

**ACUSON Bonsai**  
Cardiovascular Ultrasound System  
**The essence of power  
and portability**



# Addressing your challenges in echocardiography

With the number and complexity of cardiovascular cases today, the need for portable, high quality fast echo exams is growing throughout the healthcare system from the hospital to the physician office and from the echo lab to the patient's bedside.

The ACUSON Bonsai ultrasound system is an ultra-portable system that provides the perfect harmony of power and portability. It performs in any environment – wherever and whenever you need it without compromising mobility or imaging performance.

The highly compact system provides exceptional imaging results, a wide variety of advanced applications and workflow features that enable you to transform your care delivery and improve your patient's experience throughout your day.



# Facts and figures

**34 million echo exams in the USA in 2017<sup>1</sup>**

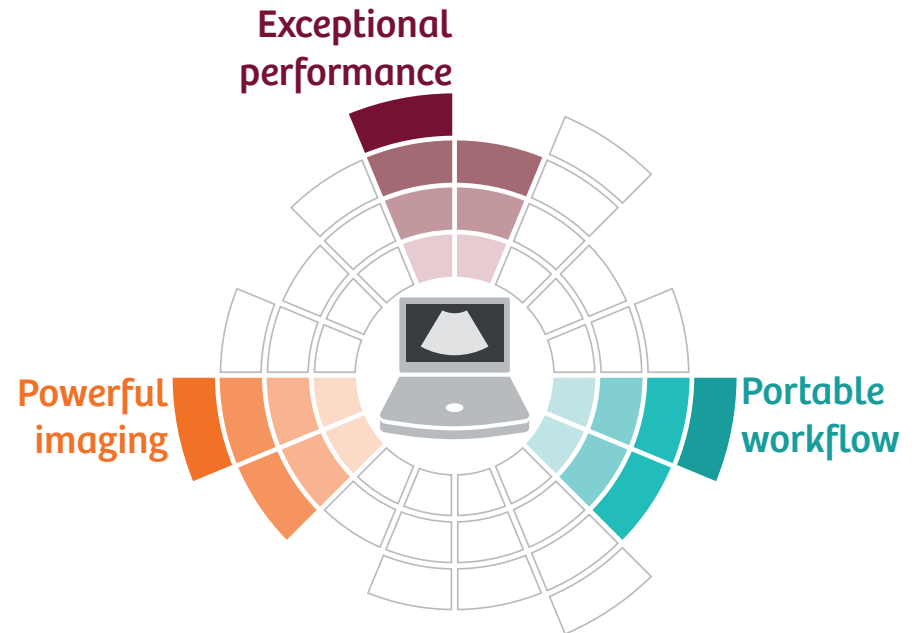


**The 2018 CMS reimbursement rate for high-volume TTE Doppler studies rose by as much as 15%<sup>2</sup>**



The ACUSON Bonsai system addresses your challenges in routine echo with:

- **Powerful imaging** to improve your clinical confidence
- **Exceptional performance** to help you instantly assess a variety of patient conditions
- **Portable workflow** to improve your efficiency whenever and wherever you need it



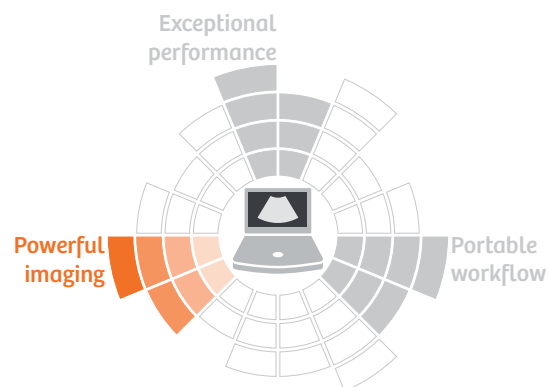


# Powerful Imaging

Powerful precise imaging starts with diagnostic accuracy and consistency. This requires an ultrasound system designed with unique imaging technologies that will deliver accurate and reproducible results no matter who the patient is, no matter who's operating the system, no matter who's reading the images.

