

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.

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.

Category: Quality Assurance/Improvement
Prehospital Care Record Audit

Policy No: 2005
Date: 04/01/96
11/1/98

- 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

Pediatric Burns

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

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 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 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

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 Tachycardia

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

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

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