

The power of ultrasound + artificial intelligence



AI-driven ultrasound is solving challenges and supporting clinicians

Advancements in artificial intelligence (AI) in ultrasound are helping healthcare providers make more informed decisions faster and manage increased demand.^{36, 42}

It's as if clinicians have a new teammate.



This is critical during a time when staffing shortages are the norm and many experienced clinicians are leaving the profession.

Heavy workload and burnout may be some of the key factors driving the departures.

Sonography vacancies jumped from

6.9% in 2021 to
16.7% in 2023¹



By 2030, it is anticipated that there will be a shortfall of

10 million
healthcare workers
globally²



81%

of health systems surveyed in the US reported radiology technologist shortages³



At the forefront of AI

For more than 25 years, GE HealthCare has been defining the ultrasound category.

Today, the company is *redefining* this category by pairing its expertise in ultrasound with groundbreaking AI capabilities.

The recent launch of Verisound™ Digital & AI Ultrasound Solutions allows us to deliver optimal, simplified, and scalable clinical and operational workflows. It is designed to improve workflow efficiency and support clinicians in managing higher scan volumes, helping expand access to diagnostic imaging.

As of publication, the company has 100 AI-enabled device authorizations across all modalities in the U.S., more than any other medical technology company.⁴



Existing and emerging AI tools support not only diagnostic and clinical decision-making but also clinician well-being.⁴³

Improved workflows are driving efficiency,³⁶ allowing clinicians to focus more on patient care. In addition, fewer repetitive clicks and manual manipulations aim to reduce operator musculoskeletal stress.⁴⁹

Enhancing the AI innovation pipeline

GE HealthCare + Intelligent Ultrasound

GE HealthCare has ensured that it will continue to innovate and offer exceptional AI solutions across its ultrasound portfolio by acquiring the clinical artificial intelligence (AI) software business from Intelligent Ultrasound.

A leader in integrated AI-driven image analysis tools designed to make ultrasound smarter and more efficient, Intelligent Ultrasound pioneered the SonoLyst suite of AI tools, which powers several Voluson™ GE HealthCare ultrasound devices.

The acquisition strengthens GE HealthCare's capabilities and ensures a pipeline of innovative technology designed to improve workflows and enhance ease-of-use, benefitting both clinicians and patients.



AI-powered ultrasound: Making an impact here and now



Advancements in AI-enabled ultrasound are helping reinvent care and unlock clinical challenges.

Every day, AI-powered ultrasound is supporting faster, more informed diagnoses; improved workflows; a better experience for staff and patients; and is driving positive outcomes.^{36, 43, 44}

“By using AI, we are pushing limits and enhancing diagnostic capabilities. At the same time, the functionality makes exams easier. The AI built into the Voluson Expert 22 is so far advanced compared to what we’ve seen before, and it’s only a hint. It’s our responsibility to push it even further by using it, by challenging it, and showing it makes a difference.”†



—Lawrence Platt, MD
Center for Fetal Medicine & Women’s Ultrasound
Los Angeles, CA

Some of the tasks that are now AI-powered by GE HealthCare Ultrasound and the Verisound AI family include⁵:

Standardizing



SonoLyst, a suite of AI tools offered on select Voluson women's health ultrasound devices, **standardizes obstetrical exams**, improving consistency and saving time by identifying fetal anatomy seen on standard 2nd trimester views and further adding annotations and measurements, improving efficiency by 65%.⁶

Detecting



Auto Nipple Detection on Invenia™ ABUS Premium, powered by Verisound AI, automatically offers the positioning of the nipple marker to enable consistency within the breast volumes to speed up the overall exam time.

Measuring



On Vivid™ Pioneer, Easy AFI LV **ascertains measurement of the left ventricle** to measure strain in nine seconds on average, and Easy AutoEF allows users to measure ejection fraction in just one click.⁸

Validation



Scan Quality Assessment on Invenia ABUS Premium provides an immediate qualitative evaluation during the exam for proper breast coverage and positioning to make your staff feel confident.

