



GE Healthcare Names New 3.0T MRI System for Today's Healthcare Heroes

November 28, 2021

Chicago, November 28, 2021: GE Healthcare is proud to unveil SIGNA Hero [\[i\]](#), a new 3.0T magnetic resonance imaging (MRI) system named in honor of all the healthcare workers who continue caring for our global community amidst today's COVID-19 pandemic. Offering new workflows and AIR Recon DL enhancements, SIGNA Hero is designed to help those on the frontlines meet today's most pressing needs [\[ii\]](#). With better image quality, enhanced workflows, increased productivity, improved patient comfort and greater sustainability, SIGNA Hero aims to make challenging exams simpler, turning "difficult" to "routine."

[SIGNA Hero](#)
PICTURE CREDIT: GE Healthcare
IMAGE/JPEG - 3.58 MB

"True heroes are built for any challenge, and today's healthcare workers have proven themselves true heroes," says Jie Xue, president & CEO, Magnetic Resonance Imaging, GE Healthcare. "While the world's healthcare heroes cared for patients on the frontlines, our GE Healthcare team kept working the background on cutting-edge technologies to help reduce the burden on clinicians and improve patient outcomes. The result is SIGNA Hero – a system dedicated to all those who always care for our global community."

Healthcare systems – and radiology departments in particular – face more strain than ever. In the United States alone, the COVID-19 pandemic is expected to have led to a 35 percent drop in MRI procedure volume in 2020 – from 42 million procedures in 2019 to an estimated 27.4 million in 2020 [\[iii\]](#). This backlog in non-urgent patient care, combined with today's growing disease burden and industry-wide staff shortages demands new solutions to help clinicians manage today's evolving needs.

To help address these challenges, GE Healthcare designed SIGNA Hero to help accommodate more patients of all shapes and sizes, offering a 70 cm bore and detachable table for enhanced patient comfort. Additionally, the system unlocks new clinical workflows for today's healthcare heroes, leveraging artificial intelligence to improve the clarity of images while increasing operational efficiency. This includes AIR Recon DL, GE Healthcare's pioneering deep learning image reconstruction technology that works across all anatomies and offers clinicians a 30-50 percent reduction in exam times [\[iv\]](#).

"Prior to going live, we were doing on average 10-12 patients a day. With AIR Recon DL, we were able to add four time slots a day on average," explains Randall Stenoien, MD, owner and CEO of Houston Medical Imaging. "As we come out of COVID and increase volumes further, we're going to have a really tremendous opportunity to be more efficient and improve patient outcomes. It's been a wonderful experience."

To date, AIR Recon DL has benefited nearly one million patients around the world, and feedback from clinical users has been overwhelmingly positive – including observations of sharper and less noisy images.

Stenoien adds: "We were seeing a dramatic reduction in scan times. One of our first patients was a pituitary scan; 30 minutes 40 seconds. In January on the same scanner, the scan was 14 minutes and 42 seconds, a 52 percent reduction. And when I sent those images to my neuroradiologist, I immediately got a phone call to ask what in the world had happened. It was the prettiest pituitary scan she'd ever seen."

Now, at the Radiological Society of North America's 2021 Annual Meeting, GE Healthcare is excited to announce two new extensions of this cutting-edge deep learning technology, including 3D sequences and PROPELLER for motion robustness [\[v\]](#). Both solutions are designed to provide sharper images with better signals in half the time for nearly 90 percent of the daily clinical scans done, regardless of the anatomy being imaged.

Furthermore, clinicians can scan multiple organs simultaneously and with fewer patient adjustments using whole-body imaging. Combined with GE Healthcare's patented AIR Coils, clinicians have total freedom in coil positioning and handling during an MRI scan. Each coil is lightweight and flexible to closely wrap around patients, like a blanket, to fit each patients' form – helping them achieve the best results possible.

This feature is especially useful in light of today's disease burden. For example, prostate imaging – a traditionally uncomfortable experience – is now much faster, simpler and more comfortable with wing-to-wing clinical solutions like One Stop Prostate imaging with AIR Coils and AIR Recon DL, which can complete the patient scan in less than 15 minutes.

Additionally, AIR Touch and AIR x leverage the power of GE Healthcare's Edison platform to help daily practice run smoother. To begin, AIR Touch dramatically simplifies scan set up for technologists, reducing set up time by up to 37 percent with automated coil selection and landmarking that optimizes key elements in the coil configuration automatically to get an excellent image for every patient, while using the full power of each coil. Then, AIR x provides automated slice prescriptions to help reduce previously redundant, manual steps. The AI-based, automated workflow tool for brain and knee scanning helps increase consistency and productivity for greater operational efficiency.

GE Healthcare also designed the system with sustainability in mind. To help healthcare systems save on operational costs in the long run, SIGNA Hero is an eco-friendly system designed to be capable of lowering helium usage up to 67 percent due to GE Healthcare's Intelligent Magnet Technology, which is 1.4x more efficient than previous generations. Moreover, the SIGNA Hero magnet is two tons lighter than its predecessor. And while they are scanning, the system is designed to easily decrease power consumption and scan time by up to 50 percent with AIR Recon DL.

Finally, GE Healthcare's built-in, instantly accessible Digital Ecosystem provides immediate expert support and coaching to seamlessly educate staff, manage department protocols, and remotely update scanner software at times that best suit department schedules.

For more information on GE Healthcare's MR portfolio and SIGNA Hero system, see gehealthcare.com or visit the company's #RSNA21 booth in

person or [virtually](#).

[i] SIGNA™ Hero is 510(k) pending at FDA. Not yet CE Marked. Not available for sale in the United States or the EU. Not commercially available in all markets.

[ii] AIR Recon DL 3D and PROPELLER are 510(k) pending at the FDA. Not CE marked. Not available for sale in the United States or EU. Not commercially available in all markets.

[iii] IMV Medical Information Division. 2020 MR Market Outlook Report.

[iv] GE Healthcare data on file

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