



# County of Santa Cruz

0405

## HEALTH SERVICES AGENCY

POST OFFICE BOX 962, 1080 EMELINE AVENUE, SANTA CRUZ, CA 95061-0962  
(831) 454-4011 FAX: (831) 454-4488 TDD: (831) 454-4123

### EMERGENCY MEDICAL SERVICES

May 5, 2000

AGENDA: May 23, 2000

BOARD OF SUPERVISORS  
County of Santa Cruz  
701 Ocean Street  
Santa Cruz, CA 95060

### RE: STATUS REPORT ON THE SANTA CRUZ FIRE DEPARTMENT PARAMEDIC PROGRAM

Dear Board Members:

On October 19, 1999 your Board authorized the Health Services Agency Administrator to enter into an agreement designating the City of Santa Cruz Fire Department (SCFD) as an authorized paramedic service provider. Under this one year agreement Santa Cruz Fire began delivering engine-based paramedic services from its West Side station on November 29, 1999. Your Board also directed HSA to report back at the first meeting in April on the progress made by Santa Cruz Fire. That report was deferred to this date because of the later than expected start-up date by Santa Cruz Fire.

The process utilized to monitor the initial implementation of paramedic services at SCFD is essentially the same as that used with the Central Fire Protection District. Paramedic activity is monitored in accordance with the EMS Quality Assessment and Safety Plan for Implementation of City of Santa Cruz Paramedic Program (First Year). This includes review by the EMS Medical Director, the Emergency Medical Services Integration Authority quality assurance staff, and Dominican Hospital base-station staff. Focused clinical review of Santa Cruz Fire paramedic performance includes: prehospital care report review; critical skills performance review; seldom used medications and skills review; pediatric drugs and skills review; and, compliance with EMS protocols and policies.

#### Prehospital Care Report Review

Between November 29, 1999 and April 23, 2000 there were 169 Prehospital Care Reports (PCR) filed by SCFD paramedics. The Health Services Agency's EMS Medical Director reviews each PCR. The focus of the review was to identify and evaluate the paramedic's performance of critical skills, seldom-used drugs and skills, pediatric care, and compliance with EMS protocols and policies. Summary data on the first 128 patient contacts are included in this report as the EMS Medical Director is on leave and a complete accounting of all PCR'S through April 23 is not yet available to HSA.

Board of Supervisors  
May 23, 2000  
Page 2

### Critical Skills Performance Review Results

**Intubation/Airway Management:** The EMS Medical Director reviewed three instances of endotracheal intubation under the control of SCFD paramedics and found the performance satisfactory. The Prehospital Liaison Nurse (PLN) at Dominican reviews the care of patients arriving by ambulance to the Emergency Department with an unstable airway or requiring advanced airway techniques. There were no instances of an unstable airway amenable to field management.

**Intravenous Access:** All SCFD paramedic attempts to establish an intravenous (IV) line, as specified by clinical indicator criteria, were reviewed. The PLN, in consultation with the base station medical director, has identified no cases under the control of SCFD paramedics where clinical outcomes were adversely affected by the failure to establish IV access in the field.

**Cardiac Rhythm Interpretation:** Of the eighty-three instances where SCFD paramedics utilized an EKG to monitor and interpret cardiac rhythms, there was one disparity in PLN rhythm interpretation. This difference in interpretation had no adverse affect on the clinical care of the patient.

### Seldom-used Drugs and Skills Review

All seldom-used drugs (as defined by clinical indicators), pediatric cases requiring drugs, cricothyrotomy and needle thoracostomy procedures, intra-osseous infusions, external jugular IV's, synchronized countershocks, and defibrillation are subject to review by the EMS Medical Director. There were no seldom-used drugs administered by SCFD paramedics. Of the remaining seldom-used skills, there was one occurrence of defibrillation (correctly applied), one pediatric case requiring drugs, and one external jugular IV access. There were no untoward outcomes directly resulting from the performance of the seldom-used skills.

### General Patient Management Review

Through April 23, SCFD paramedic assessment skills, knowledge of treatment protocols, and appropriate implementation of and adherence to EMS policies and procedures have been reviewed and found to be satisfactory. There is some concern regarding the relatively low number of calls thus far. The West Side engine is averaging just over one call per day where its paramedic has lead responsibility for patient care. With eight paramedics on staff, there has been significant variability in the number of patient contacts among paramedics. Discussions are underway with the **EMSIA** and SCFD as to the seriousness of the volume issue and options available to assure adequate patient contacts and skills maintenance. Since SCFD has been adding experienced paramedics to its force, mainly veteran AMR paramedics, the issue is not considered to be threatening to the quality of patient care being delivered at this time. Additionally, seven of the eight paramedics are working part-time with AMR so they have additional patient contacts outside their role with SCFD.

The Health Services Agency and the Prehospital Advisory Committee are satisfied that the Santa Cruz Fire Department is performing satisfactorily in its initial months of providing **engine-**based paramedic services from its West Side station. There is no evidence that paramedic skills

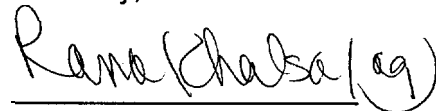
Board of Supervisors  
May 23, 2000  
Page 3

have degraded, nor is there evidence that the public has not benefited from their services. HSA will continue to monitor SCFD paramedic performance. An updated report will be presented in the fall in conjunction with consideration of SCFD's request to continue and expand its paramedic services to an additional station.

It is, therefore, RECOMMENDED that your Board:

Accept and file this report on the performance of the Santa Cruz Fire Department's paramedic program.

Sincerely,



Rama Khalsa, Ph.D

**HSA Administrator**

RK:RV

RECOMMENDED



Susan A. Mauriello  
County Administrative Officer

cc: County Administrative Officer  
County Counsel  
Auditor-Controller  
HSA Administration  
EMS Administrator  
Santa Cruz Fire Department  
Kent Benedict, M.D.  
Marc Yellin, M.D.  
TAG  
EMCC  
EMSIA