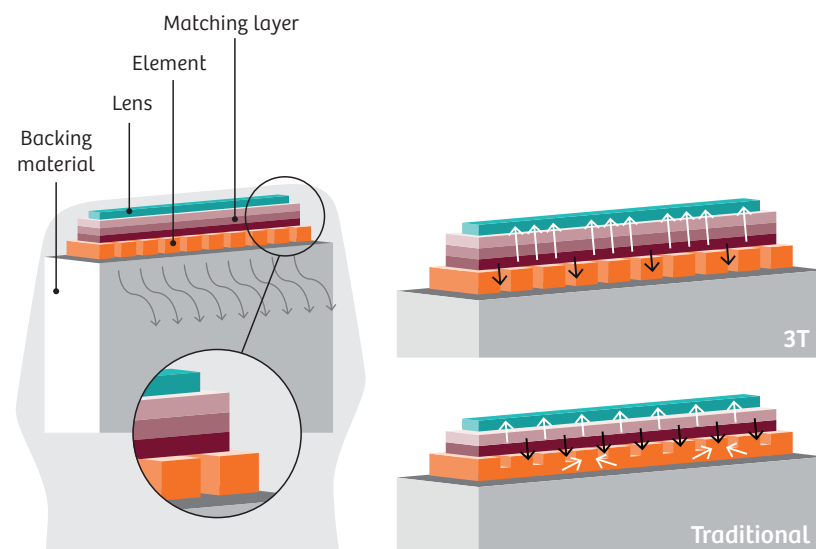
## Single crystal 3T™ technology

Featuring a unique single crystal 3T™ technology, paired with 12-beam and 128-channel signal processing, the ACUSON Bonsai system provides precise imaging results. One-touch image optimization and advanced imaging capabilities further enhance clinical outcomes and ease-of-use.



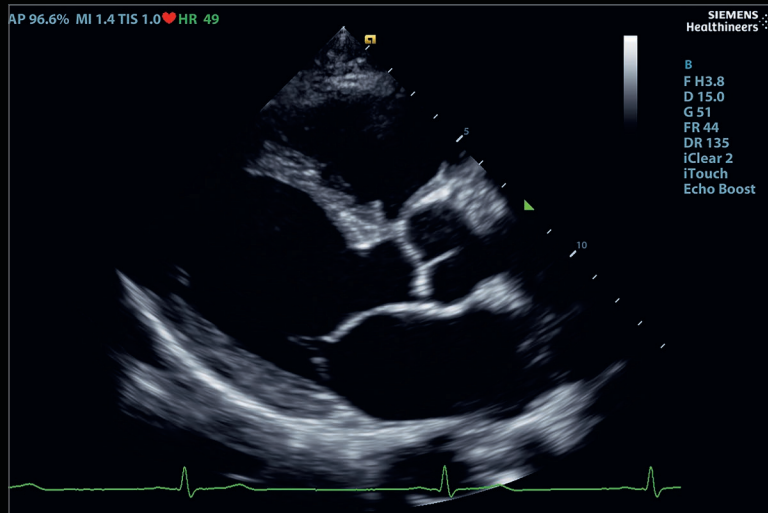
Single crystal 3T technology has a proprietary:

- **Triple-matching layer design** for higher sensitivity, wider bandwidth, and improved S/N.
- **Total-cut design** for lower cross-talk noise, better directivity, and improved lateral resolution.
- **Thermal-control design** for better acoustic transmission and better S/N.



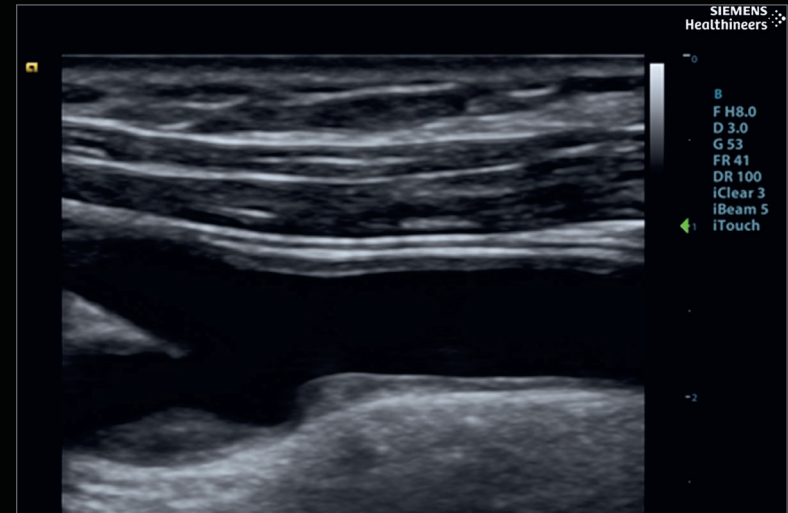
The power of the ACUSON Bonsai system will allow you to do pharmacological stress tests with contrast where ever needed.

