12-LEAD ECG PROCEDURE
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Patients with a medical history and/ or presenting complaints consistent with Acute Coronary Syndrome (ACS). Indications for the procedure may include one or more of the following:
  - Chest or upper abdominal pain, described as pressure or tightness
  - Nausea or vomiting
  - Diaphoresis
  - Shortness of breath and/ or difficulty with ventilation
  - Anxiety, feeling of “doom”
  - Syncope or dizziness
  - Other signs or symptoms suggestive of ACS

PHYSICIAN CONSULT
- If interpretation of ECG is inconclusive and ST segment elevation is present, seek immediate consultation with STEMI Receiving Center (SRC)

CONTRAINDICATIONS
- Life threatening conditions including ventricular tachycardia, ventricular fibrillation, or 3rd degree AV block
- Uncooperative patients
- Any situation in which a delay to obtain ECG would compromise care of the patient

EQUIPMENT
- ECG machine and leads

PROCEDURE
- Attach ECG limb leads to arms and legs
- Attach ECG chest leads as follows:
  - V1: right of sternum, 4th intercostal space
  - V2: left of sternum, 4th intercostal space
  - V3: halfway between V2 and V4
  - V4: left 5th intercostal space, mid-clavicular line
  - V5: horizontal to V4, anterior axillary line
  - V6: horizontal to V5, mid-axillary line
  - V4R- V6R: right 5th intercostal space, mid-clavicular line to mid axillary line (for suspected right ventricular infarction (RVI) and/ or physician request). Lead V4R must be obtained whenever ST segment elevation is noted in leads II, III, and AVF

SPECIAL CONSIDERATIONS
- If the 12-lead ECG demonstrates ST elevation and an acute ST elevation Myocardial Infarct is suspected refer to STEMI Policy C 9
- Infarctions may be present with a normal 12-lead ECG. Consider taking a 15-lead ECG.

RELATED POLICIES/ PROCEDURES
- Chest Pain/ Acute Coronary Syndrome C 8
- STEMI Policy C 9