Optimizing



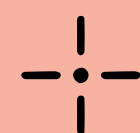
With both Auto Abdominal Color Assistant and Auto Abdominal Preset Assistant, LOGIQ™ family AI solutions **leverage abdominal organ detection** allowing the system to automatically switch to optimal color flow shortcuts and preset parameters, optimizing image quality and confidence.³⁶

Populating



In near-real time, LOGIQ's Thyroid Assistant, powered by Koios DS,[™] **automatically populates all TI-RADS® descriptors** and generates an AI-based thyroid cancer risk assessment using machine learning and proprietary algorithms, leading to a 57% reduction in benign biopsies.⁹

Guidance



Caption Guidance™ on the Venue™ family of point-of-care ultrasound and Caption AI™ on Vscan Air™ SL wireless handheld ultrasound provide **real-time, turn-by-turn, on-screen guidance that prompts probe movements** to help more medical professionals capture diagnostic-quality cardiac images.

Labeling



Whizz Label on Versana Premier™ and Versana Balance™ ultrasounds **automatically labels liver, gallbladder, and right kidney** on ultrasound images during abdomen scans of the right upper quadrant (RUQ), helping to save time and enhance workflow productivity for users across experience levels.

Assessing



Breast Assistant, powered by Koios DS on both the LOGIQ family¹⁰ and on Invenia ABUS Premium and Invenia ABUS Prime ultrasound systems, **automatically provides a quantitative breast malignancy risk assessment** aligned to a BI-RADS ATLAS® category in as little as two seconds.

“With radiologists just doing a TI-RADS evaluation, I found I could move from about a 27% reduction to a 41% elimination of negative biopsies. And then if I added the AI modifier, I could move up to 57% reduction in negative biopsies. That means almost 60% of the biopsies that I was doing could have been avoided by following the recommendations from Thyroid Assistant.”^{9†}

—Timothy W. Deyer, MD, MSE
Clinical Assistant Professor, Department of Radiology,
Weill Cornell Medical Center, New York, NY
Chief Medical Information Officer, Head of Interventional
Radiology, East River Medical Imaging, New York, NY



Ultrasound + AI has the power to help us know more and do more

Healthcare professionals are using the marriage of ultrasound and AI in three primary ways:

1

**Guided
ultrasound**

2

**Workflow
productivity**

3

**Detection and
diagnostic & clinical
decision support**



1

Guided ultrasound

AI is helping users, from the most experienced to newer healthcare professionals, acquire quality diagnostic images.



Guidance opens the possibilities to:

- Acquire reliable, consistent, diagnostic-quality ultrasound images
- Capture complex, complete ultrasound studies

Caption AI and Caption Guidance provide cardiac scan guidance on the Vscan Air SL and the Venue family. This AI expands the possibility of full echocardiography at the point of care to patients who may not otherwise have access to ultrasound or may experience long wait times.

With this AI-driven software, ultrasound users can **capture cardiac images successfully**. Real-time, turn-by-turn, on-screen guidance helps users capture diagnostic-quality images.

2

Workflow productivity

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.

AI is a critical tool when it comes to saving time and clicks during scans. This not only increases productivity, but also eases the wear and tear on clinicians by reducing clicks and automating certain repetitive tasks.^{36, 44}



87%

reduction in exam time

The SonoPelvicFloor AI-powered tool on the Voluson Expert Series and Voluson SWIFT ultrasound devices removes the complexity of assessing pelvic floor anatomy by **guiding the user through the exam and automating plane alignment and measurements**, so exam time is reduced by 87% over manual exams.¹¹

33%

reduction in radiologist reading time

Invenia ABUS is the first FDA-approved ultrasound supplemental screening technology specifically **designed for detecting cancer in dense breast tissue**. Adding QVCAD™ can reduce radiologist reading time for ABUS by 33%.¹²

2

Workflow productivity

Reducing keystrokes and clicks helps drive efficiency.

90% of clinical sonographers experienced symptoms of work-related musculoskeletal disorders¹³

These injuries and related missed work time lead to up to \$120+ billion yearly in direct and indirect costs for employers¹⁴



2-4

fewer manual steps

Whizz Label on Versana Premier and Versana Balance automatically labels key organs in scans of the right upper quadrant of the abdomen, removing 2-4 manual steps in the exam.

