

About GE Healthcare

GE Healthcare is a leading global medical technology and digital solutions innovator. GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

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- 2. Forecasting the Future of Cardiovascular Disease in the United State, AHA Policy Statement, 2011, sources CIR.0b013e31820a55f5
- 3. Source: Healthcare Infrastructure and Procedural Volume for Ultrasound Imaging, Frost & Sullivan, 2018. Approx. 108.12 million echo exams are performed annually; Calculation based on 26% total global prevalence of CVD cases (422 million) undergoing echo exam; extrapolated from US study indicating roughly 26% of total prevalent CVD cases underwent echo exams percentage value validated from reports.https://www.prb.org/wp-content/uploads/2015/12/2015-wor rld-population-data-sheet_eng.pdf
- 4. Kurt M, Shaikh K, Peterson L, et al. Impact on contrast echocardiography on evaluation of ventricular function & clinical management in a large prospective cohort. J Am Coll Cardiol. 2009; 53(9):802-810
- Depending on operation modes used and battery status
- The Role of AI in Streamlining Echocardiography Quantification White Paper, Kristin McLeod JB80498XX 6.
- Based on results of time and motion study conducted by GE "JB49055XX Cardiac Auto Doppler"; study results indicated time savings related productivity increase up to ~8 on an annual basis for a facility per sonographer
- 8. European Association of Echocardiography recommendations for standardization of performance, digital storage and reporting of echocardiographic studies (Eur Journal of Echo 2008 – Evangelista, Badano, Monaghan, Zamorano, Lancello
- 9. Recommendations for Quantification of Doppler Echocardiography: A Report From the Doppler Quantification Task Force of the Nomenclature and Standards Committee of the American Society of Echocardiography (JASE 2002)
- Centricity Cardio Workflow v7 Intelligent Reporting out-of-the-box configuration compared to 2017 IAC guidelines excluding doppler. CCW Intellgent Reporting Outcome JB74831XX
- 11. EchoPAC Suite is a marketing name for EchoPAC Plug-in
- 12. With the DICOM SR support. Measures & Analysis (M&A) for an exam can be sent at the end of the exam or when exported from local archive. The destination can be either a server on the network (Storage SCP) or a removable media (DICOM Media) depending on the DICOM dataflow selected. Custom measurements supported only for Adult Echo (TID5200) and Pediatric Heart (TID5220).
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- 14. Data Breaches Will Cost Healthcare \$4B in 2019, Threats Outpace Tech, healthitsecurity, source: t.ly/xrAA
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- te.net/publication/279616130_Errors_in_Sonography 17. e. a. M. Mårtensson, «High incidence of defective ultrasound transducers in use in routine clinical practice», European Journal of Echocardiography, vol. 10, no. 3, pp. 389-394, 2009. https://academic.oup.com/ehjcimaging/article pads/FULLTEXT01.pdf
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Ultra Edition is not a product name, it refers to the 2020 release of the Vivid portfolio

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JB72911XX



POWERED BY AI ELEVATED BY YOU

Vivid[™] iq **Ultra Edition**



gehealthcare.com/vivid





of sonographers experience symptoms of Work Related Musculoskeletal Disorders (WRMSD)¹

\$**120**+

billion yearly direct and indirect costs for employers¹





USER EXPERIENCE EXCELLENCE

Your well being is our top priority

Prolonged scanning poses a known risk for work related musculoskeletal disorders (WRMSDs). Staff wellness is a key asset to your organization. Shorter exams, an intuitive user interface and adoption of an ergonomic body posture can positively impact your staff wellness. These are all possible with the Vivid *iq* Ultra Edition.

A new level of user experience

The updated touch user interface was designed for convenience and fast scanning, for both left and right-hand users, minimizing muscle strain and helps sustain eye contact with the image area.

The new trackpad functionality and ergonomic wrist-rest accessory enable fast scanning and much needed ergonomic support.



Do more on the trackpad

Minimize cognitive fatigue

Intuitive and familiar user interface

Your time is precious. Save it.

DETECTABILITY⁶ **98**%



Fully automatic recognition of the apical imaging views and measurements of GLS and segmental longitudinal Strain for LV.



POWERED BY AI

Improve diagnostic speed and accuracy

Vivid iq Ultra Edition features the latest AI-based technology to help reduce tedious tasks and improve workflow efficiency. You can diagnose more confidently and accelerate exams via automated (AI-driven) Cardiac Doppler and 2D LV measurements.

