# **An ACC Accredited Medical Center Makes STEMI Process Improvements**

Chest Pain Center Accreditation empowered the healthcare professionals at Laret Regional Medical Center<sup>1</sup> to make life-saving decisions about administering lytic therapy, which improved patient outcomes and lowered mortality rates.

# Challenge

Prior to pursuing Chest Pain Center Accreditation, Laret Regional Medical Center<sup>1</sup> aligned itself with a nearby urban hospital where they transferred many of their STEMI patients for treatment in the cath lab. However, the hospital's emergency room physician and his team members first had to contact the cardiologists at the receiving hospital regarding each patient.

Between waiting for a call back and arranging for EMS transport, door-in/door-out (DIDO) times ranged from 60 to 90 minutes—just to get the patient out the door. The receiving hospital is nearly 60 miles away, which made it impossible to meet the recommended door-to-door-to-balloon (D2D2B) timeframe of 90 minutes. Nevertheless, the cardiologists at the receiving hospital pushed back on the next-best option of administering clot-busting drugs, which, to be effective, must be administered within 30 minutes.

It's important to also understand that about 95 percent of the STEMI patients come in through the front door of this hospital rather than by ambulance. That's because many of them do not have health insurance, and they want to avoid the ambulance bill. Although the hospital professionals encourage patients to call 911, that rarely happens, reducing the likelihood that they will be transported directly to the PCI facility.

## **Solution**

With the accreditation process fully underway, the hospital professionals were empowered to address the problem. They invited the head cardiologist at the receiving hospital to participate in their chest pain meetings as part of the accreditation process. But despite their efforts, he still felt the patients could be transported in a timely manner. It was not until they conducted a reverse time study that things changed. The study revealed that everything would have to proceed 100 percent as planned—with no glitches—in order for it to work. Even then, the cardiologist at the receiving hospital would only have about 15 minutes to move the patient to the cath lab and successfully plant the device. The results of the study spoke for themselves, and everyone finally acknowledged that it was impossible.

Today, lytic therapy is administered to all of these patients, unless they do not meet specific criteria, and the hospital now boasts an average door-to-needle (D2N) time of about 15 minutes. Once the drug is administered, the patients are out the door in about 45 minutes and on their way to the cath lab at the receiving hospital.

### Results

With the process changes in place, treatment outcomes for cardiovascular patients have significantly improved. Much of this can be attributed to the accreditation process, which forced the hospital professionals to take a hard look at the processes that were already in place and then act as advocates for change.

"I believe accreditation has allowed me — and the nurses and physicians I work with —to be more focused when it comes to the care of the cardiovascular patients," said Laret Regional Medical Center's Chest Pain Center coordinator. "We are making decisions based on what is best for the patient at that time rather than waiting for a call back from a cardiologist who is an hour away."



# **Results - continued**

As a result, patients are benefiting from the following improvements:

- 100 percent compliance with D2N in less than 30 minutes and median D2N at 17 minutes
- 2 percent ED volume growth and greater volume of STEMI- and non-STEMI patients
- Better alignment with the receiving hospital to facilitate the transfer of heart patients after clot-busting drug is administered
- · Blood tests are administered more quickly
- Troponin turnaround times consistently under 60 minutes using a central lab
- Increased confidence levels among hospital nurses and other healthcare professionals who are now empowered to take life-saving steps for their heart patients

"A lot of the process improvements have allowed us to have more control over a STEMI patient. Our nurses have more confidence, and they realize this is something tangible and that they can save somebody's life because of what they know. The word gets out. When you have good outcomes, patients want to come here first because they're concerned they may not make it to the other hospital," the clinical coordinator explained.

# Look to ACC Accreditation Services

Hospitals that are intent on connecting quality and cost with outcomes and patient satisfaction look to ACC Accreditation Services to help them create cardiovascular communities of excellence. Achieving accreditation status improves a hospital's productivity, patient throughput, and the quality and consistency of care. In short, it better positions a hospital as a preferred provider of cardiovascular care.

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