50%

reduction in keystrokes

Auto Doppler Assistant on the LOGIQ E10 Series, LOGIQ Fortis™, and LOGIQ Totus™ can reduce keystrokes by more than 50%.¹⁵

3

Detection and diagnostic & clinical decision support

The power of more knowledge to inform diagnosis and treatment is paramount, and adding AI to ultrasound may exponentially add to the clinician's knowledge.



Comparing over
900K
images

Tools such as Breast Assistant, powered by Koios DS, on the LOGIQ platform, Invenia ABUS Premium and Invenia ABUS Prime help physicians **confidently assess the likelihood of malignancy of breast lesions**, knowing that AI has compared their patient's lesion to more than 900,000 other images.¹⁶

Up to
55%
reduction in
benign biopsies

One study found Breast Assistant powered by Koios DS reduces benign biopsies by up to 55%.²⁴ This diagnostic clarity can both help physicians **detect disease earlier and avoid unnecessary procedures** and treatments on non-malignant lesions.

3

Detection and diagnostic & clinical decision support

Ultrasound is especially vulnerable to operator variability between exams.¹⁷

In addition to inter-operator variability, there are also challenges with inter-reader variability. For example, when evaluating a thyroid nodule to determine if a biopsy is needed, radiologists with comparable training and experience **disagree with each other 25% of the time** making their diagnosis. In fact, when presented the same case only a month later, physicians disagree with themselves, **changing their initial diagnosis nearly 20% of the time.**¹⁷



41%

reduction in inter-reader variability

Thyroid Assistant, powered by Koios DS, helps reduce inter-reader variability by 41%.¹⁶

3

Detection and diagnostic & clinical decision support

Verisound AI-powered tools can help, not only with inter-reader variability but also with inter-operator variability.



100%
reproducibility

AI Auto Measure – Spectrum Recognition on Vivid Ultra Edition* semi-automatically detects appropriate measurement of spectral Doppler images, enabling the system to fast-forward the path from scanning to measurements with 98% accuracy and 100% reproducibility.¹⁸

*Ultra Edition refers to the 2022 release of the Vivid portfolio and is not a product name.

1
click

Easy AFI LV, automated one-click LV strain analysis, delivers AI-based global and segmental strain measurements that require no manual interaction apart from initiating the tool and approving the results.

In hospitals and clinics around the world, AI is now elevating the power of many GE HealthCare ultrasound devices

Clinicians benefit with faster, more accurate results, increased diagnostic confidence, fewer musculoskeletal work-related injuries, and more efficient workflows.^{36,44}

Patients benefit from shorter exam times, fewer unnecessary procedures, and earlier diagnoses.^{36,42}

But this is only the beginning.

GE HealthCare envisions a future where data is connected, patients benefit from precision medicine, and artificial intelligence supports clinicians as it touches and improves every aspect of healthcare.

Verisound: Digital & AI ultrasound solutions

You want your clinicians to be able to focus on patient care, not tedious tasks. Verisound optimizes your team's clinical and operational ultrasound workflows to increase efficiency throughout your operation.



The future is one where healthcare has no limits.

A closer look

AI-driven innovations on GE HealthCare ultrasound devices

Today's reality:

90%

of sonographers experience work-related musculoskeletal disorders¹³



\$120+ billion

yearly in direct and indirect costs for employers due to injuries, staffing shortage, and increased demand¹⁴



Experienced clinicians

leaving the profession



Inspired by these challenges, GE HealthCare is designing three primary types of AI solutions:

