GE HealthCare

The power of ultrasound + Artificial Intelligence

Addressing the challenge of staff shortages during a time of increased demand

The challenge

Hospitals and clinics are facing a perfect storm of increased demand for ultrasound services at the same time staff shortages and clinician retention are causing challenges for both patients and providers.

By 2030,
it is anticipated that there will be a shortfall of 10 million healthcare workers[i]

27,000
additional sonographers will be needed in the US by 2024, an **increase of 24%**[ii]

90%
of sonographers experienced work-related musculoskeletal disorders[iii]

81%
of health systems surveyed in the U.S. reported radiology technologist shortages[iv]

The answer

Adding AI is like having another teammate in the room.

Reduce exam time and complexity while easing the physical stress on ultrasound users with GE HealthCare's AI-powered ultrasound devices.

GE HealthCare launched its first AI-powered tools more than five years ago, and today AI is a mainstay in many of its ultrasound products across multiple care areas. Its Verisound™ AI & Digital Solutions optimize your team's clinical and operational ultrasound workflows to increase efficiency and profitability.

Our AI-powered features enable you to:

- Improve the patient experience with shorter, more efficient exam times
- Obtain next level results by helping less experienced sonographers capture diagnostic-quality images quickly
- Support higher scan volume
- Reduce clinician burnout and work-related repetitive stress injuries

Expanding access

AI is helping users, from the most experienced to newer healthcare professionals, acquire quality diagnostic images. This broadens the set of professionals who can get consistently good images.

Caption Guidance™
on the Venue™ family provides real-time, turn-by-turn, on-screen guidance to help new POCUS users capture diagnostic-quality cardiac images, thereby expanding access to more patients

Reducing time & complexity

With increased demand for imaging services showing no sign of slowing down and a continued tight labor market, healthcare organizations continue to look for ways to ensure that time is spent on the highest-value tasks.

Users experience a **48% time saving** with the introduction of automated view detection and automated cardiac axis measurements using fetalHS on select Voluson™ scanners[v]

Ejection fraction and strain **results are possible in 15 seconds** on average using Easy AFI LV with AI View Recognition on Vivid™ systems[viii]

Pelvic floor exams see an **87% reduction in exam time** with SonoPelvicFloor on select Voluson systems[vi]

Reduce interpretation time 24% using Thyroid Assistant powered by Koios DS™ available on select LOGIQ™ scanners[ix]

Reading time of breast exams is **reduced by 33%** with QVCAD™ on Invenia™ ABUS 2.0[vii]

Supporting clinician well-being

Improved workflows are driving efficiency, allowing clinicians to focus more on patient care. In addition, fewer repetitive clicks and manual manipulations aim to reduce operator musculoskeletal stress.

Reduce keystrokes by more than 50% with Auto Doppler Assistant on LOGIQ E10 Series[x]

Achieve fast measurement of left ventricle dimensions with up to **80% fewer clicks** using AI Auto Measure 2D on Vivid systems[xi]

Experience a **2-4 step reduction per exam** using Whizz Label on Versana Premier™ and Versana Balance™ allowing clinicians to spend more time caring for patients

Complete a wide range of Doppler measurements with 2 clicks or up to **93% fewer keystrokes** with Cardiac Auto Doppler with AI Spectrum Recognition on Vivid scanners[xii]

For additional information on the power of AI + Ultrasound across care areas, request the AI executive summary from your local sales representative.

i. 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.
ii. https://www.sdms.org/docs/default-source/Resources/work-related-musculoskeletal-disorders-in-sonography-white-paper.pdf.
iii. Work Related Musculoskeletal Disorders In Sonography, Society Of Diagnostic Medical Sonography, Susan Murphey, https://journals.sagepub.com/doi/full/10.1177/8756479317726767.
iv. "Radiology Staffing Shortages Nation Wide?", AHEC online, Sept 27, 2021.
v. JB24039XX – 2023 Voluson Expert Series Product Claims.
vi. C2173180 – PC410 Claims Voluson SWIFT BT23.
vii. Interpretation Time Using a Concurrent-Read Computer-Aided Detection System for Automated Breast Ultrasound in Breast Cancer Screening of Women With Dense Breast Tissue (Yulei Jiang). Read More: https://www.ajronline.org/doi/10.2214/AJR.18.19516.
viii. 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).
ix. Koios Medical internal data. Presented at Society for Imaging Informatics in Medicine annual meeting, 2021.
x. Auto Doppler Assistant Study results. GE HealthCare internal study JB08078XX.
xi. The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem, JB20789XX.
xii. Based on results of time and motion study conducted by GE HealthCare JB49055XX–Cardiac Auto Doppler; study results indicated time savings related productivity.

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