



County of Santa Cruz

HEALTH SERVICES AGENCY

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EMERGENCY MEDICAL
SERVICES PROGRAM

Policy No. 1600

April 1, 2012

Emergency Medical Services Program

Approved

Medical Director

Subject: STEMI IDENTIFICATION, TRANSMISSION, AND HOSPITAL DESTINATION FROM THE FIELD

I. Criteria for 12-Lead ECG Acquisition

A. Chest pain /anginal equivalent symptoms

- 1) Chest pain consistent with Acute Coronary Syndrome (ACS). Suspicion of ACS is primarily based upon patient history: chest discomfort, jaw pain, arm pain, neck pain, or other anginal equivalent symptoms.
- 2) Be alert to patients likely to present with atypical symptoms or "silent AMIs": women, the elderly, and diabetics. Atypical symptoms may include non-pulmonary shortness of breath, syncope, dizziness, diaphoresis, nausea/vomiting, altered level of consciousness, severe fatigue.
- 3) Patients with chronic SOB such as a COPD may be included if there are additional new symptoms such as dizziness, weakness, diaphoresis, nausea/vomiting or ALOC.

B. Consider 12-lead when the following conditions are present:

- 1) Arrhythmias
- 2) Cardiogenic pulmonary edema
- 3) Cardiogenic shock
- 4) Post cardiac arrest (ROSC)
- 5) Age 80 or older with any type of medical complaint.

II. Acquire 12-Lead ECG as Indicated

- A. See Policy 5900 - 12-Lead ECG Procedure
- B. Document 12-Lead ECG acquired on PCR (A-12)

III. Criteria for Identifying a STEMI

A STEMI is indicated when 12-Lead ECG interpretation Indicates (**meets ST Elevation MI criteria**).

IV. Criteria for ECG Transmission/STEMI Center Communication

- A. When ECG interpretation indicates an acute MI (**meets ST Elevation MI criteria**), transmit ECG to STEMI Receiving Center and make a verbal report to the receiving ED as soon as possible.
- B. The verbal report to the STEMI Center will include the following:
 - ETA to the STEMI Receiving Hospital
 - Patient age and gender
 - Chief Complaint, including duration of complaint (PQRST)
 - Vital Signs
 - Significant physical findings
 - ECG interpretation (**meets ST Elevation MI criteria**)
 - Field treatments and response to treatments
 - Patient's cardiologist (if known)
- C. Document transmission of ECG (T12)

V. Hospital Destination

- A. **All patients for whom the ECG meets ST Elevation MI criteria; the ECG shall be transmitted to the STEMI Receiving Center and the patient shall be transported directly to the STEMI Receiving Center.** The STEMI Receiving Center will accept these patients except when experiencing an internal disaster or in the event there are no cardiac catheterization services available, regardless of ICU/CCU or ED status. If the STEMI Receiving Center has no cardiac catheterization services available, transport the patient to the closest ED.
- B. **All patients who have had an ECG that does not indicate acute ST Elevation MI will be transported to the local receiving hospital (Watsonville Community Hospital in South County, Dominican Hospital in North County) and it is not required that the ECG be transmitted.**
- C. When STEMI interpretation is less clear, ECG transmission is optional and will depend upon factors discussed in the **Note** below
- D. Specifically, when **paramedics in South County** have an **ECG that does not indicate STEMI, but still elect to transmit**, they should **transmit the patient's ECG to WCH** and make verbal contact for medical direction regarding the transport destination.
- E. ROSC STEMI patients from South County may be too unstable to transport directly to Dominican Hospital. Crews should evaluate the relative stability of the ROSC patient and call Dominican Hospital before transporting to verify Dominican staff agrees to accept the patient. Unstable ROSC patients in South County should be transported to WCH.

Note:

STEMI identification may be complicated by various ECG "imitators" or by various conditions such as left bundle branch block, paced rhythms, the presence of pericarditis, etc. In these instances, paramedics will depend on the clinical evaluation of the patient, and proceed with ECG transmission and radio contact with the local receiving hospital (Watsonville Community Hospital in South County, Dominican Hospital in North County) for clarification and guidance.

VI. Paramedic Documentation

- A.** When an ECG is acquired in the field, PCR documentation should reflect the findings of the ECG (A-12). When an ECG is transmitted to a hospital, PCR documentation should reflect this (T-12).
- B.** A copy of the field ECG will be attached to the TOC and delivered with the patient.
- C.** When an ECG is acquired in the field (whether or not the ECG indicates a STEMI), the verbal communication between the Paramedic Unit and the Base Hospital will be recorded for CQI purposes, even if the Base Hospital is not a STEMI Receiving Hospital.
- D.** No patient name is to be placed on the field ECG. Instead, use the patients initials (last name, First name) and the last 4 digits of the run number entered under ID number.