1

**Guided
ultrasound**

2

**Workflow
productivity**

3

**Detection and
diagnostic &
clinical decision
support**

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
Voluson Women's Healthcare Ultrasound				
Voluson family of products	<i>fetalHS</i>		<i>fetalHS</i> offers users a time-saving of 48% with the introduction of automated view detection and automated cardiac axis measurements. ¹⁹	A step-by-step guidance that helps identify fetal situs and normal fetal heart anatomy using the 4-Chamber Heart, 3-Vessel View/3-Vessels and Trachea View, and Cardiac Axis. By acquiring a series of cine loops, views are automatically identified using AI, and cardiac axis is calculated.
Voluson family of products	SonoLyst		<p>A suite of tools that leverage AI to identify fetal anatomy seen on standard views, then automatically annotates and measures where applicable.</p> <p>Can reduce the time to complete the 28 recommended 2nd trimester exam requirements by up to 40%.^{6*}</p> <p>SonoLystX: Your virtual onboard expert uses AI to produce high-quality scans.</p> <p>SonoLystIR: (Image Recognition) Simply scan, then freeze, and the system does the rest.</p> <p>SonoLyst/live: Takes image recognition to the next level by capturing images as you scan in real time without stopping to freeze, annotate, or store. You can save approximately 31% of exam time vs manual exam (image review process not included).²⁰</p> <p><small>*Vs manual exam time.</small></p>	
Voluson family of products	Fibroid Mapping		Fibroid Mapping is an AI reporting tool that maps fibroids in 3D with exact position in relationship to the uterus. Classify each fibroid according to FIGO [®] classification, while simplifying communication with colleagues, referring physicians, and patients.	Fibroid Mapping will successfully segment fibroids in 88% of the cases. ²¹
Voluson family of products	SonoPelvicFloor		By guiding you through the exam, and automating plane alignment and measurements, you can reduce pelvic floor exam time by up to 87% over manual examinations. ²²	Analysis of the pelvic floor anatomy can be complicated. Through AI, SonoPelvicFloor simplifies the exam process by automating plane alignment, live C-plane tracking, and measurements while offering workflow guidance to improve efficiency.

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
Voluson family of products	SonoCNS		<p>Reduces exam time by 81% (57% for Voluson SWIFT).⁶</p> <p>Applying SonoCNS reduces the analysis time of datasets by 81.3%.¹⁹</p> <p>SonoCNS performance has been improved, with time to access planes reduced by 16% and calculating measurements reduced by 29%, making the tool faster and more efficient.*²³</p> <p><small>*As compared to Voluson E10 BT19 version.</small></p>	SonoCNS helps properly align and display recommended views and measurements of the fetal brain.
Voluson family of products	SonoL&D			<p>Objectively measure and evaluate fetal head progression during the 2nd stage of labor with SonoL&D.</p> <p>SonoL&D provides measurements for both angle of progression (AoP) and head-perineum distance (HPD) to support clinical decision-making and identify the need for intervention.</p> <p>Objective measurement data with clinical assessment is combined into one report.</p> <p>Patient/partner communication is enhanced with online education video and graphics. Clinical video tutorials on AoP and HPD measurement provided on Voluson system.</p>
Voluson family of products	SonoAVC™ follicle		SonoAVC <i>follicle</i> —automatically calculates the number, dimensions, and volume of hypoechoic structures in a volume sweep to help monitor patient follicles faster. ³⁹	
Voluson family of products	Auto Caliper		<p>Auto Caliper simplifies ovarian follicle measurement—just tap on the follicle and the system automatically measures it.</p> <p>Auto Caliper offers an 87% keystroke reduction and an 80% time savings when measuring follicles in 2D vs the traditional manual workflow.²³</p>	Auto Caliper will successfully place measurements in 96.4% of the cases. ²¹
Voluson family of products	SonoAVC <i>antral</i>		SonoAVC <i>antral</i> automates ovarian reserve assessment by counting and categorizing antral follicles.	

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
Voluson family of products	SonoBiometry		SonoBiometry can reduce keystrokes (BPD, HC, AC, FL, HL, cisterna magna, lateral ventricle, and cerebellum).	
Voluson family of products	SonoNT/IT		A semi-automated tool to help provide quantifiable NT measurements.	
Voluson family of products	SonoAVC <i>general</i>		Innovative tool to help provide visualization and measurements of various hypoechoic structures within anatomy such as the fetal brain, kidneys, bladder, stomach, and gynecological sonohystograms.	
Voluson family of products	SonoVCAD™ <i>heart</i>		Enhances volume automation to help standardize orientation of the fetal heart. Automates the display of each of the six relevant views of the fetal heart to standardize image orientation of the fetal heart.	May help reduce inter- and intra-observer variability.
Voluson family of products	SonoVCAD <i>labor</i>		A 3D automated tool that allows you to confidently measure fetal head progression, rotation and direction while automatically documenting the labor procedure with objective ultrasound and manual data in one easy report.	Helps monitor fetal progression during the second stage of labor.
Voluson family of products	SonoRender <i>live</i>		Simplifies surface rendering with the touch of 1 button. Facilitates volume rendering with an automated placement of the render line for optimal surface rendering. Continuously updates render line placement with fetal movement during 4D examinations.	
Voluson family of products	SonoFHR		Automatically calculates the HR within a spectrum. SonoFHR automatically places calipers reducing keystrokes by 85% versus standard manual measurements. ⁴⁰	

