

MEMORANDUM:

DATE: March 30, 2005

TO: Joint Powers Governing Board Members
County Health Officers
Lake County Administrative Officer
Prehospital Care Medical Directors
Prehospital Care Nurse Coordinators
Fire Chiefs' Associations/EMS Liaisons
EMCC Chairpersons

FROM: Jody Hurd, Administrative Assistant

RE: Informational Mailing

Enclosed for your information and review are the following items:

1. **POLICY CHANGE NOTICE #71**-please incorporate these into your Policy, Procedures, and Protocols Manual as directed in this notice
2. **North Coast EMS Policies and Procedures Drafts:**
 - a. **Policy # 2302- Administration-Patient Care, Cancellation and Transfer of Patient Care Policy**

*Please review these draft policies and send your comments to North Coast EMS no later than **MAY 16, 2005**. Refer any questions/comments to Larry Karsteadt or Louis Bruhnke.*

For your information:

- A. General Fund #3040 FY 2003-2004 Final Progress Report
- B. FY 04-05 General Fund Grant #EMS 4040 First Quarter Progress Report
- C. North Coast EMS Agency- Prehospital Activity Overview (Part 1) by County, 7/1/2003 – 6/30/2004
- D. North Coast EMS Agency- Prehospital Activity Overview (Part 1) by County, 7/1/2004-9/28/2004
- E. FY 04-05 General Fund Grant #EMS 4040 Second Quarter Progress Report
- F. Special Project EMS #4061- First Quarter Report
- G. Special Project EMS #4061- Second Quarter Report
- H. EMS Agency Fee Schedules

- I. EMSA Letter regarding North Coast Region 2004 Trauma Care System Plan Update
- J. EMSA Letter regarding Base Hospital Status of Adventist Health/Redbud Hospital
- K. Assistance to Firefighters Grant Program Flyer
- L. EMSA Memo- Update of Division 2.5 of the Health and Safety Code Effective January 1, 2005
- M. California Department of Health News Release- Proposed Changes to Nurse-to-Patient Ration Regulations
- N. EMSA Letter regarding Minimum Personal Protective Equipment for Emergency Medical Service and Ambulance Personnel in California
- O. Article written by Louis Bruhnke, Coordinator published in Emergency Medical Services (February 2005) titled “Lessons from Chernobyl”
- P. Best Practices (February 2005) article titled “Draft Scope of Practice Generates Strong Opinions”
- Q. EMS Insider (December 2004) article titled “EMS Medication Temperature Guidance Released”
- V. Best Practices (undated) article titled “Fee Schedule Goes 80/20, No Progress on Condition Codes”
- W. Best Practices (undated) article titled “Rural/Frontier EMS Promotes New Reimbursement Strategies”
- X. Disaster Management & Response (Volume 2, Number 4) article titled “Pediatric Emergency Preparedness for Mass Gatherings and Special Events”
- Y. E-mail regarding Critical Earthquake Safety Information Interesting Perspective
- Z. EMS Insider (September 2004) article titled “When Does a Person Become a Patient?”
- AA. EMS Insider (October 2004) article titled “Top 4 Billing Mistakes to Avoid”
- BB. E-mail regarding Laidlaw International Inc. company changes

CHANGE NOTICE

CHANGE #71

March 30, 2005

TO: ALL PREHOSPITAL CARE POLICY MANUAL HOLDERS

Note: Record change notice on Record of Change Form. Insert this change notice behind the record of change sheet.

INSTRUCTIONS	POLICY #	POLICY DESCRIPTION	# OF PAGES
Replace	#2204	Administration-Patient Care LALS Supply and Equipment List	3
Replace	#2205	Administration – Patient Care EMT-P Standard Drug/Intravenous Solution List	2
Replace	#2304	Administration-Patient Care BLS- Determination of Death	3
Replace	#5332	Scope of Practice/Procedure-EMT-II Benzodiazepines	2

Subject: Administration – Patient Care
LALS Supply and Equipment List

- I. Authority and Reference (incorporated herein by references)
 - A. Division 2.5 of Health and Safety Code
 - B. California Code of Regulations, Title 22
 - C. North Coast EMS Policies and Procedures
 - D. State Emergency Medical Services Authority "Recommended Ambulance Equipment", contained in California Highway Patrol Ambulance Driver's Handbook (#CHP-894)

- II. Purpose
To establish the regional minimum supply and equipment standard for any ambulance or emergency vehicle which responds as, or is held out as, an ALS or LALS unit. ALS or LALS units may exceed the equipment and supply quantities listed herein for procedures and medications which are within the certificate holder's scope of practice described in North Coast EMS Policy and Procedures. This policy is also intended to develop a mechanism for base hospitals to establish supply and equipment requirements which exceed the minimum standard for LALS provider within the Base Hospital's zone.

- III. Minimum Equipment and Supplies
 - A. Minimum Equipment:
Equipment referred to in Section I. C. of this policy. All equipment referred to in this reference, including but not limited to "suggested" equipment, is mandatory.
 1. One (1) mobile or portable FCC approved radio which is capable of two-way communication on Med-Net frequencies 1 through 7.
 2. One (1) three-chambered pneumatic anti-shock garment.***
 3. One (1) portable DC cardiac monitor/defibrillator which is capable of adult and pediatric monitoring and defibrillation through adult and pediatric-sized electrodes.
 4. One (1) each, laryngoscope with handle, spare batteries, and a spare light bulb.
 5. One (1) each, #4 straight and curved laryngoscope blade with light.
 6. One (1) each, #1 and #2 straight laryngoscope blade with light.
 7. One (1) each, adult and pediatric Magill forceps.
 8. One (1) each, adult and pediatric malleable stylet.
 9. One thermometer.
 10. One pulse oximeter (required only on "first-out" ambulances).
 11. One end tidal CO2 monitor or esophageal detector device (EDD).

Subject: Administration – Patient Care
LALS Supply and Equipment List

B. Minimum Supplies:

All supplies referred to in Section I.C. of this policy. All supplies referred to in this reference, including but not limited to "suggested" supplies, are mandatory.

1. One (1) each, esophageal obturator airway with mask, or esophageal gastric tube airway with mask and stomach tube or Esophageal/Tracheal Airway Device.***
2. Electrodes and conductive medium for adult and pediatric monitoring and defibrillation.
3. Four (4) each, 14 gauge, 16 gauge, 18 gauge, 20 gauge, 22 gauge, and 24 gauge catheter over needle intravenous catheters.
4. One (1) venous constricting band with a width of at least one inch.
5. Alcohol preps, water resistant tape, and 2" x 2" gauze pads.
6. One (1) 20 ml syringe.
7. One (1) 10 ml syringe.
8. One (1) 3 ml syringe.
9. One (1) each, red, blue, green, and purple top Vacutainer tubes, or equivalent.
10. One (1) each, 18 gauge by 1 1/2 inch, 23 gauge by 1 inch, and 25 gauge by 5/8 inch hypodermic needles.
11. One (1) IV cap.
12. One (1) each, 2.5 mm through 9.0 mm endotracheal tubes (in 0.5 mm increments).
13. One (1) sterile suction catheter and glove pack for endotracheal suctioning.
14. Two (2) Epinephrine 1 mg in 1 ml (1:1000) ampules.
15. Four (4) Epinephrine 1 mg in 1 ml (1:10,000) preloads.
16. Two (2) each, 0.083% Albuterol Sulfate solution for inhalation in 3 ml unit dose bottles or equivalent.
17. Four (4) each, children's Aspirin (81 mg).
18. Four (4) Atropine 0.5 mg in 5 ml preloads or two (2) 1.0 mg in 10 ml preloads.
19. One (1) multi-dose vial Atropine 0.04 mg/ml containing at least 20 ml's.
20. One (1) Calcium Chloride 1 gm in 10 ml preload.
21. Two (2) Dextrose 50% in 50 ml preload.
22. Two (2) Dextrose 25% in 10 ml preload.
23. Two (2) each, Diazepam 10 mg in 2 ml or equivalent.
24. Two (2) Furosemide 20 mg in 2 ml ampules or equivalent.
25. Three (3) Lidocaine HCl 100 mg in 5 ml or 10 ml preload

Subject: Administration – Patient Care
LALS Supply and Equipment List

26. One (1) Lidocaine HCl 2 gm in 10 ml preload or pre-mixed Lidocaine drip 4 mg/ml.
27. Two (2) Morphine Sulfate 10 mg in 1 ml vial, or 10 mg in 10 ml preloads.
28. One (1) bottle Nitroglycerine 0.4 mg (1/150 grain) sublingual tablets, or one (1) canister aerosol spray delivering 0.4 mg per meter-dosed spray.
29. Two (2) Sodium Bicarbonate 44.6 mEq in 50 ml preload.
30. Four (4) Naloxone 1 mg in/ml ampules, or one (1) multi-dose vial.
31. Two (2) normal Saline, 250 or 500 ml in a plastic container. (The Base Hospital Medical Director may at his/her option substitute 5% Dextrose in water 250 or 500 ml in a plastic container. If this option is exercised, the Medical Director of North Coast EMS shall be notified in writing.)
32. Four (4) normal Saline, 1000 ml in plastic containers.
33. Two (2) D5 ½ NS 500 ml or one (1) D5 ½ NS 1000 ml in plastic containers.
34. Two (2) each, 60 gtt/ml, 15 gtt/ml, and 10 gtt/ml intravenous infusion sets or equivalent.
35. One (1) small volume nebulizer, Puritan Bennett #0001140 or equivalent.
36. Fifteen (15) triage tags, Met Tag or equivalent.

IV. Additional Base Hospital Requirement

A Base Hospital may require an LALS provider within the base hospital's zone to maintain supplies and equipment which exceed these minimum requirements. If a base hospital seeks to require any additional inventory requirements, the base hospital shall:

- A. Propose the additional requirements in writing with reasons and justification to the North Coast EMS Medical Director; and,
- B. Copy the proposal to the affected LALS provider(s).
- C. The North Coast EMS Medical Director will return a decision within forty-five (45) days unless additional time is required to receive comments regarding the base hospital proposal. All decisions will be made within ninety days (90) of receipt of proposal.

*** Indicates optional with the signed approval of the provider's base hospital
Prehospital Care Medical Director

Approved: _____ Date: _____

Approved as to Form: _____ Date: _____

Subject: Administration - Provider
EMT-P Standard Drug/Intravenous Solution List

Associated Policies: 2202, 2203, 2204

- I. Authority and Reference (incorporated herein by references)
- A. Division 2.5 of Health and Safety Code
 - B. California Code of Regulations, Title 22, Section 100126
 - C. North Coast EMS Policies and Procedures
 - D. California Emergency Medical Services Authority "Recommended Ambulance Equipment", contained in California Highway Patrol Ambulance Driver's Handbook (#CHP-894)
- II. Purpose
- To list minimum supplies and materials required for each Advanced Life Support Unit (Paramedic). Supplies and materials listed are in addition to those specified in the LALS Supply and Equipment List.
- A. Minimum Equipment and Supplies:
- 1. Two (2) each, activated charcoal 50 gm suspended in 8 oz Sorbitol.
 - 2. One (1) each, activated charcoal 25 gm without Sorbitol or equivalent.
 - 3. Five (5) each, Adenosine 6 mg vials.
 - 4. Five (5) each, Bretylium Tosylate 500 mg in 10 ml ampules. ***
 - 5. Two (2) each, Diphenhydramine HCl 50 mg in 1 ml or 5 ml preloads.
 - 6. Two (2) each, Dopamine HCl 200 mg in 5 ml ampule or one (1) 1600 µ/ml pre-mix.
 - 7. One (1) Glucagon 1 mg in 1 unit vial.
 - 8. Two (2) each, Magnesium Sulfate 10% solution in 50 ml or 50% solution (5G/10ml).
 - 9. Two (2) each, Oxytocin 10 USP units in 10 ml vials or equivalent. ***
 - 10. One (1) Neosynephrine 0.5% solution.
 - 11. One (1) Procainamide 100 mg/ml (1 gm/10 ml) in 10 ml vial or equivalent. ***
- B. Minimum Number of IV Solutions:
- 1. One (1) NS 50 ml in plastic container.
- C. Other Equipment:
- 1. One (1) each, 40, 32, and 26 Fr. Ewald tubes or equivalent.
 - 2. One (1) each, nasogastric tube, 12, 14, 16, and 18 French or equivalent.
 - 3. One (1) infant feeding tube, 8 French or equivalent.
 - 4. One (1) 60 ml irrigation (catheter tip) syringe.
 - 5. One (1) closed system gastric lavage tray or equivalent.

Subject: Administration - Provider
EMT-P Standard Drug/Intravenous Solution List

6. One (1) Heimlich valve.
7. One (1) infusion pump, drip or volumetric (optional).
8. Six (6) Betadine preps or equivalent.
9. One (1) 3-way IV stopcock.
10. One (1) transtracheal over the needle catheter (13 gauge) or equivalent.
11. Two (2) 12 - 14 gauge angiocatheters.
12. One (1) female luer-lock adapter.
13. One (1) jet insufflation device.
14. Two (2) intraosseous needles 13 - 18 gauge, 1 1/2 - 2 inches long.

*** Indicated optional with the signed approval of the provider's base hospital Prehospital Care Medical Director.

Approved: _____ Date: _____

Approved as to Form: _____ Date: _____

Subject: Administration – Patient Care
BLS – Determination of Death

Associated Policies: 2305, 2307

- I. Authority and Reference (incorporated herein by references)
 - A. Division 2.5 of Health and Safety Code
 - B. California Code of Regulations, Title 22
 - C. North Coast EMS Policies and Procedures

- II. Purpose
To establish regional policy and procedure for basic life support (BLS) personnel to determine and document death in the prehospital setting. For the purpose of this policy, "BLS personnel" is defined as a rescuer who is currently certified as a First Responder or Emergency Medical Technician-I within the North Coast EMS region.

- III. Policy
 - A. Do Not Resuscitate (DNR) Requests:
CPR should not be initiated on a pulseless, non-breathing patient when a valid Do Not Resuscitate (DNR) Request, No Code or No CPR Order meeting Policy #2307 requirements is presented.
 - B. Obvious Death:
CPR does not need to be initiated if a pulseless, non-breathing patient has one or more of the following conditions:
 1. Decapitation.
 2. Decomposition.
 3. Incineration of the torso and/or head.
 4. Visible exposure, destruction, and/or separation of vital internal organs (brain, spinal cord, liver, heart, or lungs).
 5. Rigor or livor mortis (without contributing environmental factors - see special considerations).
 6. Severe injuries obviously incompatible with life.
 7. Submersion greater than or equal to twenty-four (24) hours.
 - C. Possible Death:
If any doubt exists regarding the patient's conformance with the criteria above for obvious death, then CPR shall be initiated (unless impossible) and maintained until transfer of patient care to ALS personnel, or patient delivery at a receiving hospital.
 - D. North Coast EMT-II's/P's may discontinue CPR upon voice orders from a base hospital physician. EMT-I's transferring care to ALS personnel are authorized to follow an EMT-II's/P's instructions to discontinue resuscitation.

Subject: Administration – Patient Care
BLS – Determination of Death

- E. At no time shall BLS personnel discontinue CPR unless one or more of the following criteria are met:
 - 1. The rescuer is physically exhausted and unable to continue.
 - 2. Spontaneous circulation and respiration is restored.
 - 3. CPR is being transferred to other persons qualified to perform CPR.
 - 4. A California-licensed physician at the scene (i.e., telecommunication orders cannot be accepted by BLS personnel) assumes total responsibility for the patient by ordering BLS personnel to discontinue CPR.
 - 5. A valid Do Not Resuscitate (DNR) Request, No Code, or No CPR Order meeting Policy #2307 requirements is provided.

