



# Vivid E95

Patient Care. Elevated.



# Taking your cardiovascular care insights to a new level.

## Patient Care. Elevated.

Empowered. Expanded...Artificial Intelligence.



At GE Healthcare, we're committed to support the vital work you do with patients every day. Leveraging artificial intelligence powered by GE Healthcare's Edison platform, we've taken the extraordinary processing capacity of our breakthrough software beamformer, cSound™, to a whole new level.

As a result, now you can empower your care team with the expanded advantages and artificial intelligence of the Vivid™ E95 cardiovascular ultrasound system. Diagnose more confidently with the help of enhanced 2D and color image quality. Accelerate exams via extended automatic Doppler measurements for TEE and TTE. Gain reproducible

results with advanced capabilities for quantifying heart function and ejection fraction. All so you can make every moment count with patients – seeing problems clearly and quickly, performing procedures with great precision ... and providing Patient Care. Elevated.

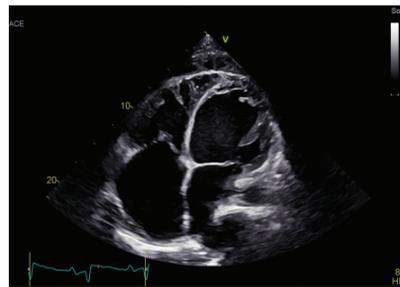


## Echo Lab

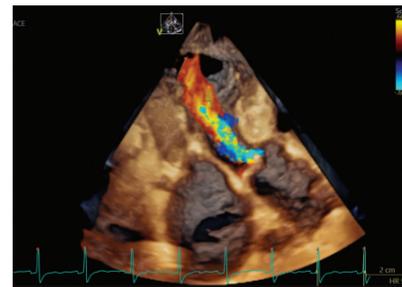
### Visualization

#### One patient, one probe

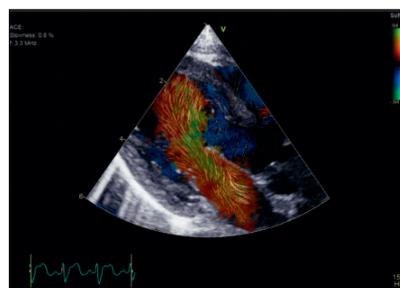
The new one-probe adult 4D TTE solution on the Vivid™ E95 provides an excellent ergonomic workflow solution with uncompromised 2D, 4D, color and Doppler image quality performance at ultra-high volume rates – all with a single probe. This allows for complete and comprehensive diagnosis with one probe and avoids switching of probes, thereby reducing exam time and helping you move swiftly through your work with minimal muscular stress and strain on the operator.



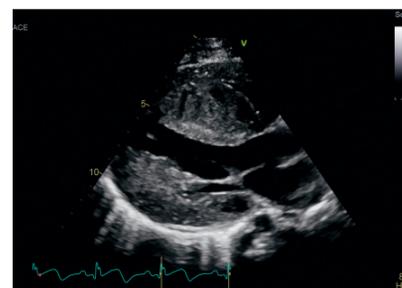
**TCI and ACE** – Observe the spatial, temporal and contrast resolution in the 2D image obtained with this new 4Vc-D probe.



**4D color imaging with the 4Vc-D probe** – This aortic valve regurgitation shows the E95's high volume rates with excellent spatial resolution in single beat acquisition.



**Blood Speckle Imaging** – Available for pediatrics as well as transesophageal echo (6VT-D only), BSI, which reduces the angle dependency and aliasing issues of conventional color flow, provides a graphical representation of the trajectories of the blood cells.

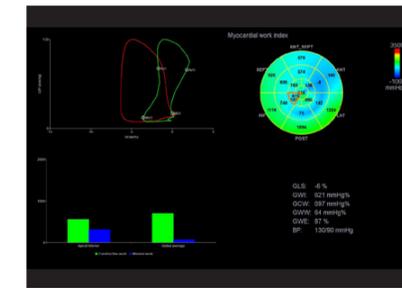
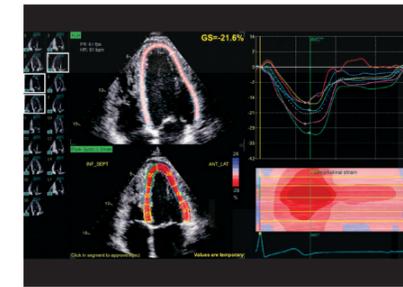


**Virtual Apex** – Phased array probes provide a wide field of view for enhanced visualization of structures at the sides of the sector.