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
LOGIQ General Imaging Ultrasound				
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Auto Doppler Assistant		Reduces time, keystrokes, and reach: >20% time savings >50% keystroke reduction ¹⁵	
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus LOGIQ P Series	Auto Lesion Segmentation		Automatically traces nodule boundaries and generates two-dimensional measurements with just a few keystrokes.	
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus LOGIQ P Series	Breast Assistant, powered by Koios DS		Results in two seconds or less. ¹⁶	AI-based decision support tool for breast lesion segmentation and characterization. Sensitivity increased from 92%-97% to 97%-98%. Specificity increased from 38%-46% to 45%-52%. Benign biopsy rates were reduced by up to 55% without a reduction in sensitivity. ²⁴ Improved consistency of interpretation, both inter- and intra-operator. ²⁴
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	OB Measure Assistant		Reduces keystrokes and enhances reproducibility by automating key fetal measurements. ⁴¹	
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Auto-Preset Assistant		Automatically activates the correct preset for the anatomy being scanned. Reduces user variability in scan time by 54% and improves keystroke consistency by 47%, minimizing user-to-user variation. ³⁵ Enhances workflow, by saving up to 5 clicks per exam, ³⁶ leading up to 33% fewer keystrokes and 25% less time on AI-automated tasks. ³⁵	

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Auto Abdominal Color Assistant		<p>Detects which abdominal organ is being scanned and automatically switches to optimal color flow parameters, such as gain and scale, for that organ.</p> <p>Enhances workflow by saving up to 27% of keystrokes and 11% of time for tasks automated by AI per scan.³⁶</p>	
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Easy AutoEF		<p>Our AI-based Auto ROI detection algorithm allows users to measure ejection fraction, with no manual interaction apart from initiating the tool and approving the results.³⁷ EF results in just 1 click.¹⁸</p> <p>Easy AutoEF is restricted for use with adult TTE on GE HealthCare raw B-mode dataloops of the LV. Easy AutoEF does not support left ventricles with septal bulge.³⁷</p>	
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Easy AFI LV		<p>Our AI-based global and segmental strain measurements require no manual interaction apart from initiating the tool and approving the results. Additionally, you will be able to view EF measurements. Strain results in 15 seconds (on average).⁸</p>	
LOGIQ E10 Series LOGIQ Fortis	Auto-Renal Measure Assistant		<p>Automatically detects the kidney and measures length, height, and width.</p> <p>Saves up to 10 clicks per user³⁸ and usage of trackball on console by leveraging deep learning to automate measurement in a matter of seconds.³⁶</p>	

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Thyroid Assistant, powered by Koios DS		Interpretation time fell by 24% compared to non-Koios-aided exams—enhancing the patient experience as well as department productivity. ²⁵ Results available in two seconds per image. ²⁶	In research studies, the tool helped users across all levels of experience make more informed FNA decisions compared to their own interpretations alone. ²⁶ Variability from reader to reader was reduced by 41%—enabling more classification consistency across the department. ²⁶ Specificity for FNA recommendations improved by 37%—contributing to fewer unnecessary biopsy orders. ²⁶ Sensitivity for FNA recommendations increased by 14%—reflecting the ability to detect more true positives. ²⁶
LOGIQ E10 Series LOGIQ Fortis LOGIQ Totus	Volume Navigation Image Based Registration (V Nav IBR)		Research-only tool. Automates the registration between an ultrasound volume sweep and a CT volume dataset or an MR volume dataset acquired with EOB contrast. Eliminates the steps associated with manual registration.	
Vivid Cardiovascular Ultrasound				
Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC™ Vivid Pioneer*	AI Auto Measure 2D		Achieves fast measurements of left ventricle dimensions: Up to 84% fewer clicks. ²⁷ Up to 85% time saved on LV caliper measurements in the EchoLab. ²⁸ <small>*AI Auto Measure 2D for Vivid Pioneer is CE marked only; not available in US.</small>	100% reproducibility. ^{18,29}
Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC Vivid Pioneer	AI Auto Measure— Spectrum Recognition		Semi-automatically detects appropriate measurement of spectral Doppler images, enabling the system to fast-forward the path from scanning to measurements with 98% accuracy and 100% reproducibility. ^{18,30} Enables fewer manual interactions by automatically opening the appropriate measurement tool.	100% reproducibility. ³⁰

