

An ACC Accredited Hospital Significantly Reduces Diversions

Chest Pain Center Accreditation empowered Daylin Hospital¹ to improve CV patient care by reducing practice of diverting ED traffic.

Challenge

During the past several years, population growth has far outpaced Daylin Hospital's¹ ability to expand. At the same time, heavy traffic makes it difficult, if not impossible, for patients to reach larger, urban hospitals in a timely fashion. Plans to expand the community hospital were simply not implemented soon enough to meet the increased demand.

Unable to keep up with the rapid growth, Daylin Hospital¹ was forced to divert patients about 125 hours per month. During one quarter of the year, diversion peaked at 193 hours per month, which translates to a monthly loss of revenue of nearly \$2.9 million. Unfortunately, this sent a message to area residents that getting to the hospital by ambulance was not an option.

When ACC Accreditation Services entered the scene, healthcare professionals at the hospital were doing their best just to manage the patients they had. It can be difficult to focus on process improvements while handling a seemingly never-ending patient load. As the accreditation process unfolded, it became increasingly clear that the best approach was to address one process at a time. Before long, they were making a difference.

Solution

To begin, changes were realized in terms of expansion. "We opened our cardiac intervention program in August 2015; we started construction to add 23 more beds in 2016; and we are adding another interventional vascular suite. We started a percutaneous coronary intervention (PCI) program, and now we keep the patients here and do all the STEMI and balloons to the heart," said the hospital's director of cardiovascular services. "It's a never-ending cycle of improvements."

In the interim, however, more immediate changes occurred in order to meet the needs of the patients. By forming a hub-spoke relationship with a larger, urban hospital system, the community hospital was able to more efficiently transfer patients to a higher level of care. A Care Link one-call number made it possible to contact the healthcare professionals at the larger hospital system, who then took over the process of transporting acute STEMI patients to their urban location. Length-of-stay and door-to-transfer times plummeted, accounting for an overall reduction in mortality.

In 2014, the community hospital took the improvements a giant step further. Now, rather than calling the cardiologists at the urban location, these interventional cardiologists are on call 24/7. The cardiologists are located within 30 minutes of the hospital where they stay in an apartment overnight. The hospital also added a second cath lab, which increased its ability to handle these emergency cases and eliminated the need to transfer patients to the urban hospital for treatment.

Results

During the first quarter of 2014, the door-to-transfer time in the hospital's emergency room was 124 minutes. Changes were implemented, and that time dropped to 99 minutes. Still not satisfied with the results, the hospital initiated a one-call approach with the urban hospital, and the time dropped to 45 minutes and 34 minutes respectively. Now that the cath lab procedures are done on site at the community hospital, they experienced an average door-to-balloon time of 63 minutes during the third quarter of 2014 and 47 minutes during the fourth quarter.

"We stopped calling our on-call cardiologists with STEMI patients and let our ER physicians make the call to transfer those patients to our tertiary partner. The decrease in door-to-transfer time was simply phenomenal."

*Daylin Hospital¹
Director of
Cardiovascular Services*



ACC
Accreditation
Services™

1) Pseudonym

Results - continued

But that's not where the story ends. While pursuing Chest Pain Center Accreditation through ACC Accreditation Services, the hospital implemented the following additional major changes:

- The hospital established a special phone line for cardiac emergencies so the ER physician can speak directly with the on-call cardiologist; the interventional cardiologist decides if the CCL team needs to come in, and if so, the clerk calls one number that alerts all four team members at once; the team responds with a call back while they're on the road, providing verification that they received the page
- EMS installed AirStrip® on their trucks, which makes it possible to send a field EKG directly into the hospital's MUSE Cardiology Information System; so, along with a call to alert the ER, the doctor can already see the patient's EKG; the interventional cardiologist can also see the EKG via his or her smartphone, which speeds up the decision-making process; for acute STEMI patients, the hospital now has the ability to upload the EKG images from the cath lab to a cloud-based system, making it possible for cardiologists at the urban hospital to open the file and review it before the patient arrives by helicopter
- Low-risk chest pain patients are moved to the observation unit, resulting in a 6 percent increase in chest pain observation and a subsequent increase in patient volume and a decrease in the number of diversion hours; virtual placement of the observation patient in the IP setting has grown about 66 percent during the past six months
- Stress testing options have improved, and the use of a defined ACU area for observation patients supports a reduction in the length of stay from 14.3 hours to 13 hours

As the hospital's ability to handle the patient load improved, diversion times dropped. By fourth quarter of last year, patients were only being diverted for 32 hours. This occurred after three consecutive quarters of declining hours (60, 58 and 32 respectively), resulting in a savings of \$2.4 million.

Every year, all of the hospital's ER, ICU, cath lab and ACU professionals participate in educational training through Apex Innovation®, an organization that designs, manufactures and provides tools, software, competencies, resources and educational web-based programs for a wide range of organizations. The results are noteworthy. In every category, the hospital's healthcare professionals scored 2 to 5 points higher compared to Magnet organizations and 2 to 6 points above all ACC-accredited hospitals.

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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