

## **FOR IMMEDIATE RELEASE**

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Contact:  
Gwendolyn Mitchell/Laurel Anderson  
Office of Public Affairs  
(408) 299-5119

Joy Alexiou  
Health & Hospital System  
(408) 885-4164

# **Cardiac Care System to Improve Rapid Treatment for Heart Attacks, Improve Care**

SAN JOSE, CALIF. — Coronary heart disease is the leading cause of death in Santa Clara County. Nationwide the estimated cost was \$151.6 billion in 2007, according to the American Heart Association. Today, the County of Santa Clara Board of Supervisors approved the establishment of a Comprehensive Cardiac Care System that will eliminate barriers to rapid treatment of people suffering from the most serious heart attacks, "ST Segment Elevation Myocardial Infarction" (STEMI). The Santa Clara County Public Health Department's Emergency Medical Services (EMS) Agency will implement the system by mid-summer.

"Heart disease is a killer and for many there are no signs until they experience a heart attack. The Board of Supervisors believes the Comprehensive Cardiac Care System will be instrumental in improving the treatment of individuals suffering from heart attacks," said Supervisor Liz Kniss, Chair of the Board's Health and Hospital Committee.

The system will designate local hospitals as STEMI Receiving Centers, resulting in paramedics transporting residents identified with these heart attacks to the nearest receiving center with emergency cardiac catheterization capability to ensure timely and appropriate treatment.

The new system will provide timely access to hospitals with Percutaneous Coronary Intervention (PCI) capability. The best method of re-opening clogged coronary arteries is cardiac catheterization known as PCI, which uses a catheter threaded into the coronary artery to open the blockage. Compared to clot-busting medications (thrombolytics), patients receiving PCI within 90 minutes of arrival at a hospital have a 38 percent reduction in the risk of death, having a second heart attack or having a stroke.

Santa Clara County ambulance transport data reveals that each month approximately 450 emergency 911 calls for suspected heart attacks were responded to, and of those calls, paramedics identified approximately 10-15 patients per month that had ST Segment Elevation Myocardial Infarction. STEMI's are caused by the sudden blockage of a coronary vessel. Reopening the vessel and allowing recirculation of oxygenated blood to the heart muscle is the key goal of treatment. Since heart muscle cells, like most nerve cells, never grow back, rapid treatment is critical. Damage due to delayed re-opening of a blocked coronary artery is not

reversible. Emergency cardiac catheterization enables doctors to measure blood pressure within the heart and how much oxygen is in the blood.

“Comprehensive Cardiac Care Systems are the emerging standard of care for STEMI patients, and are designed to overcome barriers to prompt treatment by providing both rapid access to the most appropriate care and the best available technologies,” said Bruce H. Lee, Director of the County’s Emergency Medical Services Agency. “Development of this new system, similar to Santa Clara County’s Stroke and Trauma System, and designation of STEMI Receiving Centers, is a critical factor in improving patient recovery and survival.”

The EMS Agency has been making improvements in cardiac care for the past four years, including upgrading field equipment, which has resulted in obtaining 12-lead electrocardiograms (EKGs). A 12-lead EKG is the most accurate way of determining if a patient is having a STEMI, and in the past was available only in hospitals. Another priority has been the training of Santa Clara County paramedics so that they can readily identify STEMI patients suffering from the most serious heart attacks.

The Comprehensive Cardiac Care System Task Force of cardiologists, emergency physicians and hospital leaders from 12 Santa Clara County hospitals was formed in 2007. The Task Force focused on the recommendations for STEMI Receiving Center designation, pre-hospital triage, and transmission of the 12-lead EKG to the hospital.

Eight hospitals including Santa Clara Valley Medical Center, El Camino Hospital, Good Samaritan Hospital, Kaiser Permanente Medical Center-Santa Clara, O’Connor Hospital, Kaiser Permanente Medical Center - Santa Teresa Hospital, Regional Medical Center of San Jose, and Stanford Hospital & Clinics, have been identified as potential participants of the new system.

Hospitals must meet the following criteria in order to obtain designation as a STEMI Receiving Center:

- \* Have a California Department of Health Services licensed Cardiac Catheterization Laboratory.
- \* Be capable of treating patients who present with an ST Segment Elevation Myocardial Infarction on a 24 hours a day/7 day a week basis.
- \* Ensure each on-call cardiologist who performs emergent catheterization meets the American College of Cardiology minimum performance standard of 75 catheterizations per year.
- \* Have cardiothoracic surgery capability on site or have transfer agreements with other hospitals that can provide this service.
- \* Agree to provide quality improvement and patient outcomes data to the EMS Agency as requested.
- \* Participate in a countywide quality improvement committee.
- \* If determined necessary by the County EMS Agency, agree to purchase and maintain 12-lead EKG transmission/receiving systems compatible with the Santa Clara County Emergency Medical Services System.