soon and to implement a new RIS/PACS. “We are in a process of constant technological innovation, which fits with the motto of the founders of the hospital: ‘Science and technology with social projection.’ A process that Agfa HealthCare looks forward to supporting.

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