








# The power of ultrasound + Artificial Intelligence

Clinical support and workflow efficiency

Staff shortages are plaguing hospitals and clinics worldwide. To add to the challenge, the demand for ultrasound services is on the rise. Clinicians and administrators need a solution, and they need it now.








<p><b>27,000</b> additional sonographers will be needed in the US by 2024, an <b>increase of 24%</b><sup>i</sup></p> 	<p><b>By 2030,</b> it is anticipated that there will be a shortfall of 10 million healthcare workers<sup>ii</sup></p> 	<p><b>81%</b> of health systems surveyed in the U.S. reported radiology technologist shortages<sup>iii</sup></p> 	<p><b>90%</b> of sonographers experienced work-related musculoskeletal disorders<sup>iv</sup></p> 
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 **AI is the teammate that clinicians need to make informed decisions faster, and that administrators need to meet increased demand, and support ultrasound users' well-being.**

## A full suite of AI-powered solutions




GE HealthCare is on the forefront of AI for ultrasound, with more than 25 offerings to simplify time-consuming tasks across key care areas and departments. Our Verisound™ AI & Digital Solutions optimize your team's clinical and operational ultrasound workflows to increase efficiency and profitability.

Our wide array of AI tools can help with many standard tasks including (but not limited to):

<p><b>Guidance</b> Onscreen guidance provides prompts to guide probe movements helping new users capture diagnostic-quality cardiac images</p> 	<p><b>Standardizing</b> AI tools can standardize some portions of obstetrical exams, improving efficiency by 65%<sup>v</sup></p> 	<p><b>Measuring</b> Select cardiovascular measurements are made quickly and with just one click thanks to AI<sup>vi</sup></p> 	<p><b>Populating</b> Automatically populating TI-RADS™ descriptors makes thyroid cancer risk-assessment more accurate leading to a 57% reduction in benign biopsies<sup>vii</sup></p> 	<p><b>Labeling</b> AI-powered automatic labeling of the liver, gallbladder and right kidney during abdomen scans helps level the playing field for users across experience levels</p> 	<p><b>Detecting</b> AI tools detect and track nerves during specific nerve block procedures in 99% of cases<sup>viii</sup></p> 	<p><b>Assessing</b> AI automatically provides a quantitative breast malignancy risk in as little as two seconds</p> 
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## AI can improve both the patient and clinician experience

Reducing exam and read time, improving diagnostic confidence, and easing the wear and tear on operators are all possible with GE HealthCare's AI-powered ultrasound systems. Here are just a few examples:

<p><b>Reduce exam time by 81%</b> and help properly align and display recommended views and measurements of the fetal brain<sup>v</sup></p> 	<p>Complete a wide range of Doppler measurements with up to <b>93% fewer keystrokes</b> by using Cardiac Auto Doppler with AI Spectrum Recognition<sup>ix</sup></p> 	<p><b>Cut thyroid study interpretation time by 24%</b>, enhancing the patient experience and department productivity<sup>x</sup></p> 
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For additional information on the power of AI + Ultrasound across care areas, request the AI executive summary from your local sales representative.

i. <https://www.sdms.org/docs/default-source/Resources/work-related-musculoskeletal-disorders-in-sonography-white-paper.pdf>  
 ii. World Health Organization, "Global Strategy on Human Resources for Health: Workforce 2030: Reporting at Seventy-fifth World Health Assembly", Departmental News, Geneva, June 2, 2022. <https://www.who.int/news/item/02-06-2022-global-strategy-on-human-resources-for-health-workforce-2030>  
 iii. "Radiology Staffing Shortages Nation Wide", AHEC online, Sept 27, 2021.  
 iv. Work Related Musculoskeletal Disorders In Sonography, Society Of Diagnostic Medical Sonography, Susan Murphey, <https://journals.sagepub.com/doi/full/10.1177/8756479317726767>.  
 v. Scan Assistant powered by SonoLyst and SonoBiometry reduces keystrokes 65%. GE HealthCare internal document JB20479XX / DOC2727504.  
 vi. Time to strain measurement result may vary with heart rate, frame rate and Vivid system. Verification of performance done by GE HealthCare clinical application specialists using Vivid system (DOC2739637).

vii. 2023; The AI-enabled future of ultrasound in thyroid imaging: How artificial intelligence is assisting radiologists in thyroid nodule management. Author: Timothy W. Deyer, MD, MSE Clinical Assistant Professor, Dept. of Radiology, Weill Cornell Medical Center, New York, NY Chief Medical Information Officer, Head of Interventional Radiology, East River Medical Imaging, New York, NY (JB24312XX).  
 viii. Venue Family R4 cNerve study DOC2725435.  
 ix. Based on results of time and motion study conducted by GE HealthCare JB49055XX – Cardiac Auto Doppler; study results indicated time savings related productivity.  
 x. Koios Medical internal data. Presented at Society for Imaging Informatics in Medicine annual meeting, 2021.