The results are impressive. Exam time is reduced, and operator fatigue minimized with up to 80% less clicks to get 2D measurements, and inter-observer variability diminished.⁶

Discover the many innovations brought by the Vivid *iq* Ultra Edition, and more importantly, how these can contribute to make clinical practice - Elevated by You.

Ultra Fast. Ultra Precise. Ultra Efficient. Cardiac Auto Doppler with AI

REDUCED TIME PER MEASUREMENT

LOWER INTER OPERATOR VARIABILITY

REDUCE VARIABILITY



Fewer Keystrokes⁷

Standardized exams with greater reproducibility⁷

AI AFI LV with AI View Recognition



ACCELERATED WORKFLOW



Productivity improvement

CLINICAL EXCELLENCE for the Echo Lab

LESS CLICKS, UP TO 6 ዀ -80%

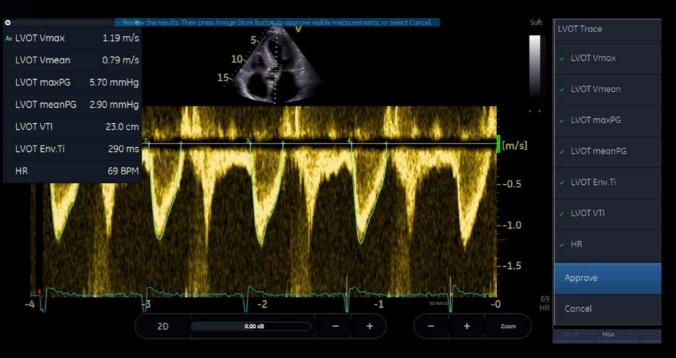
AI Al Auto Measure 2D

With the power of AI, the manual caliper measurements can be completed with 3 clicks: Freeze - Measure - Auto. A full set of reproducible measurements will instantly appear on the screen.



ACCURACY ⁶ 98%

With the power of AI, a wide range of Doppler measurements can be completed with 2 clicks: Freeze - Measure. A Doppler trace and full set of associated measurements will instantly appear on the screen.



POWERED BY AI ELEVATED BY YOU

At GE Healthcare we strive to empower you by reducing wasted time and effort. We aim to remove tedious tasks and help make every moment count for your patients.



Al Al Auto Measure Spectrum Recognition

Pediatric imaging

LVH

10

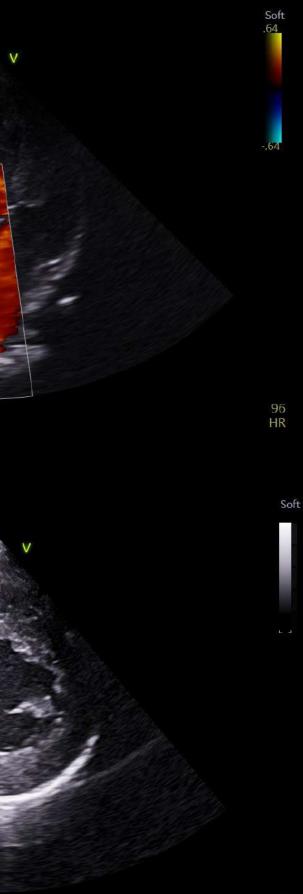
Visualize small anatomies with speed, clarity and confidence thanks to Vivid *iq* Ultra Edition's superb high-resolution imaging and dedicated pediatric probes.

SPEED AND VERSATILITY

for Pediatrics

Speed and versatility are needed for your pediatric echo exams.

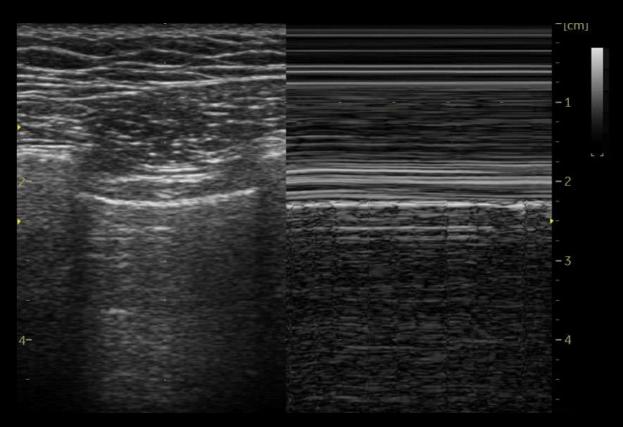
The Vivid *iq* Ultra Edition delivers high image quality with dedicated presets and advanced quantification tools, enabling precise measurements for all your patients – big or small.