- IV. Procedure
 - A. In any event where death is determined by BLS personnel, cancel ALS response, notify the appropriate agency with primary investigative authority (coroner, law enforcement) and all pertinent facts and findings should be documented as soon as possible. Refer to your County Coroner's policy regarding disposition of the deceased.
 - B. If death appears to be from other than natural causes, the body and scene should be disturbed as little as possible to protect potential crime scene evidence.
 - C. A First Responder or EMT-I who does not begin resuscitation of a pulseless and apneic patient shall document the prehospital event on a First Responder Report or Prehospital Care Report (PCR) to be retained by that first responder's or EMT-I's provider agency for a period of not less than 4 years.

- V. Special Information
 - A. Division 2.5 of the California Health and Safety Code, Section 1798.6(a), states that the authority for patient care management in an emergency shall be vested in that licensed or certified health care professional, which may include any paramedic or other prehospital emergency personnel, at the scene of the emergency who is most medically qualified specific to the provision of rendering medical care.
 - B. If directed by a law enforcement officer to transport a victim who is obviously dead, comply with the order and document the incident upon arrival at the hospital. Provisions of the California Penal Code make it

Subject: Administration – Patient Care
BLS – Determination of Death

unlawful to willingly fail or refuse to comply with any lawful order, signal or direction of any peace officer.

- C. Hypothermia can mask the positive neurological reflexes which indicate life, so it is imperative to be certain no contributing environmental factors exist, such as cold water submersion or cold exposure. If there exists any possibility that either of these could be a factor, resuscitation should be started immediately.

Approved: _____ Date: _____

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Subject: Scope of Practice/Procedure- EMT-II
Benzodiazepines

- I. Indications
 - A. Sustained and/or recurrent grand mal seizures.
 - B. Before cardioversion or transcutaneous pacing in conscious patients.

- II. Therapeutic Effects
 - A. Decreased cerebral irritability
 - B. Relaxes skeletal muscles
 - C. Sedation

- III. Contraindications
 - A. Absolute:
 - 1. Suspected or know allergy to Benzodiazepines.
 - B. Relative:
 - 1. Shock
 - 2. Pregnancy
 - 3. Trauma to rectum (for rectal administration).
 - 4. Congenital or surgical anomaly of the rectum (for rectal administration)

- IV. Adverse Effects
 - A. Respiratory depression or arrest may be caused or worsened by Benzodiazepines.
 - B. Drowsiness, vertigo, ataxia, transient hypotension
 - C. Rectal injury may occur due to forceful entry of the syringe
 - D. Inadequate absorption, following rectal administration

- V. Administration of Diazepam
 - A. Adult:
 - 1. 2.5-20 mg IV push in 2.5 mg increments titrated to effect. May give up to 40mg in status epilepticus. 5-10 mg IM.
 - B. Pediatric:
 - 1. 0.1-0.3 mg/kg slow IV push or 0.5 mg/kg (maximum dose 20mg) rectally.

Subject: Scope of Practice/Procedure- EMT-II
Benzodiazepines

VI. Administration of Midazolam (Paramedic Scope Only)

A. Adult:

1. IV: 1-2.5 mg slow IV (over 2-3 min);
may be repeated if necessary in small increments (total maximum dose to 0.1 mg/kg not to exceed 10 mg)
2. IM: 5 mg (0.07 mg/kg) IM

B. Pediatric:

1. IV .05 mg/kg not to exceed 5 mg per dose or 10 mg total.
2. IM 0.1 mg/kg. Further doses up to .4 mg/kg. No single dose to exceed 5 mg or 10 mg total.

VII. Special Information

- A. Never give without resuscitation equipment available
- B. Push as close to the hub as possible. Benzodiazepines may precipitate if mixed with other drugs or IV solutions.
- C. Effects of Benzodiazepines potentiated with alcohol and other sedatives.
- D. Painful upon IM administration, unpredictable absorption.
- E. Do not inject a single IM dose of more than 2 cc. Any dose greater than 2 cc should be administered in multiple injections.

Approved: _____

Date: _____

Approved as to Form: _____

Date: _____

Subject: Administration – Patient Care
Cancellation and Transfer of Patient Care Policy

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Associated Policies:

- I. Authority and Reference (incorporated herein by references)
 - A. Division 2.5 of Health and Safety Code
 - B. California Code of Regulations, Title 22, Division 9
 - C. North Coast EMS Policies and Procedures

- II. Purpose

To establish procedural guidelines for basic life support (BLS) personnel to discontinue response of advanced life support (ALS) or limited advanced life support (LALS) and provide BLS transport, and guidelines for LALS personnel to discontinue an ALS response and provide LALS transport. This policy is also intended to establish a procedure for prehospital care personnel to relinquish care and custody of a patient to a lower certificate holder.

- III. Guidelines For Cancellation of ALS or LALS Response by BLS Personnel

- A. In general, BLS personnel at the scene of a medical emergency should ~~not~~ transport even if ALS or LALS personnel are responding. ~~Ordinarily, BLS personnel should wait for ALS or LALS personnel to arrive at the scene. The following exceptions may be applied: unless the ETA is only a few minutes~~
 - 1. ~~the patient is suffering from an injury or illness which clearly requires rapid transport in order to reduce the risk of increased morbidity or mortality caused by delayed transport; or,~~
 - 2. ~~the patient clearly has only a minor injury or illness which has no apparent indication for ALS or LALS care.~~
- B. ~~If, in the opinion of BLS personnel, the patient meets one of the above exceptions for cancellation of ALS or LALS with BLS transport, then the BLS provider shall contact the base hospital by radio or telephone with a complete report of the patient's condition. The base hospital physician or MICN shall determine if cancellation of ALS or LALS with BLS transport is appropriate.~~
- C. ~~ALS or LALS may be cancelled with base hospital permission for BLS transport.~~ Transporting BLS units shall attempt to rendezvous with an ALS or LALS unit between the scene and receiving hospital if so ordered by the base hospital.
- D. In the event of radio failure and/or inability to telephone the base hospital, the BLS unit may transport a patient ~~if the patient clearly meets one of the exception criteria in paragraph A of this section.~~ In the event that the patient has any apparent indication for ALS or LALS, then the transporting BLS unit shall not cancel an ALS or LALS response; rather, the BLS unit

Subject: Administration – Patient Care
Cancellation and Transfer of Patient Care Policy

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shall attempt to rendezvous with an ALS or LALS unit between the scene and receiving hospital.

~~IV. Guidelines For Cancellation of ALS Response by LALS Personnel~~

~~A. LALS personnel at the scene of a medical emergency should not transport a patient if ALS personnel are responding, and the patient has indication(s) for prehospital ALS treatment exceeding EMT-II scope of practice. The following exceptions may be applied:~~

- ~~1. the patient is suffering from an injury or illness which clearly requires rapid transport in order to reduce the risk of increased morbidity and mortality caused by delayed transport; or,~~
- ~~2. the patient has an injury or illness which does not require EMT-P treatment (therapy within EMT-P scope of practice that exceeds EMT-II scope of practice) for the relief of unnecessary suffering, and/or decreased risk of morbidity and mortality.~~

~~B. If, in the opinion of LALS personnel, the patient meets one of the above exceptions for cancellation of ALS with LALS transport, then the LALS provider shall contact the base hospital by radio or telephone with a complete report of the patient's condition. The base hospital physician or MICN shall determine if cancellation of ALS with LALS transport is appropriate.~~

~~C. ALS may be cancelled with base hospital permission for LALS transport. Transporting LALS units shall attempt to rendezvous with an ALS unit between the scene and receiving hospital if so ordered by the base hospital.~~

~~D. In the event of radio failure and/or inability to telephone the base hospital, the LALS unit may transport a patient if the patient clearly meets one of the exception criteria in paragraph A of this section. In the event that the patient has any apparent indication for ALS, then the transporting LALS unit shall not cancel an ALS response; rather, the LALS unit shall attempt to rendezvous with an ALS unit between the scene and receiving hospital.~~

V. Relinquishing Patient Care to a Lower Certificate Holder (in a separate unit)

A. The following prehospital care certificate holders may relinquish custody and care of a patient to a lower certificate holder when the patient's condition clearly does not require the scope of practice of higher certificate holder; that is, the scope of practice of the lower certificate holder can address the needs of the patient: EMT-P to EMT-II or EMT-I; EMT-II to EMT-I.

B. If a prehospital provider seeks to relinquish care to a lower certificate holder, he/she shall contact the base hospital with a complete report of the

Subject: Administration – Patient Care
Cancellation and Transfer of Patient Care Policy

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- patient's condition, and specify to whom the patient will be transferred (EMT-II to EMT-I; EMT-P to EMT-II, etc.). The base hospital may grant or deny permission for the same.
- C. In the event of radio failure and/or inability to telephone the base hospital, the higher certificate holder shall maintain care and custody of the patient.

VI. Documentation and Base Hospital Review

- ~~A. Implementation of this policy by prehospital care personnel shall be documented on the Ambulance/Rescue Record (ARR). When applicable, a Radio Failure Report shall also be completed and submitted with a copy of the ARR in accordance with North Coast EMS Policy and Procedure.~~
- ~~B.A. The base hospital should review and discuss implementation of this policy during regular chart review, and shall report any problem or pattern of irregularity in compliance with this policy to the North Coast EMS Medical Director.~~

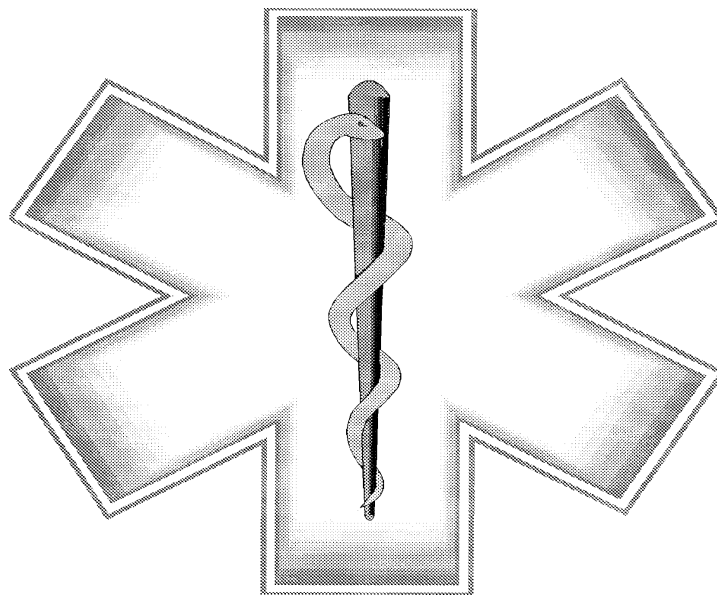
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NORTH COAST EMERGENCY MEDICAL SERVICES

3340 Glenwood Street, Eureka, California 95501

Serving Del Norte, Humboldt, Lake and southern Trinity Counties



Fiscal Year 2003 - 2004 Final Report

General Fund Grant # 3040

August 30, 2004

Overview:

In Fiscal Year 2003-2004, North Coast Emergency Medical Services (EMS) continued to serve as the local EMS agency for the functions delegated by Del Norte, Humboldt, Lake and southern Trinity Counties. The Agency continued to manage the regional EMS system in accordance with state law and guidelines, under direction of the Joint Powers Governing Board and in coordination with a large network of organizations and individuals. North Coast EMS staff and contractors facilitated the planning, coordination and evaluation of the EMS system through a program of community consensus, patient and EMS participant advocacy and continuous quality improvement (CQI).

The Joint Powers Governing Board directed the activities of North Coast EMS during FY 2003-2004. The Board consisted of the following members: Supervisor John Woolley, Humboldt County, Chairperson; Supervisor Chuck Blackburn, Vice-Chairperson, Del Norte County; and Supervisor Rob Brown, Lake County. Alternates to the JPA Board were: Supervisors Martha McClure, Del Norte County; Ann Lindsay, M.D., Humboldt County; and Supervisor Ed Robey, Lake County. The Agency was managed by the following general fund employees (totaling 4.6 FTE). Please note that approximately 15% of Larry Karsteadt's salary was offset by the Trauma Grant (#1091):

- Larry Karsteadt, Executive Director (1.0 FTE)
- Wendy Chapman, Training Coordinator (1.0 FTE)
- Maris Hawkins, Program Assistant II (0.6 FTE)
- Louis Bruhnke, EMT-P, EMS Coordinator (1.0 FTE)
- K. Jody Hurd, Administrative Assistant (1.0 FTE); replaced Charlotte Aros

Several part-time independent consultants totaling less than 0.5 FTE were involved with general fund operations, including:

- John Kelsey, M.D., Regional Medical Director
- Pat Farmer, R.N., Mobile Intensive Care Nurse & Base Hospital Site-Visit Coordinator
- Pam Haynes, RN, Regional Trauma Coordinator (Trauma Grant) and Emergency Dept Approved for Pediatric Site-Visit Coordinator
- Tim Citro, EMT-P, AED Review/Cindy Henderson, EMT-P, AED Review
- Willie Sapeta, EMT-P, EMT-I Testing (Lake County)
- City Ambulance of Eureka, Inc., Rural Outreach Special Project Grant
- Northern California Safety Consortium, Prehospital MCI/Disaster Preparedness Special Project Grant
- Jay Myhre, EPCIS Programmer
- Ezequiel Sandoval, Office Computer Maintenance
- The Abaris Group (Trauma Grant)
- Mary Donati, R.N., Trauma Grant
- Moss, Levy, and Hartzhiem, Auditor
- Vickie Gibney, R.N., MICN Test Revision (Written and Skills)
- Debbie McMahan, R.N., Sutter-Coast Hospital CQI and FCA
- Tom Apelar, EMT-P, PHTLS Training
- ReddiNet

North Coast Emergency Medical Services General Fund #3040 Progress Report

Fiscal Year 2003-2004

The following report on progress at North Coast EMS during Fiscal Year 2003-04 meets the requirements of the California EMS Authority General Fund Contract #EMS-3040 and the document entitled: "Funding of Regional EMS Agencies with General Fund Monies (June, 2001)." The report specifically addresses the goals, workload indicators, accomplishments and issues relative to contract objectives and as specified by the California EMS Authority (EMSA).

1.0 System Organization and Management

Objective: To develop and maintain an effective management system to meet the emergency medical needs and expectations of the population served.