## Quantification

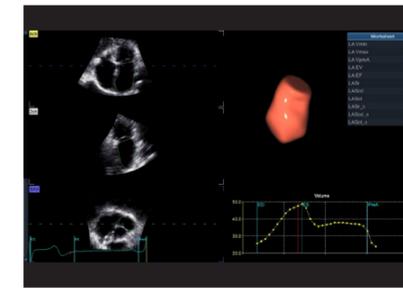
### Define the care path

Quantification with Vivid E95 is all about helping providers evaluate problems and pursue the path forward. Count on a full suite of intuitive tools to make your work easy and efficient. Quickly, accurately and thoroughly quantify left and right ventricular wall motion and other key functions.

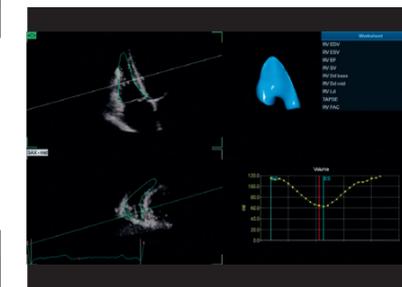


**Myocardial Work** – Using new and reduced load dependent parameters, Myocardial Work may provide more accurate and reproducible results, important especially for follow-up of patients over time. The new parameters are based upon the results obtained with AFI (longitudinal strain) by accounting for the systolic blood pressure measured at rest immediately prior to the echo exam, as well as the MV and AV opening and closure times.

**Automated Function Imaging (AFI) 2.0** – AFI 2.0 with the help of the artificial intelligence-based View Recognition feature will provide automated quantification of left ventricular segmental and global longitudinal strain as well as several other related parameters, including ejection fraction.



**4D Auto LAQ** – This semi-automatic surface detecting algorithm helps clinical users get fast, reproducible and accurate 4D quantification of the left atrium, acquired with 4D TTE probes. It provides left atrial volumes as well as ejection fraction, global longitudinal and circumferential strain.



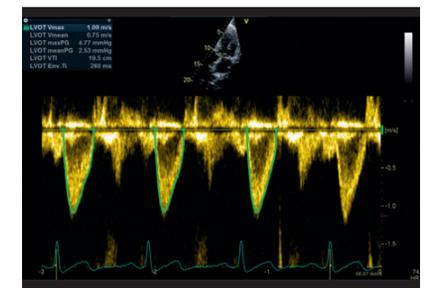
**4D Auto RVQ** – This package helps visualize and quantify the right ventricle in TTE images via a semi-automatic, surface-detecting algorithm. It's seamlessly integrated into the regular M&A menu, with results ready for immediate review.

## Workflow

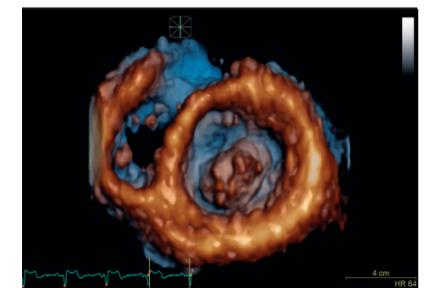
### Streamline your exams

Vivid E95 with cSound performance makes 4D imaging as easy as 2D imaging with efficient and intuitive tools. The high-quality raw data as well as the DICOM format adapts to your preferences in terms of resolution and gray scale. You can move smoothly through your work, thanks to automated tools that minimize user interaction and provide quick access to stored settings.

The **QuickApps** tool provides flexibility and easy workflow by providing instant access to settings that were stored earlier to match your color flow or contrast parameters, keeping the geometry of the current live image.



**Cardiac Auto Doppler** – This artificial intelligence-based tool provides Doppler measurements over all heart cycles for the most common parameters, supporting consistent results and potentially saving time in both adult and pediatric TTE and TEE studies.



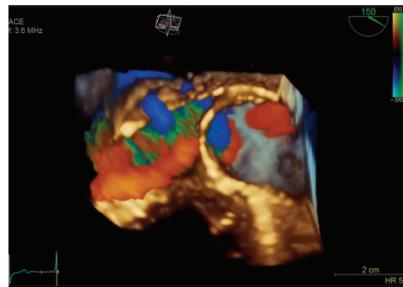
**4D Views** – With one touch, view different options such as 4-chamber, 2-chamber, APLAX, mitral valve, septum, and aortic valve. After a rapid alignment, the app takes the full volume acquisition data set and automatically crops away the volume to instantly deliver the view you want.