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
<p>Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC Vivid Pioneer</p>	<p>Easy AutoEF</p>		<p>Ejection fraction results in just one click.⁸</p>	
<p>Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC Vivid Pioneer</p>	<p>Easy AFI LV with AI View Recognition</p>		<p>Ejection fraction and strain results in 15 seconds on average on Vivid Ultra Edition* and nine seconds on average on Vivid Pioneer.⁸</p> <p><small>*Ultra Edition refers to the 2022 release of the Vivid portfolio and is not a product name.</small></p>	<p>100% reproducibility.¹⁸</p>
<p>Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC Vivid Pioneer</p>	<p>Cardiac Auto Doppler with AI Spectrum Recognition</p>		<p>A wide range of Doppler measurements can be completed with 2 clicks.</p> <p>Up to 93% fewer keystrokes.³¹</p>	
<p>Vivid E95, E90, E80 Vivid S70N, S60N Vivid T9, T8 Vivid iq EchoPAC Vivid Pioneer</p>	<p>AI View Recognition</p>		<p>Automatically detect which standard 2D scan plane is acquired and store this label in the image file to be used later for streamlining workflows.</p>	
<p>Vivid Pioneer</p>	<p>AI FlexiViews LAA</p>		<p>Automatically provides you with 4D enface imaging of the LAA, enabling immediate access to FlexiSlice views for LAA assessment, with minimal manual adjustments.</p>	

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
Venue Point of Care Ultrasound				
Venue Venue Go™	Automated Function Imaging (AFI)			Quickly and easily assesses structural heart defects with objective quantitative analysis of the complete longitudinal myocardial strain of the left ventricle, right ventricle and left atrium throughout the heart cycle.
Venue family	Auto B-lines		Highlight and count B-lines in real time with counts as reliable as visual counting performed by experts. ⁴⁶ Just press “freeze” to display the frame with the highest B-line count.	
Venue family	Auto Bladder Volume		Reduces exam clicks from 18 to five dramatically improving workflow options. ⁴⁷	Measures the bladder dimensions and calculates the bladder volume in adults. Provides semi-automated measurements of the bladder dimensions from two views: transverse and longitudinal.
Venue family	Auto IVC			IVC measures were equivalent to those of an expert user 87% of the time for minimal diameters and 92% for maximal diameters. ⁴⁸
Venue Venue Go Venue Fit™	Auto VTI		Experience up to 87% time savings ³³ by quickly trending VTI over time and assessing the heart in a single step.	
Venue family	Caption Guidance™	Real-time, turn-by-turn, on-screen guidance prompts user probe movements to help POCUS users capture diagnostic-quality cardiac images.		
Venue family	Nerveblox™			Automatically labels key anatomical landmarks in the ultrasound image, helping clinicians feel confident during the procedure and streamlining the workflow with the goal of reducing procedure time.
Venue family	Real-time EF			Continuously calculate the real-time ejection fraction during live scanning, with results within +/- 10% points of experts in 86% of cases. ³²

