ULTRASIGHT
at the heart of every echo

ENABLING ECHO STEWARDSHIP

Task Shifting to Expand Access and Improve Efficiency in Echocardiography

The Problem: Backlogs and Off-Hours Gaps in Cardiac Imaging

In hospitals across the U.S., echo labs face mounting backlogs and limited off-hours coverage. Patients admitted with lightheadedness, dyspnea, or hypotension often wait hours—or even days—for imaging, delaying diagnosis and disposition decisions. Rapidly determining which patients have acute cardiac disease requires echocardiography—a critical tool for identifying heart failure, pericardial effusion, pulmonary embolism, and acute coronary syndromes. Yet access to trained sonographers remains limited outside normal daytime hours, leading to delays in diagnosis, extended hospital stays, and greater strain on care teams.

Common Challenges Include:

- **Echo lab backlogs** delaying inpatient evaluations for hours and days.
- **Off-hours coverage gaps** requiring patients to wait until morning for imaging.
- **Operational inefficiency**, with physicians waiting for image acquisition before making decisions.

Echo labs are challenged by backlogs and off-hours coverage gaps, leading to delayed diagnoses and reduced throughput.

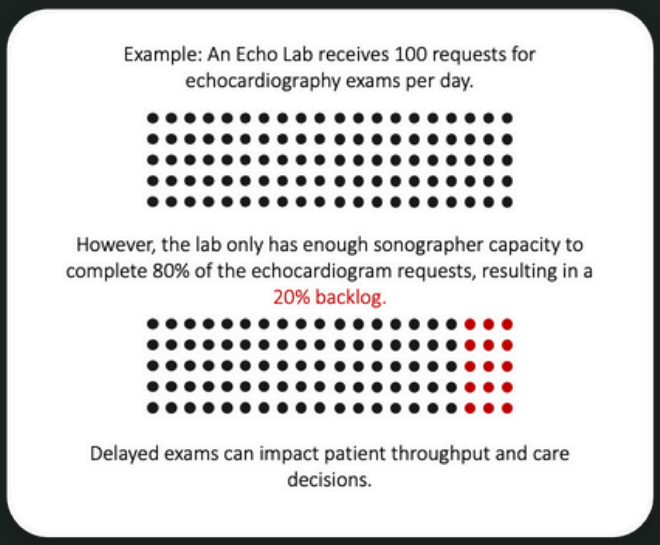
> In the ED, every minute matters. Waiting overnight for a sonographer isn't just inconvenient—it can drastically change outcomes for patients with tamponade, acute heart failure, or cardiogenic shock."

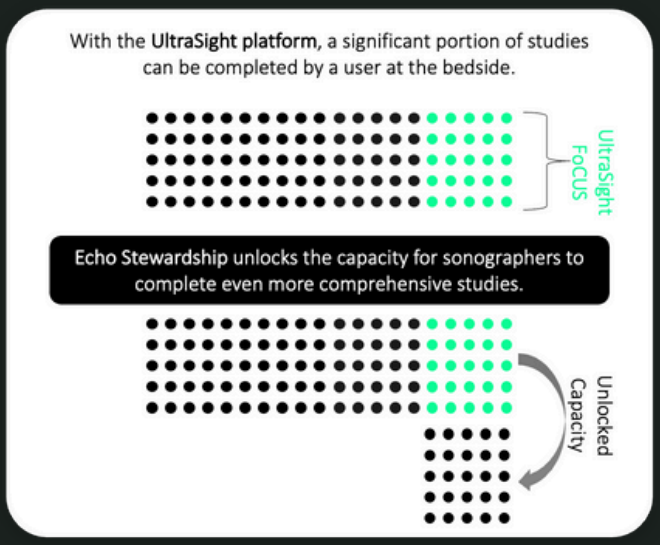
— Nicole Duggan, MD
Emergency Medicine, Brigham and Women's Hospital

Echo Stewardship: Expanding Access to Diagnostic-Quality Echocardiography

What is Echo Stewardship?

An integrated program combining training, analytics, and AI-assisted image acquisition to enable qualified MDs and APPs to perform focused echocardiograms (FoCUS) safely and efficiently, under cardiology oversight.





