

Category:	Quality Assurance/Improvement Prehospital Care Record Audit	Policy No:	2005
		Date:	04/01/96
			11/1/98

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## **PRE-HOSPITAL CARE RECORD AUDIT**

### **I. PURPOSE**

- A. To review and evaluate the provision of pre-hospital care as reflected in the Patient Care Records contained in the Marin County Pre-hospital Care Information System.
- B. To continually improve the level of awareness of system functioning and the provision of patient care.
- C. To facilitate proactive system planning, education and the early resolution of emerging issues.

### **II. AUTHORITY**

- A. Health and Safety Code, Title 22, Division 9
- B. California Administrative Code, Chapter 4

### **III. RELATED POLICIES**

- A. Quality Improvement Provider Agency Responsibilities, #2004
- B. Patient Care Record, #2115
- C. ALS Treatment Guidelines, #8301 through 8310

### **IV. POLICY**

- A. All providers of pre-hospital care shall have Quality Improvement Plans that have been approved by the EMS Office.
- B. Provider plans shall include mechanisms for the performance of prospective, concurrent, and retrospective review with appropriate reporting and feedback.
- C. Audit of Patient Care Records is one aspect of a Quality Improvement program and shall be guided by the following procedure.
- D. Appendices A and B may be amended as requested.

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## V. PROCEDURE

### A. Audit process

1. Each calendar month, the EMS Office shall generate a “General Screening Filter” and “Type Specific Filters”.
2. These filters shall be provider specific, with each primary zone provider receiving audit reports for activity within their zone and each provider for their own activity.
3. Additionally, a system-wide report shall be included in the PMCC agenda packet for information and review by the committee.
4. Following receipt of each report, the provider shall review the report, taking appropriate action according to the individual CQI plan.
5. On a quarterly basis, the provider shall send a written report to the EMS Office summarizing the results of the audits and actions taken, needed, or recommended. A summary will be sent to PMCC members.
6. The PMCC and/or the EMS Office shall recommend or take action as appropriate.

### B. Audit types

1. General Screening Filters
  - a) This report shall have fixed criteria, agreed upon by consensus of the PMCC.
  - b) Reports shall include a list of those records not meeting one of the general screening criterion.
  - c) The General Screening filter is found in Appendix A.
2. Specific Filters
  - a) Criteria for specific filters shall be developed using the ALS Treatment Guidelines and shall be agreed upon by consensus of the PMCC.

- b) In general, specific filters should contain six or fewer criteria.
- c) Specific filters are found in Appendix B and a schedule in Appendix C.

## Appendix A

### General Screening Filter (Updated 12/2000)

#### **Period of report**

**Total Number of calls for county**

**Total Number of records for this provider**

**Total number of vital signs taken by provider**

**Total ALS Patients**

#### **Screening Criteria (including percentage of whole)-**

1. Vital signs are incomplete--missing systolic or diastolic blood pressure, heart rate, or respiratory rate
2. Policy requires that one complete set of vital signs be recorded for each patient. For the purpose of these audits, a complete set of vital signs includes systolic and diastolic blood pressures, heart rate and respiratory rate, recorded one time for each patient. Complete vital signs are required for all patients, including patients below the age of 4 with altered GCS who are not seizure patients.
3. ALS patients missing pre-hospital care—number of ALS patients (one or more ALS procedures were done or medications given) for whom a pre-hospital care impression was not entered.
4. ALS patients with chest pain or CVA, > 20 minutes at scene—patients with “special scene conditions” indicated are excluded from this group.
5. ALS patients with trauma, > 10 minutes at scene—patients with “special scene conditions” indicated are excluded from this group.
6. With patient > 15 minutes, less than 2 sets of vital signs

## Appendix B

### Specific Filters (Updated 12/2000)

#### Abdominal Pain

No Oxygen given  
No ECG recorded  
SBP < 100, 2 IVs not started  
SBP < 100, no Fluid Challenge done

#### Acute Pulmonary Edema

No Oxygen given  
No Nitro given, SBP > 90  
Nitro given, SBP <= 90  
Morphine given without hospital contact  
Furosemide not given  
Dopamine given  
No ECG recorded  
SBP Below 90  
No Peripheral IV

#### Acute Respiratory Distress - Other

No Oxygen given  
No Peripheral IV  
Any Medication  
No ECG recorded

#### Adult Pain Management

Age 14 or under, no consultation made  
or attempted  
Patient age 14 or under

#### Airway Obstruction

No ECG recorded  
Cricothyrotomy done  
No Oxygen given  
McGill Forceps used to remove a foreign  
body

#### Allergic Reaction - Mild

List all medications given  
No Oxygen given  
No ECG recorded  
No Diphenhydramine (Benadryl) given