## Interventional

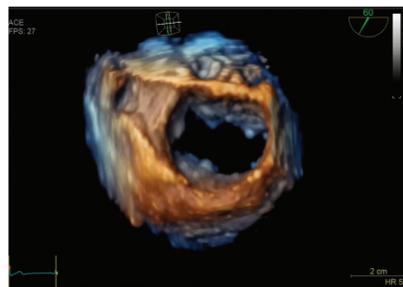
### Visualization

**Ultra-high single-beat volume rates**  
With TEE procedures growing, so is the need to find ways to achieve the benefits of 4D imaging without compromising productivity.

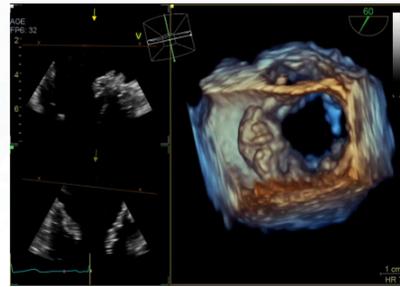
Vmax<sup>®</sup> enabled by cSound™ 2.0 offers ultra-high 4D volume rates acquired in single beat acquisition with no loss of image quality. Elimination of ECG gated multibeat/stitching acquisition provides enhanced overview of structures and function in cases with high and/or irregular heart rhythm – which potentially reduces interventional procedure time and improves patient outcomes.



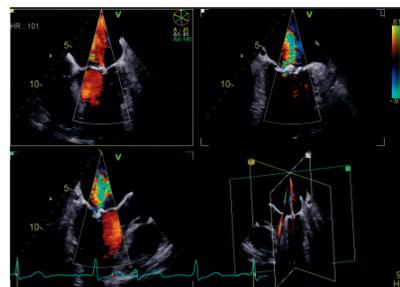
**4D TEE color imaging with Vmax** – This aortic valve flow overview acquired at 10 fps demonstrates 4D color volume rates at large volume sizes, acquired in single beat acquisition.



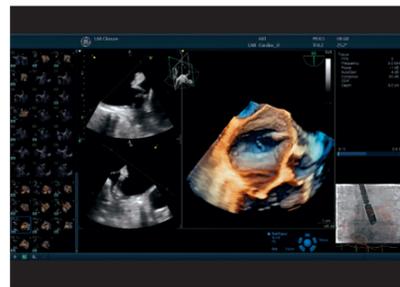
**HDlive™** – This advanced visualization method simulates light propagation and scattering through tissue.



**FlexiZoom** – Access this intuitive user interface for flexible, quick and easy visualization of the structures of interest.



**Triplane** – Image three planes from the same heartbeat, with high temporal and spatial resolution.



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

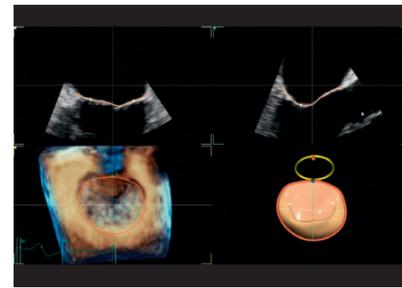


**Micro TEE Multiplane Probe** – Clearly visualize complex heart conditions in neonatal patients (down to 2.5 kg) and for adults with intolerance to standard TEE. The small tip size and excellent image quality allows for use during certain interventional procedures, as shown in this LAA example.

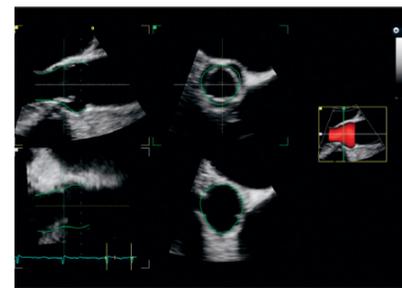
### Quantification

#### Exploration made easy

Quantification with Vivid E95 elevates providers' ability to evaluate problems and pursue the path forward. Count on a full suite of intuitive tools to make your work easy and efficient.



**4D Auto MVQ™** – Supporting TEE images, this integrated package helps visualize and quantify the mitral valve via a semi-automatic, surface-detecting algorithm.