Result: Faster treatment decisions, reduced backlogs, and continued cardiology oversight.

Increasing Access to Cardiac Care

The Echo Stewardship Program is designed for non–cardiac sonographer clinicians who routinely evaluate and manage patients. The primary intended users are Advanced Practice Providers (APPs) - including nurse practitioners and physician assistants, who have the clinical training, patient familiarity, and workflow proximity to acquire focused echocardiograms at the point of care. Additional qualified users include trainees and technologists (e.g., stress-test or EKG techs) who perform patient-facing evaluations and can be rapidly trained on the standardized acquisition protocol.

FoCUS examinations performed under this program are reimbursable when billed using CPT code 93308 (limited echocardiogram), which provides a clear and established pathway for Medicare and other payers to support clinically appropriate, focused cardiac ultrasound services.

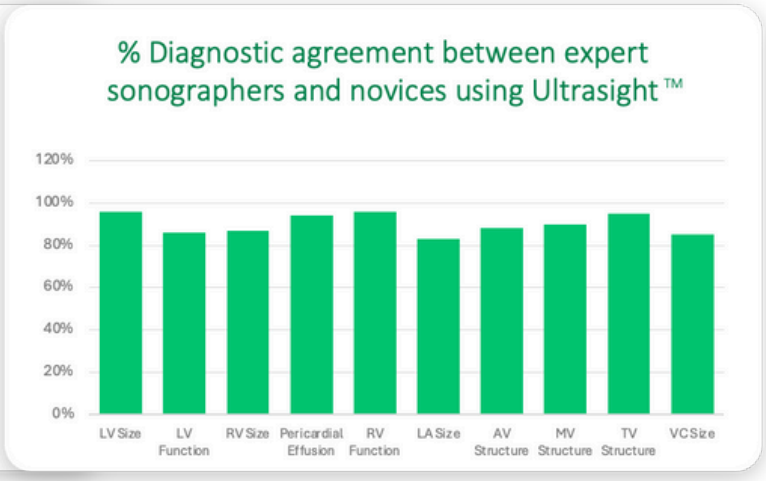
By enabling these providers to acquire diagnostic-quality focused echoes, the program expands the effective clinical workforce while preserving cardiologist oversight for final interpretation and reporting.

Clinical Validation: AI-guided Echo Upholds Diagnostic Quality while Improving Operational Efficiency

UltraSight supports a new standard of Echo Stewardship—helping health systems extend the reach of echocardiography beyond traditional sonography teams. By enabling APPs to acquire diagnostic-grade cardiac images under real-time AI guidance, hospitals can reduce bottlenecks, accelerate time-to-diagnosis, and ensure that every patient has access to timely cardiac assessment.

97%

diagnostic-quality on key endpoints, captured using UltraSight



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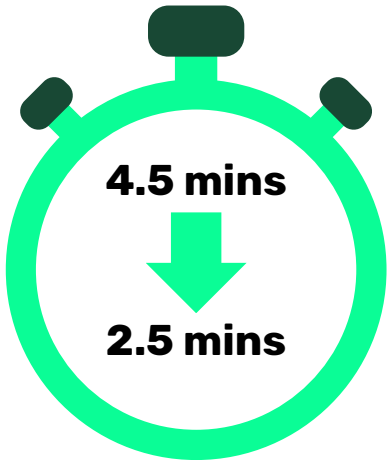
After only 8 hours of training + 8 supervised practice scans, users reached >80% diagnostic-quality images in 8 of 10 standard echocardiographic views, with several views achieving >90–100% adequacy, and >83–94% diagnostic agreement with sonographers.

Mor-Avi V, Sugeng L, Tsaban G, et al. Real-time artificial intelligence guidance for echocardiographic image acquisition by inexperienced users: A multicenter study. Circ Cardiovasc Imaging. 2023;16(11):e015569. doi:10.1161/CIRCIMAGING.123.015569

Users completed focused echo exams in under 3 minutes with >95% interpretable diagnostic yield.



Kumar A, Baum E, Parmer C, Kugler J. Limited echocardiogram acquisition by novice clinicians aided with deep learning: A randomized controlled trial. Biol Methods Protoc. 2025;10(1):bpaf083. doi:10.1093/biomethods/bpaf083.

