

# ACC Accredited Hospital Improves Cath Lab Transfer Times

## Challenge

Prior to pursuing Chest Pain Center Accreditation through ACC Accreditation Services, the healthcare professionals at Modino Hospital<sup>1</sup> faced the challenge of lowering door-to-balloon times to less than 90 minutes. By establishing a goal of 60 minutes and aiming for as low as 45 minutes, they hoped to lower mortality rates. “Time is muscle, and we don’t have much time to save these patients,” said the hospital’s chest pain coordinator. “Doing excellent work is a matter of more effort; we knew we could do better.”

Before implementing a host of improvements, the process looked like this: When STEMI patients arrived at the hospital, they were administered another EKG. Then, prior to STEMI activation, an ED physician confirmed the interpretation with the on-call cardiologist. On-site physicians could not perform the primary intervention if they were not on call or part of back-up personnel. Instead, ancillary members were notified 15 minutes after STEMI activation. Unfortunately, these steps combined to further delay the process.

The hospital formed a task force to explore the causes of EKG delays and to develop strategies that would decrease CV patient time in the ED. The team implemented a PDCA (Plan, Do, Check, Act) initiative to help determine the barriers to success. They used several strategies to uncover the reason for the delays, including brainstorm sessions, cause-and-effect diagrams, and process reviews of actual outlier cases. The process analysis identified several environmental, human resource, communication and patient presentation factors that needed to be addressed.

## Solution

To reach their goal of improving direct-to-cath lab transfer times, the team of healthcare professionals worked closely with EMS, ED and various department teams. This combined effort focused on driving the integration of care for patients by enacting quality improvement intervention and several collaborative initiatives, including:

- Implementing an around-the-clock cardiology back-up system
- Pre-activating EKG transmission before the patient arrives at the ED and initiating ED Pause to facilitate rapid transport to the cath lab
- Coordinating patient transport with members of EMS, ED, security and the cath lab
- Implementing a single-call alert notification system and educating goal on the staff to achieve a D2B time of less than 60 minutes
- Creating a process for emailing EMS charts directly to the medical records department and database administrator within the next 24 hours for timely data collection

Administrative leadership and clinical engagement were key factors in the team’s success. In addition to requiring that all chest pain coordinators must be advanced practice nurses, a decision proven to improve outcomes, the hospital administrators also supported using a four-person call-back team. This top-down initiative ensured that the hospital’s healthcare professionals have the resources they need to be successful.

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*Modino Hospital<sup>1</sup>  
Chest Pain Coordinator*



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## Results

The results speak for themselves. “In the first two to three years, (our D2B time) went from almost 90 minutes (on average) to less than 60,” the hospital’s chest pain coordinator said. “Our target now is at least 45, and we are still working on that.” But thanks to ED Pause and the ability to reduce patient time in the ED, D2B times improved greatly, placing the hospital above the 50th percentile for the first time in years. Patients who arrived at the ED with a pre-hospital EKG spent less time in the ED:

- The average median team arrival time was 3.2 minutes
- The average median physician arrival time was 11 minutes
- The D2B median time was 27 minutes compared to 57 minutes without the pre-hospital EKG

Not only did the numbers improve, but the process made it possible for various teams to work together, simultaneously fostering engagement and streamlining the STEMI process. Much of this was possible because of ACC Accreditation Services, which uses a continual process improvement methodology. The ACC reviewer takes on the role of cheerleader, consultant and networker while sharing best practices with the team. After working together for about a year, the ACC review specialist and the hospital team establish a relationship of trust, which in turn encourages members of the team to share their challenges rather than hide them.

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## 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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