

# STEMI NEWS

July 2010

Performance Criteria	Performance Benchmarks	Contra Costa Qtr 4, 2009	Contra Costa Qtr 1, 2010
EMS* to Intervention (PCI) Median Time	< 90 minutes (National)	80 minutes	83 minutes
EMS* Scene Median Time	< 15 minutes (Local EMS)	15 minutes	13 minutes
911 Call to Intervention (PCI) Median Time	< 90 minutes (National) **	88 minutes	94 minutes
Door to first PCI Time with Field Activation	< 60 minutes (National) **	57.5 minutes	64 minutes
Percentage of Time Door to PCI < 90 minutes	> 75% of time (National)	100%	86%

EMS\* = First contact with EMS provider      \*\* High Performance STEMI System Benchmarks

## Contra Costa STEMI System Performance 2010



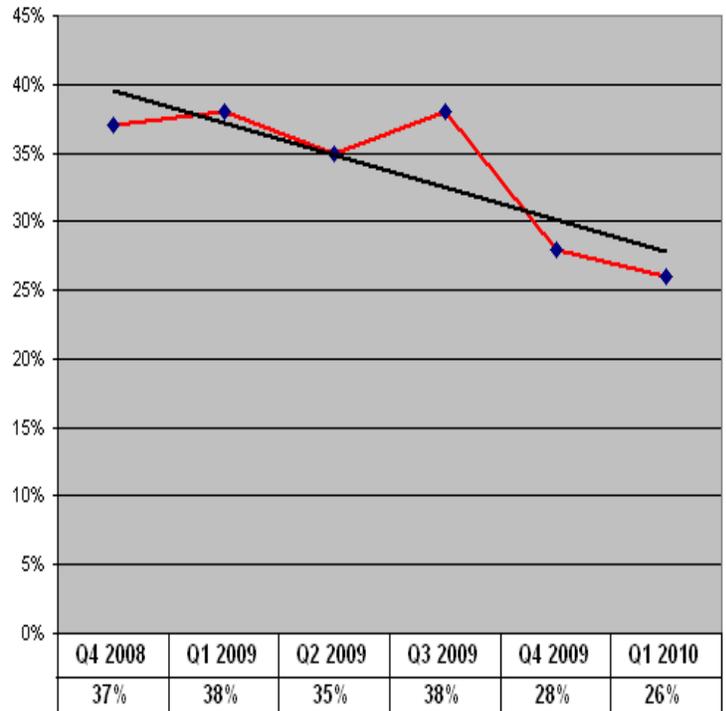
### Team STEMI: False Activations Down by 12%

Mark Buell, RN, CEN, EMT-P, Prehospital Care /STEMI System Coordinator

One of the biggest challenges in any STEMI System is reducing false STEMI activations. Contra Costa has been monitoring our STEMI System false positive rate from the beginning. The data shows that in cases where the STEMI Center does not verify the prehospital STEMI by 12 lead it is due to: 1) artifact, 2) machine over-read or 3) patient factors that are not able to be determined in the field.

Last fall prehospital providers received enhanced training in the evaluation of 12 leads and the most common factors that lead to false activations. This training has resulted in a successful reduction of our STEMI System false positive rate from highs of 38% to 26%.

Now with the upcoming 12-lead transmission pilot there is an opportunity to reduce that number dramatically. John Muir Concord Campus and AMR are just about ready to launch the pilot. Doctors San Pablo and Sutter Delta have expressed willingness to participate. **So stay tuned TEAM STEMI!**





## Case Study: The Right-Sided 12 Lead

Mark Buell, RN, CEN, EMT-P, STEMI System Coordinator

**Situation:** 9-1-1 call involving 70-year-old male with chest pain rated by pain scale as 4/10, radiating to his back. Patient took one nitro and pain increased to 9/10.

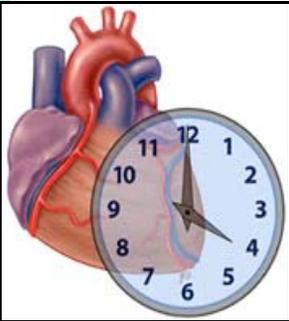
**Background:** Patient seen a few days earlier for chest discomfort and told pain was pleuritic.

**Assessment:** Left-sided 12 lead was completed and read as abnormal, sinus bradycardia. HR 58, BP 142/72, RR 18, SPO2 100%. Skin pale, cool and dry. Paramedic decided to do a right-side 12 lead based on the patient's history of increased pain with nitro. Right-sided 12 lead showed a STEMI!

**RX:** STEMI Alert called and patient transported code 3 to STEMI Center. Treated with ASA and NTG en route.

**STEMI Center:** Patient arrived and met by cardiologist and taken directly to Cath lab for PCI with door to intervention (D2I) of 30 minutes.

**Lesson learned:** Persist in prehospital assessment when patients are responding atypically. Ruling out STEMI by traditional left-sided 12-lead and then repeating the 12 lead on the right side helped speed this patient to definitive intervention. Job well done!



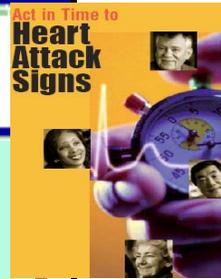
## Doctors San Pablo and Kaiser Walnut Creek Selected for Pioneering Heart Program

California Department of Public Health has launched a pilot program looking at hospitals to provide emergency and non-emergency angioplasty and stenting without in-hospital surgery program backup. There were only six

hospitals in California selected and two of them are here in Contra Costa.

Both facilities are strong partners of the Contra Costa STEMI System since September 2008. They have been successful in meeting national benchmarks for STEMI Center performance. Contra Costa EMS supported each hospital's application and will continue to work closely with them during the study period.

**Congratulations Doctors San Pablo and Kaiser Walnut Creek!**



## Public Education

*“Act In Time!”*

This Quarter over **52%** of STEMI patients continued to transport themselves to the hospital. Teach all chest pain patients to **“Act in Time”** and call **9-1-1**

## STEMI Star Recognition

“STEMI Stars” is Contra Costa STEMI Systems Recognition Program focused on highlighting exemplary performance in the care of STEMI patients and/or support of the STEMI System. Regardless of patient outcome exemplary performance and outstanding effort should be recognized. **This quarter's STEMI Star Recipients are:**

**John Muir Medical Center-Concord:** In recognition for exemplary partnership in facilitating rapid intra-facility transfer of STEMI patients between Contra Costa Regional Medical Center (CCRMC) and their facility.

**CCRMC:** For outstanding process improvement facilitating rapid transfer of walk-in STEMI patients to a STEMI receiving center.

**Uma Cox and Jeff Bradford (AMR):** For outstanding efforts in patient assessment. After a L-sided 12 lead was negative, performed an R-sided 12 lead that was positive for STEMI with D2I of 30 minutes.

**Micheal Martinez, Brad Nygard and Lucas Lambert (MOFPD):** In recognition for not giving up in convincing a patient who was refusing a 12-lead ECG. The team insisted and after consent the patient was found to have a STEMI.