The Platform
AI-Enabled Echo Stewardship

Patient presents with a condition requiring a limited echo (FoCUS).

FoCUS is acquired using UltraSight, accelerating treatment decision.

Images are sent to PACS for final interpretation.

Program Components

01 Integrate

Compatible
with existing ultrasound devices

Embedded
on-device software

02 Train

1-Day training
session for any user

Automatic guidance
to the optimal view

03 Track

Live dashboard
Usage monitoring & management

Real-time
quality meter

Key Features

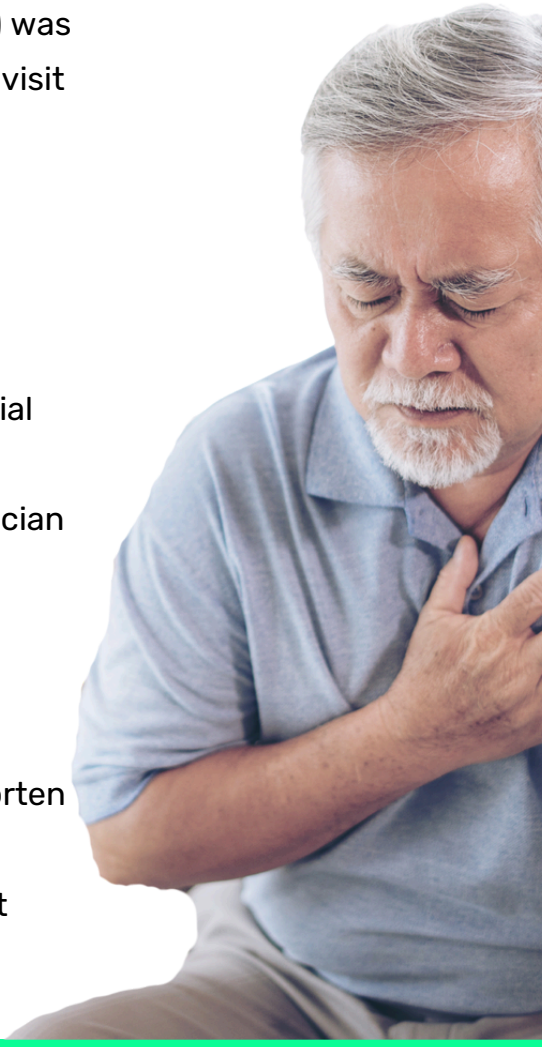
Real-time guidance: On-screen cues and feedback to help users capture diagnostic-quality views.

Quality scoring: Ensures acquired images meet diagnostic thresholds.

Compatibility: Available on any portable carts and handheld systems.

Anonymized Patient Story: Early Detection of Decompensation in a Recently Hospitalized Patient

A middle-aged patient with a history of heart failure (EF 45%) was seen in follow-up nine days after an emergency-department visit for pericardial effusion. Although the patient reported no symptoms and appeared clinically stable, the stewardship-trained clinician performed a focused echocardiogram at the point of care to reassess cardiac function. The FoCUS examination revealed new severe global hypokinesis with an estimated EF of 25–30%, as well as a persistent mild pericardial effusion, findings that were not apparent on physical exam. Recognizing the risk for impending decompensation, the clinician immediately redirected the patient back to the emergency department for expedited evaluation and management.



This case demonstrates how the Echo Stewardship Program enables frontline clinicians to identify early deterioration, shorten time to definitive care, and prevent delays in management—particularly among patients who may appear stable but are at high risk for rapid clinical decline.

> AI guidance isn't just about helping clinicians capture images; it's about reshaping how hospitals deliver cardiac care. With UltraSight, we can ensure that timely, diagnostic-quality imaging is available to every patient, in every setting, around the clock."
>
> **— Clyde F. Sanford MD, FACC**
> Chair of Heart and Vascular Institute
> Tyler, CHRISTUS Trinity Clinic

UltraSight delivers AI-guided cardiac ultrasound technology that enables users—regardless of sonography experience—to acquire accurate, high-quality echocardiographic images at the point of care.

See UltraSight in action.

ultrasight.com