## Quick image optimization



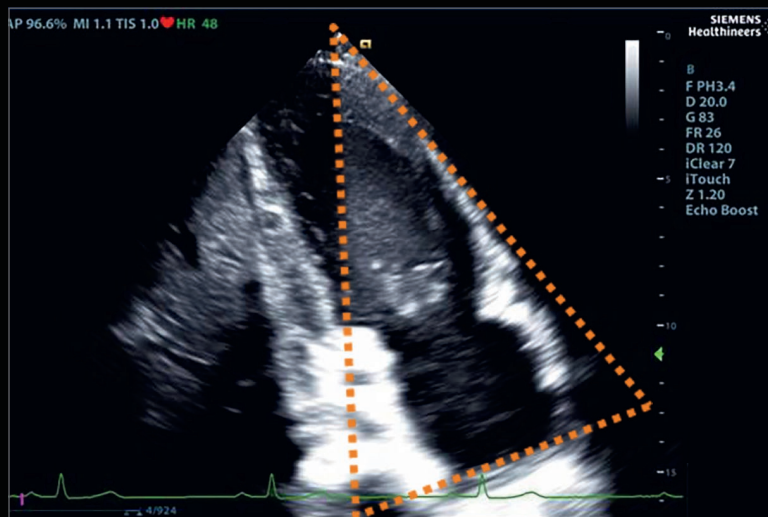
### Echo Boost™ (Auto Image Optimization)

PLAX view using the SP5-1s transducer with Echo Boost™, iClear™ (Speckle Suppression Imaging) and iTouch™ (Auto Gain Optimization). Echo boost improves the homogeneity of cardiac images throughout the whole field of view.



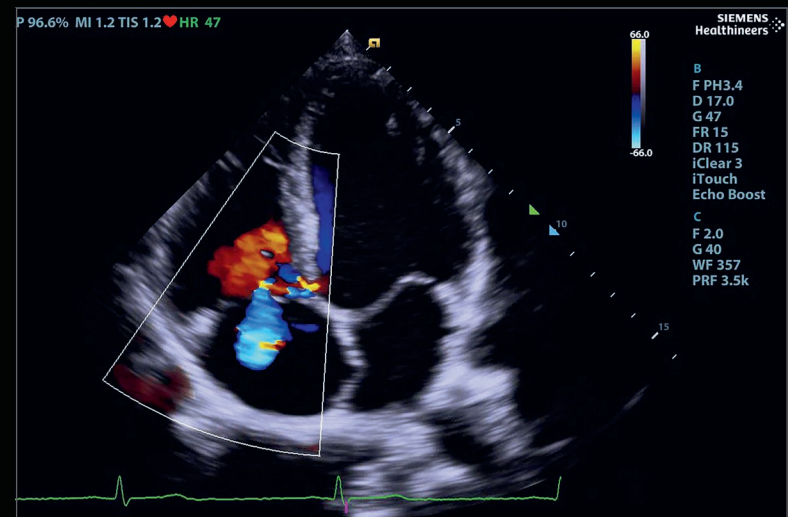
### iBeam™ (Spatial Compound Imaging)

Carotid artery using the L10-3s transducer with iBeam™.



### LGC (Lateral Gain Control)

Apical two chamber view using the SP5-1s with LGC sector 3 & 4 enabled highlighting the endocardial border of the left ventricle.



### HDR Flow (High Dynamic Range)

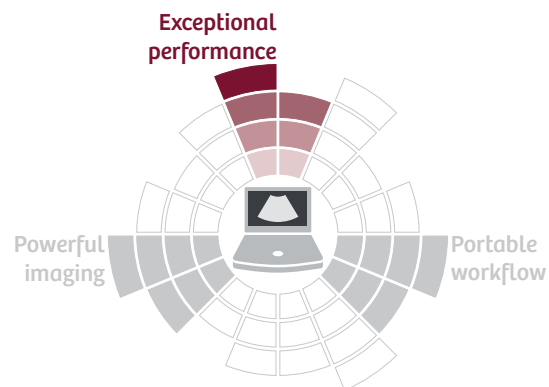
Apical four chamber view using the SP5-1s transducer with HDR Flow which simultaneously visualizes low flow and high flow states.

