At the March, 2016 meetings of the State Emergency Medical Advisory Committee (SEMAC) and the State EMS Council (SEMSCO), the acquisition and transmission of 12 lead electrocardiograms (ECG) by Basic Life Support (BLS) and Advanced Emergency Medical Technician (AEMT) level providers was approved for use by New York State’s EMS agencies. This decision was based on the results of a demonstration project, which established that BLS providers acquiring and transmitting a 12-lead ECG from the field to physicians in hospitals may substantially improve the timeliness of identification and intervention in patients suffering from an ST Elevation Myocardial Infarction (STEMI).

The SEMAC approved BLS/AEMT 12 lead ECG acquisition as a regional option. Should an EMS agency wish to implement a 12 lead ECG program at the BLS/AEMT level, the EMS agency must be granted approval by their Regional Emergency Medical Advisory Committee (REMAC) and each certified EMS provider must complete a REMAC approved training program. The acquisition and transmission of 12 lead ECG will be an option in the NYS BLS Protocols, but training will not be included in the state approved original or refresher curricula/courses.

In systems heavily reliant on BLS providers, acquiring and transmitting 12-lead ECG from the field to physicians in hospitals can substantially improve the timeliness of identification and intervention in patients suffering from STEMI. This may also improve care in two-tiered systems where BLS is likely to be on scene and working in conjunction with, or intercepting with Advanced Life Support (ALS) providers.

Policy

REMACs may choose, but are not required, to allow the BLS/AEMT acquisition and transmission of 12 lead ECGs into their systems. If approved, the REMAC may develop a policy for which devices may be used and how they will integrate into the existing systems for STEMI care. Any device approved must be capable of transmitting 12 lead ECG data to the receiving hospital.

EMS Agencies wishing to implement a BLS/AEMT 12 lead acquisition and transmission program must make a written request to their REMAC. The request should include, but may not be limited to the following:
• A letter from the agency medical director supporting the implementation of the 12 lead program, including the physician’s plan for training, quality assurance and appropriateness review.

• A letter from the receiving hospital(s) advising that they are capable of receiving the 12 lead data and providing it to the appropriate hospital personnel.

• Agency policies and procedures for the 12 lead program that are consistent with state and regional policies and protocols. This should include, but may not be limited to, the following:

  o Use of the approved training program, requirements for continuing education, maintenance of competencies and the documentation for authorized providers;
  o A description of how the agency will follow the NYS Statewide Adult and Pediatric Protocols – Adult Cardiac Related Problem (M-5) [http://www.health.ny.gov/professionals/ems/protocol.htm];
  o A description of the 12 lead device proposed to be utilized by the EMS agency; and
  o Assurance that 12 lead ECGs obtained while caring for a patient will be subject to physician review.

Once the EMS agency has received written approval from the REMAC, the EMS Service must provide the Department with an updated Medical Director Verification Form (DOH-4362) [http://www.health.ny.gov/forms/doh-4362.pdf] indicating approval to participate in the 12 lead acquisition program.