Workload Indicators:

Total Static Population Served = **216,200**

Total Annual Tourism Population = **+3 million**

Number of Counties = **3.3** (Del Norte, Humboldt, Lake, s. Trinity)

Geographic Size of Region = **6,840 square miles** (5,840 in the three JPA member counties and approximately 1,000 in southern Trinity County, which roughly equals one-third of the County)

Accomplishments: This year,

1. North Coast EMS personnel attended the following state EMS meetings:
 - a. Emergency Medical Directors Association of California (EMDAC)
 - b. Emergency Medical Services Administrators Association of California (EMSAAC)
 - c. State Trauma Advisory Committee
 - d. Rough and Ready Planning Meetings and Conferences, Ukraine
 - e. EMS for Children Coordinator Committee
 - f. EMS for Children Conference Planning Committee
 - g. EMS for Children Statewide Conference
 - h. EMS for Children Statewide Conference - Registration Processing
 - i. EPCIS Special Project – Conference Calls
 - j. ReddiNet Meetings
 - k. NorCal EMS National Registry EMT-I
 - l. EMSAAC Annual and ReddiNet Conference, Lake Arrowhead, CA

2. North Coast EMS personnel attended the following regional meetings:
 - a. Joint Powers Governing Board
 - b. Humboldt/Del Norte Medical Advisory Committee (MAC) and Lake MAC

- c. Lake and Humboldt County Emergency Medical Care Committees (EMCC)
 - d. Lake County Ambulance Ordinance Subcommittee
 - e. Regional Trauma Advisory Committee Meetings (southern and northern sections)
 - f. Humboldt County Fire Chiefs Association
 - g. Humboldt County Child Death Review Team
 - h. Humboldt County Injury Prevention and Injury Prevention Press Conference
 - i. Injury Prevention Booth – St. Joseph Health Fair
 - j. Child Passenger Safety Committee, Ceremony and Public Service Announcements
 - k. Humboldt/Del Norte Disaster Committee
 - l. Fire Safe Council
 - m. Del Norte County First Responder Dispatch
 - n. MCI/Disaster Special Project Steering Committee
 - o. Arcata Airport Table Top Exercise and Drill
 - p. Lake County Airport Exercise
 - q. Humboldt and Lake County State Exercise
 - r. Community Resource Mobilization
 - s. Prehospital MCI/Disaster and Rural Outreach Special Project Steering Committees
 - t. HRSA Committees
 - u. Sutter-Lakeside and Sutter-Coast Base Hospital Meetings
 - v. Humboldt and Lake County Health Officers
 - w. Humboldt County MCI/Communications
 - x. Trauma Registry (Collector) Meetings – Humboldt and Lake
 - y. Regional Trauma Advisory Committee Meetings
 - z. EMS Week Presentations
 - aa. Humboldt Multi-Casualty Incident Conference
 - bb. Protransport Meeting
3. North Coast EMS hired K. Jody Hurd as Administrative Assistant following the resignation of Charlotte Aros.
 4. North Coast EMS contracted with several GF and special project contractors, including: Dr. John Kelsey, Pat Farmer, R.N., Pam Haynes, R.N., Tim Citro, EMT-P, Cindy Henderson, EMT-P, Jay Myhre, Ezequiel Sandoval, The Abaris Group (Trauma), Pam Haynes, R.N. (Trauma), Mary Donati, R.N., (Trauma); City Ambulance of Eureka, Inc. (Rural Outreach), the Northern California Safety Consortium (MCI/Disaster), Moss, Levy and Hartzhiem (Agency Audit), Willie Sapeta, (Lake County EMT-I Testing), Debbie McMahon, R.N. (CQI), Tom Apelar, EMT-P (PHTLS), ReddiNet (Hospital Communications) and Vickie Gibney, R.N. (MICN).
 5. The Agency distributed draft and final policies, protocols and information items for regional review and input in five Informational Mailings.
 6. North Coast EMS maintained (www.northcoastems.com), which regularly posts upcoming training, the EMS Plan, the Regional Trauma Plan and links to other EMS web sites and other information. The Call of the Month was suspended due to time constraints.
 7. North Coast EMS executed the State EMS General Fund contract for a total of \$229,933 and

received a 25% advance for FY03-04. This years' total appropriation again represents a 4% decrease in the annual state fund (\$9,484, which is the second year in a row). All counties submitted their fiscal shares, almost all SB612 funds have been received and the Bertha Russ Lytel Foundation grant for the Regional Medical Director was increased to \$12,500. The GF budget was adjusted with JPA Board approval and the state contract was modified. The Agency again began the year with a larger Fund Balance/Reserve than in past years.

8. The Agency continued the Regional Trauma Project, the Prehospital Multi-Casualty Incident/Disaster Preparedness special project and the Rural Outreach Medical Training special project. We formally received contract extensions for all three projects and continued to participate in the Hospital Communications System grant (ReddiNet).
9. The Agency submitted all required quarter and final reports for the General Fund, Trauma Project, Rural Outreach, Prehospital MCI/Disaster and ReddiNet.
10. The Agency audit was conducted for FY 2002-03; the audit report was sent to the EMSA and was distributed to Governing Board. There were no findings.
11. The Agency completely revised the Regional EMS Plan and later provided a year end update as requested by the EMSA specific to ambulance services. The revised Plan was approved by the EMSA.
12. The North Coast EMS Regional Trauma Plan was approved by the EMSA as part of the Trauma Project.
13. The Regional Multi-Casualty Incident Plan was completed as part of the MCI Special Project.
14. North Coast EMS commented to the EMSA on the proposed state regulations.
15. Statements of Economic Interest were distributed for completion as required to all JPA members, staff and relevant contractors.
16. Three JPA Governing Board meetings and a public hearing (Redbud Status Change) were convened during the year. Fees were increased and the Regional Trauma Plan was approved in addition to numerous other actions.
17. The Bertha Russ Lytel Foundation grant was submitted and received for FY 04-05. The allocation was continued at \$12,500.
18. Statements of Economic Interest were completed as required and all employees completed the Department of Justice background checks.
19. The office acquired an automatic computer back-up system and a voice mail system.
20. The Agency submitted and received a special project entitled: *Implementation of a Regional Trauma System* beginning next fiscal year.

Issues/Solutions:

1. North Coast EMS and the other regional agencies, all of which are in need of a state General Fund augmentation, received an annual 4% cut beginning in FY 2002-03. Fortunately, because of AB430 Trauma System Care Systems Plan Preparation and Implementation Funding, we were able to prevent staff cuts. However, increasing operational costs and cost of living expenses are continuing, and continuation of the state cut in the future will negatively impact the Agency. Consequently, we increased certifications and other fees, received a larger allocation from Bertha Russ Lytel Foundation, reduced travel and non-essential expenditures and reduced contractor expenses. The new Trauma Grant will help offset staff cuts for FY 2004-05.
2. Although the relative workload is greater, current staff size at North Coast EMS is less by almost one FTE than in the late 1980s. Consequently, staff participation in state and regional activities and overall travel has decreased.
3. The Bertha Russ Lytel Foundation increased funding to North Coast EMS two years in a row at our request, to help offset decreasing state GF revenue. For FY 2004-05, however, the Foundation requested additional justification for the increase and a more detailed explanation of our budget. This information was provided.

2.0 Staffing and Training

Objective: To ensure personnel functioning within the EMS system are properly trained, licensed/certified/authorized and/or accredited to safely provide medical care to the public.

Workload Indicators:

Total Number of Personnel Certified/Authorized/Accredited by Regional Agency = **1,139**
Total Number of Personnel Completing Training Courses Approved by Regional Agency = **442**
Total Number and Type* of Approved Training Programs Approved by Region = **33**
Total Number and Type of Training Programs Conducted by Regional Agency = **1**
Total Number of Continuing Education Providers Authorized by Regional Agency = **37**

* - for Type of Certificate or Program, see below (#1 and 2 respectively).

Status: This year,

1. The following EMS personnel possessed North Coast EMS issued documents:

- | | |
|------------------------------------|-----------------------------|
| a. Certified EMT-Is = | 920 (79 are ETAD certified) |
| b. Certified EMT-IIIs = | 3 |
| c. Accredited Paramedics = | 104 |
| d. Authorized MICNs = | 112 |
| e. Field Training Officers = | 51 |
| f. Heparin/Nitro Infusion Medics = | 50 |

2. Regional instructors conducted the following North Coast EMS approved training programs:

	Approved	Conducted
a. Esophageal Tracheal Airway Device =	9	4
b. EMT-I =	15	18
c. Paramedic =	1	1
d. Field Training Officers =	2	2
e. Mobile Intensive Care Nurse =	2	3
f. Emergency Medical Dispatch =	1	
g. Lake County EMT-I Tests Sessions =	1	3
h. Heparin/Nitro Infusion =	several	2
i. Cardiac Pacing	several	1

3. Instructors reported that a total of **368** students completed the primary classes (EMT-I, Paramedic, MICN).
4. The North Coast Paramedic Training Program was initiated as a new program under the administrative oversight of North Coast EMS.
5. Approval for **37** continuing education (CE) programs was continued by North Coast EMS and numerous CE programs were offered within the region.
6. All Agency staff completed the Department of Justice requirement with regard to conducting background checks on applicants for certification for cause.
7. Several licensure or certification reviews were conducted or continued during the year.
8. The Rural Outreach Medical Training special project grant was extended. Several Pediatric Emergencies for Prehospital Professionals (PEPP) classes were conducted (one in each county). As part of the extended Trauma grant, Prehospital Trauma Life Support (PHTLS) class was held in Del Norte County.
9. The Agency continued to implemented use of Heparin and Nitroglycerine Infusions, Cardiac Pacing and Versed (as part of an expanded Benzodiazepine policy) by trained paramedics.
10. Agency staff attended the North Coast Paramedic Training program and EMT-I and First Responders classes.
11. The Agency helped coordinate new training programs associated with use of the Collector Trauma Registry program and the ReddiNet program as part of the Trauma and Hospital Communications grants.
12. North Coast EMS raised fees during the year for certifications.
13. The North Coast Safety Consortium conducted a MCI Conference in Humboldt County as part of the extended MCI grant.

14. The Executive Director and EMS Coordinator co-presented the International MCI: Chernobyl Experience at the MCI Conference, and the Executive Director presented the same talk at Redwood Memorial Hospital for continuing education credits.

Issues/Solutions:

1. The Trauma grant and both special projects involving the training of prehospital personnel, Rural Outreach and MCI/Disaster, required extensions to allow contractors can complete all objectives.
2. North Coast EMS assumed administrative oversight for the new North Coast Paramedic Training program in September to ensure that sufficient paramedics continued to be available within the region to staff ambulances. The Agency inadvertently neglected to properly notify the EMSA of the new class, EMSA appropriately questioned the newness of the program and eventually accepted the Agency's process to verify newness. North Coast EMS is currently in the process of preparing to apply for national accreditation.
3. During the year, the new paramedic-training program received a student compliant and request for partial refunding. The issues raised were reviewed appropriately and funds were reimbursed. The program also had difficulty in getting Operating Room approval at a few hospitals, but this was satisfactorily resolved.
4. North Coast EMS attempted to conduct PHTLS classes in Humboldt and Lake Counties, but there were insufficient sign-ups to conduct the classes.

3.0 Communications

Objective: To develop and maintain an effective communications system that meets the needs of the EMS system.

Workload Indicators:

Total Number of Primary and Secondary PSAPs = **11**

Total Number of EMS Responses = **18,913** Prehospital Care Reports were submitted

Total Number of Ambulances Dispatched = **18,498** transports were reported

Total Number of Emergency Medical Dispatch (EMD) Programs Approved by Region = **2**

Total Number and Type of EMD Programs Authorized by Agency = see #1 & 2 below.

Status: This year,

1. North Coast EMS again utilized the Priority Dispatch Corp, USA to conduct one Emergency Medical Dispatch training program in the region. Located in Utah, Priority Dispatch Corp, USA is Certified by the National Academy of EMD and is the oldest and most widely used program in the world. Unfortunately, the class was canceled due to a lack of students.
2. Eleven (11) Public Safety Answering Points (PSAPs) were utilized by regional EMS providers as follows (several PSAPs directly dispatch ambulances):

PSAP	Location	EMD Utilized
a. Del Norte Co. Sheriffs Department	Del Norte County	No
b. Humboldt Co. Sheriffs Department	Humboldt County	No
c. Humboldt State University	“	No
d. Arcata Police Department	“	No
e. Eureka Police Department	“	Yes
f. California Highway Patrol - Arcata	Del Norte & Humboldt	No
g. Fortuna Police Department	Humboldt County	No (dropped)
h. California Division of Forestry - Fortuna	“	Yes (secondary PSAP)
i. Trinity Co. Sheriffs Department	Trinity County	No
j. Lake Co. Sheriffs Department	Lake County	No (dropped)
k. California Highway Patrol – Ukiah	Mendocino County	No

3. Six (6) non-PSAP ambulance dispatch centers were utilized within the region for dispatching ambulances:

a. K’ima:w Tribal Police	Humboldt County	No
b. City Ambulance of Eureka	“	No
c. Southern Trinity Rescue Dispatch	Trinity County	No
d. Redwood Empire Life Support	Sonoma County	No
e. CDF – Howard Forest	Mendocino County	No
f. CDF – Napa	Napa County	No

4. North Coast EMS maintained contracts requiring field to hospital communications and recording equipment with six (6) base hospitals, one alternative base hospital and 17 LALS/ALS providers (includes: Del Norte Ambulance, K’ima:w Ambulance, Arcata-Mar River Ambulance, Orleans Fire, Loleta Fire, Southern Trinity Area Rescue (STAR), Shelter Cover Fire, City Ambulance of Eureka, Inc. {Eureka, Fortuna, Garberville stations}; Upper Lake Fire; Nice Fire; Lucerne Fire; Clearlake Oaks Fire; Lake County Fire; South Lake Fire; Kelseyville Fire; Lakeport Fire; Redwood Empire Life Support {RELS - includes Clearlake and Lakeport Stations}. All providers except Orleans Fire and Loleta Fire are also ambulance services. County permitted (or contracted) ambulance providers include: Del Norte Ambulance, Arcata-Mad River Ambulance, City Ambulance of Eureka, Inc., STAR and RELS). During the year, the Agency entered into an agreement with REACH to provide ALS/RN level air transport services in Lake County under existing medical control with Coastal Valley’s EMS.

5. The North Coast EMS region continued to utilize a Med-Net Communications System installed in 1977-78 that includes six (6) county owned and one (1) fire district owned Mt. Top Repeater, seven (7) hospital owned base station radios and numerous provider-owned mobile units (estimate 40).

6. North Coast EMS and all counties have contributed their Regional Med-Net Repeater Replacement Trust Fund share this year for long-term repeater replacement.

7. As a participant in the State Domestic Preparedness Equipment and the Homeland Security

programs, conducted by Del Norte, Humboldt and Lake County O.E.S., North Coast EMS assisted the acquisition of disaster-related supplies and equipment for police, fire and EMS personnel. Part of this process will involve establishment of a single Med-Net MCI/Disaster channel for Humboldt County.

8. With a special grant from the EMSA, North Coast EMS initiated a Hospital Communications project that resulted in the purchase of ReddiNet computers equipment for each hospital, except Sutter-Coast, and the Agency. Sutter-Coast Hospital in Del Norte County elected to not participate. The agency and Public health Departments have worked closely together to promote use of this new communications system for a variety of reasons.
9. The Agency jointly coordinated and conducted a second meeting in Del Norte County with Sheriff Department, fire district, ambulance service representatives to review and modify the new dispatch policy implemented last year.
10. The Agency assisted the EMSA in the process to complete a statewide communications for the region.

Issues/Solutions: None

4.0 Transportation

Objective: To develop and maintain an effective EMS response and ambulance transportation system that meets the needs of the population served.

Workload Indicators:

Total Ambulance Response Vehicles = Estimate **47**

Total First Responder Agencies = **40** approved by North Coast EMS

Total Patients Transported = **18,498** transports were reported in the PCR program

Total Patients Not Transported = **1,529** Against Medical Advise Patients (AMA) were reported

Total Number of LALS/ALS Providers Authorized by Region = **18** (see 3.4 above)

Total Number of Transport Providers in Region = **16** (“)

Status: This year,

1. North Coast EMS continued Advanced Life Support Agreements with 17 providers (formally 19 = City Ambulance of Eureka, Inc. in now covering southern Humboldt, and we are no longer counting City of Fortuna as a separate entity), First Responder Agreements with 40 fire districts, AED Agreements with 40 service providers, and ETAD Agreements with 15 providers.
2. JPA member counties continued permits or contracts with 6 ambulance services; another 8 fire districts provide transport in Lake County, and Shelter Cover Fire in Humboldt utilizes an ambulance for the district. All but one fire district in Lake County have executed the local Joint Powers transport arrangement.

3. Lake County adopted the new Ambulance Ordinance that includes both private and public transport providers. The Agency participated as a member of the Ambulance Ordinance Subcommittee.
4. The Agency revised the Regional EMS Aircraft Policy.
5. North Coast EMS continued to implement use of Heparin/Nitroglycerine Infusion Drips, Cardiac Pacing and Versed throughout the region.
6. Comprehensive review and revision of North Coast EMS ALS Treatment Guidelines was completed, including modification of the EPCIS audit criteria.
7. North Coast EMS generated zoning and transportation quarterly data reports as part of the EPCIS program.
8. The Agency updated the EMSA Plan with the assistance of all transporting providers by EMSA request.
9. The Agency approved REACH as a new ALS air ambulance provider in Lake County under the medical control of Coastal Valley's EMS. An interim contract was executed and an expanded version is being reviewed.
10. The Agency assisted Humboldt County with the process to assess potential future ambulance coverage in Southern Humboldt County.