101 1:2HR

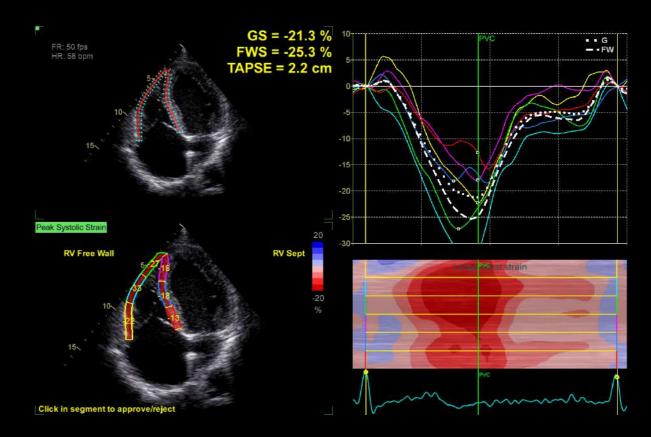
Lung Assessment

quickly optimize images.



AFI RV

Right Ventricle Global Strain (RVGLS) is an objective and accurate marker that is strongly correlated with RV ejection fraction. It has good prognostic power in many clinical studies.⁸



Designed for BEDSIDE ASSESSMENT

Vivid ig

Use the Vivid ig Ultra Edition to assess heart and lung functionality in **COVID-19** patients.

There are times when the best decision is to scan at the bedside to minimize risks. In addition to needing a portable system that is lightweight, battery powered, Wi-Fi enabled and easily cleanable, your demand for advanced imaging remains the same as in the Echo Lab. High-end performance for portable cardiac assessments is truly possible with the Vivid *iq* Ultra Edition.

With uncompromised heart visualization and excellent quantification tools, you'll save precious time with the GE Vivid AFI LV with AI-based View Recognition, and Auto EF for rapid LV Strain assessment. Al-powered measurements and tracing tools are easy to use, even by nonspecialized users.

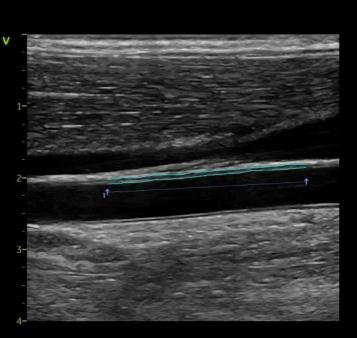
Use the new AFI RV tool to assess RV systolic function and estimate disease prognosis.

Bedside lung assessment is made easier with dedicated FAST and lung presets that help to

Vascular quantification

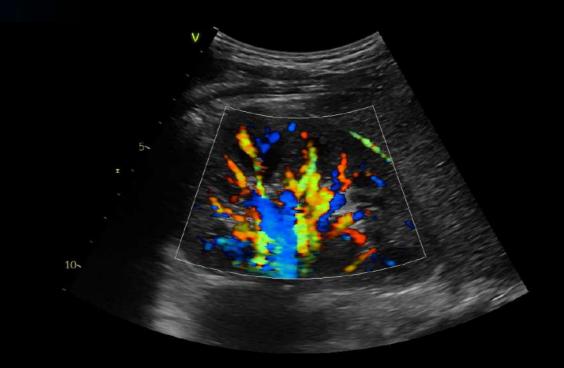
Media Thickness, with dedicated vascular measurement tools.

0.12 cm IMT A Avg 0.59 mm IMT A Max 0.76 mm 0.40 mm IMT A Min IMT A SD 0.08 mm IMT A Pts 694



Abdomen diagnosis

Visualize tissues and flow patterns with greater details thanks to Vivid iq Ultra Edition's high-resolution imaging.



CLINICAL **EXCELLENCE** beyond Cardiology

The demand for multi-purpose, cost efficient ultrasound systems with uncompromised image quality is growing. Your portable Vivid *iq* Ultra Edition will exceed your expectations across a wide range of applications.

With the aging population, vascular and abdominal exams are increasingly challenging. Vivid *iq* Ultra Edition provides you exceptional 2D and color flow imaging across applications including vascular, abdominal, fetal/obstetrics, and other applications beyond cardiology.

Efficient workflow, flexible touch screen display options (up/down, left/right), wide probe range and quantification tools ensure the confidence you need for speedy and accurate diagnosis also under challenging conditions.

