UConn Health Center
John Dempsey Hospital

Emergency Medical Services
Partners

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Mission Lifeline Hartford STEMI Project

The American Heart Association (AHA) has partnered with the Connecticut Department of Public Health and Duke Clinical Research Institute on an exciting 18-month project to improve STEMI care in the Greater Hartford Region. Hartford is one of 20 sites across the region that is part of a national effort for focused improvement in the area of heart attack systems of care. The Hartford Mission: Lifeline STEMI Systems Accelerator project kicked off on January 18, 2013, and included participation from area EMS Agencies and representatives from 14 regional hospitals. This project builds upon the AHA's Mission: Lifeline Program, which refines systems of care for the STEMI patient by engaging multiple entities (i.e., EMS, STEMI referring hospitals, and STEMI receiving hospitals) within the same geographic region. An important aspect of this Mission: Lifeline project is to examine how pre-hospital STEMI systems of care in Hartford can be improved.

Goals for this project include:

- Improved transfer times between hospitals
- More timely activation of cath-labs prior to patient arrival
- Increased speed of reperfusion
- Implementation of systematic process for the collection of critical patient care data
- More accurate and consistent feedback to hospital staff and EMS on patient outcomes and performance

Paramedic STEMI Conference: September 25 West Hartford Town Hall

On September 25 from 9-12 the Hartford Mission Lifeline project will be hosting ***STEMI Systems of Care: From EMS to Cath Lab***, an educational conference for 150 Hartford area paramedics to discuss STEMI care at the West Hartford, CT town hall. The agenda will include case reviews presented by physicians representing each of the area's PCI centers. Some of the topics presented will be STEMI alerts, pre-hospital treatment for the MI patient, STEMI imposters, and proper ECG acquisition. After the conference, all attendees will receive free access to the AHA's online 12-lead course (Learn: Rapid STEMI ID). Attendees will receive 3 CMEs. There is no cost to attending this conference! The initial round of service registration has closed, but additional spots have been opened. Paramedics should register at this link:

https://www.surveymonkey.com/s/HartfordParamedic2

Hurry as registration is now first come first served and space is limited.

Importance of Early STEMI Notification

Early notification of incoming STEMI patients to John Dempsey Hospital has led to a 16 minute decrease in average door-to-balloon (DTB) time for patients arriving by EMS this year. Our cath lab was preactivated by our ED physicians in 77% of all EMS STEMI patients. Remember EMS is the dispatcher for the cath lab. Every minute extra in early notification is a potential minute of saved heart muscle. Keep up the strong work!

August STEMI Kudos-Bristol EMS

Bristol EMS paramedic Jay Pax and her partner Steve Ouellette responded for a patient with sudden non-radiating chest pain, accompanied by shortness of breath and nausea. When the 12-lead ECG revealed ST elevation in the inferior leads with reciprocal depression, the crew transmitted the ECG and called in a STEMI alert to **John Dempsey Hospital**, which activated the cath lab 10 minutes prior to the patient's arrival. The patient who received ASA, Zofran and Fentanyl en route was found to have a 100% occlusion of the distal right coronary artery (RCA), which was successfully stented. The patient was released home two days later grateful for the fine pre-hospital and in hospital care he received. **51 Minute Door-to-Balloon time! 90 Minute EMS First-Contact-to-Balloon time.**

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Later in the month Pax and her partner Ardit Shehu responded for a male patient who had suffered a syncopal episode while having his morning coffee. The patient, who admitted to periodic episodes of chest pain over the last week, initially refused transport to the hospital. The Bristol team, recognizing the seriousness of the patient's condition, convinced the patient of the urgent need to get to a PCI hospital. Their insistence clearly saved his life. Pax transmitted their 12-lead, which showed an inferior STEMI, to **John Dempsey Hospital**, and radioed in. Based on the ECG and their report, Dr. Mathew Ledford activated the cardiac cath lab 22 minutes prior to the patient's arrival. Because the patient had hit his head, he was required to get a stat CAT scan prior to receiving the PCI procedure. The CAT scan proved negative and the patient was taken right to the cath lab where he was discovered to have a critical 99% occlusion in his distal right coronary artery (RCA), which was successfully stented. The patient was released home in good condition two days later. **42 Minute Door-to-Balloon Time. 87 Minute First EMS Contact-to-Balloon Time.**

BRISTOL HOSPITAL Emergency Medical Services

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Bristol EMS paramedics Cliff Maestri and Robert LaPerriere responded for a patient who was pale and diaphoretic, with acute chest pain. Their initial 12-lead ECG revealed a Left Bundle Branch Block (LBBB). While treating the patient with ASA and NTG, they did repeat 12-leads which showed dynamic ECG changes including new and increased elevation in the chest leads. They called in a **STEMI Alert.** JDH Dr. Robert Fuller immediately activated the cardiac cath lab. Thanks to the early notification, the patient's heart muscle was spared precious minutes as the assembled cath team successfully cleared and stented the 100% occlusion from the patient's LAD restoring perfusion to the damaged muscle. **49 Minute Door-to-Balloon time! 81 Minute EMS First-Contact-to-Balloon time.**

August STEMI Kudos-UCONN FD

UCONN Fire Department paramedics John Pickert and Wendell Cote responded for a male patient with chest pain, syncope X 2 and bradycardia with severe hypotension (BP-54/32). While they were unable to transmit their ECG, **John Dempsey Hospital** ED physician Dr. Joanne Kuntz activated the cath lab based on their radio patch. The medics gave the patient nearly two liters of fluid and started a dopamine drip. The patient was rushed to the cath lab where he was discovered to have a large thrombus occluding the right coronary artery (RCA). The thrombus was removed and the artery stented, restoring full perfusion. The patient is pain-free and doing very well. **39 Minute Door-to-Balloon time. 60 Minute EMS First-Contact-to-Balloon time.**

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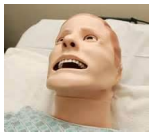
UCONN Fire Department paramedics Neil Prendergast and Matthew Kellick and EMTs Michael Suchinski and Dalton Browning from **American Medical Response** responded for a patient with sudden onset of chest pain. The paramedics acquired an immediate 12-lead ECG which suggested a myocardial infarction. Prendergast transmitted the ECG, gave the patient ASA and called in a **STEMI Alert**, which activated the cath lab prior to patient arrival. The patient, who was rapidly deteriorating, required intubation, an intraaortic balloon pump, and an Impella Device to support heart function prior to receiving the PCI intervention. He also went into cardiac arrest, requiring multiple defibrillations. He was discovered to have extensive blockages in his heart, including a 100% occlusion of the Left Anterior Descending Artery (LAD), which was successfully stented. The teamwork of many helped give the patient a fighting chance to survive.

September Morning CME UCONN

Topics: Pneumonia, Case of the Erratic, Combative, Crazy Dude, Drug Review: Midazolam, Journal Review: High-Dose Nitro
September 18, 2013 *(Wednesday)* 8:30-11:30 A.M.
East Farms Fire Department , 94 South Road, Farmington

~~September 11 Evening~~ CME is Cancelled.



Regional Paramedic Skills

October 30, 2013
4:00-6:00 P.M., 6:30-8:30 P.M.
Contact Peter Canning at
canning@uchc.edu to reserve your slot

CONTACT US:

Any questions or suggestions about EMS? Looking for patient follow-up?

Contact EMS Coordinator Peter Canning at canning@uchc.edu or call (860) 679-3485.