# Exceptional Performance

Transforming care delivery is about access and efficiency. It starts with improving access to precise care and delivery. Once in the system, care delivery is predominantly about efficiency – increased workforce productivity and optimized clinical operations.

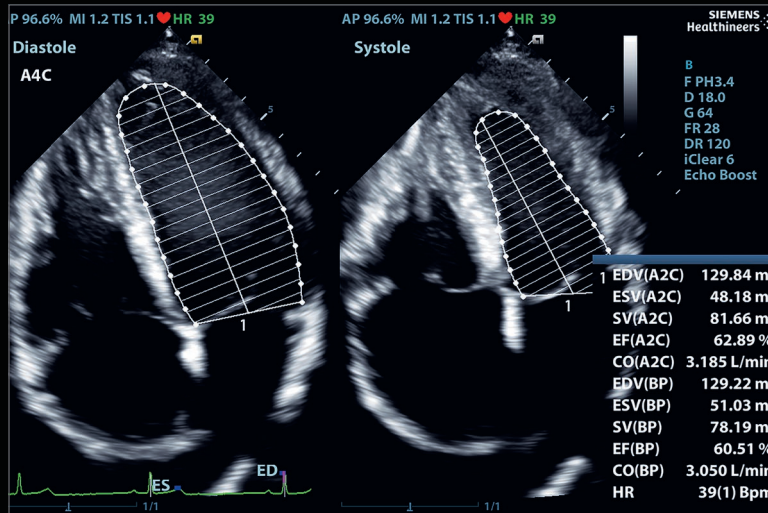
With the ACUSON Bonsai system you can confidently assess your cardiovascular patients with a complete set of user-friendly applications: Auto EF, stress echo, strain, auto IMT, and anatomical M-mode. These highly focused features support all your routine cardiovascular exams, allowing you to support more patients in more environments.

Relax knowing that you have exceptional performance in a compact system to complete your routine exams – from pediatric and adult routine echo to TEE and vascular.



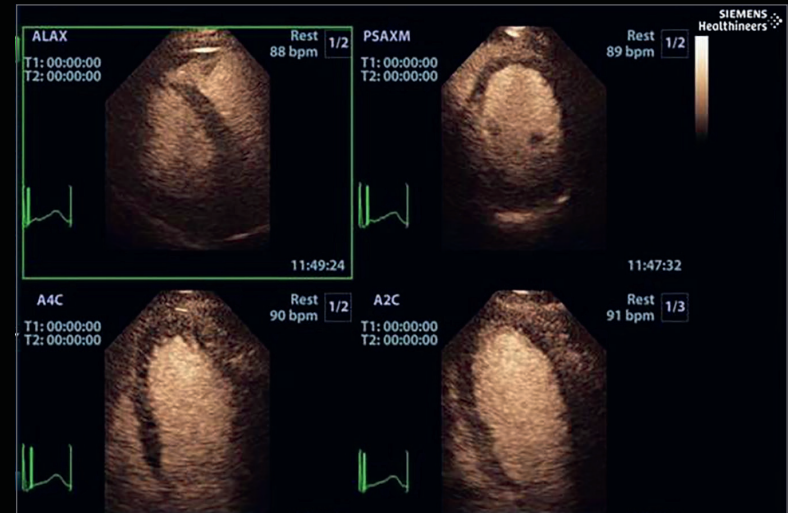


**For all your  
routine echo  
exams**



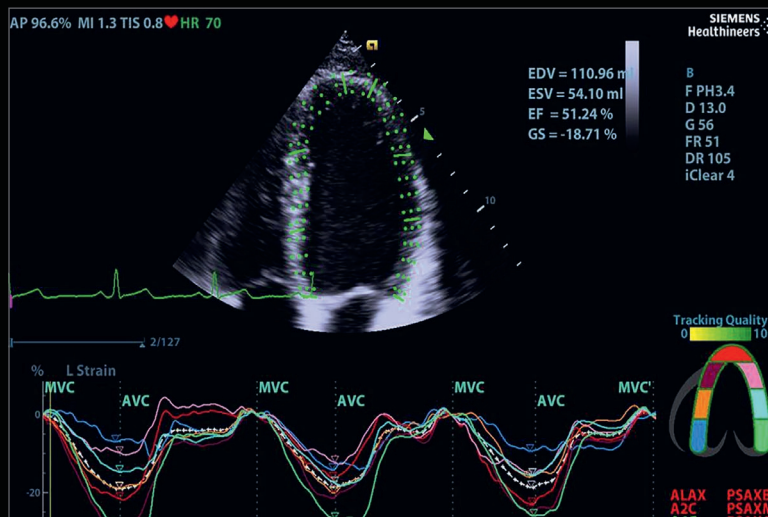
#### AutoEF (Automatic Ejection Fraction measurement)

Apical four chamber view using the SP5-1s transducer with results from one-click AutoEF.



