	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8827.13
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	12-Lead ECG	Last Approval Date:	06/09/22
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EMS Medical Director

EMS Administrator

## Purpose:

A. To establish an advanced life support skill guideline for utilizing 12-Lead Electrocardiogram (ECG).

## Authority:

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

## Indications:

- A. Discomfort/Pain of Suspected Cardiac Origin per Policy PD# 8030 in stable adult patients.
- B. Consider obtaining a 12-Lead ECG for patients over forty (40) years of age with the following symptoms:
  - 1. Symptomatic Bradycardia per Cardiac Dysrhythmias Policy PD #8024
  - 2. Symptomatic Tachycardia per Cardiac Dysrhythmias Policy PD #8024
  - 3. Diabetic >30 years old with typical or atypical symptoms of acute coronary syndrome (ACS)
  - 4. Syncope
  - 5. Post ROSC
- C. Patients over seventy-five (75) years or Women ≥ forty (40) with atypical\* signs or symptoms of ACS.

\*Atypical ACS signs and symptoms include: Atypical chest pain, shortness of breath, nausea, hypotension, brady/tachy dysrhythmias, or syncope.

## Special Considerations:

- A. Patients should not have transport unduly delayed by attempts to obtain a 12-Lead ECG.
- B. Obtaining 1 high-quality ECG within ten (10) minutes of patient contact is important to patient care and accurate diagnosis.
- C. Repeat ECGs can should be performed if there is a change in the patient's status or clinical presentation., but otherwise, Prehospital serial ECGs are not indicated due to the high instance of false alerts.
  - 1. In the setting of ROSC: Repeat ECGs are most accurate seven (7) minutes after obtaining ROSC, as the initial ECG can reveal STEMI, but subsequent ECGs may normalize.
- D. 12 Lead ECG computer interpretations reading "Acute MI", "Acute MI Suspected", "ST Elevation Criteria Met", or "STEMI" are accepted as consistent with acute myocardial infarction.
- E. All 12-lead ECGs consistent with an acute STEMI shall be transmitted to the STEMI receiving facility. If the 12 lead is not transmitted, the reason must be documented in the ePCR.

- F. A copy of all 12-Leads obtained during prehospital care shall be delivered to the receiving facility with the patient.
- G. 12-Lead ECGs may be transmitted to an ALS Base Hospital when requesting a medical consult for interpretation.

Cross Reference: PD# 2060 – Hospital Services PD# 8024 – Cardiac Dysrhythmias PD# 8030 – Discomfort/Pain of Suspected Cardiac Origin PD# 8031 – Medical Cardiac Arrest