Technology	AI tool	Guided ultrasound	Workflow productivity	Diagnostic & clinical decision support
Invenia ABUS Automated Breast Ultrasound				
Invenia ABUS Premium Invenia ABUS Prime	QVCAD		Reduce reading time by 33%. ¹²	Experience up to 93% sensitivity for lesion detection. ³⁴
Invenia ABUS Premium Invenia ABUS Prime	Breast Assistant, powered by Koios DS		Results in two seconds or less. ⁴¹	Up to 55% decrease in benign biopsies on Invenia ABUS Premium and Invenia ABUS Prime. ²⁴
Invenia ABUS Premium	Scan Quality Assessment, powered by Verisound AI		Provides an immediate qualitative evaluation during the exam for proper breast coverage and positioning.	
Invenia ABUS Premium	Auto Nipple Detection, powered by Verisound AI		Automatically offers the positioning of the nipple marker to enable consistency within the breast volumes to speed up the overall exam time.	
Versana Ultrasound for Primary Care				
Versana Premier Versana Balance	Whizz Label		2-4 steps reduced to spend more time caring for patients.	
Vscan Air Handheld Ultrasound				
Vscan Air CL	Auto Bladder Volume		Delivers easy, reliable bladder volume measurements. This enhances accuracy and supports clinical decisions, helping to reduce unnecessary catheterizations. ⁴⁵	
Vscan Air SL	Caption AI	Caption Guidance provides real-time guidance that shows you, step-by-step, how to maneuver the probe to capture diagnostic-quality standard echocardiographic views.		Caption Interpretation™ AutoEF software leverages AI to automatically estimate ejection fraction eliminating the need for LV endocardial border tracing for focused assessments at the point of care.
bk Medical Surgical Visualization & Guidance				
bk3000 bkActiv	Prostate Volume Assist (PVA)		AI-driven technology for prostate measurements in ultrasound.	