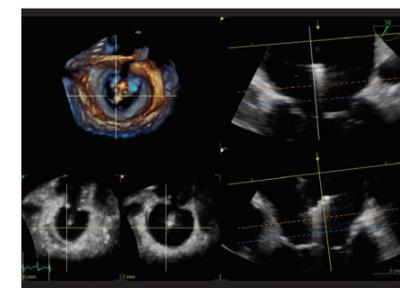


**4D Auto AVQ™** – Automatically segment, align and quantify the aortic outflow tract – vital to device sizing and orientation for TAVI/TAVR procedures.

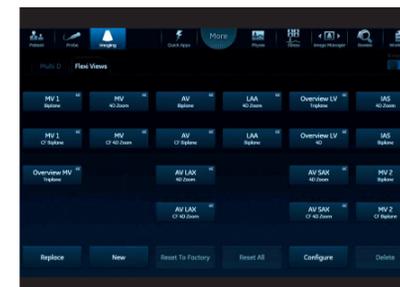
### Workflow

#### Facilitate complex procedures

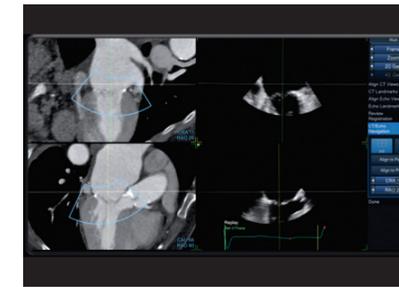
You can move smoothly through your work, with tools that help to simplify workflow and reduce scanning time. Additional tools include 2-click crop, Biplane prepare and 4D views.



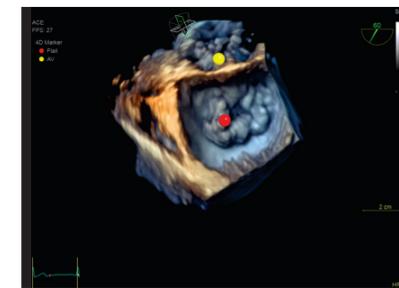
**FlexiSlice** – With a distance gauge and two new viewing layouts, this updated interactive tool for obtaining 2D or render views in live or replay mode may provide enhanced insight as well as save time.<sup>1</sup>



**FlexiViews™** – Gain quick access to predefined 4D/Multiplane views during live mode, potentially reducing scan time during complex interventional procedures.



**CT Fusion** – Simultaneously navigate 4D ultrasound and CT data, which can be used to relate 4D ultrasound images to X-ray fluoroscopy orientation.



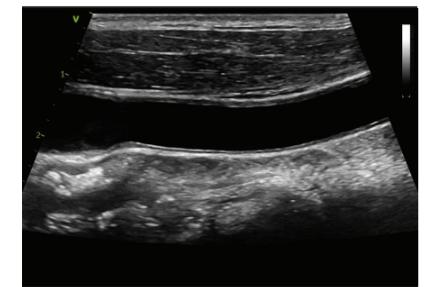
**4D Markers** – Make annotations that are viewable from all angles on 4D ultrasound volume data sets and their 2D views, facilitating communication in the echo lab, cath lab and OR.

## Shared Services

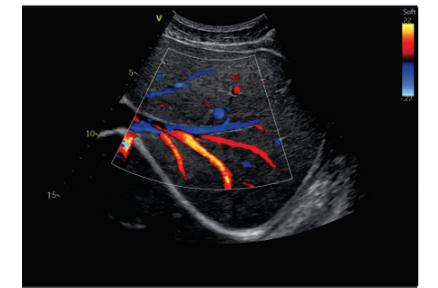
### Visualization

#### Image a wide range of patients

Vivid E95 delivers superb performance in your shared services operation, including cardiac, stress echo, vascular, abdominal, OB/GYN and small-parts applications. With a growing obese population, XDclear™ probes combined with cSound beamformer technology can make a difference in many of your exams, helping you quickly and easily acquire images on many different patient types.



**Vascular** – The two linear probes, 9L-D and 11L-D, highlight True Confocal Imaging (TCI) – providing automatic focusing throughout the field of view, with superb signal-to-noise ratio and excellent spatial resolution both near and far. Together with Virtual Convex™ provides a wider far field visualization and aims to enhance image quality.



**General Abdominal** – The two curved array probes, C1-6-D and C2-9-D, support general imaging as well as abdominal, renal, urology and OB/GYN applications. Both probes have XDclear™ transducer architecture, which delivers the high spatial resolution and deep penetration required for uniform presentation of anatomic structures throughout the field of view. The endocavity transducer, iC5-9-D, is also available.