Issues/Solutions:

1. On December 23, 2003, a REACH Air Ambulance crashed in Mendocino County killing two flight nurses and the pilot.
2. Redwood Empire Life Support (RELS) discontinued ambulance services in Lake County overnight after numerous years as the only private provider. The Lake County Fire Districts (Lakeport and Lake County) responded immediately and increased coverage. Numerous meetings were conducted, the new ordinance was adopted, and all pre-existing fire districts or departments with ambulances are in the process of applying for permits. No private ambulance services applied.

5.0 Assessment of Hospitals and Critical Care Centers

Objective: To establish and/or identify appropriate facilities to provide for the standards and care required by a dynamic EMS patient care delivery system.

Workload Indicators:

Total Base Hospital Contacts = **11,999**
 Total Patients Received = **18,498** patients were transported
 Total Number of Hospitals Designated by Region = **11**
 Total Number of Base and Alternative Base Hospitals = **7**

Total Number of Emergency Departments Approved by Pediatrics (EDAPs) = 4

Status: This year,

1. North Coast EMS patients continued to be transported to seven (7) hospitals located within the region. Six are licensed as basic emergency departments (one in Del Norte County, three in Humboldt County and two in Lake County) and one is a stand-by ED (Jerold Phelps in southern Humboldt County). Patients are transferred to at least 20 facilities located outside of the region; the EPCIS computer program reported 1,470 inter-facility transfer during the year.
2. North Coast EMS continued formal designation of six (6) base hospitals and one (1) alternative base hospital. All but three facilities (Jerold Phelps, Sutter-Coast and Sutter-Lakeside) are also a North Coast EMS designated Emergency Department Approved for Pediatrics (EDAP).
3. The Agency continued to work with base hospital Prehospital Care Medical Director and Prehospital Care Nurse Coordinator, as needed, to address disclosure protected quality improvement issues.
5. Sutter-Lakeside Hospital was fully reinstated as a Base Hospital.
6. Sutter-Coast Hospital in Del Norte County discontinued the Prehospital Care Nurse Coordinator position required for Base Hospital status. The Agency subsequently probated the hospital and is working to restructure the program. Sutter-Coast also dropped the EDAP program.
7. North Coast EMS initiated a formal assessment of the potential impact of a status change from a Basic to a Stand-by Emergency Department to streamline patient flow.
8. As part of the state funded trauma project, the North Coast EMS Regional Trauma Plan was approved by the EMSA. The AB430 grant ended in March, 2004, but the Agency purchased a Collector Trauma Registry program, new computers and numerous other items to help enhance trauma care within the region. Preliminary Trauma Center Fees were adopted by the JPA Governing Board and four facilities were targeted to become Trauma Centers (one Level III and three Level IVs). New state RN ratios requirements and specialty physician coverage issues delayed the process to designate targeted centers after twice inviting the American College of Surgeons to conduct "consultation" visits. The Agency submitted a special project grant request to the EMSA to complete implementation of the Regional Trauma Program.
9. The Executive Director continued to participate as a member of the State Trauma Advisory Committee with Dr. Luther Cobb of Arcata as the rural alternate.
11. The EMS Coordinator facilitated the process for interested hospitals to acquire the State Communication System. The Agency received a second contract for additional training. The ReddiNet System has been installed in Mad River, St. Joseph, Redwood, J. Phelps, Lakeside and Redbud Hospitals. The Agency and Health Officers of Lake and Humboldt Counties distributed a memo to encourage use of this new system.

12. The JPA Governing Board increased the Hospital Change in Status Fee from \$500 to \$2,000 to help cover Agency costs.
13. North Coast EMS submitted a letter to DHS on behalf of the regional hospitals regarding the potential negative impact of new RN ratios on Base Hospital status.

Issues/Solutions:

1. Sutter-Lakeside Hospital was fully reinstated as a Base Hospital.
2. Sutter-Coast Hospital in Del Norte County discontinued the Prehospital Care Nurse Coordinator position required for Base Hospital status. The Agency subsequently probated the hospital and is working to restructure the program. Sutter-Coast also dropped the EDAP program.
3. North Coast EMS initiated a formal assessment of the potential impact of a status change from a Basic to a Stand-by Emergency Department to streamline patient flow.
4. Implementation of the North Coast EMS Regional Trauma Plan was delayed due to the impact of new state RN ratios requirements and specialty physician coverage issues. The Agency submitted a special project grant request to the EMSA to complete implementation of the Regional Trauma Program (which will be funded). Mad River Hospital was initially interested in applying for Level III status but dropped out of the designation process.
5. The North Coast Paramedic Training Program encountered problems during the year with a few facilities discontinuing clinical training. A potential solution is to revise Base Hospital contracts to require provision of clinical training in all regional hospitals.
6. New RN ratios had a significant impact on most of the hospitals located within the region, although all appear to have either adopted the new standards or received an exception. Continuation of Base Hospital status is being tested in Del Norte County, Adventist Health-Redbud is seeking a licensure status change, planned Trauma Center designations were delayed and the EDAP program at Sutter-Coast was discontinued.
7. The new Hospital Communications System (ReddiNet) is being under-utilized by regional hospitals despite numerous attempts to promote use. However, the EMSA executed a new grant for additional training for Humboldt and Lake Counties, which provided the necessary review for potential users.

6.0 Data Collection and Evaluation

Objective: To provide for appropriate system evaluation through the use of quality data collection and other methods to improve system performance and evaluation.

Workload Indicators:

Total Patient Care Reports Generated = **18,913**
 Total Trauma Patients = **2,378**

Total Cardiac Patients = **1,509** (1,189 Chest Pain and 318 Cardiac Arrest Patients)

Total Medical Patients = **16,120** (includes Total Transports less Trauma)

Total Pediatric Patients = **907**

Total Number of CQI Cases in Region = the Agency participated in numerous cases during the year.

Status: This year,

1. The EPCIS computerized Prehospital Care Reporting (PCRs) program was maintained and upgraded. North Coast EMS completed the revision of all ALS policies in concert with a revision of the "Treatment Guidelines" portion of the EPCIS program.
2. Agency staff, several Prehospital Care Medical Directors (PCMDs), Prehospital Care Nurse Coordinators (PCNCs) and ALS Providers conducted quality improvement investigations.
3. The Agency continued to promote expansion of the EPCIS reporting process to include AMAs and emergency transfers.
4. North Coast EMS continued to participate in the multi-LEMSA process to develop a web-based EPCIS program as part of a NorCal EMS, Inc. special project grant.
5. The EPCIS programmer developed new computer generated reports (including ALS Procedures and Medications) to help summarize regional EMS activity. Other special reports were generated by request. Importantly, we estimate that the region is very close to 100% compliance relative to use of the EPCIS program.
6. The Agency participated in numerous continuous quality improvement investigations, generally in concert with providers and/or Prehospital Care Nurse Coordinators.
7. The Agency submitted "chute time" reports to Humboldt County, and provided other special data reports during the year.
8. The EMSA required Automated External Defibrillation data reports were submitted as required.
9. Agency staff reviewed and commented on proposed state data and CQI documents.
10. New EPCIS computers are in the process of installation in all hospitals throughout the region. Collector Trauma Registry software will be installed on these computers at the four targeted Trauma Centers.
11. Collector training was provided for Agency and hospital personnel (at the four targeted Trauma Centers) as part of the Trauma Project.
12. As requested, REACH provides monthly activity reports specific to the new Air Ambulance Service in Lake County for Agency review.
13. North Coast EMS installed an automatic office computer back-up system.

14. PCMDs and PCNCs in Lake County identified ongoing problems with late submission of PCRs, and in collaboration with the Agency and ALS Providers, enhanced the timeliness of submissions.

Issues/Solutions:

1. The EMS Coordinator and EPCIS contractor completed the revision of the EPCIS “Treatment Guideline” category, the category used to conduct electronic PCR audits, to more closely reflect local protocols and practices.
2. The EPCIS main server computer crashed during the first quarter but the system was reinstalled successfully.
3. Chronically late PCR submissions in Lake County were identified at both facilities. The Agency, PCMDs and PCNCs distributed a memo, and collectively worked with ALS Providers to enhance the timeliness of submissions.
4. Collector software problems delayed the installation of the new EPCIS and Trauma Registry computers. Collector software is being modified so that the four hospital computers can electronically submit data to the office main server computer.
5. The Agency needs to enhance efforts to orient PCNCs and other administrative personnel to utilize EPCIS as a CQI tool at the Base Hospital and ALS Provider levels.

7.0 Public Information and Education (PI&E)

Objective: To ensure that the population within the jurisdiction of the regional EMS agency has access to information and public information courses as it relates to emergency medical services.

Workload Indicators:

Total Public Information and Education Courses Conducted and/or Approved by Agency = See #1
Total Number of Public Information and Education Events Involving Agency = See #1 below

Status: This year,

1. North Coast EMS continued to participate in PIE activities by attending Injury Prevention, Child Death Review Team and Child Safety Seat Committee meetings.
2. One layperson AED program continued to provide services in Humboldt County and other inquiries regarding this have been received and processed.
3. North Coast EMS staff presented Kris Kelly Star of Life Awards during EMS Week, including: Del Norte County – First Responder/First Aid, Librado Garcia and Cecil Smith, Security Officers Lucky 7 Casino; Basic Life Support, James Karanopoulos, Gasquet Fire. Humboldt County – Search and Rescue, Humboldt County Sheriff’s Department Search and Rescue; First Responder,

Rod Johnson, Orleans Fire; Basic Life Support, Michael Schultz, Jeff Borberg and Jason Campillo, Eureka Fire; Advanced Life Support, Kristen Metcalf, City Ambulance; Administration/ Education, Doug Boileau, Arcata-Mad River Ambulance. Lake County – Retired Chief Jim Burton, Clearlake Oaks Fire.

4. The Training Coordinator continued to actively participate in the State's EMS for Children program and Co-Chaired the EMSC conference planning committee.
5. Articles and PSAs were aired during the year featuring the Training Coordinator, North Coast EMS and EMS in general.

Issues/Solutions:

1. Staff size, particularly with the state GF cut, is inadequate to provide more than a limited involvement in PIE.

8.0 Disaster Medical Response

Objective: To ensure the preparedness and response of the regions EMS system in the event of a disaster or catastrophic event within the region or in a neighboring jurisdiction.

Workload Indicators:

Total Number of Disaster/MCI Responses (responses with 5 or more victims) = **One Reported**

Total Disaster Drills Involving Staff = at least **6**

Total Disaster-related Meetings Attended by Staff = at least **15**

Status: This year,

1. Agency staff attended Humboldt-Del Norte Disaster and the Lake EMCC Committee meetings, several disaster planning or review meetings (including Weapons of Mass Destruction, Homeland Security, HRSA, etc).
2. North Coast EMS completed the "Prehospital MCI/Disaster Preparedness" special project coordinated by the Northern California Safety Consortium.
3. The Executive Director assisted Humboldt County in the effort to enhance the Med Net System for MCI/Disaster purposes, specific as part of the process to establish a single disaster channel in each county.
4. The Executive Director and EMS Coordinator participated in statewide disaster medical services activities, including Disaster Medical Assistance Team planning (DMAT) and international disaster programs involving the Ukraine.
5. The Northern California Safety Consortium drafted the Regional MCI Plan as part of the Prehospital MCI/Disaster Special Project. Steering Committee meetings were conducted as well. See the MCI/Disaster Project final report.

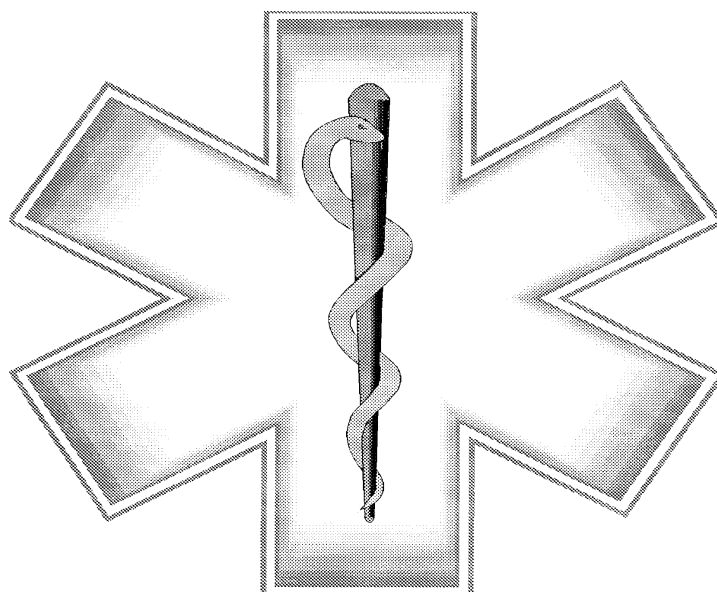
6. Agency personnel commented on draft State Disaster Medical Guidelines and Standards, continuing to endorse the need for adequate state funding of local efforts (particularly in rural areas) and again urging flexibility with regard to Board of Supervisors designation of local DMS responsibilities.
7. The Rural Outreach special project included a CE offering specific to MCI training.
8. The Agency reviewed the Humboldt County Haz-Mat Plan, no comments were needed.
9. The Agency observed and commented on numerous disaster drills/exercises within the region.
10. North Coast EMS submitted letters of support for the acquisition of HRSA funds.
11. The Executive Director and EMS Coordinator participated the EMSA/National Guard organized “Rough and Ready” planning exercise at Chernobyl, Ukraine. The EMS Coordinator also participated in an inter-nation disaster exercise near Live, Ukraine.
12. The EMS Coordinator and Executive Director presented a slide show at the MCI conference, and at Redwood Memorial Hospital, specific to the Chernobyl experience. The EMS Coordinator drafted an article for publication as well.
13. The Executive Director toured the local PGE decommissioned nuclear power plant in preparation for the Chernobyl presentation.

Issues/Solutions: None.

NORTH COAST EMERGENCY MEDICAL SERVICES

3340 Glenwood Street, Eureka, California 95501

Serving Del Norte, Humboldt, Lake and southern Trinity Counties



Quarter 1 Progress Report

July 1, 2004 – September 31, 2004

General Fund Contract # EMS-4040

October 1, 2004

October 1, 2004

Carol MacRae, Contracts Manager
EMS Authority
1930 Ninth Street, Suite 100
Sacramento, CA 95814

RE: FY 04-05 General Fund Grant #EMS 4040 First Quarter Progress Report

Dear Carol:

The General Fund First Quarter Progress Report for Fiscal Year 2004-2005 (Contract #EMS-4040) is attached.

Please call if you have any questions.

Sincerely,

Larry Karsteadt, Executive Director
North Coast Emergency Medical Services

cc: Joint Powers Governing Board
County Health Officers
Ruth Lincoln, Lake County Health Department
EMCC Chairpersons
Information Mailing

Overview:

In the first quarter of Fiscal Year 2004-2005, North Coast Emergency Medical Services (EMS) continued to serve as the local EMS agency for the functions delegated by Del Norte, Humboldt, Lake and southern Trinity Counties. The Agency continued to manage the regional EMS system in accordance with state law and guidelines, under direction of the Joint Powers Governing Board and in coordination with a large network of organizations and individuals. North Coast EMS staff and contractors facilitated the planning, coordination and evaluation of the EMS system through a program of community consensus, patient and EMS participant advocacy and continuous quality improvement.