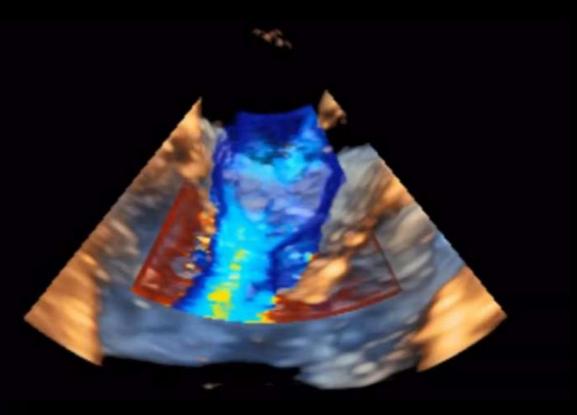
Develop fast and complete quantitative assessment of vascular anatomies, such as the Intima





HD Color

4D color flow rendering technique for semi-tran velocity jets.



CLINICAL EXCELLENCE

for Interventional Procedures

When minimal footprint and infection control are critical, your heart team will appreciate a portable solution.

While intracardiac echo (ICE) is a dynamic and growing space, procedure rooms may be small and overcrowded, and infection control a constant struggle.

With the Vivid *iq* Ultra Edition minimal footprint, you can overcome your space constraints, while easily navigating imaging via the trackpad and touch screen, with your gloves on.

HD Color adds precision and insight to your everyday 4D TEE pre-operative screening and diagnostic procedures.

Expect more from your portable ultrasound and benefit from the Vivid family advanced multiplane and 4D visualization and navigation tools.

2D ICE

Great image quality, with easy and intuitive Intracardiac echo (ICE) touch user interface for your 2D ultrasound-guided ablation and structural heart procedures.

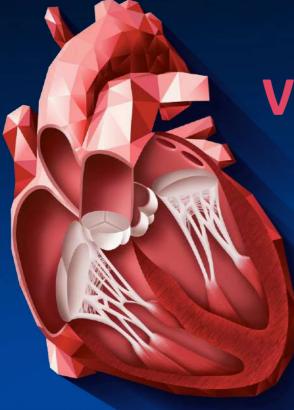


4D color flow rendering technique for semi-transparent visualization of origin and size of high





Vivid iq Ultra Edition

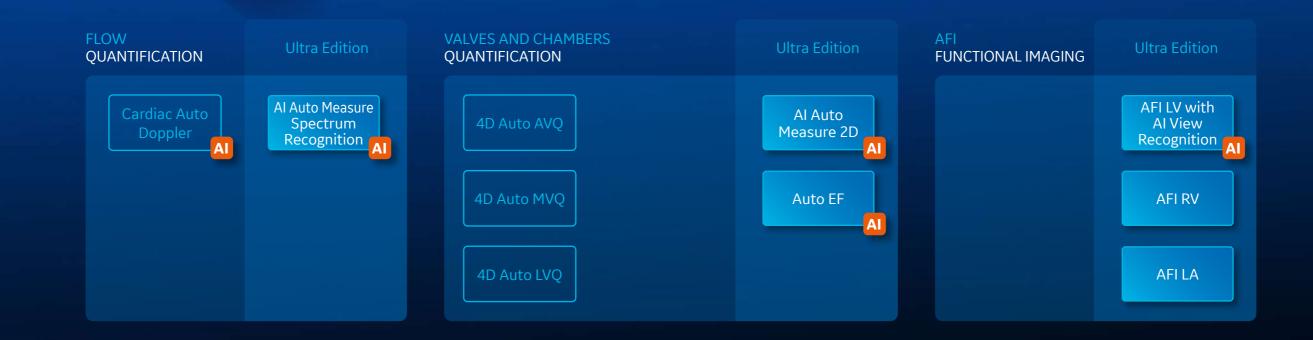


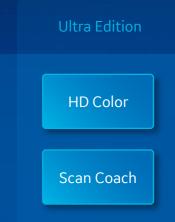
VIVID HEART APPLICATIONS

A wide range of clinical applications for use in Echo Lab, in the ICU and NICU, in the EP Lab and Cath Lab, and in Cardiovascular practices.

VISUALIZATION AND NAVIGATION







APPLICATIONS POWERED BY

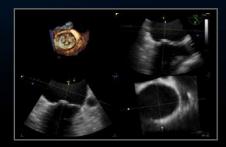




VISUALIZATION AND NAVIGATION

New in Ultra Edition

Why guess? When you can see.



