



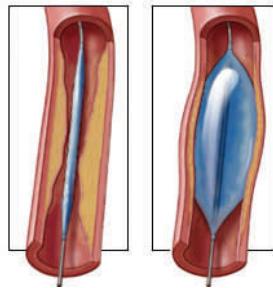
# Emergency Medical Services Partners

May 2011, Issue 10

[uconnems.uchc.edu](http://uconnems.uchc.edu)

## Balloon Time

We frequently talk of door-to-balloon time in measuring how we are doing with care of patients having acute ST-Elevation Myocardial Infarctions (STEMIs). Door-to-balloon is the time it takes from when a patient enters the emergency department to the moment up in the cardiac catheterization lab when the cardiac catheter (with balloon attached) crosses over the blocked lesion in the heart. While the national standard is 90 minutes, every minute saved improves patient outcome. Here at John Dempsey we are working with area EMS services to extend that 90 minute standard into the community. We are now measuring not just door-to-balloon, but 911-to-balloon, EMS-first-contact to balloon and first 12-lead-to-balloon. We review every STEMI call with a eye toward spotting steps to improve our system, decrease balloon times and improve patient outcomes. Our EMS/Hospital partnership has been having spectacular results. Please keep up the great work!



## 100% STEMI Benchmark Success

100% of STEMIs brought to John Dempsey Hospital by EMS to date in 2011 have exceeded the national standard of 90 minute door-to-balloon time. Our average EMS door-to-balloon time was 42 minutes. This includes two patients who required periods of CPR and another patient with severe respiratory distress who required intubation in the ED prior to going to the cath lab. 87% of STEMIs had door-to balloon times under 60 minutes. There were three door-to-balloon times under 30 minutes (24, 26, 27). 83% of all STEMIs (excluding cardiac arrests) had EMS first contact-to-balloon times of under 90 minutes.



## STEMI ALERT Medical Control Patches

If you are bringing us a patient with a STEMI, when you contact CMED, tell CMED you want a patch to John Dempsey Hospital with **Medical Control for a STEMI ALERT**. Once



we come on the line, confirm Med Con. Then state right at the beginning you have a STEMI ALERT or a Possible STEMI ALERT. Describe the patient condition and your 12-lead ECG. Speaking directly to one of our emergency physicians will speed activation of the cath lab, decrease door-to-balloon time, and save your patient precious heart muscle. And remember: The earlier you call in, the more prepared we will be for your arrival. Keep up the great work with the STEMI ALERTS. Your prehospital care is a critical component to patient outcomes!

Association of door-to-balloon time and mortality in patients admitted to hospital with ST elevation myocardial infarction: national cohort study

Safif S Rathore, MD/PhD student,<sup>1</sup> Jeptsha P Curtis, assistant professor,<sup>2</sup> Jersey Chen, assistant professor,<sup>2</sup> Yongfei Wang, statistician,<sup>2</sup> Brahmajee K Nallamothu, assistant professor,<sup>4</sup> Andrew J Epstein, assistant professor,<sup>5</sup> Harlan M Krumholz, Harold H Hines Jr professor of medicine (cardiology) and epidemiology and public health,<sup>2,3,6</sup> for the National Cardiovascular Data Registry

*"Any delay in door-to-balloon time for patients with ST elevation myocardial infarction undergoing primary percutaneous coronary intervention is associated with higher mortality, even among patients treated within 90 minutes of admission."*

British Medical Journal  
May 2009

## Emergency Medical Services Heroes



**Simsbury Ambulance** Paramedic Karin Stewart and her crew Lisa Rinaldi-Barfield and Donna Anderson responded to a chest pain call in Simsbury on a Saturday afternoon. Stewart did a rapid 12-lead ECG, which revealed her patient was having a massive inferior MI. Stewart called in a STEMI ALERT and she and her crew rapidly transported the patient to John Dempsey Hospital where their patient was found to have a 100% occlusion of the right coronary artery. The patient underwent angioplasty, a coronary thrombectomy and stenting which resulted in successful restoration of critical blood flow. Door-to-balloon time was under an hour. The patient did well and was released home days later. Another great job by EMS!

## EMS CME— June 29, 2011—7:00 PM

### Advances in Cardiac Arrest Care

James Suozzi, M.D.

Cheshire Medical Center

Keene, NH

2nd Topic—TBA

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Keller Auditorium, John Dempsey Hospital  
Pizza and refreshments will be served at 6:30 PM . All EMS responders and members of the general public are encouraged to attend. Mark your calendars!

## UCONN Health Center EMS Web Site

For news, educational information, CME schedule and past copies of our newsletter *Partners*, check out our web site at:

[uconnems.uchc.edu](http://uconnems.uchc.edu)

## More STEMI Success

Great Job by UCONN Fire Department paramedics Dan Massaro and John Martinez , American Medical Response crew Krystyna Letizo and Walter Jablonski, and Farmington Fire Department EMTs who responded to a recent chest pain call in Farmington. EMT Richard Palmer gave the patient aspirin. The medics transmitted their 12-lead from the patient's side, and called in a STEMI ALERT. The patient was rapidly transported. There was a 60-minute 911-to-balloon time and a 24-minute door-to-balloon time.

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### American Medical Response

paramedic John Anderson and

EMT Giovanni Martinez responded in Hartford for a patient having chest pain. Anderson did a quick 12-lead ECG and instantly saw the patient was having a massive anterior MI. Wasting no time, they began transport to John Dempsey Hospital and provided us with early notification. Their EMS first contact at patient side-to-balloon time was 58 minutes. Our hospital door-to-balloon time was 31 minutes.

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Both patients did very well and were discharged in a few days with instructions to follow heart healthy diets.



AMERICAN MEDICAL RESPONSE

## EMS CME— May 5, 2011—9:00 AM

All area providers are welcome.

### Seizures: Types, Causes and Treatment

Richard Kamin, M.D.

Peter Canning, Paramedic, R.N.

### Case Reviews:

Kamin/Canning

### Journal Review:

*Effect of high flow oxygen on mortality in chronic obstructive pulmonary disease patients in prehospital setting: randomized controlled trial*  
British Medical Journal: 2010

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Room D1002 of the Administrative Resources Building (ASB) located by the helipad. For questions about CME or to obtain a copy of journal article, contact Peter Canning at [canning@uchc.edu](mailto:canning@uchc.edu) or call at (860) 679-3485.

## CONTACT US:

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



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