The Joint Powers Governing Board directed the activities of North Coast EMS during the first quarter of FY 2004-2005. The Board consisted of the following members: Supervisor John Woolley, Humboldt County, Chairperson; Supervisor Chuck Blackburn, Vice-Chairperson, Del Norte County; and Supervisor Rob Brown, Lake County. Alternates to the JPA Board were: Supervisors Martha McClure, Del Norte County; Ann Lindsay, M.D., Humboldt County; and Supervisor Ed Robey, Lake County.

The following general fund employees managed the Agency (totaling 4.6 FTEs). Please note that the Agency received a new special project grant entitled: *Implementation of the Regional Trauma System* that will cover a portion of staff FTE this year.

- Larry Karsteadt, Executive Director (1.0 FTE)
- Wendy Chapman, Training Coordinator (1.0 FTE)
- Maris Hawkins, Program Assistant II (0.6 FTE)
- Louis Bruhnke, EMT-P, EMS Coordinator (1.0 FTE)
- K. Jody Hurd, Administrative Assistant (1.0 FTE)

Several part-time independent consultants totaling less than 0.5 FTE were involved with general fund operations, including:

- John Kelsey, M.D., Regional Medical Director
- Pam Haynes, RN, Base Hospital, EDAP, RN Coordinator
- Jay Myhre, EPCIS Programmer
- Ezequiel Sandoval, Office Computer Maintenance
- Vickie Gibney, R.N., MICN Test Revision (Written and Skills)
- Debbie McMahon, RN, PCNC, FCA, CQI and Paramedic Program
- Willie Sapeta, EMT-P, Lake County Testing
- Doug Boileau, North Coast Paramedic Program Coordinator
- Cindy Hendersen, EMT-P, AED Reports

Numerous individuals and organizations within the three and one-third county area directly contributed to the regional accomplishments during the third quarter.

North Coast Emergency Medical Services General Fund #4040 - Quarter 1 Progress Report

July 1, 2004 to September 30, 2004

The following report on progress at North Coast EMS during the first quarter of Fiscal Year 2004-05 meets the requirements of the California EMS Authority General Fund Contract #EMS-4040 and the document entitled: "Funding of Regional EMS Agencies with General Fund Monies (June, 2001)." The report specifically addresses the goals, workload indicators, accomplishments and issues relative to contract objectives, as specified by the California EMS Authority (EMSA), and specific to the Local EMS Agency (LEMSA) functions delegated in contract by JPA member counties and Trinity County.

1.0 System Organization and Management

Objective: To develop and maintain an effective management system to meet the emergency medical needs and expectations of the population served.

Workload Indicators:

Total Static Population Served = **225,450** (estimate 3,000 residents in south Trinity County)

Total Annual Tourism Population = **+3 million**

Number of Counties = **3.3** (Del Norte, Humboldt, Lake, s. Trinity)

Geographic Size of Region = **6,840 square miles** (5,840 in the three JPA member counties and approximately 1,000 in southern Trinity County, which equals roughly one-third of the County)

Accomplishments: This quarter,

1. North Coast EMS personnel attended the following state EMS functions:

- a. EMS for Children Coordinators Meeting, Orange County
- b. Processed EMSC Conference Registrations
- c. State Trauma Advisory Committee, San Diego

2. North Coast EMS personnel attended the following regional meetings:

- a. Joint Powers Governing Board
- b. Humboldt/Del Norte Medical Advisory Committee (MAC)
- c. Lake and Humboldt County Emergency Medical Care Committees (EMCC)
- d. Humboldt County Fire Chiefs Association
- e. Humboldt County Child Death Review Team
- f. Humboldt County Injury Prevention Meetings
- g. Child Passenger Safety (CPS) Committee
- h. Injury Prevention/Child Passenger Safety Booth – Humboldt County Fair, Ferndale
- i. Humboldt/Del Norte Disaster Committee

- j. Sutter-Coast Base Hospital Meeting
 - k. Trauma Meeting with St. Joseph Hospital
 - l. Del Norte First Responder Dispatch Meeting
 - m. Southern Humboldt Evaluation Contractor Meeting
 - n. North Coast Paramedic Training Program Planning Meetings and Conference Calls
 - o. MICN Planning Meeting
 - p. St. Joseph Hospital Surgical QRC Meeting
3. North Coast EMS executed or is in the process of executing, new contracts with several GF contractors, including: Dr. John Kelsey, Pam Haynes, R.N., Cindy Henderson, EMT-P; Jay Myhre, Ezequiel Sandoval, Vickie Gibney, R.N., Doug Boileau, EMT-P, Debbie McMahon, R.N., Willie Sepata, EMT-P, and Ed Nickerson, R.N.
 4. The Agency distributed draft and final policies, protocols and information items for regional review and input in one Informational Mailing, including: Reduction or Closure of Hospitals, Fee Schedule, Denial of EMT-I and EMT-II Certification, LALS Supply and Equipment list, revision of EMT-P Drug List, Ambulance Rate Surveys, ETAD and AED data, final reports, an article written by Louis Bruhnke, EMS Coordinator, and various articles of interest.
 5. North Coast EMS maintained (www.northcoastems.com), which has policies, procedures, upcoming training, the revised EMS Plan, the revised Trauma Plan, the new MCI Plan, the last Informational Mailing, links to other EMS web sites and other information posted regularly.
 6. North Coast EMS completed the State EMS General Fund final report.
 7. The Agency received a new special project grant entitled: *Implementation of the Regional Trauma System* and continued a small Hospital Communication grant to support additional ReddiNet training.
 8. The Agency submitted the required quarterly report for the new trauma project.
 9. North Coast EMS executed new contracts with the EMSA: state General Fund (EMS #4040 and Trauma (EMS# 4061).
 10. The Agency established a Selection Committee (Dr. Kelsey, Pam Haynes and Larry Karsteadt) and selected Ed Nickerson, R.N., PCNC, as our new Regional Trauma Coordinator.
 11. The new North Coast Paramedic Training Program was continued under Agency sponsorship and the application for national accreditation was submitted.

Issues/Solutions:

1. Increasing operational costs and cost of living expenses will continue and we anticipate a budget shortfall in FY 2005-06 unless state General Fund assistance, special project and/or local funds are increased. Fortunately, this year, the new special project grant will help offset existing staff costs.

2. The seven regional agencies are in need of a state GF fiscal augmentation to keep up with increasing operating costs and, in FY 2006-07, to absorb the addition of Tulare County to the Fresno, Kings, Madera Region without decreasing the shares to the other regions.
3. Due to the absence of a formal EMCC, the Agency decided to conduct quarterly MAC-like meetings in Del Norte County to review issues, provide updates and work more closely with local EMS responders.

2.0 Staffing and Training

Objective: To ensure personnel functioning within the EMS system are properly trained, licensed/certified/authorized and/or accredited to safely provide medical care to the public.

Workload Indicators:

Total Number of Personnel Certified/Authorized/Accredited by Regional Agency = **977***
 Total Number of Personnel Completing Training Courses Approved by Regional Agency = **34**
 Total Number and Type* of Approved Training Programs Approved by Region = **31***
 Total Number and Type of Training Programs Conducted by Regional Agency = **1***
 Total Number of Continuing Education Providers Authorized by Regional Agency = **38**

* - for Type of Certificate or Program, see below (#1 and #2 respectively).

Status: This quarter,

1. The following EMS personnel possessed North Coast EMS issued documents:

- | | |
|------------------------------|------------------------------------|
| a. Certified EMT-Is = | 757 (66 are ETAD certified) |
| b. Certified EMT-IIIs = | 3 |
| c. Accredited Paramedics = | 105 (55 with Hep/Nitro; 24 Pacing) |
| d. Authorized MICNs = | 112 |
| e. Field Training Officers = | 56 |

2. Regional instructors conducted the following North Coast EMS approved training programs:

	Approved	Conducted
a. Esophageal Tracheal Airway Device =	9	1
b. EMT-I =	14	
c. Paramedic =	1	1
d. Field Training Officers =	1	1
e. Mobile Intensive Care Nurse =	2	1
f. Emergency Medical Dispatch =	1	
g. Lake County EMT-I Tests Sessions	1	2

3. Instructors reported that a total of 34 students completed these classes. Several other classes were not completed this quarter but are in progress.

4. The new North Coast Paramedic Training Program was initiated under North Coast EMS last year. The first class is in the process of completion; 2 of 30 students have received their state license.
5. The Agency applied for national accreditation on September 28, 2004 and we are in the process of completing the self-study packet.
6. Approval for 38 continuing education (CE) programs was continued by North Coast EMS and numerous CE programs were offered within the region.
7. A few licensure or certifications reviews were conducted this quarter and criteria to assist with this process (and to ensure uniformity) were established for EMT-Is and EMT-IIs.
8. Larry Karsteadt was appointed to the new state EMT-II Task Force and continued as a member of the State Trauma Advisory Committee, Louis Bruhnke continued as a member of the Education Task Force and Wendy Chapman continued as a member of the State EMSC Coordinators Group.
9. The new State EMT-I Regulations will be adopted soon, and the Training Coordinator is in the process of coordinating numerous significant changes involving all existing EMT-I basic and refresher programs in the region.

Issues/Solutions:

1. North Coast EMS needs to conduct MCI and Incident Command training in Lake and Del Norte Counties this year with the assistance of the Northern California Safety Consortium.
2. The new EMT-I regulations will allow the addition of a Narcan option. The Agency is in the process of assessing need and cost-benefits to this new program.

3.0 Communications

Objective: To develop and maintain an effective communications system that meets the needs of the EMS system.

Workload Indicators:

Total Number of Primary and Secondary PSAPs = **11**
 Total Number of EMS Responses = **4190** Prehospital Care Reports were submitted
 Total Number of Ambulances Dispatched = **4121** transports were reported
 Total Number of Emergency Medical Dispatch Programs Approved by Region = **2**
 Total Number and Type of EMD Programs Authorized by Agency = see #1 & 2 below.

Status: This quarter,

1. North Coast EMS continued the Emergency Medical Dispatch program at the Eureka Police Department and CDF in Fortuna using Medical Priority, Inc.

2. Eleven (11) Public Safety Answering Points (PSAPs) were utilized by regional EMS providers as follows (several PSAPs directly dispatch ambulances):

PSAP	Location	EMD Utilized
a. Del Norte Co. Sheriffs Department	Del Norte County	No
b. Humboldt Co. Sheriffs Department	Humboldt County	No
c. Humboldt State University	“	No
d. Arcata Police Department	“	No
e. Eureka Police Department	“	Yes
f. California Highway Patrol - Arcata	Del Norte & Humboldt	No
g. Fortuna Police Department	Humboldt County	No
h. California Division of Forestry - Fortuna	“	Yes (secondary PSAP)
i. Trinity Co. Sheriffs Department	Trinity County	No
j. Lake Co. Sheriffs Department	Lake County	No
k. California Highway Patrol – Ukiah	Mendocino County	No

3. Six (6) non-PSAP ambulance dispatch centers were utilized within the region for dispatching ambulances:

a. K’ima:w Tribal Police	Humboldt County	No
b. City Ambulance of Eureka	“	No
c. Southern Trinity Rescue Dispatch	“	No
d. Redwood Empire Life Support	Sonoma County	No
e. CDF – Howard Forest	Mendocino County	No
f. CDF – Napa	Napa County	No

4. North Coast EMS maintained contracts requiring field to hospital communications and recording equipment with six (6) base hospitals, one alternative base hospital and 17 LALS/ALS providers.

5. The North Coast EMS region continued to utilize a Med-Net Communications System installed in 1977-78 that includes six (6) county owned and one (1) fire district owned Mt. Top Repeater, eight (8) hospital owned base station radios and numerous provider-owned mobile units (estimate 40). All repeaters except Rogers in Humboldt (which is rarely used) have been replaced.

6. North Coast EMS continued the Regional Med-Net Repeater Replacement Trust Fund for long term repeater replacement.

7. North Coast EMS utilized a small Hospital Communication System general fund grant from EMSA to bring additional ReddiNet training to the area. The Health Departments and Agency continued to promote use of the ReddiNet System in Lake and Humboldt Counties.

8. Humboldt County OES, the Health Department and the Agency proceeded with plans to upgrade the Med Net System to create a single MCI/Disaster communications channel.

9. The Agency initiated a review of other EMD programs to determine whether another program would be better for the region.
10. The Agency helped coordinate and attended a meeting of the Del Norte County First Responder Dispatch Group, which resulted in revision of the existing dispatch policy by Crescent City Fire.
11. North Coast EMS again assisted the EMSA-led process to complete a statewide communications survey within the region.

Issues/Solutions:

1. The Del Norte County Sheriffs Department requested that we investigate other EMD programs, in addition to Medical Priority, Inc., to determine if a reputable, national level program could more easily provide local training with smaller classes. Enrollment in Medical Priority training programs requires larger class sizes than we can fill or afford. If local classes could be conducted for 2 or 3 dispatchers, it is likely that the Sheriffs Dept would implement an EMD program.
2. Due to the absence of a formal EMCC, the Agency decided to conduct quarterly MAC-like meetings in Del Norte County to review issues, provide updates and work more closely with the EMS responders.

4.0 Transportation

Objective: To develop and maintain an effective EMS response and ambulance transportation system that meets the needs of the population served.

Workload Indicators:

Total Ambulance Response Vehicles = Estimate **47**

Total First Responder Agencies = **40** approved by North Coast EMS

Total Patients Transported = **4,121** transports were reported in the PCR program

Total Patients Not Transported = **376** Against Medical Advise Patients (AMA) were reported

Total Number of LALS/ALS Providers Authorized by Region = **17**

Total Number of Transport Providers in Region = **14**

Status: This quarter,

1. North Coast EMS continued Advanced Life Support Agreements with 17 providers, First Responder Agreements with 40 fire districts, AED Agreements with 40 service providers, and ETAD Agreements with 15 providers.
2. JPA member counties continued permits or contracts with 6 ambulance services; another 8 fire districts provide transport in Lake County. The latter adopted a new ambulance ordinance last year that included all public transporting services.

3. North Coast EMS ensured that each transporting fire district in Lake County has current ALS Provider Agreements with us to complete the county's ambulance permit process. All providers did so successfully or are in the process of doing so.
4. North Coast EMS executed an interim MOU with REACH, which began Air Ambulance Operations within Lake County in February 2004. The Agency is in the process of finalizing the documents. Medical control will remain with Coast Valleys EMS for the Lake County based helicopter service.
5. The Agency participated in the process and reviewed the *Southern Humboldt County Ambulance Service Sustainability Assessment – Final Report*, conducted by the Public Health Dept and prepared by Prehospital Consulting and Training.

Issues/Solutions:

1. North Coast EMS submitted a letter to the Trinity County Sheriffs Dept in support of Southern Trinity Area Rescue to help ensure that potentially unsafe scenes are cleared by law enforcement before EMS responders are placed in harms way.
2. The Agency received and forwarded a copy to the Lake Pillsbury Fire Chief a notice from Coastal Valley's EMS that Ukiah Ambulance would soon discontinue responding an ambulance to the area. The Lake County Fire Chiefs are working with dispatch to ensure continuing ambulance coverage, and fortunately, Cal-Star and REACH helicopter services are available as well. The best solution to this sudden change needs to be determined, but the Agency fully supports use and permitting by of the existing BLS ambulance located in the area.

5.0 Assessment of Hospitals and Critical Care Centers

Objective: To establish and/or identify appropriate facilities to provide for the standards and care required by a dynamic EMS patient care delivery system.

