

# Using AI to improve speed and consistency across the MRI department

MRI departments around the world struggle to balance the pressure of rising demands. Particularly when their equipment is aging, they experience challenges in delivering optimal care to their patient base; how to balance image quality, consistency and reproducibility against rising patient volumes? Artificial intelligence (AI) has emerged as a powerful tool to help enhance diagnostic accuracy as well as efficiency in MRI. At Hospital Nuestra Senora del Rosario in Madrid, Spain, Dr. Eliseo Vañó is leveraging Al to tackle some of his issues. By upgrading the existing MRI fleet with Philips' SmartSpeed technology, the hospital has transformed its operations. Unprecedented scanning speed and diagnostic quality are now achieved, while enhancing patient experience – even with their older equipment.

## The challenge

Hospital Nuestra Senora del Rosario faced the challenge of increasing patient demands while, at the same time, their MR fleet was aging. Providing consistent and accurate imaging care for their patients is essential for the hospital, but outdated technology was making this increasingly difficult. *"MRI departments face challenges like aging equipment and growing healthcare demands"* 

Dr. Eliseo Vañó, Hospital Nuestra señora del Rosario, Madrid, Spain



### **Customer's equipment and transition**

The hospital's MRI fleet consisted of three different MRI systems, each installed more than a decade ago: an Ingenia 3.0T upgraded to the MR 7700, an Ingenia 1.5T, and an Achieva 1.5T with SmartPath to dStream upgrade.

To improve its capabilities, the hospital has recently installed SmartSpeed throughout its entire MRI fleet. This standardized the operating environment – including the user interface – and improved consistency and reproducibility across the hospital.

"We now have SmartSpeed available on all three of our systems. That consistency and reproducibility, and the same interface for the technicians, that's really an advantage."

Dr. Eliseo Vañó, Hospital Nuestra señora del Rosario, Madrid, Spain

### Al improves speed and consistency across all scanners, and helps shorten time slots

Philips' SmartSpeed AI technology has improved the department's performance by accelerating scan times and allowing to transition to fast 3D sequences. This boosted efficiency: the hospital could reduce examination time slots from 25 to 15 minutes and there is more time for patient positioning and care.

*"SmartSpeed allows us to dedicate more time to the patient. We reduced our 25-minute patient slots to only 15 minutes."* 

Dr. Eliseo Vañó, Hospital Nuestra señora del Rosario, Madrid, Spain



# SmartSpeed unlocked 3D sequences in the daily workflow, providing enhanced diagnostic information

SmartSpeed allows to transition from using several 2D sequences to using one isotropic 3D sequence facilitating multiplanar reformatting for better anatomical delineation. This simplifies planning and represents an advancement from radiological perspective, resulting in more accurate and timely diagnostics.

"One of the most game-changing aspects of SmartSpeed is that it allows us to switch from 2D to 3D sequences. We have easier diagnoses and earlier diagnoses for the patient."

Dr. Eliseo Vañó, Hospital Nuestra señora del Rosario, Madrid, Spain

# Using AI to deliver more consistent images in quicker slots across an entire fleet of MR systems

The Philips' SmartSpeed integration of AI has revolutionized MRI operations at Hospital Nuestra Senora del Rosario, demonstrating that even older systems can reach new clinical heights. Dr. Eliseo Vañó leveraged this technology to modernize and improve patient care and efficiency, illustrating the positive impact of AI in modern healthcare. As technology continues to evolve, the hospital remains committed to exploring further enhancements, caring to provide optimal patient outcomes and setting a standard for innovative diagnostic practices.

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