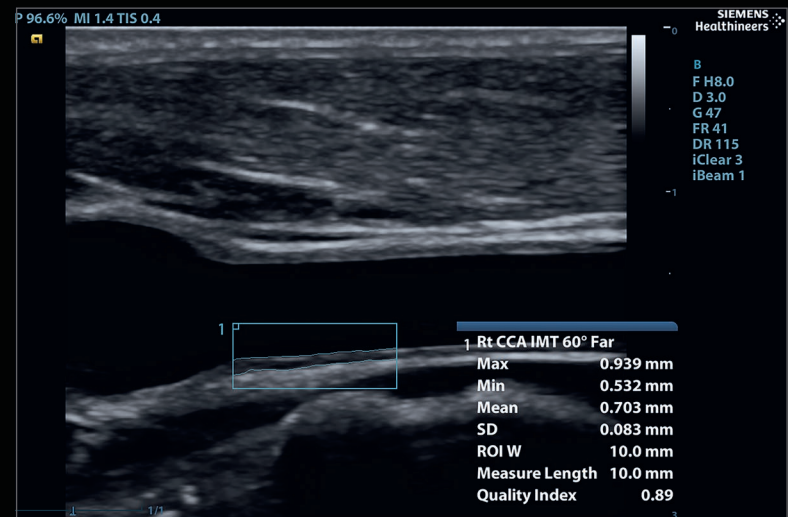
#### Stress Echo with LVO (Left Ventricular Opacification)

Assess LV function using the SP5-1s transducer during a stress echo exam using LVO Contrast Imaging (UWN (Ultra-Wideband Non-Linear)+ Contrast Imaging™)³.



#### Strain/Strain Rate (Tissue Tracking Quantitative Analysis)

Apical four chamber view quantifying left ventricular longitudinal strain with Tissue Tracking Quantitative Analysis.



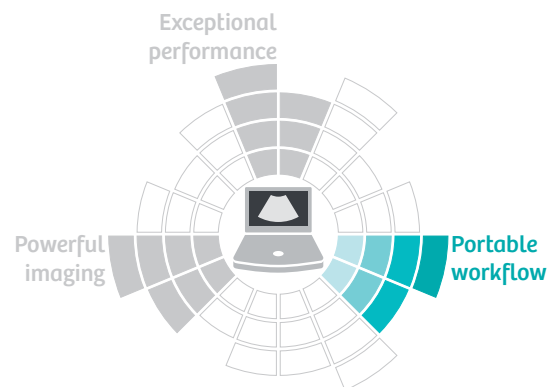
#### Auto IMT (Automatic Intima-media thickness measurement)

The intima-media of the carotid artery is highlighted using the Auto IMT feature.

# Portable Workflow

Improving access to care has many dimensions. Access is about availability – about making care available everywhere.

Whether mounted on the user-friendly cart or hand-carried, the ergonomic design of the ACUSON Bonsai system provides the ergonomic functionality required to optimize the cardiovascular environment. Its slim profile makes it easy to transport and store. Multiple applications and customizable function keys improve workflow and patient care through customizable measurements and reports.



## Ultra Portable Design

Lightweight system that is easy to maneuver, weighing 12.8 lbs with a quick boot up time, 7 seconds from standby and 28 seconds from first boot

## Optimized Monitor

15.6" 1080P LED backlit monitor with automatic ambient lighting

## Meaningful Ergonomics

State-of-the-art noiseless system (39 dB) with a control panel home-based design that includes 8 user-defined keys and a 10 inch adjustable height cart