Workload Indicators:

Total Base Hospital Contacts = **2,714**

Total Patients Received = **4,121** patients were transported

Total Number of Base (6) or Alternative (1) Base Hospitals Designated by Region = **7**

Total Number of EDAPs designated by region = **4**

Status: This quarter,

1. North Coast EMS patients continued to be transported to seven (7) hospitals located within the region. Six are licensed as basic emergency departments (one in Del Norte County, three in Humboldt County and two in Lake County) and one is a stand-by ED (Jerold Phelps in southern Humboldt). Patients are transferred to at least 20 facilities located outside of the region.

2. North Coast EMS continued formal designation of six (6) base hospitals and one (1) alternative base hospital.
3. Four of the seven hospitals, including Mad River Community, St. Joseph, Redwood and Adventist Health-Redbud are approved by North Coast EMS as Emergency Department Approved for Pediatrics (EDAPs).
4. The Agency continued to work with base hospital Prehospital Care Medical Director and Prehospital Care Nurse Coordinator, as needed, to address disclosure protected quality improvement issues.
5. North Coast EMS contracted with the EMSA for the new special project entitled: *Implementation of the Regional Trauma Plan* to complete the effort to designate four trauma centers and implement a state approved Trauma System on the north coast. We submitted the first quarterly report and selected Ed Nickerson, R.N., as the new Regional Trauma Coordinator.
6. The Sutter-Coast Base Hospital probation was continued through a series of letters and meetings designed to restructure the program.
7. The Agency continued a small contract with EMSA and brought additional ReddiNet System training to Humboldt County.
8. North Coast EMS completed the process, with the Joint Powers Board appointed panel, to evaluate the impact of a licensure status change at Adventist Health-Redbud Hospital in Clearlake. The report recommended a change from a basic to standby emergency department to help streamline patient through-put. The hospital submitted the Impact Evaluation Report to DHS, and the Agency made a formal request to EMSA to allow Redbud to continue as a Base Hospital if DHS approves the change.

Issues/Solutions:

1. North Coast EMS continued the probation of the Sutter-Coast Base Hospital program, but we are very pleased with progress of the restructuring process to date. Agency staff checked the onsite computer station during a recent visit and concur with Del Norte Ambulance personnel that a more convenient and ergonomically designed station is essential for the medics to enter data on the EPCIS computer.
2. The ReddiNet System is not being utilized enough despite encouragement by the Public Health Officers and the Agency. Persistence and potential involvement by the Boards of Supervisors in Humboldt and Lake Counties needs to be considered.

6.0 Data Collection and Evaluation

Objective: To provide for appropriate system evaluation through the use of quality data collection and other methods to improve system performance and evaluation.

Workload Indicators:

Total Patient Care Reports Generated = **4,190**

Total Trauma Patients = **612**

Total Cardiac Patients = **281** (224 Chest Pain and 57 Cardiac Arrest Patients)

Total Medical Patients = **613**

Total Pediatric Patients = **200**

Total Number of CQI Cases in Region = several

Status: This quarter,

1. The EPCIS computerized Prehospital Care Reporting (PCRs) program was maintained and seven new computers are in the process of reprogramming for distribution to each hospital. New computer maintenance agreements need to be generated as well, and four of the computers will also utilize the Collector Trauma Registry software.
2. Agency staff, several Prehospital Care Nurse Coordinators (PCNCs) and ALS Providers conducted several quality improvement investigations.
3. The Agency has three new digital radio/telephone recording devices to facilitate CQI review of trauma activities. These will be distributed to three of the four targeted trauma center as part of the formal designation process.
4. REACH continues to submit PCRs specific to Lake County activity on a monthly basis. These are reviewed by the Regional Medical Director and EMS Coordinator.
5. The Agency continued to participate in the special project with Nor Cal EMS, Inc. to design and evaluate the new web-based EPCIS program.

Issues/Solutions:

1. New Collector software is in the final stages of reprogramming such that Trauma Registry data from each Trauma Center can be electronic send to our main server computer in the office. Maintenance agreements have to be developed as well.
2. North Coast EMS needs to continue the effort to orient PCNCs and other personnel to readily utilize EPCIS as a CQI tool. Several strategies are under consideration.
3. Sutter-Coast Hospital discontinued the computer station modem connection and the Agency has been unable to acquire about 3 months of data, so the figures for this quarter are lower than expected. Sutter has agreed to reconnect the modem line.
4. Agency staff checked the onsite computer station during a recent visit and concur with Del Norte Ambulance personnel that a more convenient and ergonomically designed station is essential for the medics to enter data on the EPCIS computer. We will formally make this request if it not resolved soon.

7.0 Public Information and Education (PI&E)

Objective: To ensure that the population within the jurisdiction of the regional EMS agency has access to information and public information courses as it relates to emergency medical services.

Workload Indicators:

Total Public Information and Education Courses Conducted and/or Approved by Agency = See #1
Total Number of Public Information and Education Events Involving Agency = See #1 below

Status: This quarter,

1. North Coast EMS continued to participate in PIE activities by attending Injury Prevention, Child Death Review Team, EMSC and Child Safety Seat Committee meetings.

Issues/Solutions:

1. Staff size, particularly with the state GF cut and additional workload because of the Trauma Project and special projects, is inadequate to provide more than a very limited involvement in PIE. Consequently, we do not plan to conduct any new PIE activities this year, and our involvement in PIE events will be limited.

8.0 Disaster Medical Response

Objective: To ensure the preparedness and response of the regions EMS system in the event of a disaster or catastrophic event within the region or in a neighboring jurisdiction.

Workload Indicators:

Total Number of Disaster/MCI Responses (responses with 5 or more victims) = **1 Reported**
Total Disaster Drills Involving Staff = **0**
Total Disaster-related Meetings Attended by Staff = **1**

Status: This quarter,

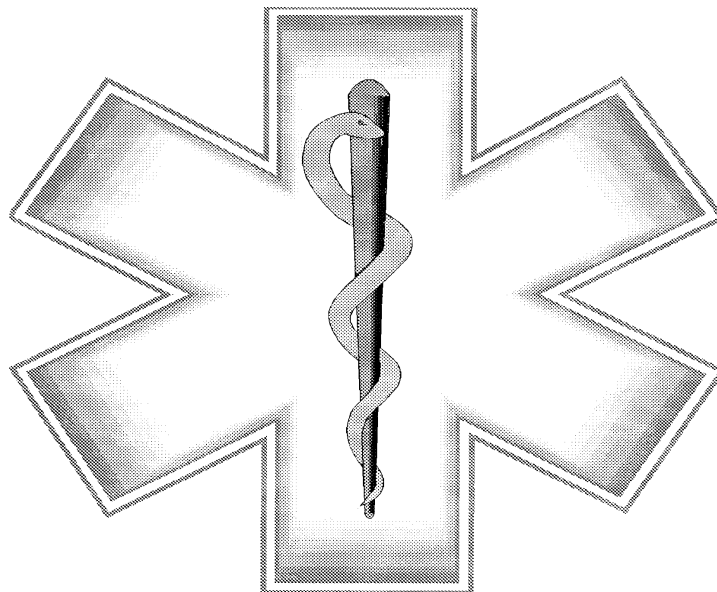
1. Agency staff attended Humboldt-Del Norte Disaster and Lake EMCC Committee.
2. North Coast EMS will distribute the final Regional MCI Plan after considering a recent recommendation following a Humboldt County disaster exercise regarding use of new Triage Tags.
3. The Agency intends to contract with the Northern California Safety Consortium to present the MCI related topics, *Incident Command and Medical Scene Command* in Lake and Del Norte counties this year.

Issues/Solutions: none

NORTH COAST EMERGENCY MEDICAL SERVICES

3340 Glenwood Street, Eureka, California 95501

Serving Del Norte, Humboldt, Lake and southern Trinity Counties



Quarter 2 Progress Report

October 1, 2004 – December 31, 2004

General Fund Contract # EMS-4040

January 14, 2004

January 14, 2005

Carol MacRae, Contracts Manager
EMS Authority
1930 Ninth Street, Suite 100
Sacramento, CA 95814

RE: FY 04-05 General Fund Grant #EMS 4040 Second Quarter Progress Report

Dear Carol:

The General Fund Second Quarter Progress Report for Fiscal Year 2004-2005 (Contract #EMS-4040) is attached.

Please note that we are in the process of upgrading our Prehospital Care Reporting System (EPCIS) and are temporarily unable to generate quarterly data reports. Our programmer, who lives in Washington, is scheduled to resolve this issue next Monday if he can travel here. Therefore, we are unable to include EPCIS dependent Workload Indicators in this report.

Please call if you have any questions.

Sincerely,

Larry Karsteadt, Executive Director
North Coast Emergency Medical Services

cc: Joint Powers Governing Board
County Health Officers
Ruth Lincoln, Lake County Health Department
EMCC Chairpersons
Information Mailing

Overview:

In the second quarter of Fiscal Year 2004-2005, North Coast Emergency Medical Services (EMS) continued to serve as the local EMS agency for the functions delegated by Del Norte, Humboldt, Lake and southern Trinity Counties. The Agency continued to manage the regional EMS system in accordance with state law and guidelines, under direction of the Joint Powers Governing Board and in coordination with a large network of organizations and individuals. North Coast EMS staff and contractors facilitated the planning, coordination and evaluation of the EMS system through a program of community consensus, patient and EMS participant advocacy and continuous quality improvement.

The Joint Powers Governing Board directed the activities of North Coast EMS during the first quarter of FY 2004-2005. The Board consisted of the following members: Supervisor John Woolley, Humboldt County, Chairperson; Supervisor Chuck Blackburn, Vice-Chairperson, Del Norte County; and Supervisor Rob Brown, Lake County. Alternates to the JPA Board were: Supervisors Martha McClure, Del Norte County; Ann Lindsay, M.D., Humboldt County; and Supervisor Ed Robey, Lake County.

The following general fund employees managed the Agency (totaling 4.6 FTEs). Please note that the Agency received a new special project grant entitled: *Implementation of the Regional Trauma System* that will cover a portion of staff FTE this year.

- Larry Karsteadt, Executive Director (1.0 FTE)
- Wendy Chapman, Training Coordinator (1.0 FTE)
- Maris Hawkins, Program Assistant II (0.6 FTE)
- Louis Bruhnke, EMT-P, EMS Coordinator (1.0 FTE)
- K. Jody Hurd, Administrative Assistant (1.0 FTE)

Several part-time independent consultants totaling less than 0.5 FTE were involved with general fund operations, including:

- John Kelsey, M.D., Regional Medical Director
- Pam Haynes, RN, Base Hospital, EDAP, RN Coordinator
- Jay Myhre, EPCIS Programmer
- Ezequiel Sandoval, Office Computer Maintenance
- Vickie Gibney, R.N., MICN Test Revision (Written and Skills)
- Debbie McMahon, RN, PCNC, FCA, CQI and Paramedic Program
- Willie Sapeta, EMT-P, Lake County Testing
- Doug Boileau, North Coast Paramedic Program Coordinator
- Cindy Hendersen, EMT-P, AED Reports
- Moss. Levy and Hartzhiem, Auditor

Numerous individuals and organizations within the three and one-third county area directly contributed to the regional accomplishments during the third quarter.

North Coast Emergency Medical Services General Fund #4040 - Quarter 2 Progress Report

October 1, 2004 to December 31, 2004

The following report on progress at North Coast EMS during the second quarter of Fiscal Year 2004-05 meets the requirements of the California EMS Authority General Fund Contract #EMS-4040 and the document entitled: "Funding of Regional EMS Agencies with General Fund Monies (June, 2001)." The report specifically addresses the goals, workload indicators, accomplishments and issues relative to contract objectives, as specified by the California EMS Authority (EMSA), and specific to the Local EMS Agency (LEMSA) functions delegated in contract by JPA member counties and Trinity County.

1.0 System Organization and Management

Objective: To develop and maintain an effective management system to meet the emergency medical needs and expectations of the population served.

Workload Indicators:

Total Static Population Served = **225,450** (estimate 3,000 residents in south Trinity County)

Total Annual Tourism Population = **+3 million**

Number of Counties = **3.3** (Del Norte, Humboldt, Lake, s. Trinity)

Geographic Size of Region = **6,840 square miles** (5,840 in the three JPA member counties and approximately 1,000 in southern Trinity County, which equals roughly one-third of the County)

Accomplishments: This quarter,

1. North Coast EMS personnel attended the following state EMS functions:
 - a. Processed EMSC Conference Registrations
 - b. Attended and coordinated the EMSC Conference in Sacramento
 - c. State Trauma Advisory Committee, Conference Call

2. North Coast EMS personnel attended the following regional meetings:
 - a. Joint Powers Governing Board
 - b. Humboldt/Del Norte Medical Advisory Committee (MAC)
 - c. Lake and Humboldt County Emergency Medical Care Committees (EMCC)
 - d. Humboldt County Fire Chiefs Association
 - e. Humboldt County Child Death Review Team
 - f. Humboldt County Injury Prevention Meetings
 - g. Child Passenger Safety (CPS) Committee
 - h. State Disaster Exercise at St. Joseph Hospital
 - i. Humboldt/Del Norte Disaster Committee

- j. Trauma Meetings in Humboldt and Lake Counties
 - k. North Coast Paramedic Training Program Planning Meeting.
 - l. Humboldt County Health Officer
 - m. Lake and Humboldt County HRSA Meetings
 - n. Mad River Community Hospital Trauma (with Janette Lackette)
 - o. New EMT regulations update meetings with Eureka and Humboldt Fire District.
 - p. C.D.F. all hands mandatory training day.
3. North Coast EMS executed contracts with Ed Nickerson, R.N. (Regional Trauma Coordinator), Mary Donati, R.N. and Mary Cardinale-Stein, R.N. (to assist with the trauma center designation process in Lake County) a part of the Trauma Grant, and with Dr. Charles Rinker, national rural trauma expert from Bozman, Montana (trauma center advocate). Please see EMS Contract # 4061 Quarterly Report for more information about the Regional Trauma System.
 4. The Agency did not distribute any Informational Mailings this quarter.
 5. North Coast EMS maintained (www.northcoastems.com), which has policies, procedures, upcoming training, the revised EMS Plan, the revised Trauma Plan, the new MCI Plan, the last Informational Mailing, links to other EMS web sites and other information posted regularly.
 6. North Coast EMS initiated the FY 2003-04 fiscal audit process with Moss, Levy and Hartzhiem.
 7. The Agency administered the new special project grant entitled: *Implementation of the Regional Trauma System* and completed a small Hospital Communication grant to support additional ReddiNet training.
 8. The Agency submitted the required quarterly reports for the GF contract and the new trauma grant.
 9. North Coast EMS continued contracts with the EMSA: state General Fund (EMS #4040 and Trauma (EMS# 4061).
 10. North Coast EMS installed a new voice mail system in the office, purchased a laptop computer and docking station for the Executive Director, and new printer for the Program Assistant.
 11. The North Coast Paramedic Training Program was continued under Agency sponsorship. 23 students from the first class have now taken the national exam; 16 have passes the first time, 5 the second time, 2 dropped. 15 completed the internship and 13 have been accredited. We conducted a planning meeting and continued to prepare the self-study packet. Numerous surveys were compiled, instructor resumes/CVs and all materials necessary to answer questions were collected, clinical matrices were completed.
 12. The Executive Director was appointed to the State EMT-II Task Force by EMSAAC.
 13. The Agency conducted one JPA meeting, which included: the final GF budget was approved, the state special project contract and budget were approved and the meeting schedule for this year was set.

14. The Agency submitted a request to the EMSA to modify the State GF contract budget, and submitted all contracts with GF and trauma contractors for review and approval. All contracts have been approved.
15. The Agency initiated a comparison of bids relative to the trauma center designation process as part of the special project grant. Please see the quarterly report - #EMS 4061 – for more information.