#### Allergic Reactions - Mod/Severe, Anaphylaxis

Epi given, patient 50 or >, hospital contact  
not made  
Dopamine given  
No Peripheral IV  
No Diphenhydramine (Benadryl) given  
No Fluid Challenge done, SBP < 90  
No Oxygen given  
No ECG recorded

#### ALOC/Coma/CVA

No Oxygen given  
No ECG recorded  
No Peripheral IV  
No Fluid Challenge done, SBP < 90  
No Glucose Determinations made  
Blood Sugar < 70, Dextrose and Glucagon  
not given  
Naloxone given

#### Asthma - Mild/Moderate

No ECG recorded  
No Albuterol administered  
No Oxygen given

**Asthma - Severe**

No Albuterol administered  
No Oxygen given  
Epinephrine administered  
Oral or Nasal Intubation performed  
No IV or Saline Lock initiated  
No ECG recorded  
Epi given, patient 50 or >, hospital contact not made

**Burns**

No Oxygen given  
Morphine given  
No Peripheral IV  
Any medication given other than Morphine

**Cardiopulmonary Arrest - Asystole**

No Atropine administered  
No successful IV or no Oral Intubation  
No Epinephrine administered  
No Peripheral IV  
No successful Intubation  
Neither Oxygen nor CPR given  
No ECG recorded

**Cardiopulmonary Arrest - PEA**

Neither Oxygen nor CPR given  
No ECG recorded  
No Epinephrine administered  
No IV, IO, nor Intubation and not code 3 to hospital

**Cardiopulmonary Arrest - VF/VT**

Neither Oxygen nor CPR given  
No Defibrillation performed  
No ECG recorded  
No Epinephrine administered  
No Lidocaine administered  
No successful IV or no Oral Intubation

**Chest Pain**

No IV or Saline Lock initiated  
No Aspirin administered  
No ECG recorded  
No Morphine or Nitroglycerine administered  
No Oxygen given

**Chest Pain, Unlikely to be Cardiac**

No IV or Saline Lock initiated  
No Oxygen given  
No ECG recorded

**Chronic Obstructive Pulmonary Disease**

Atrovent given  
Any medication other than Albuterol or Atrovent  
No Albuterol administered  
No IV or Saline Lock initiated  
No ECG recorded  
No Oxygen given

**Croup/Epiglottitis**

List all medications given  
List all procedures performed  
No Oxygen given

**Drowning/Near Drowning**

No Oxygen given  
No ECG recorded  
No Peripheral IV  
List all medications given

**Dysrhythmias - Bradycardia**

External Pacing used  
No Oxygen given  
No Atropine administered  
No Peripheral IV  
No ECG recorded

**Dysrhythmias - Sust. V.T., pulse present**

No Oxygen given  
No ECG recorded  
No Peripheral IV  
No Lidocaine administered  
No Cardioversion done, SBP < 90 or GCS

< 15

#### Dysrhythmias - SVT

No Oxygen given  
No ECG recorded  
Vagal Maneuver done  
No Peripheral IV  
No Cardioversion done, SBP < 90 or  
GCS < 15  
List all medications given

#### Dysrhythmias - Ventricular Ectopy

No Peripheral IV  
No Lidocaine administered  
No Oxygen given  
No ECG recorded  
Bretylium (Bretylol) administered

#### Envenomation

No ECG recorded  
No Peripheral IV  
List all medications given  
List all procedures performed

#### Gastrointestinal Bleeding

No Oxygen given  
SBP < 100 or Pulse > 120, no Fluid  
Challenge done  
No ECG recorded  
No Peripheral IV

#### Heat Illness - Mild

No Peripheral IV

#### Heat Illness/Hyperthermia

No Peripheral IV  
No Fluid Challenge done  
No glucose given  
Blood Sugar < 70, Dextrose not given  
List all medications given

#### Hypothermia/Frostbite

List all medications given  
No ECG recorded  
List all procedures performed  
No Peripheral IV

#### Imminent Delivery (normal/with complications)

List all medications given  
List all procedures performed  
Code 3 Transport to Hospital  
No Peripheral IV  
No Oxygen given

#### Neonatal Resuscitation

CPR given  
Oral Intubation performed  
Intraosseous Infusion or Peripheral IV  
Epinephrine administered  
No Oxygen given

#### Non-Traumatic Shock

Two IVs started  
Dopamine given  
No ECG recorded  
No Oxygen given

#### Pediatric Allergic Reaction

No IV or Saline Lock initiated  
No Diphenhydramine (Benadryl) given  
No Epinephrine administered  
List all medications given except Benadryl or  
Epi  
No ECG recorded

#### Pediatric Altered Level of Consciousness

No ECG recorded  
Naloxone given  
Oral Glucose given  
Blood Sugar < 60, Dextrose not given  
BS < 60, and No IV or IO and Glucagon  
not given  
No Oxygen given  
No Peripheral IV or IO initiated