## Ergonomics

### A familiar, yet modern and efficient package

- Choice of a 22" high-quality, high-resolution, wide-screen OLED monitor or a 24" high-resolution, high-contrast LCD monitor
- 12" LCD touch screen
- Adjustable floating keyboard
- Convenient data management
- Easy mobility
- Low power consumption with efficient and low noise cooling
- Minimal muscular stress and strain for operator with one-probe solution (4D TTE)



## ViewPoint™ 6 With EchoPAC™ Suite<sup>1</sup>



### Image and Measurement Transfer

- Raw data and all measurements (including customized) from Vivid® Systems
- User selectable raw data file transfer in DICOM environment.
- User selectable transfer of systolic part of loop for stress echo, in DICOM environment
- DICOM™ and public DICOM SR from 3rd party
- Pediatric DICOM SR Support

### EchoPAC Post- Processing

- Full access to GE raw data
- Access to all Vivid measurement tools
- Review, post-process, and measure using AFI, Wall Motion Scoring, etc.

### Image Management

- Store and review cine loops and static images
- Measure
- Annotate
- Export
- Send to/Retrieve from Long Term Storage

### Reporting

- Create clean, comprehensive, easy-to-read reports
- Complete reports faster with quick report templates
- Easily add images to report
- Option to customize reporting forms and printout
- Report templates for TTE (adult and pediatrics), TEE (adult and pediatrics), Stress, Vascular

### IT Integration

- HIS Interface (HL7)
- Patient Data
- Orders
- EMR Interface (HL7)
- Report Text
- Formatted report (PDF)
- PACS Interface (DICOM)
- Export
- Long term Archive

GE Healthcare has a variety of service solutions delivering flexibility and value for your ultrasound equipment.

### AssurePoint™ Services

**We can help optimize equipment availability and improve productivity.** Innovative remote and proactive technologies that assist with reducing unplanned downtime.

**We can help maintain clinical excellence and enhance patient care.** Knowledgeable, timely support to help keep equipment operating at peak performance.

**We can help manage risk and meet budget realities.** Informatics and decision support tools to extend useful equipment life and meet changing regulatory requirements.

### iLinq™

**Real-time answers to technical questions.** Direct access to technical expertise right from the console in as little as four minutes.

### InSite™

**Fast diagnosis and repairs.** Remote access to system configuration and diagnostic tools. Allows GE specialists to diagnose, calibrate and repair systems remotely without user intervention.

**Personalized clinical expertise support direct to customers.** Real-time remote support from clinical application domain experts.

### iCenter™ Maintenance

**Asset analytics at your fingertips.** A secure internet application providing informatics for enhanced asset management decision making.

### Accidental Probe Coverage

**Coverage assurance for your probe accidents**

### QA Care

**QA documentation support for ultrasound accreditation.** GE Healthcare helps to provide a solution to the image quality and system performance documentation to help control the impact the accreditation process has on your staff and the patient imaging time. The Quality Assurance (QA) program covers the equipment performance and image quality system checks specified by the American College of Radiology and other accrediting bodies. These services can help expedite the accreditation process and help you maintain your accreditation.

<sup>1</sup>EchoPAC Suite is a marketing name of EchoPAC Plug-in.

## Security

**Vivid E95 is built and configured for reliability and security.**

**LDAP** – Help ensure patient data safety with Lightweight Directory Access Protocol, which allows your IT team to maintain greater control of who's in the system, reducing the risk of breaches.

**Configurable system password** – There are fully configurable user log-on passwords and internal passwords that can meet your IT department's requirements regarding security strength.

**Disk encryption** of the drive, which contains patient archive and images, helps ensure safety and privacy of the data, even in case of theft.

**Windows® 10 Operating System** with application whitelisting to prevent unauthorized programs from running and potentially harming the scanner.

## Connectivity

**Pediatric DICOM SR support** – Pediatric measurements sent by SR automatically populate the pediatric report on the receiving side for fast, accurate review elsewhere.

**Enhanced support for cardiac and vascular DICOM SR,** including user defined measurements.

**Tricefy® Uplink\*** – Expedite uploading of images and patient data to Tricefy Cloud – a long-term archive that enables image sharing with colleagues or patients.

**Automated raw data transfer** – The AI-based View Recognition feature simplifies use of raw data in a PACs environment.

\*Optional

\*\*Compared to scanning without Virtual Convex.

†Compared to v201

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