CASE STUDY

Real-world results prove Vista Cardiac delivers faster, more consistent and reliable CMR scans

Key Results

- 26% faster CMR scan time
- 50% reduction in scan time variance
- 1-day CMR access, reduced from a 28-day backlog
- Improvement in image quality across all technologists
- 50% more scan slots, enabling 900 additional scans with existing resources

Challenge

Brigham & Women's Hospital (BWH), a leading academic medical center in Boston, Massachusetts, has seen its Cardiac MRI (CMR) volume double over the past decade. As a top-tier institution in cardiac care, continued growth was anticipated.

BWH performed 7-15 CMR studies daily, each averaging 60 minutes with high variability. Operating at full capacity, the hospital's four multi-purpose scanners had an outpatient wait time of 28 days. Filling cancellation or no-show slots was also challenging due to the varying durations of MRI and CMR exams.

BWH needed a solution to help address traditional CMR limitations, reduce patient backlogs, and eliminate lengthy wait times.

Vista Cardiac Solution

In 2022, BHW implemented Vista Cardiac, intelligent software for MRI acquisition. Designed to streamline MRI exams, Vista Cardiac automates and simplifies CMR scans, enabling all technologists to produce high-quality scans quickly, consistently, and efficiently. Unlike conventional CMR software, Vista Cardiac can automate the tedious tasks required of a technologist with speed and precision.

Vista Cardiac is FDA-cleared and the only 3rd-party software capable of controlling MRI machines during image acquisition and reconstruction. Vista Cardiac is compatible with Siemens and GE MRI systems.

"Vista Cardiac is a vital tool to enhance consistency and productivity in cardiac MRI studies for technologists across all experience levels."

– DR. RAYMOND KWONG, DIRECTOR OF CARDIAC MRI, BRIGHAM & WOMEN'S HOSPITAL

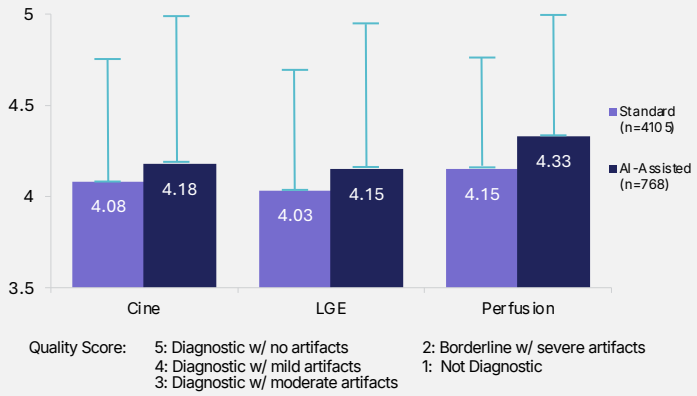
Real-world results

BWH conducted over 2,000 patient studies using Vista Cardiac and experienced 1) improved image quality and consistency, 2) faster scan times with less variability, and 3) increased patient access.

Improved image quality and consistency

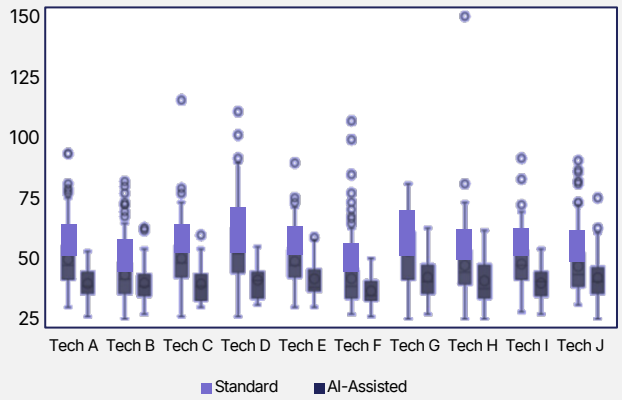
BWH consistently achieved faster, higher-quality CMR scans across all technologists, with experience levels ranging from 6 months to 15 years.

Scan quality across sequences



Quality Score: 5: Diagnostic w/ no artifacts; 4: Diagnostic w/ mild artifacts; 3: Diagnostic w/ moderate artifacts; 2: Borderline w/ severe artifacts; 1: Not Diagnostic

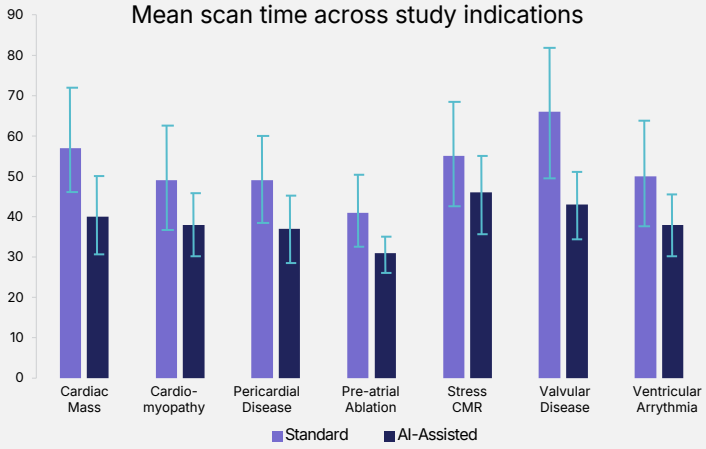
Scan time consistency across technologists



Faster scan times with less variability

On average, AI-assisted scan times were 26% shorter with 50% less variance across all studies.

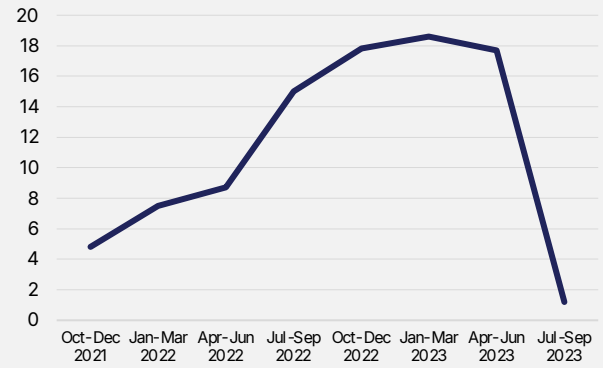
Mean scan time across study indications



Increased patient access

Reduced 28-day patient backlog* to 1 day with 50% more scan slots using existing resources.

Wait time for CMR (operational days), 2022-2023



*Also includes wait time for non-operational days

Conclusion

Over 26 months, BWH's implementation of Vista Cardiac demonstrated significant clinical and operational benefits, improving the quality, efficiency, and accessibility of CMR. Plans are in place to expand to peripheral hospitals, bringing CMR access to more patients.