Endnotes

1. “White Paper From the 2024 Consensus Committee on the Future of Medical Imaging and Radiation Therapy,” American Society of Radiologic Technologists, last modified October 30, 2024 https://www.asrt.org/docs/default-source/research/whitepapers/2024-consensus-committee-on-the-future-of-medical-imaging-and-radiation-therapy.pdf?sfvrsn=1f869819_12.
2. 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>.
3. “Radiology Staffing Shortages Nation Wide?” AHEC online, Sept 27, 2021.
4. Shryock, T. (2025) ‘GE HealthCare tops FDA list for AI-enabled medical devices for fourth year in a row’, Medical Economics, 23 July. Available at: <https://www.medicaleconomics.com/view/ge-healthcare-tops-fda-list-for-ai-enabled-medical-devices-for-fourth-year-in-a-row> (Accessed: 11 September 2025).
5. Check local markets for availability. Not all products are available in all markets.
6. GE HealthCare Voluson internal claims document JB20479XX / DOC2727504.
7. Venue Family R4 cNerve study DOC2725435.
8. 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).
9. 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).
10. Not available on LOGIQ e.
11. GE HealthCare internal document DOC2173180 – PC410 Claims Voluson SWIFT BT23.
12. 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>.
13. Work Related Musculoskeletal Disorders In Sonography, Society Of Diagnostic Medical Sonography, Susan Murphey, <https://journals.sagepub.com/doi/full/10.1177/8756479317726767>.
14. Prevention of Work-Related Musculoskeletal Disorders. Occupational Safety and Health Administration 2016. Available at: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=UNIFIED_AGENDA&p_id=4481. Accessed July 8, 2016.
15. GE HealthCare Auto Doppler Assistant internal study JB08078XX.
16. Koios Medical internal data. Available upon request. Result availability is dependent on the available network bandwidth.
17. Errors in Sonography, DOI: 10.1007/978-88-470-2339-0_8.
18. The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod, Jurica Sprem JB20789XX.
19. JB24039XX – 2023 Voluson Expert Series Product Claims.
20. Internal study of mid-trimester anatomy scans using SonoLyst*live* versus manual exam (JB29622XX).
21. GE HealthCare Voluson internal document DOC2967080 – JB28536XX.
22. GE HealthCare internal document DOC2173180 – PC410 Claims Voluson SWIFT BT23.
23. JB25187XX – 2019 Voluson Expert BT20 messaging.
24. Barinov L, Jairaj A, Becker M, et al. Impact of data presentation on physician performance utilizing artificial intelligence-based computer-aided diagnosis and decision support systems. J Digit Imaging (2018). <https://doi.org/10.1007/s10278-018-0132-5>. Barinov L, Jairaj A, Paster L, Hulbert W, Mammone R, Podilchuk C: Decision quality support in diagnostic breast ultrasound through artificial intelligence. IEEE Signal Processing in Medicine and Biology Symposium (SPMB), 2016.
25. Koios Medical internal data. Presented at Society for Imaging Informatics in Medicine annual meeting, 2021.
26. All Thyroid Assistant stats from Koios Medical internal data. Available upon request. Result availability is dependent on the available network bandwidth.
27. Applicable to the AI AutoMeasure-2D algorithm. Results based on GE HealthCare internal data (DOC2361011).
28. Based on an internal GE HealthCare study where three observers were doing both manual and automated caliper measurements of LV study parameters on 25 PLAX acquisitions. The achieved timing varied both for the automated and the manual measurements, but on average, over a total of 71 data points, the manual measurements took 76 seconds, while just 11 seconds with AI Auto Measure 2D.
29. Applicable to the AI Auto Measure – 2D algorithm. Results based on GE HealthCare internal data (DOC2367624).
30. Applicable to AI Auto Measure – Spectrum Recognition. Results based on GE HealthCare internal data (DOC2292732).
31. Based on results of time and motion study conducted by GE HealthCare “JB49055XX – Cardiac Auto Doppler”; study results indicated time savings related productivity.
32. Messaging and claims DOC2454794 and DOC2391130.
33. GE HealthCare internal study DOC2254811.
34. Performance and Reading Time of Automated Breast US with or without Computer-aided Detection. Read More: <https://pubs.rsna.org/doi/10.1148/radiol.2019181816>.
35. GE HealthCare study. LOGIQ Ultrasound AI-driven solutions for abdominal exams. Conducted November 2023. JB29531XX.
36. FDA Submission – Appendix Q AI Summary: Manual vs AI workflow.
37. Easy AutoEF is restricted for use with adult TTE on GE HealthCare raw B-mode dataloops of the LV. Easy AutoEF does not support left ventricles with septal bulge.
38. Won, D., Walker, J., Horowitz, R., et al. (2024). Sound the Alarm: The Sonographer Shortage is Echoing Across Healthcare. Journal of Ultrasound in Medicine. <https://doi.org/10.1002/jum.16453>.
39. Voluson Signature 20 Customer Presentation, 2024, JB27584XX.
40. 2024 – Voluson Signature 20 & 18 – Product Claims Document DOC2967080/JB28536XX.
41. LOGIQ E10 Presentation, 2024, JB18516XX.
42. IMV 2023 General Ultrasound Market Outlook Report. © 2023 IMV, part of Science and Medicine Group.
43. Younan K, Walkley D, Quinton AE, Alphonse J. Burnout in the sonographic environment: The identification and exploration of the causes of sonographer burnout and strategies for prevention and control. Sonography. 2022;9(4):175–85. <https://doi.org/10.1002/sono.12333>.
44. Siewert, B., Brook, O. R., Mullins, M. M., Eisenberg, R. L., & Kruskal, J. B. (2013). Strategies for optimizing staff safety in a radiology department. *RadioGraphics, 33*(1), 245–261. <https://doi.org/10.1148/rg.331125174>.
45. Iván Fernández-Prada, Sendoa Ballesteros-Peña. Application of bladder ultrasound to reduce urinary catheterization in patients suspected of acute urinary retention: A systematic review. Enfermería Clínica. Volume 35, Issue 2, March–April 2025, 502163. <https://www.sciencedirect.com/science/article/abs/pii/S2445147925000426>.
46. Short J, Acebes C, Rodriguez-de-Lema G, et al. Visual versus automatic ultrasound scoring of lung B-lines: reliability and consistency between systems. Med Ultrason. 2019, Vol 21 no1, 45049 DOI: 10.11152/mu-1885.
47. GE HealthCare internal study DOC3139738.
48. Technical product claims DOC2199650.
49. American Society of Echocardiography. (2025, April 29). Echo Magazine: March–April 2025. <https://www.asecho.org/magazine-issue/march-april-2025/>.

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