

**County of Santa Clara**  
**Santa Clara Valley Health & Hospital System**  
Public Health  
Emergency Medical Services



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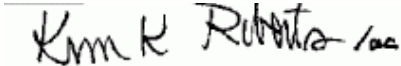
HHC01 121008

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DATE: December 10, 2008

TO: Supervisor Liz Kniss, Chairperson  
Supervisor Blanca Alvarado, Vice-Chairperson  
Health & Hospital Committee

FROM:   
Kim Roberts  
SCVHHS - Chief Executive Officer

SUBJECT: Accept Status Report on EMS Policy on Stroke Centers

**RECOMMENDED ACTION**

Accept status report from the Public Health Department, EMS Agency, on the Santa Clara County Stroke Care System and related EMS Policies.

**FISCAL IMPLICATIONS**

There are no fiscal implications associated with this informational report.

**REASONS FOR RECOMMENDATION**

Stroke is common and it is devastating. Nationally, it is the third leading cause of death and the leading cause of disability. These deaths are tragic but, for many, the lifelong disability from stroke is a “fate worse than death”. Not long ago there wasn’t much that paramedics could do for stroke patients. There is no treatment that can be done in the field nor were there any special hospitals to take them to. Typically, stroke patients would arrive at a hospital where the CT scanner wasn’t functioning, where there was no radiologist to interpret the images, and where there was no neurologist on staff to see the patient and recommend treatment. Transfer to a better-equipped hospital was not a viable option because the delays involved often mean that no treatment that could eliminate the effects of the stroke can be given. This is currently the case for most of California.

As many local hospitals within Santa Clara County began to enhance their ability to care for stroke patients the Santa Clara County EMS Agency recognized that this dismal prognosis for stroke need not apply to county residents. While the concept of specialty designation for stroke is very controversial in the EMS circles, one thing was very clear: when it comes to patient destination there is only one chance to get it right. Taking a page from Santa Clara County's highly successful trauma system, the EMS Agency has partnered with eight hospitals in Santa Clara Valley on a landmark effort directed at integrating the entire spectrum of stroke care, from the moment the 911 call is placed to when the patient is discharged from the hospital. The goal is to save lives and reduce disability for Santa Clara County EMS patients.

## **BACKGROUND**

Two years ago, under the leadership of the Santa Clara County Board of Supervisors, Santa Clara County became the first California County to implement a comprehensive stroke system. As a result, every patient who calls 911 with symptoms of an acute stroke is taken immediately and directly to a certified stroke center where they are evaluated immediately and are treated with specially trained emergency physicians and stroke neurologists. In effect, our prehospital policies have had the effect of raising our community’s standard of care for stroke to an unparalleled degree making Santa Clara County the safest place to have a stroke in California .

Since the March 2006 implementation of Santa Clara County's stroke system other organizations have paid close attention. The American Stroke Association, the National Stroke Association, the Stroke Awareness Foundation and the Peninsula Stroke Foundation have recognized our EMS Agency as a model. Santa Clara County's program has been showcased at conferences and in news reports. Other California counties have followed suit by adopting their own stroke policies. Also, in recognition of the enhanced standard of care for stroke care established in this county, the California Department of Public Health, under a

provision of California's Master Plan for Heart Disease and Stroke Prevention and Treatment, has recommended statewide policies based on Santa Clara County's novel program.

This report provides a brief recap of the planning and implementation efforts leading to the stroke system and a status report since EMS Agency began redirecting stroke patients directly to Primary Stroke Centers in March of 2006.

### **Stroke Task Force Recommendations:**

In the summer of 2004, the EMS Agency convened a broad cross section of EMS and hospital professionals to investigate the feasibility of modified procedures that culminated in specific goals and recommendations to the Board of Supervisors and the EMS Agency. (Table 1):

1. GOAL: Develop a safety net of facilities that can deliver timely, safe and effective emergency care for stroke victims.

This goal has been accomplished with the certification of all eight facilities as Primary Stroke Centers (Table 2). The EMS agency is investigating other methods of extending stroke care to non-stroke hospitals through telemedicine.

2. GOAL: Designate and facilitate the accreditation of all qualified licensed acute care hospitals as Primary Stroke Centers.

As of January 2006, eight facilities have achieved JCAHO Certification as a Primary Stroke Center .

3. GOAL: Incorporate all medical personnel and facilities into a stroke resource network that facilitates prevention, identifies treatment and recovery of stroke patients.

This is an ongoing goal that is part of the purview of the Stroke Audit Committee.

4. GOAL: Encourage data collection and research on stroke-related topics.

EMS Agency is currently involved in collecting data from all paramedic reports and from

all eight PSC's concerning the PSC Activity as well as obtaining outcome information on the transported Stroke Patients. There is one major study underway that is comparing Santa Clara County stroke outcomes with other counties that do not have stroke systems. This is being performed in conjunction with the University of California , San Francisco.

5. GOAL: Solicit cooperation for ongoing education about stroke issues for the general public.

EMS Agency continues to advise the PSC's and the third party non-profit education groups (Stroke Awareness Foundation, Peninsula Stroke Association, American Heart Association, etc.) of the importance for public education to increase the awareness of the general public to use EMS for rapid transport and attention to their stroke symptoms.

Continuing education for EMS providers, nurses and physicians is provided through various forums. Many of the PSC's offer ongoing monthly Stroke Education for which the paramedics are invited to attend. The provider agencies require their personnel to participate in Stroke update classes each year.

To date, there is no unified public education effort between all the stroke centers however each stroke center has done some individual activity. This has been identified as an early goal for the Stroke Audit Committee.

The attachment to this report summarizes the Task Force recommendations, and the status of implementation, as well as stroke system performance data.

### **CONSEQUENCES OF NEGATIVE ACTION**

The Health and Hospital Committee and the Board of Supervisors will not receive the information requested on the Santa Clara County EMS Stroke Care System.

### **ATTACHMENTS**

- Stroke report