## Long Lasting Battery

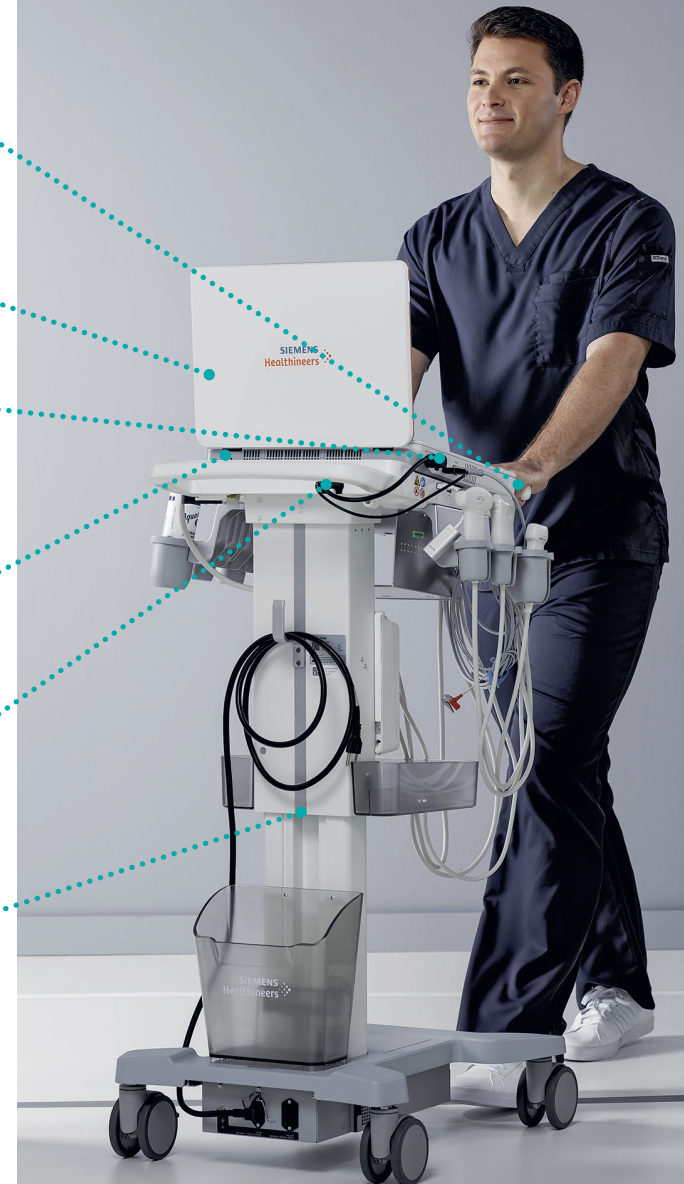
Lithium-Ion battery that has 3.5 hours working battery on both the system and cart batteries

## Durability

Whole body is encompassed in a Magnesium-alloy shell with a spill resistant user interface

## Integrated Cart

A durable, 10 inch height adjustable cart with cart lock for system security







### **Enhance workflow with raw data advanced post-processing**

The ACUSON Bonsai system allows raw data advanced processing of archived images to help improve clinical workflow and patient throughput.

### **Standardize and facilitate complete exams using iWorks™ with INsert™ Automated Exam Protocols**

- Facilitate exams with up to **43%** reduced exam time and up to **75%** fewer keystrokes<sup>4</sup>
- Improve diagnostic confidence with automated image acquisition protocols

