

## CUSTOMER CASE



"The Agfa HealthCare DX-D 300 Direct Radiography system is the catalyst to take radiology fully digital."

*Dr. Alfonso Haya, Medical Director*

"We are big on the green agenda - the Agfa HealthCare CR and DR solutions are instrumental to this ambition."

*Dr. Ignacio Galán, Head of the Radiology Department*



USP Clínica Sagrado Corazón, Seville, Spain

# Taking the heat off radiology peaks in emergency care

Supported by a new DX-D 300 DR solution from Agfa HealthCare, this flagship of Spain's largest private hospital group will soon acquire legal university status as a radiology teaching facility.



### Did you know...

- In medicine, Seville is home to the largest DNA bank in Spain, as well as a major European research hub for renewable energies.

### About USP hospital group

USP Hospitales, with headquarters in Madrid, was created in 1998 and is the leading private healthcare group in Spain. Currently, it consists of 13 hospitals nationwide and 36 medical services centers. Four thousand clinicians yearly attend to more than 2 million patients. In 2009, the group performed 116,000 surgical interventions, 11,800 births and 444,000 emergency interventions, and recorded 339,000 hospital stays.

When the summer heat is over, at the emergency department of the highly reputed USP Clínica Sagrado Corazón, Seville, the staff is ready to take the healthcare heat: Agfa HealthCare's DX-D 300 Direct Radiography (DR) system can handle the workload peaks with ease, providing a staff- and patient-friendly examination environment.

With one of the most centralized healthcare systems in the world, Spain is spending an average amount of its gross domestic product on healthcare, based on Organization for Economic Cooperation and Development guidelines. Spain ranks seven on the World Healthcare Organization's care ranking, and the Spanish citizens are the second most satisfied with the quality of the healthcare offered by both public and private hospitals.

The Spanish model is a two-tiered, public/private system, with some 12% of the population being privately insured. All receive healthcare that is among the best in Europe and the world. Nowhere in Spain is the synergy between both healthcare worlds clearer than in Seville. The Hospital Universitario Virgen del Rocío, generally considered to be one of the best public teaching hospitals in Spain, and USP Clínica Sagrado Corazón, one of the flagship hospitals of the leading Spanish private hospital group, USP Hospitales, are all present in the Seville city center.

### University status for radiology department

"We are the leading private healthcare group in Spain and the most important one in Andalusia and Seville," says Dr. Alfonso Haya, Medical Director of the USP Clínica Sagrado Corazón, "with clinical specialties like neurosurgery, that are recognized all over the world. Our ambition is to have our doctors and staff recognized by achieving legal university hospital status. The first department to achieve this stature will be radiology in 2011. We have been investing heavily in digitization with



"In the time I have used the DX-D 300 solution, I have never needed to retake a patient."

*Guadalupe Godoy Chaves, Technologist, Emergency Department*

the installation of the DX-D 300 Direct Radiography system as the catalyst of our ambition to make the department fully digital."

With six different campuses throughout the Seville area, and a seventh soon to come, the need for a completely digital workflow is acute. Currently, all centers have Computed Radiography capacity using Agfa HealthCare solutions. More than 70,000 annual X-ray examinations require fast image transfer to a centralized picture archiving and communication system (PACS) and ubiquitous access to images and patient data. "The availability of the DX-D 300 DR system will double our examination capacity in the emergency department," explains Dr. Ignacio Galán, Head of Radiology Department at USP Clínica Sagrado Corazón. "We have considerably increased our peak capacity because the patient flow is extremely fast with Agfa HealthCare's DR solution. Patients appreciate the short waiting times and the technologists like the extreme flexibility of the DR workflow. The planned deployment of PACS, integrating our distributed CR capacity with an optical fiber connection, will really boost our efficiency."

### CR and DR solutions support green agenda

Dr. Ignacio Galán appreciates the state-of-the-art technology associated with the DX-D 300 solution. Next to the classic benefits of CR and DR, he strongly embraces the positive ecological advantages of the

"I am thrilled by the DR technology."

*Dr. Monica Romero Gomez, Radiologist*



solution: no chemical waste and patients receive a minimal dose of radiation. "We are big on the green agenda, and clean technology is appreciated by both our staff and the patients. We ultimately aim at achieving a digital radiology environment, and the Agfa HealthCare CR and DR solutions are instrumental to this ambition. The small eco-footprint is also a good rationale in negotiating favorable volume agreements with the insurance companies for clinical treatments."

### Emergency department is front-line test for productivity

Installing the first DX-D 300 DR system in Spain's largest private hospital group is far from a haphazard decision. Inspired by the fact that about 60% of all patients enter the hospital through the Emergency Department, it is also where waiting times often need to be significantly reduced. Typically, in southern countries with extreme day temperatures, hospital visits for examinations will peak in late afternoon. And during summer, when the outside temperature is mercilessly high, patients even tend to avoid going to the hospital at all. Consequently, in fall, emergency department visits double.

"We know this means extremely busy late afternoons," says Emergency Department Technologist Guadalupe Godoy Chaves. "We have already experienced the flexibility of the DX-D 300 DR solution during peak periods."



## Challenges

- Obtain a digital radiology department
- Achieve legal university hospital status
- Handle seasonal patient peaks

## Solutions

- Install CR in all medical centers
- Install DX-D 300 solution in main hospital emergency department
- NX workstations in emergency and radiology departments pending PACS roll-out

## Benefits

- Faster patient throughput, lower radiation dose
- Staff- and patient-friendly examination environment
- Consistent image quality leads to zero retakes
- Strengthened quality perception

She adds, “The main reason to have the solution is its incredible speed: patients need only stay for a short while in the examination room because the system quickly adapts to the study type. We can easily maneuver the bucky as well as the tube, which we can turn around the patient. We can also move the table the patient is lying on. This is convenient for many different patients: small children, immobile adults, obese or the very weak. And it gets better: The DX-D 300 software quickly selects the right examination parameters once we enter the patient’s data. It also instructs the system to properly position the bucky and the tube. It makes my life so much easier.”

### MUSICA<sup>2</sup> image quality at the core of high quality exam results

Radiologist Monica Romero Gomez confirms the comfortable workflow: “The change is dramatic, because the patients feel at ease and are effortlessly positioned for the examination. Also, images are almost immediately available for the radiologist and referring clinicians in the hospital.” She further expects the emergency department’s productivity to increase thanks to the faster patient throughput offered by the DX-D 300. Dr. Romero Gomez is confident that the improved and consistent image quality provided by Agfa HealthCare’s MUSICA<sup>2</sup> image enhancement software will help to assure the best examination quality, notwithstanding the higher productivity.

To Technologist Guadalupe Godoy Chaves, the contribution of MUSICA<sup>2</sup> software greatly enhances the results of the examinations: “In the time I have used the DX-D 300 solution, I have never needed to retake a patient. The image quality remains consistent from the day’s first take to the very last. And the patient receives less radiation dose.”

Concludes Radiologist Romero Gomez: “I am thrilled with the new digital imaging technologies. We have invested in many new systems including a CT scanner and this DR solution. In particular, the DX-D 300 will allow radiologists to confer with referring clinicians using the MUSICA<sup>2</sup> images even before we actually write the formal report. It’s going to expedite team work considerably, for the ultimate benefit to the patient.”

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