

# ED Chest Pain Is Complicated

## The answer is magnetic

Two thirds of the nine million patients being seen for chest pain in US emergency departments every year don't get a quick rule-in or rule-out. One 5-minute non-invasive CardiAQ scan has the potential to enable more confident triage for emergency departments overflowing with gray zone patients.

### Chest Pain Statistics



**90%+**  
of EDs report  
overcrowding



**50-70%**  
patients are in the  
'Gray Zone'

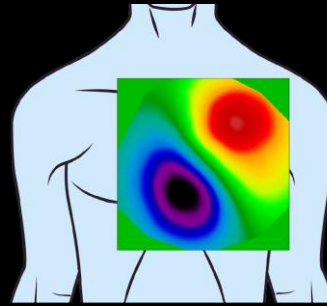


**\$10,000**  
opportunity cost of 1 incremental  
hour of ED Boarding

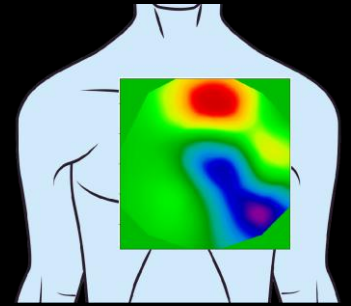


Potential to Visualize Ischemia

## Magnetocardiography the Heart's Magnetic Signature



Healthy Patient



High Risk Coronary  
Artery Disease  
(HRCAD) Positive

### The Clinical Innovation of Magnetocardiography

Magnetocardiography (MCG) is a powerful, non-invasive tool for imaging the heart's physiology. MCG measures the magnetic fields produced by the heart's electrical activity, which pass through tissue undistorted, revealing ischemic signals that standard tools like ECG can miss.



#### The CardIAQ MCG System

- 5-minute, non-invasive scan
- Radiation- and contrast-free
- 1-hour training. Any clinical staff



“We asked: can we do this in a busy emergency room? In our first clinical trial, in one of the busiest emergency rooms in NYC, we were able to successfully evaluate this technology and demonstrate its potential. We observed that the device was easy to use and ED workflow was not disrupted by this 5-minute scan.”

Dr. Jeffrey Bander, Chief of Cardiology, Mount Sinai West



"We believe that our combined efforts will advance the field of cardiac diagnostics and significantly impact patient care. Together, we aim to revolutionize the management of heart disease."

Dr. Mohamad Alkhoul, Professor & Vice Chair for Strategic Partnerships, Mayo Clinic

## Case study: An invisible heart attack

### Study participant O35

#### The cost of delay

Active ischemia can be invisible to standard tests, risking catastrophic cardiac events hours after discharge.

#### The MCG Advantage

A 5-minute non-invasive MCG scan can reveal the heart's unique magnetic signature. Preliminary analysis suggests this patient could have been flagged as abnormal nearly 6 hours earlier.



Outcome:  
100% Mid-LAD Occlusion,  
Received 4 Stents

11:59 AM  
Presented to ER,  
Chest Pain

ECG & Troponin  
negative. No indication  
of ACS

1:53 PM  
CardiAQ MCG scan  
acquired (Investigational).  
\*Results not used clinically

2:30 PM  
Patient Discharged  
(GERD).

6:00 PM  
Returned with severe  
chest pain. STEMI  
confirmed on new ECG.

## CardiAQ Studies to date: 423 participants scanned, 0 adverse events.

### Mt Sinai ED Study

Patients presenting to the ED with chest pain symptoms suggestive of ACS not experiencing STEMI

127

Patients scanned

79%

Sensitivity\*

84%

Specificity\*

<https://www.jacc.org/doi/full/10.1016/j.jacc.2026.02.2965>

\* Excluding subjects diagnosed with cardiac disease other than occlusive ischemia

### Mayo Clinic Study

Patients scheduled for diagnostic angiography or revascularization for ischemia / acute MI

34

Patients scanned

83%

Sensitivity

81%

Specificity

<https://www.jacc.org/doi/full/10.1016/j.jacc.2026.02.2070>



SCAN QR Code



For Partnership  
Opportunities or  
Research Interest

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