**Pediatric Bradycardia**

CPR given  
Epinephrine administered  
Atropine given  
No Peripheral IV or IO initiated  
No Oxygen given  
Oral Intubation performed  
No ECG recorded

not given  
Diazepam (Valium) given

**Pediatric Shock**

List all medications given except Dopamine  
List all procedures performed  
Dopamine given  
No Peripheral IV or IO initiated  
No Oxygen given  
No ECG recorded  
Code 3 Transport to Hospital  
No Fluid Challenge done

**Pediatric Burns**

No ECG recorded  
Intraosseous Infusion or Peripheral IV  
List all medications given  
List all procedures performed

**Pediatric Tachycardia**

No ECG recorded  
No Peripheral IV or IO initiated  
Adenosine given  
Cardioversion done  
List all medications given except Adenosine  
No Oxygen given

**Pediatric Cardiac Arrest**

No Oxygen given  
No Peripheral IV or IO initiated  
No Epinephrine administered  
List all medications given except Epi or narcan  
Defibrillation performed  
No ECG recorded  
No CPR given

**Pediatric Toxic Exposures**

No ECG recorded  
List all procedures performed  
List all medications given except Dopamine  
List all medications given  
No Peripheral IV or IO initiated  
Code 3 Transport to Hospital

**Pediatric Respiratory Distress**

Epinephrine administered  
Naloxone given  
Albuterol given  
Oral Intubation performed  
No ECG recorded  
No Oxygen given  
List all medications given except Benadryl or Epi

**Pediatric Trauma**

Fluid Challenge done  
No Oxygen given  
No ECG recorded  
No Peripheral IV or IO initiated  
Code 3 Transport to Hospital

**Pediatric Seizure**

No Oxygen given  
No ECG recorded  
Intraosseous Infusion or Peripheral IV  
No glucose given  
IV or IO Established, BS < 60, no  
Dextrose given  
BS < 60, and No IV or IO and Glucagon

**Pneumothorax**

No ECG recorded  
Needle Thoracostomy done  
No IV or Saline Lock initiated  
No Oxygen given

**Poisons/Drugs**

Atropine given  
List all medications given except Charcoal, Atropine, Valium or Benadryl  
Diazepam (Valium) given  
Activated Charcoal given  
IV not established  
No ECG recorded  
Diphenhydramine given

**Respiratory Arrest**

IV not established  
Naloxone given  
No ECG recorded  
No Oxygen given

**Seizures**

No glucose given  
IV not established  
Blood Sugar < 70, Dextrose not given  
Diazepam (Valium) given  
Naloxone given  
No ECG recorded  
No Oxygen given

**Severe Pre-Eclampsia/Eclampsia**

List all medications given  
IV not established

**Syncope/Near Syncope**

List all medications given  
SBP < 90, Pulse > 120, no Fluid Challenge done  
No ECG recorded  
No IV or Saline Lock initiated

**Toxic Gas Inhalation**

IV not established  
Albuterol given  
No ECG recorded  
No Oxygen given

**Traumatic Injury**

IV not established  
SBP < 100, 2 IVs not started  
SBP < 100, no Fluid Challenge done  
MAST inflated  
No Oxygen given

**Vaginal Hemorrhage with/without shock**

No Oxygen given  
No ECG recorded  
IV not established  
Two IVs started  
Fluid Challenge done  
Oxytocin given

**Poisons/Drugs**

Atropine given  
List all medications given except Charcoal, Atropine, Valium or Benadryl  
Diazepam (Valium) given  
Activated Charcoal given  
IV not established  
No ECG recorded  
Diphenhydramine given

**Respiratory Arrest**

IV not established  
Naloxone given  
No ECG recorded  
No Oxygen given

**Seizures**

No glucose given  
IV not established  
Blood Sugar < 70, Dextrose not given  
Diazepam (Valium) given  
Naloxone given  
No ECG recorded  
No Oxygen given

**Severe Pre-Eclampsia/Eclampsia**

List all medications given  
IV not established

**Syncope/Near Syncope**

List all medications given  
SBP < 90, Pulse > 120, no Fluid  
Challenge done  
No ECG recorded  
No IV or Saline Lock initiated

**Toxic Gas Inhalation**

IV not established  
Albuterol given  
No ECG recorded  
No Oxygen given

**Traumatic Injury**

IV not established  
SBP < 100, 2 IVs not started  
SBP < 100, no Fluid Challenge done  
MAST inflated  
No Oxygen given

**Vaginal Hemorrhage with/without shock**

No Oxygen given  
No ECG recorded  
IV not established  
Two IVs started  
Fluid Challenge done  
Oxytocin given