INDICATION:

- A patient suspected of having a cardiac event. This includes patients with atypical presentations. Symptoms and historical data that clearly raise suspicions of a cardiac event include:
  - Chest pain or discomfort without a clear non-cardiac explanation
  - History of known heart disease or cigarette use or hypertension or diabetes with:
    - Non-traumatic chest pain/chest discomfort or
    - Shortness of breath or
    - Nausea or vomiting (without other clear explanation)
  - Chest pain that radiates to or pain that originates in the arm, shoulder, neck, jaw or back (without other clear explanation)
  - Diaphoresis (without other clear explanation)
  - Age > 45 years with
    - Acute anxiety. Anxiety is common with acute cardiac conditions even in the absence of pain and should be considered a symptom rather than a chief complaint
    - Generalized weakness
  - Tachycardia (without other clear explanation)
    - Consider EKG for rates between 100-130 and required for rates of 130 or more
  - Significant bradycardia (50 or less)
  - Syncope or near-syncope

PROCEDURE:

- Complete initial assessment and stabilizing treatment. DO NOT DELAY TREATMENT TO OBTAIN 12-LEAD ECG.
  - In situations in which delaying treatment to obtain an ECG would compromise patient care in the field, such as those with cardiopulmonary arrest, acute respiratory failure, blood pressure < 90 systolic, altered level of consciousness, or other severe conditions, acquire the 12-Lead ECG at incident location or in vehicle just prior to beginning transport.
- Place precordial lead electrodes and acquire tracing as per manufacturer’s directions.
- Relay ECG interpretation to base hospital if indicated.
- Transmit ECG tracings that are positive or suspected for acute MI before arrival to receiving Cardiovascular Receiving Center.
- If defibrillation or synchronized cardioversion is necessary, place paddles or defibrillation pads, removing 12-lead patches if necessary.

DOCUMENTATION:

- Document obtaining 12-Lead and interpretation on prehospital care report (PCR).
- Transmit 12-Lead to CVRC from the field.
- Attach or upload a copy of 12-lead to PCR.

CAUTION: AN ECG THAT IS “NORMAL” OR NEGATIVE FOR STEMI DOES NOT RULE OUT AN ACUTE MI OR SERIOUS ANGINA.
NOTES:

— Presentation of heartburn, pleuritic or musculoskeletal chest pain does not rule out heart disease or acute MI.
— Do not need to repeat positive for acute MI 12-lead performed at clinic or other similar medical setting.
— Machine interpretation of suspected MI may not be accurate in presence of paced rhythms, bundle branch blocks, and certain tachycardia rhythms (e.g., SVT, atrial flutter). When communicating machine interpretation to base hospital, paramedics should advise base of paced / BBB / tachycardia rhythms.
— Base Hospital contact required for patients who refuse BLS or ALS transport after having a 12-lead performed in the field.