Transforming Cardiac Care
One EKG at a Time

In February 2012, the 117-bed TriStar Centennial Heart & Vascular Center in Nashville, Tenn., started considering ways to expand its success as a STEMI-referral site. The center turned to AirStrip Cardiology to put access to real-time EKG data in the palm of the physicians’ hands. Physicians can now view EKG data via iPad or iPhone before the patient even reaches the hospital.

Kaitlyn Dmyterko

Breaking down geographical barriers and electrifying access to care

TriStar Centennial Heart & Vascular Center began looking for ways to stay ahead of the competition and streamline care, including improving its D2B times. With AirStrip Cardiology, 12-lead EKG information reaches the cardiologist’s mobile device while the patient is en route to the hospital, allowing the cardiologist to make faster, more precise clinical decisions for immediate action upon entrance to the emergency room. Cardiologists can analyze and make better diagnoses in real-time.

“If we have a patient at one of our sister facilities in Smyrna, Tenn., one of our cardiologists can view the EKG and make a clinical determination on how to care for that patient a lot faster,” says James Drumwright, chief operating officer for the Heart & Vascular Center.

The technology has completely revamped the old system of care. Before, when a patient had an MI, the cardiologist was called, the patient showed up and the cardiologist dove into the case headfirst with only the information communicated from the referring doctor or emergency medical staff.

Now, the emergency room physician can view the EKG in real-time on an iPhone or iPad, alleviating the use of unreliable faxes, PDFs or emails.

With more detailed information, cardiologists are able to pick up on cardiac arrhythmias or other heart conditions that may have been missed on a fax system. AirStrip offers a sharper picture of waveforms and can be used to detect differences of less than 0.5 millimeters. As a result, cardiologists are able to intervene quicker with more accurate workups delivering proactive care to patients.

“The technology really provides you with some upfront information before you even meet the patient,” says David C. Huneycutt, Jr., MD, cardiologist at TriStar Centennial Heart & Vascular Center. “So much of what we do on the emergency basis is driven by the EKG. Having that one piece of objective data in your hand immediately is extremely helpful.”

“Now, we are able to plan for STEMI care a lot sooner, and we are able to deliver that care in a lot more concise and organized manner,” Drumwright adds.

The technology also augments care in the off-hours. “It’s helpful in a non-emergent setting for a hospitalized patient to see if there is any change in his or her condition,” Huneycutt says.

“The reality of the situation is that doctors are not always in the hospital,” he adds. “They might be at an outlying clinic, on call or away from the hospital, and this really allows us to look at this information quickly.”

The burden on hospital IT and budgets has been minimal, Drumwright says. AirStrip loads the solution to the hospital’s server remotely and physicians are using AirStrip in a matter of minutes. All that is required is a simple download from the App Store to the iPhone or iPad.

“It’s very intuitive and requires virtually no training, just someone basically showing you how to use it,” Huneycutt says.

Keeping up with the competition

“You have to stay ahead of the curve from a technology perspective,” says Drumwright. “We are constantly finding new forms of technology that can help us improve patient care, improve our quality outcomes, and sometimes it offers an opportunity to decrease overall cost.”

The AirStrip impact on care has been seen from first event to hospital discharge, even helping to improve the relationship and communication with EMS and community hospitals. “Anytime we can improve our relationships in the community, we can improve our referral patterns,” Drumwright adds. In time, they hope the solution will help to increase their volume of cardiology patients.

He sees the technology as a bridge to encourage other hospitals to partner with the healthcare system. In the age of hospital integration, the AirStrip solution also can help maximize care and form partnerships within the community, especially as data become more accessible across sites.

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David C. Huneycutt, Jr., MD, a cardiologist at TriStar Centennial Heart & Vascular Center in Nashville, Tenn., views a patient’s EKG on his iPhone using AirStrip Cardiology while walking through the hospital.