

REDUCING 40% OF STEMI FALSE LAB ACTIVATIONS

Case Study

THE CHALLENGE

An ST-Elevation Myocardial Infarction (STEMI) is a serious type of heart attack. It requires emergent life-saving intervention by a cardiovascular invasive physician in the hospital cardiac Cath lab. When a STEMI is suspected by EMS responders, the Emergency Department (ED) must decide whether to initiate a cardiac Cath lab activation. However, a false cardiac Cath lab activation can cost as much as \$7,000 each. Improvement of in-field STEMI diagnostics process reduce these costs greatly.

HCA Chippenham, a Richmond, VA hospital specializing in acute care, needed to lessen false STEMI alerts. Anytime a false lab activation occurs, especially in off hours, it is very costly. A false activation can force physicians, nurses and technical staff to be activated, meaning payroll begins. HCA Chippenham needed a solution that would improve accurate communication between EMS and cardiologists, STEMI coordinators, and ED directors.

THE SOLUTION

HCA Chippenham reached out to General Devices (GD) for a solution that would improve the accuracy and communications of STEMI alerts. They implemented the highly configurable mobile telemedicine solution, GD e-Bridge™. The application allows the hospital to automate and streamline their information flow, team activations, protocols and processes.

HCA Chippenham chose to incorporate GD e-Bridge 12-lead consolidation management into their workflow. When EMS conducts an in-field 12-lead ECG, GD e-Bridge enables the hospital cardiologist to view the data in real-time to make an accurate, timely diagnosis. Cardiologists and emergency personnel can access the 12-lead ECG from any brand monitor and evaluate it anywhere on any device.

Once a diagnosis is made, the customized one-touch feature in GD e-Bridge sends automated HIPAA-secure notifications to all appropriate care team members, which helps them prepare better and overall lessens door-to-treatment time. In the case of a positive remote STEMI diagnosis, GD e-Bridge triggers all necessary communications for Cath lab activation.

EFFECTS AND RESULTS

Since the implementation of GD e-Bridge, HCA Chippenham has seen remarkable results. The application has measurably improved accurate remote STEMI diagnoses, while shortening the time to treatment. According to their Emergency Management Coordinator, Ken Smith, "We are able to reduce false Cath lab activations by 40% using GD e-Bridge telemedicine as part of our process."

Since the 12-lead reports are shared with the cardiologist, the entire team can now communicate and decide whether or not it falls under the STEMI purview. Being able to accurately diagnose a STEMI directly affects the cardiologists, STEMI coordinators, ED directors and hospital finance departments. Since the implementation of GD e-Bridge, these teams have been able to reap the benefits by improving their protocols for the better.

Using the GD e-Bridge mobile telemedicine solution has saved HCA Chippenham tens of thousands of dollars in false lab activations, enhanced team communication, and improved patient outcomes. .

About HCA Chippenham

HCA Chippenham is a level II trauma center located in Richmond, VA. The 446-bed acute care hospital sees more adults and adolescents in their ER and Pediatric ER than any other hospital in the area. HCA Chippenham is the region's first choice for orthopedics, joint care, behavioral health and cardiovascular care.

ABOUT GD

GD enables smarter patient care by empowering hospitals, EMS, community healthcare and public safety with the most comprehensive, interactive, configurable, affordable, and integrated FDA listed medical communication and mobile telemedicine solutions. The benefits of which are enhanced workflows, minimized risk, reduced costs and improved patient outcomes. Learn more at www.general-devices.com