Issues/Solutions:

1. Increasing operational costs and cost of living expenses will continue and we anticipate a budget shortfall in FY 2005-06 unless state General Fund assistance, special project and/or local funds are increased. Fortunately, this year, the new special project grant will help offset existing staff costs. The Agency needs at least another fulltime position to keep up with the workload.
2. The seven regional agencies are in need of a state GF fiscal augmentation to keep up with increasing operating costs and, in FY 2006-07, to absorb the addition of Tulare County to the Fresno, Kings, Madera Region without decreasing the shares to the other regions.
3. Due to the absence of a formal EMCC, the Agency decided to conduct quarterly MAC-like meetings in Del Norte County to review issues, provide updates and work more closely with local EMS responders. The first meeting is scheduled for early January.
4. At the above meeting, Ron Sandler, Del Norte Ambulance, mentioned that our webpage and written policies have some differences. We will attempt to identify and fix specific problems, but staff time is insufficient for us to proceed with full review and reconciliation of our policy manual as we would like. Our long term goal is to make the webpage version to final, official version.

2.0 Staffing and Training

Objective: To ensure personnel functioning within the EMS system are properly trained, licensed/certified/authorized and/or accredited to safely provide medical care to the public.

Workload Indicators:

Total Number of Personnel Certified/Authorized/Accredited by Regional Agency = **1042***
 Total Number of Personnel Completing Training Courses Approved by Regional Agency = **113**
 Total Number and Type* of Approved Training Programs Approved by Region = **31***
 Total Number and Type of Training Programs Conducted by Regional Agency = **1***
 Total Number of Continuing Education Providers Authorized by Regional Agency = **37**

* - for Type of Certificate or Program, see below (#1 and #2 respectively).

Status: This quarter,

1. The following EMS personnel possessed North Coast EMS issued documents:
 - a. Certified EMT-Is = 804 (72 are ETAD certified)

- b. Certified EMT-II's = 3
- c. Accredited Paramedics = 117 (66 with Hep/Nitro; 27 Pacing)
- d. Authorized MICNs = 118
- e. Field Training Officers = 57

2. Regional instructors conducted the following North Coast EMS approved training programs:

	Approved	Conducted
a. Esophageal Tracheal Airway Device =	9	1
b. EMT-I =	14	4
c. Paramedic =	1	1
d. Field Training Officers =	1	
e. Mobile Intensive Care Nurse =	2	2
f. Emergency Medical Dispatch =	1	
g. Lake County EMT-I Tests Sessions	1	

- 3. Instructors reported that a total of 113 students completed these classes. Several other classes were not completed this quarter but are in progress.
- 4. The new North Coast Paramedic Training Program was initiated under North Coast EMS last year. The first class is in the process of completion. 23 students from the first class have now taken the national exam; 16 have passes the first time, 5 the second, 2 dropped. 15 completed the internship and 13 have been accredited.
- 5. The Agency applied for national accreditation on September 28, 2004 and we are in the process of completing the self-study packet. We conducted a planning meeting and have compiled surveys, instructor resumes/CVs and all materials necessary to answer questions and completed clinical matrices. We are planning the National Accreditation site visit to coincide with the fall class.
- 6. Approval for 38 continuing education (CE) programs was continued by North Coast EMS and numerous CE programs were offered within the region.
- 7. A few licensure or certifications reviews were conducted this quarter.
- 8. Larry Karsteadt was appointed to the new state EMT-II Task Force and continued as a member of the State Trauma Advisory Committee, Louis Bruhnke continued as a member of the Education Task Force and Wendy Chapman continued as a member of the State EMSC Coordinators Group.
- 9. The new State EMT-I Regulations were adopted and the Training Coordinator is continuing the process of coordinating numerous significant changes involving all existing EMT-I basic and refresher programs in the region.
- 10. We investigated the potential addition of Narcan to the EMT-I scope of practice in Humboldt County on a trial basis. However, after several meetings and discussions with potentially interested parties, we have elected not to pursue this option due to a low cost/benefit ratio.

Issues/Solutions:

1. North Coast EMS needs to conduct MCI and Incident Command training in Lake and Del Norte Counties this year, ideally with the assistance of the Northern California Safety Consortium. We also need to update and expand the Field Training Officer Program as it has been several years since we last did so. These projects may be delayed until next year, however, due to other priorities (including implementation of the Regional Trauma Plan, revision of the EMS Plan, and completion of the national accreditation process for the North Coast Paramedic Training Program.
2. North Coast EMS is considering applying for one or more special projects to expand the prior Rural Outreach Program, conduct MCI and Incident Command training, update the Field Training Officers program. The latter would involve a statewide assessment of current FTO training, and development of a best practices document.

3.0 Communications

Objective: To develop and maintain an effective communications system that meets the needs of the EMS system.

Workload Indicators:

Total Number of Primary and Secondary PSAPs = **11**

Total Number of EMS Responses = NA Prehospital Care Reports were submitted

Total Number of Ambulances Dispatched = NA transports were reported

Total Number of Emergency Medical Dispatch Programs Approved by Region = **2**

Total Number and Type of EMD Programs Authorized by Agency = see #1 & 2 below.

Status: This quarter,

1. North Coast EMS continued the Emergency Medical Dispatch program at the Eureka Police Department and CDF in Fortuna using Medical Priority, Inc.
2. Eleven (11) Public Safety Answering Points (PSAPs) were utilized by regional EMS providers as follows (several PSAPs directly dispatch ambulances). Please note that we have previously inadvertently neglected to include Napa and Mendocino CDF dispatch operations, which dispatch South Lake County Fire and Lake Pillsbury Fire:

PSAP	Location	EMD Utilized
a. Del Norte Co. Sheriffs Department	Del Norte County	No
b. Humboldt Co. Sheriffs Department	Humboldt County	No
c. Humboldt State University	“	No
d. Arcata Police Department	“	No
e. Eureka Police Department	“	Yes
f. California Highway Patrol - Arcata	Del Norte & Humboldt	No
g. Fortuna Police Department	Humboldt County	No

h. California Division of Forestry - Fortuna	“	Yes (secondary PSAP)
i. Trinity Co. Sheriffs Department	Trinity County	No
j. Lake Co. Sheriffs Department	Lake County	No
k. California Highway Patrol – Ukiah	Mendocino County	No

3. Six (6) non-PSAP (or secondary PSAP) ambulance dispatch centers were utilized within the region for dispatching ambulances:

a. K’ima:w Tribal Police	Humboldt County	No
b. City Ambulance of Eureka	“	No
c. Southern Trinity Rescue Dispatch	“	No
d. Redwood Empire Life Support	Sonoma County	No
e. CDF – Howard Forest	Mendocino County	No
f. CDF – Napa	Napa County	No

4. North Coast EMS maintained contracts requiring field to hospital communications and recording equipment with six (6) base hospitals, one alternative base hospital and 17 LALS/ALS providers.
5. The North Coast EMS region continued to utilize a Med-Net Communications System installed in 1977-78 that includes six (6) county owned and one (1) fire district owned Mt. Top Repeater, eight (8) hospital owned base station radios and numerous provider-owned mobile units (estimate 40). All repeaters except Rogers in Humboldt (which is rarely used) have been replaced.
6. North Coast EMS continued the Regional Med-Net Repeater Replacement Trust Fund for long term repeater replacement. The Agency and each JPA-member county has again contributed \$500 each this year.
7. North Coast EMS utilized a small Hospital Communication System general fund grant from EMSA to bring additional ReddiNet training to the area. The Health Departments and Agency continued to promote use of the ReddiNet System in Lake and Humboldt Counties. A meeting with Linda Tripoli is scheduled for early next quarter, and we intend to work with both counties to develop strategies for increasing local use as a surveillance tool, hospital-to-hospital and hospital-to-county communications tool. The Humboldt County Medical Advisory Committee (MAC) formally determined that the ReddiNet System has little application to day to day EMS system operations, and dropped this item from the agenda.
8. Humboldt County OES, the Health Department and the Agency proceeded with plans to upgrade the Med Net System to create a single MCI/Disaster communications channel. The company involved with this, RWS, is still awaiting approval of the new FCC licenses.
9. The Agency initiated a review of other EMD programs to determine whether another program would be better for the region. We decided to continue with Medical Priority, Inc., and have coordinated a class in Crescent City for February 21-23. We expect 5 dispatchers from Del Norte County, 4 from Eureka and up to 3 from Fortuna. The Del Norte County Sheriffs Department plans to implement for the first time the EMD program after the class.

10. The Agency helped coordinate and attended a meeting of the Del Norte County First Responder Dispatch Group, which resulted in revision of the existing dispatch policy by Crescent City Fire. A follow-up MAC-Like meeting has been scheduled for early January.

Issues/Solutions:

1. Last quarter, the Del Norte County Sheriffs Department requested that we investigate other EMD Programs. We have elected to continue with Medical Priority, Inc., and have scheduled a course in late-February in Del Norte County. We expect the Sheriffs Dept, Eureka PD and CDF in Fortuna to send students to this class.
2. The first quarterly MAC-like meeting is scheduled in Del Norte County for mid-January to review issues, provide updates and work more closely with the EMS responders.
3. The Agency plans to work with RWS, Humboldt County, local providers and hospitals to design and implement the single disaster Med-Net channel.
4. Ambulance coverage in the Lake Pillsbury area has shifted from Ukiah to Lake County. In the process of discussion, we confirmed with Coastal Valleys EMS that the current dispatch of Lake Pillsbury volunteer first responders by Howard Forest, CDF, Mendocino County. will continue at least six more months, while Lake County explores other dispatch options. We are very appreciative that they will do so.

4.0 Transportation

Objective: To develop and maintain an effective EMS response and ambulance transportation system that meets the needs of the population served.

Workload Indicators:

Total Ambulance Response Vehicles = Estimate **47**

Total First Responder Agencies = **40** approved by North Coast EMS

Total Patients Transported = NA transports were reported in the PCR program

Total Patients Not Transported = NA Against Medical Advise Patients (AMA) were reported

Total Number of LALS/ALS Providers Authorized by Region = **17**

Total Number of Transport Providers in Region = **14**

Status: This quarter,

1. North Coast EMS continued Advanced Life Support Agreements with 17 providers, First Responder Agreements with 40 fire districts, AED Agreements with 40 service providers, and ETAD Agreements with 15 providers.
2. JPA member counties continued permits or contracts with 6 ambulance services; another 8

fire districts provide transport in Lake County. The latter adopted a new ambulance ordinance last year that included all public transporting services.

3. North Coast EMS ensured that each transporting fire district in Lake County has current ALS Provider Agreements with us to complete the county's ambulance permit process. All providers did so successfully.
4. North Coast EMS executed an interim MOU with REACH, which began Air Ambulance Operations within Lake County in February 2004. The Agency is in the process of finalizing the documents. Medical control will remain with Coast Valleys EMS for the Lake County based helicopter service.
5. The Agency was informed of a Cardiac Pacing contract wording error and revised the contracts accordingly.
6. Regional Medical Director, John Kelsey, M.D., reviewed most of our ALS protocols. Any significant changes will go out for public comment after he has completed this project.
7. Larry Karsteadt was appointed to the State EMT-II Task Force by EMSAAC; Louis Bruhnke, EMT-P, EMS Coordinator, will attend the next meeting on behalf of the Agency in early January.

Issues/Solutions:

1. The Agency has worked closely with Lake Pillsbury Fire, Lake County dispatch, North Shore Fire and Coastal Valley's EMS to ensure ongoing ambulance coverage of the Lake Pillsbury area. At this time, North Shore Fire is continuing ambulance coverage and Lake dispatch is continuing to use CDF in Howard Forest (Mendocino County) to dispatch Lake Pillsbury Fire. The latter is in the process of acquiring an ambulance for BLS transport, and we are working with Coastal Valley's to set up a cross-regional meeting with all interested parties to ensure optimal, long range coverage.
2. North Coast EMS invited representatives from Nor Cal EMS, Inc. to review trauma patient transport and transfer issues from our region to theirs. The frequency of problematic occurrences seems low, but we will continue to work together to ensure appropriate transports and transfers into the Redding area.
3. Donna Nicolaus, EMSA, inquired about an issue between the State Department of Corrections and Del Norte Ambulance with regard to ongoing ambulance coverage of the Pelican Bay Prison. The Executive Director facilitated communications with all impacted parties. As far as we understand, a new contract was successfully negotiated and ambulance coverage for the prison will continue without disruption.
4. A meeting with Dr. Charles Rinker, rural trauma advocate, identified the need for review of the draft Regional Trauma Triage Criteria. For example, we will consider dropping Mechanism of Injury Criteria as a condition for automatic by-pass. Please see the Trauma Quarterly report #EMS-4061 for more information.

5.0 Assessment of Hospitals and Critical Care Centers

Objective: To establish and/or identify appropriate facilities to provide for the standards and care required by a dynamic EMS patient care delivery system.

Workload Indicators:

Total Base Hospital Contacts = NA

Total Patients Received = NA patients were transported

Total Number of Base (6) or Alternative (1) Base Hospitals Designated by Region = 7

Total Number of EDAPs designated by region = 4

Status: This quarter,

1. North Coast EMS patients continued to be transported to seven (7) hospitals located within the region. Six are licensed as basic emergency departments (one in Del Norte County, three in Humboldt County and two in Lake County) and one is a stand-by ED (Jerold Phelps in southern Humboldt). Patients are transferred to at least 20 facilities located outside of the region.
2. North Coast EMS continued formal designation of six (6) base hospitals and one (1) alternative base hospital.
3. Four of the seven hospitals, including Mad River Community, St. Joseph, Redwood and Adventist Health-Redbud are approved by North Coast EMS as Emergency Department Approved for Pediatrics (EDAPs).
4. The Agency continued to work with base hospital Prehospital Care Medical Director and Prehospital Care Nurse Coordinator, as needed, to address disclosure protected quality improvement issues.
5. North Coast EMS contracted with the EMSA for the new special project entitled: *Implementation of the Regional Trauma Plan* to complete the effort to designate four trauma centers and implement a state approved Trauma System on the north coast. Please see the second quarterly Trauma Report (#EMS-4061) for more information.
6. The Sutter-Coast Base Hospital probation was continued through a series of letters and calls. We are in the process of scheduling the next meeting.
7. The Agency completed a small contract with EMSA and brought additional ReddiNet System training to Humboldt County.
8. Adventist Health-Redbud Hospital in Clearlake resubmitted a request for a status change from a basic to standby emergency department to DHS, and the EMSA approved our request to allow Redbud to continue as a Base Hospital if DHS approves the change.

9. The Agency invited Nor Cal EMS, Inc. representatives to the Humboldt MAC meeting to review current policies and potential issues with regard to trauma patient transfer from our region to theirs.

Issues/Solutions:

1. North Coast EMS continued the probation of the Sutter-Coast Base Hospital program, but we are pleased the restructuring process to date. Agency is in the process of scheduling a follow-up meeting.
2. The ReddiNet System is not being utilized enough despite encouragement by the Public Health Officers and the Agency. We are working closely with Zach Smith, Humboldt County Health Dept to promote use as a hospital-to-hospital communications and hospital-to-county surveillance tool. We invited Linda Tripoli to help structure policies, etc. However, the Humboldt County Medical Advisory Committee determined that ReddiNet has no direct value in the routine prehospital setting and this issue has been removed from the agenda.
3. The Agency needs to reschedule base hospital and EDAP site visits; Pam Haynes, R.N., Clinical Coordinator, is in the process of doing so.
4. The Agency received a letter from Children’s Hospital of Oakland regarding payment for Trauma/Emergency Services provided for Lake County patients. We referred them to the Lake County Health Department.

6.0 Data Collection and Evaluation

Objective: To provide for appropriate system evaluation through the use of quality data collection and other methods to improve system performance and evaluation.