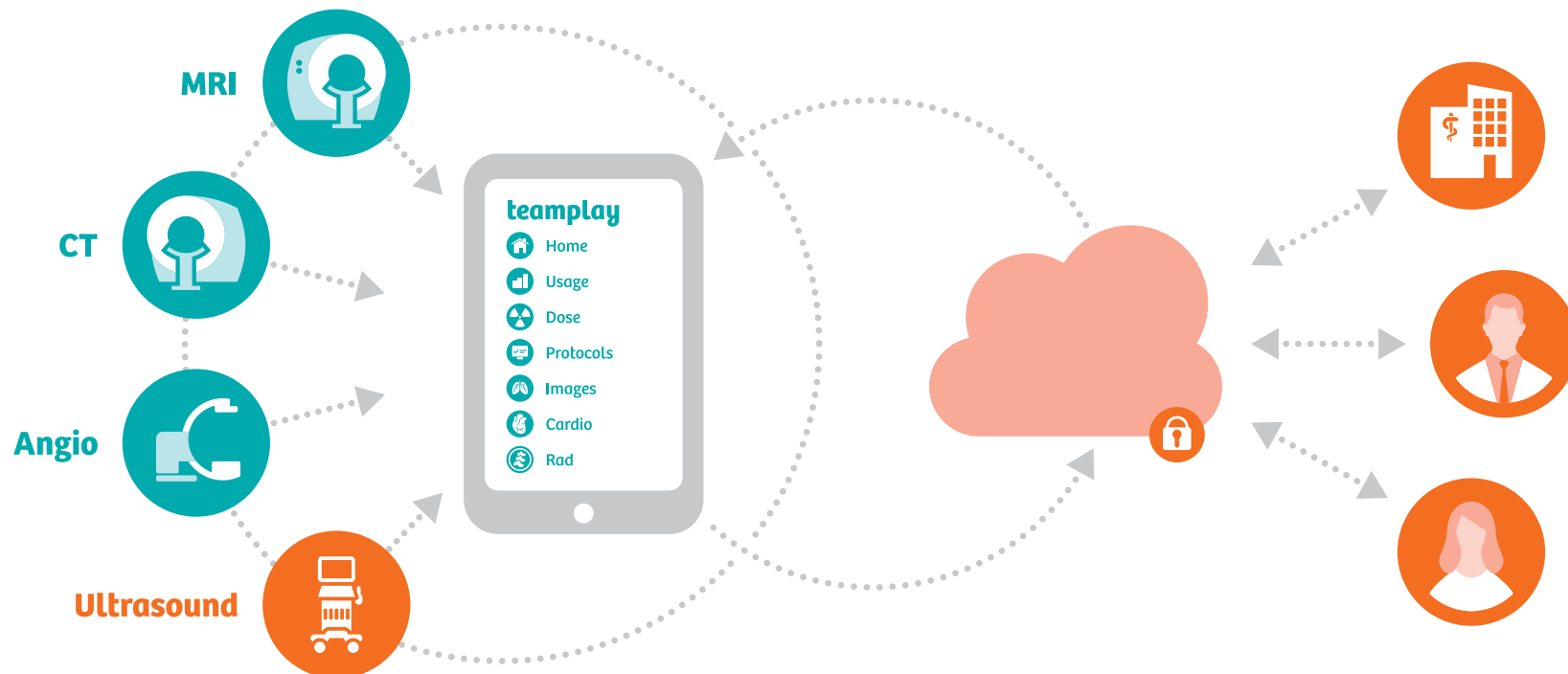
### **Adapt the system to your individual needs**

- Create your own output options, measurements and reports with eight completely customizable keys. This also allows you to launch advanced features such as Auto EF, anatomical M-mode, strain and Auto IMT
- Customization increases efficiency and enables user-specific work preferences helping to prevent user fatigue

# teamplay

## Cloud-based network for imaging fleet management

teamplay is a cloud-based network that brings together healthcare professionals in order to advance medicine and human health as a team effort. Be it an institution, hospital chain, or integrated delivery network, transparency of performance is key to its success. teamwork brings this transparency to the imaging fleet. With its built-in multivendor support, it grants instant<sup>5</sup> access to fleet statistics. And more crucially, it empowers healthcare professionals to identify improvement potential on all levels of execution.



# Siemens Healthineers – taking Ultrasound to new heights

Today, every health system struggles with rising costs and varying quality. Diagnoses and treatments are designed with the typical patient in mind. Delivery of care is often fragmented and focused on volume. The patient experience journey is in its infancy. And health-care does not yet leverage the full potential of data.

At Siemens Healthineers, we believe that transformational changes will make it possible to turn today's challenges into opportunities. That is why it is our mission to enable healthcare providers to achieve better outcomes at lower costs by helping institutions to transform care delivery and improve the overall patient experience.





The products/features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

Standalone clinical images may have been cropped to better visualize pathology.

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## Endnotes

1. Arlington Medical Research, Echo monitor report 2017
2. The 2017-2018 echo Medicare Physician Fee schedule
3. The ACUSON Bonsai Ultrasound System is designed for compatibility with commercially available ultrasound contrast agents. Because the availability of these agents is subject to government regulation and approval, product features intended for use with these agents may not be commercially marketed nor made available before the contrast agent is cleared for use. Contrast related product features are enabled only on systems for delivery to an authorized country or region of use. Siemens Healthineers makes no claims concerning the safety or effectiveness of contrast agents.
4. The Role of a Protocol Management Feature in Improving Ultrasound Lab Efficiency, 2016
5. Prerequisites include: wireless connection to clinical network, meeting recommended minimum hardware requirements, and adherence to local privacy and security regulations.

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