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To: All Connecticut Licensed/Certified EMS Organizations
All Connecticut Sponsor Hospitals

From: Raphael M. Barishansky, M.P.H., M.S., CPM
Director, Office of Emergency Medical Services

Richard A. Kamin, MD, FACEP
Medical Director, Office of Emergency Medical Services

Re: EMT scope of practice expansion: 12-lead EKG acquisition and transmission

Effective immediately, through the approval of the Connecticut EMS Medical Advisory Committee and the Commissioner of the Department of Public Health (DPH), the Connecticut Emergency Medical Technician (EMT) provider scope of practice has, pursuant to Section 19a-179a of the Connecticut General Statutes, been expanded to include the acquisition and transmittal of 12-lead EKGs.

This expansion allows for more timely and appropriate destination determination, earlier hospital notification (with resultant earlier initiation of interventional procedures) and has the potential to reduce on-scene delays.

Attached to this document is the State of Connecticut 12-lead EKG Guideline for use by EMS providers and EMS sponsor hospitals when considering this intervention for their patients. The Connecticut EMS Advisory Board Education & Training Committee has developed a training model to accompany this expansion. The training model and guideline are available on the Education and Training page of the Office of Emergency Medical Services website at http://www.ct.gov/dph/ems, in the “Instructor Resources” section.

It is the responsibility of the EMS sponsor hospital to ensure EMS providers are compliant with training & education, including knowledge of EMS sponsor hospital clinical guidelines and ongoing competency. EMS organizations should contact their sponsor hospital clinical coordinator regarding the sponsor hospital’s plan for implementation of this modification. Please note: BLS agencies implementing this scope of practice expansion must include this on their “MIC & Authorized Skills” page of their Certificate of Operation renewal paperwork during their next renewal cycle.

The Connecticut Office of Emergency Medical Services greatly appreciates the efforts of all our partners in developing this initiative and in advancing prehospital care for the residents and visitors of Connecticut.
State of Connecticut 12-Lead EKG Guideline

**Indications:** Any patient suspected of Acute Coronary Syndrome, based on history and clinical findings including any of the following:

- Chest pain, pressure, or discomfort
- Radiating pain to neck, shoulder, back, or either arm
- Shortness of breath/difficulty breathing
- Sweating incongruent with environment
- Abnormal heart rate
- Syncope/near syncope
- Profound weakness/dizziness
- Nausea, vomiting
- Epigastric pain
- Previous cardiac history
- Other cardiac risk factors (hypertension, diabetes, history of smoking, obesity, family history of heart disease, hypercholesterolemia)

**Contraindications:** None.

**Training:** EMT-level personnel shall be authorized to apply 12-lead EKGs so as to acquire and transmit the results as previously described once they have successfully completed a training program approved by the Commissioner of the Connecticut Department of Public Health (DPH), and taught by a Connecticut DPH certified EMS instructor.

**Procedure:** Acquire a 12-lead on all patients suspected of Acute Coronary Syndrome (see above) on first contact.

a) Explain to patient that a 12-lead EKG should be acquired and transmitted to the Physician.
b) Place patient in position of comfort (semi-fowler’s or supine preferred)
c) Attach 12-lead EKG electrodes per placement guideline.
d) Verify that all leads are securely attached.
e) Have patient relax and limit movement.
f) Acquire 12-lead EKG and transmit to local Sponsor Hospital.
   1. If *Acute MI Suspected* is displayed on EKG (or other definitive declaration of Myocardial Infarction [MI] or ST Elevation Myocardial Infarction [STEMI]), and patient is hemodynamically stable:
      i. Transmit EKG to STEMI center and make radio contact with STEMI center for notification of “STEMI Alert”;
      ii. Initiate rapid transport to STEMI center per Sponsor Hospital guideline.
   2. If *Acute MI Suspected* is not displayed on EKG (or other definitive declaration of MI or STEMI):
      i. Consult with the Sponsor Hospital Physician for EKG interpretation and direction.

   g) Continue to coordinate Paramedic intercept.
   h) Anticipate possible Physician orders – transport to STEMI Center, Aspirin Protocol, etc.
   i) Repeat 12-Lead EKG at 10 minute intervals or change in condition.

**Note:** A normal 12-Lead EKG does not rule out the possibility of ischemic cardiac disease and must NOT be used to screen patients or rule out Acute Coronary Syndrome in the pre-hospital setting.