Workload Indicators:

Total Patient Care Reports Generated = NA

Total Trauma Patients = NA

Total Cardiac Patients = NA (NA Chest Pain and NA Cardiac Arrest Patients)

Total Medical Patients = NA

Total Pediatric Patients = NA

Total Number of CQI Cases in Region = several

Status: This quarter,

1. The EPCIS computerized Prehospital Care Reporting (PCRs) program was maintained and seven new computers are in the process of reprogramming for distribution to each hospital. New computer maintenance agreements need to be generated as well, and four of the computers will also utilize the Collector Trauma Registry software.

2. Agency staff, several Prehospital Care Nurse Coordinators (PCNCs) and ALS Providers conducted several quality improvement investigations.
3. The Agency previously purchased three new digital radio/telephone recording devices to facilitate QI review of trauma activities. These will be distributed to three of the four targeted trauma centers as part of the formal designation process. One was installed at Lakeside Hospital because their old system stop working and the PCNC assured us that they will apply for designation.
4. REACH continues to submit PCRs specific to Lake County activity on a monthly basis. These are reviewed by the Regional Medical Director and EMS Coordinator.
5. The Agency continued to participate in the special project with Nor Cal EMS, Inc. to design and evaluate the new web-based EPCIS program. Louis Bruhnke, EMS Coordinator, will serve as our beta tester and will double enter PCRs, in part of staff time.
6. The Agency continues to install new EPCIS computers (and Collector where appropriate) at regional hospitals. At this point, this includes Mad River, Redwood and St. Joseph.
7. North Coast EMS delivered for installation the new Digital Recording System for trauma CQI purposes at Lakeside Hospital.

Issues/Solutions:

1. No figures can be included in this quarters report due to a glitch in the new EPCIS program in the office. Programmer Jay Myhre is scheduled to address this problem in mid-January.
2. Trauma Registry software (Collector) was installed at St. Joseph hospital to begin to collect trauma patient data. A maintenance agreement was drafted for execution at St. Josephs. We plan to install Collector at Redwood and Lakeside, and potentially Redbud and Mad River as part of the trauma special project and pending confirmation that they intend to apply.
2. North Coast EMS needs to continue the effort to orient PCNCs and other personnel to readily utilize EPCIS as a CQI tool. Several strategies are under consideration.
3. The EMS Coordinator temporarily connected the modem at Sutter-Coast Hospital and transferred several months worth of data to the office.
4. Agency is working with the new Sutter-Coast PCMD to ensure that Del Norte Ambulance personnel have more convenient and ergonomically designed station for the medics to enter data on the EPCIS computer. We formally made this request and understand that it is being resolved.

7.0 Public Information and Education (PI&E)

Objective: To ensure that the population within the jurisdiction of the regional EMS agency has access to information and public information courses as it relates to emergency medical services.

Workload Indicators:

Total Public Information and Education Courses Conducted and/or Approved by Agency = See #1
Total Number of Public Information and Education Events Involving Agency = See #1 below

Status: This quarter,

1. North Coast EMS continued to participate in PIE activities by attending Injury Prevention, Child Death Review Team, EMSC and Child Safety Seat Committee meetings.

Issues/Solutions:

1. Staff size, particularly with the state GF cut and additional workload because of the Trauma Project and special projects, is inadequate to provide more than a very limited involvement in PIE and other low priority projects. Consequently, we do not plan to conduct any new PIE activities this year, and our involvement in PIE events will be limited.

8.0 Disaster Medical Response

Objective: To ensure the preparedness and response of the regions EMS system in the event of a disaster or catastrophic event within the region or in a neighboring jurisdiction.

Workload Indicators:

Total Number of Disaster/MCI Responses (responses with 5 or more victims) = **1 Reported**
Total Disaster Drills Involving Staff = **2**
Total Disaster-related Meetings Attended by Staff = **2**

Status: This quarter,

1. Agency staff attended Humboldt-Del Norte Disaster and Lake EMCC Committee.
2. North Coast EMS finalized the Regional MCI Plan.
3. The Agency facilitated the process in Humboldt County to review the new Haz Mat Triage Tag and recommended to the Gang of Five that HRSA funds be used to acquire tags and associated training. Ultimately, this will mean Humboldt County will use a single Triage Tag.
4. The Agency intends to contract with the Northern California Safety Consortium to present the MCI related topics, *Incident Command and Medical Scene Command* in Lake and Del Norte counties this year if possible, and if not, we are considering including this training in a new Rural Outreach special project request.
5. The Executive Director and EMS Coordinator continue to participate in regional disaster-related activities when possible. These include: ReddiNet, Triages, meetings, exercise observations, etc.

Issues/Solutions:

1. The Agency does not have adequate staff or contractor time and must therefore limit our involvement in all but the highest priority disaster related activities. An additional half-time position, at least, is needed for us to begin to adequately address prehospital disaster needs.

October 1, 2004

Carol MacRae, Contracts Manager
Emergency Medical Services Authority
1930 9th Street
Sacramento, CA 95814-7043

Re: Special Project EMS #4061 - First Quarter Report

Dear Carol:

The first quarterly report for EMS #4061, entitled Implementation of the Regional Trauma Plan, is enclosed.

Please call if you have any questions.

Sincerely,

Larry Karsteadt, Executive Director
North Coast EMS

cc: JPA Board
Regional Trauma Committee
Ed Nickerson, R.N., Regional Trauma Coordinator

IMPLEMENTATION OF A REGIONAL TRAUMA SYSTEM

North Coast EMS

FY 2004-05 Quarter 1 Progress Report
Prevention 2010 Special Project Block
Grant # EMS 4061

October 1, 2004

Larry Karsteadt, Executive Director

Implementation of a Regional Trauma System

FY 2004-05 Quarter 1 Progress Report
Prevention 2010 Special Project Block Grant # EMS 4061

North Coast EMS - October 1, 2004

Special Projective activities that have taken place during the first quarter of this year are summarized below by Objective:

I. Objective 1 – Administer the Project

A. Quarterly Progress:

North Coast EMS continued the process to implement the Regional Trauma Plan during the first quarter.

Pam Haynes, R.N. elected not to continue as the Regional Trauma Coordinator for personal reasons. She has been an excellent Trauma System advocate and will assist with the transition process; Pam will also continue as the North Coast EMS Nurse Coordinator. The Agency advertised the position, three candidates applied and the Selection Committee recently selected Ed Nickerson. R.N., Regional Trauma Advisory Committee Member, and Prehospital Care Nurse Coordinator at Mad River Community Hospital. We are very pleased to have Ed on our team.

Other primary activities included: updating the Regional Trauma Committee; reporting progress at the Joint Powers Governing Board meeting, the Humboldt County Medical Advisory Committee meetings and Lake County Emergency Medical Care Committee meetings; executing the contract with the EMSA; executing the contract with John Kelsey, M.D., Regional Medical Director; and meeting with representatives of the St. Joseph Health System.

Specifically, Dr. Kelsey and Larry Karsteadt met with the Surgical Committee at St. Joseph Hospital to summarize program highlights and answer questions, and we planned additional meetings to help over-come potential barriers to Level III designation at St. Josephs in Eureka and Level IV designation at Redwood Memorial in Fortuna.

The Agency also solicited recommendations for a “rural trauma advocate” to assist the Agency with implementation process, particularly including addressing potential barriers to designation at St. Joseph. And, we are planning to continue to contract with a local Lake County Trauma Coordinator as well; hopefully, Mary Donati, R.N., will continue in this capacity. Sutter-Lakeside and Adventist Health-Redbud are targeted as Level IV trauma centers.

Finally, the State Trauma Advisory Committee, of which Larry Karsteadt is a member, identified the northern section of the North Coast region as one of the few remaining areas in California without either a designated trauma center or and ALS aircraft located within the region. Successful implementation of a Statewide Trauma System is possible only if these local issues are addressed.

B. Issues:

The late signing of the state budget delayed the execution of the new state contract, although key activities were continued as much as possible with existing staff. The resignation of Pam Haynes, R.N. also contributed to program delays.

II. Designate Trauma Centers

III. Complete Education Process

IV. Establish/Maintain Quality Improvement Program

A. Quarterly Progress:

The Agency continued the process to prepare new hospital computers for installation, including the new EPCIS prehospital data management system and the new Collector Trauma Registry.

B. Issues:

The Collector Trauma Registry software installation has been delayed by the programmers to complete the email link between the four targeted trauma centers and our office.

January 14, 2005

Carol MacRae, Contracts Manager
Emergency Medical Services Authority
1930 9th Street
Sacramento, CA 95814-7043

Re: Special Project EMS #4061 - Second Quarter Report

Dear Carol:

The second quarterly report for EMS #4061, entitled Implementation of the Regional Trauma Plan, is enclosed.

Please call if you have any questions.

Sincerely,

Larry Karsteadt, Executive Director
North Coast EMS

cc: JPA Board
Regional Trauma Committee
Ed Nickerson, R.N., Regional Trauma Coordinator

IMPLEMENTATION OF A REGIONAL TRAUMA SYSTEM

North Coast EMS

FY 2004-05 Quarter II Progress Report
Prevention 2010 Special Project Block
Grant # EMS 4061

January 14, 2005

Larry Karsteadt, Executive Director
Ed Nickerson, R.N., Regional Trauma Coordinator

Implementation of a Regional Trauma System

FY 2004-05 Quarter II Progress Report
Prevention 2010 Special Project Block Grant # EMS 4061

North Coast EMS – January 14, 2005

Special Projective activities that have taken place during the second quarter of this year are summarized below by Objective:

I. Objective 1 – Administer the Project

A. Quarterly Progress:

Contracted with Mary Donati, R.N., Prehospital Care Nurse Coordinator (PCNC) at Adventist-Redbud and Mary Cardinale-Stein, R.N., PCNC, Sutter-Lakeside to assist in the implementation process in Lake County.

The Regional Trauma Advisory Committee of Lake County was convened and met for discussions of the ongoing trauma project, particularly the impediments to implementing the plan and designating one or more trauma centers.

The Lake County Emergency Medical Care Committee (EMCC) was updated on the progress of the trauma plan implementation.

The Humboldt County EMCC and Medical Advisory Committee (MAC) were also updated on the progress of the plan as was the Joint Powers Agency.

The current Trauma Nurse Coordinator (TNC), Ed Nickerson and the immediate past TNC, Pam Haynes, attended the quarterly meeting of the St. Joseph's Hospital Surgical Committee to update the local surgeons on the progress of the trauma plan and answer questions regarding the trauma designation process.

Larry Karsteadt met with Jeannette Lockette, the Executive Nurse Manager at Mad River Community Hospital (MRCH), regarding the possibility of MRCH applying for a trauma designation.

As a member of the State Trauma Advisory Committee, Larry Karsteadt participated in a conference call of the committee.

North Coast EMS made multiple copies of the DVD of the presentation of Mike Williams of the Abaris Group, titled: *Improving Trauma and Emergency Department Financial Performance*. These DVD's were distributed to targeted hospitals and other interested parties.

The Collector Trauma Registry Memorandum of Understanding was drafted and instituted with St. Joseph's Hospital and the Collector software was installed in the Trauma Nurse Coordinator's office.

Larry Karsteadt participated in Lake and Humboldt County HRSA fund distribution process and advocated its use to purchase trauma registry software for Mad River Community Hospital and digital Recording Units for both Redbud and Mad River Hospitals, assuming these facilities apply for trauma designation.

North Coast EMS solicited bids for the Trauma Center application and designation process. Three bids were received, American college of Surgeons (ACS), The Abaris Group and Diane Ackers. The bids are being considered at this point.

The Agency responded to Mad River Community Hospital's letter regarding the trauma program and invited them to formally notify us as to whether or not they intend to apply for trauma center designation.

B. Issues:

The bids for the trauma designation process came in higher than expected and the funds earmarked in the grant for this process are less than needed, especially if all targeted hospitals apply, including St. Joseph, Redwood, Lakeside, Redbud and Mad River.

II. Objective 2- Designate Trauma Centers

A. Quarterly Progress:

To advocate and answer questions regarding rural trauma center designation, North Coast EMS invited Charles Rinker, MD, a board certified surgeon and surveyor for the ACS trauma program, to meet with local physicians and surgeons, hospital administrators and interested parties. Dr. Rinker met with North Coast EMS personnel and then gave two presentations where he advocated for the designation of a Level III trauma center at St. Josephs Hospital. The presentations were well attended by physicians and staff from local hospitals, including Mad River, St. Joseph's and Redwood Memorial Hospitals.

North Coast EMS solicited bids for assistance with the Trauma Center application and designation process. Three bids received were from American College of Surgeons, The Abaris Group and Diane Ackers. The bids are currently being evaluated.

North Coast EMS received a letter of inquiry from Mad River Community Hospital (MRCH) regarding the trauma application process. Our response was that we would assist them in anyway that we could and that MRCH was invited to formally notify North coast EMS of their intentions to apply.

B. Issues

We need to determine which hospitals plan on applying for a trauma designation.

Consultation bids came in higher than anticipated.

Need to explore a comparison of ACS standard vs. State of California Title XXII standards for trauma centers.

Orthopedic surgery subspecialty coverage for trauma centers is becoming an issue for local hospitals. Trauma orthopedists are a rare commodity and the local orthopedic surgeons are reluctant to take call.

Redbud Hospital has indicated concerns regarding its ability to apply for trauma center designation.

III. Objective 3- Complete Education Process

A. Quarterly Progress:

In December, 2004, Dr. Charles Rinker, MD, surgeon and surveyor with the American College of Surgeons, met with local physicians in an advocacy role for the trauma plan and trauma designation. The two presentations were attended by a large number of local surgeons, surgery sub specialists, emergency physicians and nurses, as well as interested parties.

At Dr. Rinker's presentation, concerns were voiced by local surgeons regarding the trauma triage criteria. As more data is made available from trauma data systems, the criteria may need to be modified.

Classes are in the planning stage to assist trauma coordinators in collecting and inputting the trauma registry data.

Collector trauma data registry software was installed at St. Joseph's Hospital and data is being collected.

DVD's of Abaris Group's Mike Williams class on 'Improving Trauma and Emergency Department Financial Performance' were distributed to local hospital and interested parties.

B. Issues:

Due to late start and a delay in the hiring of a Trauma Nurse Coordinator, we find ourselves behind on training and implementation of the trauma system. Citing various reasons, we have not yet received a firm commitment from local hospitals regarding their intention to apply for trauma designation, thus this may require an extension beyond June 30, 2005 to fully implement the trauma plan.

IV. Objective 4- Establish/Maintain Quality Improvement Program

A. Quarterly Progress:

Collector trauma data registry software installed at Eureka St. Joseph Hospital and has been activated. The Trauma Nurse Coordinator has started entering data into the program.

Collector maintenance Memorandum of Understanding has been drafted.

North Coast EMS has advocated the use of the HRSA grant monies to go towards the purchase of Trauma Registry software for Mad River Community Hospital and digital recording equipment for Mad River Community Hospital and Redbud Hospitals to aid in a Trauma Quality Improvement program.

State Inclusion Criteria was redistributed to users of Trauma Registry.

North Coast EMS representatives met with NorCal EMS staff in regards to trauma issues; the NorCal EMS representatives were invited to the countywide Medical Advisory Committee, which they attended. Trauma cases that involved both EMS agencies were discussed as well as an ongoing Quality Improvement process. Memorandums of Understanding between the two agencies were drafted for review.

B. Issues:

Though now underway, there has been a delay in installing Collector software at other targeted hospitals due to programming/technical difficulties in loading the program onto new computers.

Since Mad River Community Hospital previously withdrew from the trauma center designation process, there were not enough funds in the previous State Trauma Grant to purchase the Collector software for them. We have encouraged them to use the HRSA grant funds for this expenditure.

North Coast EMS has advocated the use of the HRSA grant for purchase of digital recording equipment for those hospitals that plan to apply for a trauma level designation.

When North Coast EMS has an accurate tally of the number of hospitals that will actually be participating the trauma designation application, a re-evaluation of CQI needs by North Coast EMS will ensue.