Fort Lauderdale Fire Rescue Strengthens its OHCA Chain of Survival

BRIEF BACKGROUND

The Fort Lauderdale Fire Rescue Department operates 11 fire stations, responding to nearly 53,000 incidents in 2018 — including 200 cardiac arrest calls. Data presented monthly included rates on airway management success, return of pulses during cardiac arrest and overall survival to hospital discharge.

Despite making several investments in training, protocols and equipment, survival for witnessed cardiac arrest wasn’t meeting expectations for improvement, as the department aimed to increase its overall cardiac arrest survival rate of 8.6% and Utstein survival of 36.4%.

The Quality Improvement team noticed gaps in data. No measurements were captured about the quality of EMS providers’ CPR skills such as compression fraction, compression rate and depth, recoil and ventilation effectiveness. The department’s leadership believed additional improvements could be made, but wasn’t clear where to begin.

STEPS TAKEN

Seeking to identify opportunities to strengthen its OHCA Chain of Survival, Fort Lauderdale Fire Rescue’s leadership decided to participate in the Resuscitation Academy Cardiac Arrest System Assessment.

Using a remote consultative model, the Cardiac Arrest System Assessment examined several areas of concentration within the Chain of Survival. Resuscitation Academy consultants conducted structured interviews with Fort Lauderdale stakeholders including executive leadership, cardiac arrest registry, 911 PSAP, training, quality improvement and first responders. They guided these interviews with a structured, evidence-based database of questions. Questions were organized into a maturity model consisting of five dimensions to measure the department’s capability to manage a process.

Following the interviews, consultants wrote a report highlighting steps that can be taken to strengthen survival rates, prioritizing areas for improvement. A senior consultant delivered the comprehensive recommendations and met with the department’s leadership to review the results. The entire process took less than four weeks.

CHALLENGES

Despite the implementation of additional procedures and equipment for the treatment of cardiac arrest, Fort Lauderdale Fire Rescue wasn’t seeing the expected levels of improvement.
RESULTS

Fort Lauderdale Fire Rescue prioritized recommendations from the assessment related to measurement of performance and ongoing training. Key actions were taken:

- Implementing measurement of high-quality CPR metrics from the American Heart Association
- Sharing performance data internally to create awareness and buy-in for continuous improvement
- Developing processes to make the most of their newly implemented cardiac arrest registry for quality improvement projects

OUTLOOK

The department plans to repeat the assessment in a year to measure progress and prioritize the next rounds of improvements.

CONTACT

Battalion Chief Stephen Shaw: SShaw@fortlauderdale.gov