

Written by: Steven Wagner

Codonics Horizon Helps Sports-minded Lisbon Clinic Stay Ahead of the Competition

In a bustling clinic where hundreds of patients are treated each day, medical challenges abound. Clinica de Radiologia e Especialidades Autonomas Relacionadas (CREAR), a thriving practice in Lisbon, Portugal, is no exception.

Each day, an estimated 400 patients are treated at CREAR. Most are imaged using one of 10 medical imaging devices: four ultrasound (with color Doppler), three fluoroscopy, one CT, one MRI and one bone densitometry unit.

With a range of imaging devices that broad, a secondary challenge is producing high-quality clinical images fast enough to keep pace with the patient flow. When you add to the mix the fact that many of Portugal's highly visible sports teams and prominent athletes choose to be treated at CREAR, the challenge intensifies. After all, thoroughbred athletes require swift care in order to return quickly to the sports their countrymen cherish.

Until 2004, CREAR used a wet imaging system to print all of the images produced by the various modalities. This required considerable space, could not print 3D reconstructions in color, and was expensive to maintain. Additionally, water and power consumption were substantial, and when service was required, the system was generally down for days at a time. Something had to be done.

It was then that Codonics contacted CREAR and introduced the clinic to its state-of-the-art Horizon Multi-media Dry Imager.

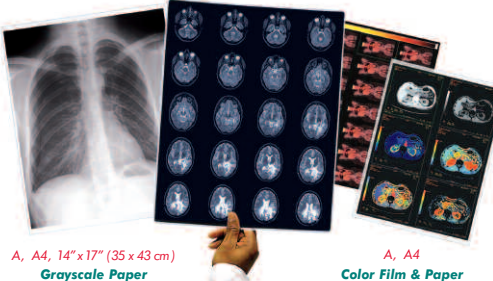
After meeting with Codonics representatives, watching the imager in action, and comparing its images with those produced by the clinic's existing system, CREAR was convinced.

"I was very surprised, very joyful at the quality of images I saw," said Luis Fouto, M.D., a senior radiologist, adding, "I wanted a system that could produce diagnostic-quality images from five imaging devices that were all connected and capable of sending data at the same time. The Codonics Horizon did all of this with unparalleled efficiency, and I'm very pleased."



Luis Fouto, M.D., Senior Radiologist, CREAR Clinic, Lisbon, Portugal

8" x 10" (20 x 25 cm), 14" x 17" (35 x 43 cm)
Blue & Clear Film



A, A4, 14" x 17" (35 x 43 cm)
Grayscale Paper

A, A4
Color Film & Paper



Codonics Horizon Multi-media Imager prints film, grayscale paper and color - simultaneously

CREAR's solution involved the acquisition of a Codonics Horizon Ci Multi-media Dry Medical Imager in late 2004 and two additional units, a Codonics Horizon Ci and a Horizon Ci-s, in early 2005, Dr. Fouto said.

With the high-end Horizons, outstanding images are presented on clear and blue film, grayscale paper, and color paper in a variety of sizes. Horizon imagers generate 35 x 43 cm, 28 x 43 cm and 20 x 25 cm blue and clear film plus grayscale paper prints in 35 x 43 cm, 28 x 43 cm, A and A4 letter sizes, and color in A and A4. The Horizon product line offers models to suit every need and budget,

but each model can output to film, color paper and grayscale paper in a combination of sizes at the same time and completely automatically.

When it came time to choose imagers for strategic placement around the

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department, the decision was surprisingly easy. After all, not only did Dr. Fouto find that Horizon prints unmatched color output with quality and vividness that matches a workstation monitor, but its exclusive grayscale paper capability brought about several benefits as well.

Specifically, CREAR uses DirectVista® Blue Film for CR and x-ray (35 x 43 cm, 28 x 43 cm and 20 x 25 cm); DirectVista Grayscale Paper and ChromaVista® Color Paper for ultrasound (A4); and DirectVista Grayscale Paper and DirectVista Blue Film for CT and MRI (35 x 43 cm). The clinic can now print stunningly colorful ultrasound images as well as 3D reconstructions.

A huge timesaving addition, Dr. Fouto and his staff no longer must traverse the clinic throughout the day to visit their centralized system. And, he's strengthening his relationships with referring physicians, who appreciate the ability to view images on DirectVista Grayscale Paper in room light. With this exclusive grayscale paper, no view box is necessary.

"With Horizon we have a package that is much more reliable for our needs," he said. "We get diagnostic-quality images on film, paper and color paper, the systems are reliable, and we save time and space. We chose Horizon for all of those reasons."

With his old system, servicing translated to downtime. CREAR was able to acquire three imagers for decentralized placement, giving him peace of mind and enabling their placement in key locations for easy access by employees.

"Codonics gives me peace of mind," he said. "It's very important to me knowing I have three systems operating with equal reliability."

With that concern behind him, Dr. Fouto and the 10 or so other radiologists who serve CREAR can concentrate on what they do best: diagnosing patients. While the clinic serves a general population, between 10% and 15% of his business involves sports. In addition to treating Olympic athletes, the clinic treats Portugal's primary soccer and other sports teams, including SLB – Sport Lisboa Benfica – a leading European soccer team and the European champion several times over.

Where that and other teams are concerned, Horizon's value has been immeasurable for one overriding reason: coaches, players and team personnel can view images in room light on their own schedule, evaluating daily what steps must be

taken while an injury heals and how soon an athlete might return to action – without the need for a view box.

"I wanted a rapid flow of examinations – that was very important to me. I wanted high-resolution images. I wanted color, especially for ultrasound. And, I wanted everything connected. Horizon gave me the flexibility and efficiency that I never could have imagined was possible."

In the realm of sports, Dr. Fouto and his team of radiologists find the consistent image reproduction of the Horizon Ci and Ci-s particularly useful in enabling physicians to evaluate tears of the labrum, a ring of fibrocartilage around the edge of the

shoulder socket; torn meniscus (knee cartilage); tendonitis; and torn rotator cuffs (shoulder). Other sports injuries in which Horizon's output of the diagnostic images have been found useful include metatarsal stress fractures, Achilles tendon tears, lumbar spine inflammation, and anterior/posterior cruciate ligament tears. Image quality is so superior that Horizon enables physicians to plan the long-term treatment of – and recovery for – high-end athletes without high-cost image processing or special viewing equipment.

Its clinical capabilities aside, Horizon has proved beneficial in numerous other ways. It fits on a desktop, weighs less than 32 kilograms, holds up to 300 sheets of film or paper, and offers the fastest time-to-first print. Additionally, it's the only imager that delivers diagnostic film, color paper, and grayscale paper from the same device. Finally, CREAR's relationships with referring physicians have been enhanced due to Horizon's outstanding image quality and its ability to deliver that quality in the physician's preferred format.

"We're much more efficient because of Horizon," Dr. Fouto said. "And, Horizon rests my mind. Instead of having a somewhat unreliable system that staff had to access from throughout the clinic, I have three reliable imagers that are placed for easy access."

"Our employees are more focused and efficient, too, knowing the Horizon gives them reliability that we didn't have before. And, the images are of the highest quality. Without a doubt, Horizon was the best solution we could have found."



Codonics DirectVista Grayscale Paper is photo-weight and can be read in room light without a light box

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**Luis Fouto, M.D., Senior Radiologist,
CREAR Clinic, Lisbon, Portugal**



Call 800-444-1198 / 440-243-1198 or visit www.codonics.com for more information.