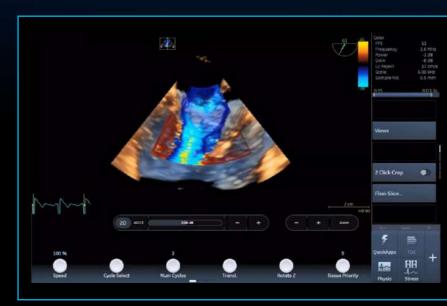
FlexiSlice

With a distance gauge and two viewing layouts, this interactive tool for obtaining 2D or render views in live or replay mode may provide enhanced insight as well as save time.



FlexiViews

Gain quick access to predefined 4D/ multiplane views during live mode, potentially reducing scan time during complex interventional procedures.





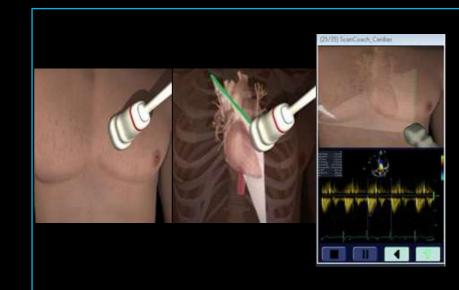
4D Markers

Make annotations that are viewable from all angles on 4D ultrasound volume data sets and their 2D views, facilitating communication in the echo lab, cath lab and OR.



View-X

See X-ray from fluoroscopy in real time right on your Vivid *iq* Ultra Edition screen as a picture in picture, facilitating communication between team members.



Ultra Edition

HD Color

4D color flow rendering technique for semitransparent visualization of origin and size of high velocity jets.

Benefits:

- Enhance spatial relationships between flow and the surrounding structures
- Suppress non-diagnostic low flow information
- Work seamlessly with other visualization techniques such as 4D markers
- Supports 4D color flow data also from previous releases

Ultra Edition

Scan Coach

A reference and education tool that provides modules depicting basic scanning techniques with animated graphics of probe position, schematic of anatomy and reference clinical image.

Benefits:

Guided scanning:

- Conveniently located onboard the console within the Scan Assist Pro feature
- Provides guidance to obtain different views and measurements
- Helps inexperienced users performing echo scans

Education and reference tool:

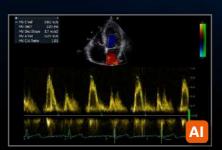
- Assists in positioning the probe and probe orientation
- Anatomical reference helps visualize where the scan plane is located inside the heart
- Scan Assist Pro exam protocols can be customized per local guidelines and help ensure exam completeness



VIVID HEART APPLICATIONS

FLOW QUANTIFICATION

Your time is precious. Save it.

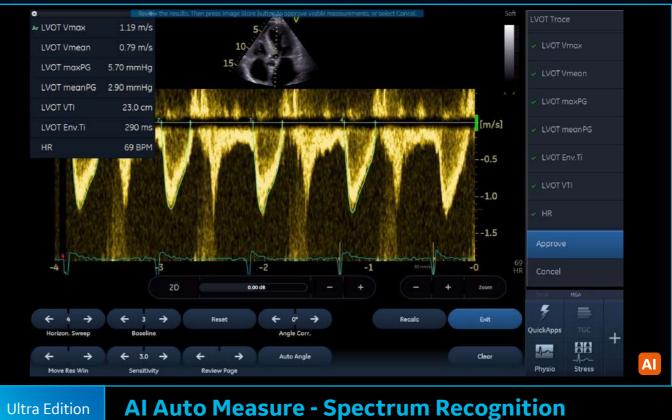


Cardiac Auto Doppler

Semi-automatic Cardiac Doppler measurements.

Benefits:

- Enhances reproducibility of follow-up studies when used in automated mode 7
- Offers Doppler measurement in multiple cardiac cycles as recommended by guidelines for irregular heart rhythms^{8,9}
- Supports less experienced users with advanced automation



Semi-automatic selection of appropriate spectral Doppler measurement tool. Benefits:

- Enables fewer manual interactions by automatically opening the appropriate measurement tool ⁶
- · Works seamlessly with Cardiac Auto Doppler
- Enhances reproducibility of follow-up studies when used in automated mode ⁶
- · Supports less experienced users with advanced automation

New in Ultra Edition

APPLICATIONS POWERED BY