



**PHILIPS**

# Replacing a legacy MRI system with a BlueSeal helium-free operating MRI system

## Advantages in clinical and operational efficiency

Magnetic Resonance Imaging (MRI) technology has undergone tremendous advancements over the past 15 years, reshaping the landscape of medical diagnostics. Despite that evolution, many healthcare institutions continue to operate legacy MRI systems that are 12 to 13 years old. According to CoCIR<sup>1</sup> guidelines, no more than

10% of an imaging fleet should be older than ten years—a clear indication of the need to modernize. Upgrading to a state-of-the-art solution, like the Philips BlueSeal MRI with helium-free operations, offers compelling advantages in clinical, technological innovation, operational efficiency and patient experience.

## Advancing MRI technology: Embracing the BlueSeal revolution

Legacy MRI systems, while dependable, are increasingly unable to keep pace with the demands of modern diagnostic imaging. The BlueSeal MRI represents a breakthrough in technology, most notably through its helium-free operation. When Dr. Maldonado decided to pursue her dream and purchase an imaging practice, she discovered that it was equipped with an outdated MRI system that required expensive weekly helium refills, creating a significant financial burden.

Dependence on helium in conventional MRI systems has multiple disadvantages for imaging

facilities – it creates operational risks due to global supply fluctuations and can result ongoing and significant costs. These concerns become even more pressing in situations where access to helium is affected by market volatility or logistical challenges. The need for frequent helium refills interrupts the continuity of scanner operations, which can negatively impact patient care and reduce the overall efficiency of the clinic. For these reasons, seeking out innovative solutions that mitigate the dependency on helium can be hugely beneficial to ensure sustainable and competitive operations in the field of medical imaging.

*“When I bought this practice we had a traditional MRI system, that consumed a lot of helium.”*

**Dr. Mayra Maldonado, Vida Imaging, San Juan de Puerto Rico**



Upgrading such an integral imaging system wasn't part of Dr. Maldonado's initial plan for the clinic's first year, but after reviewing the numbers, it became clear that prioritizing this advanced technology was the best decision. By starting strong with the latest MRI innovation, her new practice set itself up for long-term success.

Besides helium-free operations, BlueSeal MRI also includes advanced imaging capabilities enabled by leveraging the latest hardware and software algorithms, providing sharper resolution, faster scan times, and consistent reliability. Physicians immediately recognized the leap in quality.

*"My husband said to me: there must be a system out there that does not consume or need helium. I was not familiar with this technology. And we searched for it on the internet. and BAM, the Philips BlueSeal appeared. And to my surprise, I discovered it's available! Not only did this solve the helium problem, but also the imaging is of high quality. The doctors also recognized that we were using much more advanced technology,".*

**Dr. Mayra Maldonado, Vida Imaging, San Juan de Puerto Rico**

## Efficiency and cost effectiveness: Redefining MRI economics

Managing the operational and maintenance costs of aging MRI systems is a major challenge for healthcare practices. Traditional MRI machines incur ongoing expenses as they age, from frequent helium refills to repeated service visits, and as these devices get older they are more likely to experience breakdowns and become less efficient. The temptation to delay investment can be strong—after all, if the equipment still works, why upgrade? Yet, many of the risks associated with outdated systems aren't always readily apparent. An outdated imaging portfolio, longer scan times, and discomfort for both patients and technologists are often accepted simply because the benefits of an alternative aren't known.

However, recent advancements have transformed MRI technology to make it significantly more user friendly, capable of delivering scans in less time, and far more sustainable than legacy systems. Practices that embrace these innovations not only offer a higher quality of care but also benefit from improved efficiency and a more competitive edge in the ever-evolving world of medical imaging.

By eliminating helium dependency, BlueSeal MRI dramatically reduces overhead. Practices are liberated from unpredictable market prices and logistical headaches. This transition also streamlines maintenance and ensures more consistent uptime, supporting consistently higher patient throughput and more predictable revenue streams.

*"When we did the math, the operating costs weren't worth it. We wanted to make an investment in a more efficient system. In this case, helium was no longer going to be an additional expense."*

Dr. Mayra Maldonado, Vida Imaging,  
San Juan de Puerto Rico

*"So financially, it has definitely been very beneficial for our practice."*

Dr. Mayra Maldonado, Vida Imaging,  
San Juan de Puerto Rico

## Enhancing patient experience: Speed, comfort, and outcome

Patient care stands at the heart of any imaging technology decision. The BlueSeal MRI delivers a tangible improvement in both comfort and diagnostic effectiveness. Enhanced speed means shorter appointment times and reduced waitlists, while optimized image quality supports more confident clinical decisions.

Furthermore, the advanced design of BlueSeal MRI systems can offer quieter operation in a wide bore, and when combined with improved ergonomics these impacts translate into less patient anxiety and a more pleasant scanning experience.

*“When we started scanning patients, we noticed that it’s a very fast MRI and we can examine more patients while maintaining high quality.”*

**Dr. Mayra Maldonado, Vida Imaging, San Juan de Puerto Rico**



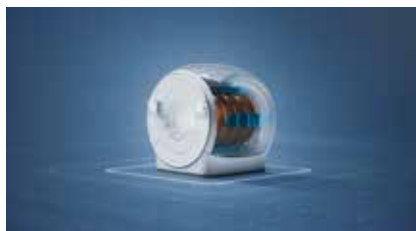


# Advancing MRI: Sustainable innovation for the future

As MRI technology evolves, the advantages of transitioning from legacy systems to modern solutions like BlueSeal helium-free operating MRI become increasingly clear. By moving away from equipment burdened with high maintenance costs and the unpredictability of helium dependence, healthcare providers can streamline their operations, reduce overhead, and deliver a more consistent patient experience. The adoption of BlueSeal MRI not only improves clinical workflow and diagnostic confidence but

also creates an environment where both patients and technologists benefit from enhanced comfort and efficiency. This smart move is more than a financial decision—it's an investment in the future of imaging, marked by innovation, reliability, and patient-centered care. As shown by the experience of Dr. Maldonado, embracing advanced platforms empowers practices to stay ahead in a rapidly changing field, ensuring excellence and sustainability for years to come.

## Explore more



### BlueSeal Technology

Transition your department to more productive helium-free MR operations.

[Learn more ›](#)



### Explore MRI stories

Read articles on latest trends and insights, MRI best practices and clinical cases, application tips and more by and for Philips MRI users.

[Learn more ›](#)



### Magnetic Resonance

Discover innovative MRI solutions for precision diagnostic imaging and exceptional patient experience. Learn more about Philips MRI technologies.

[Learn more ›](#)

<sup>1</sup> <https://www.cocir.org/publication/cocir-medical-imaging-equipment-age-profile-density-2023-edition-2/>

