

Westchester Regional Emergency Medical Advisory Committee



Nicholas DeRobertis, MD, FACEP
Chairperson

February 3, 2010

To: All Regional 911 Receiving Hospitals, EMS Agencies, and Regional EMS Council Members

At its last regular meeting on January 25, 2010, the Westchester Regional Emergency Medical Advisory Committee (REMAC) approved a process that allows patients presenting with specific signs and symptoms of Myocardial Infarction to be transported by paramedic services directly to specialty hospitals capable of providing primary percutaneous coronary intervention (PCI).

The process, referred to as the Regional STEMI Transport Program, promotes communication between paramedics in the field and local emergency department physicians to determine if patients should be transported directly to PCI equipped hospitals. Pre-hospital patient treatment procedures continue to be based on existing paramedic treatment protocols.

Imperative to this process is the need for collaboration among paramedic services and service medical directors, local hospitals and physicians providing online medical control (OLMC), and specialty PCI hospitals. Therefore, under the direction of the service medical director and in collaboration with OLMC hospital and specialty PCI hospital officials each paramedic service is required to establish a written agreement outlining training, communication, data collection and quality assurance procedures prior to program implementation.

For your reference, enclosed are the REMAC Advisory, Collaborative Agreement, and Paramedic Protocol for Acute Coronary Syndrome.

It is anticipated that paramedic service officials will begin developing plans to initiate this program over the next several weeks. In the event that questions regarding program implementation should arise, members of the REMAC are available to assist and may be reached by calling the Regional EMS Office at 914-231-1616.

Thank you in advance for your efforts with this important program.

Respectfully,

Dr. Nicholas DeRobertis, MD, FACEP
Chair, Westchester Regional Emergency Medical Advisory Committee



Westchester Regional EMS Council

R E M A C A D V I S O R Y

STEMI (ST Elevation) / Myocardial Infarction Transport Program

Issued: February 3, 2010

This Advisory applies to Westchester REMAC credentialed Paramedics only. No other EMS personnel operating within the Westchester Region may determine to transport a potential cardiac patient to a STEMI specialty referral destination facility. Potential cardiac patients who are treated and transported by non-paramedic personnel shall be transported to a 911 receiving Emergency Department in accordance with agency policy and State / Regional Protocol.

Background

Patients suffering from certain specific myocardial infarction with ST-segment elevation benefit from prompt reperfusion treatment through primary percutaneous coronary intervention (PCI). A delay to treatment diminishes clinical effectiveness of therapeutic interventional cardiac catheterization. Therefore, Westchester Regional paramedics are hereby directed to implement the following general operating procedure in conjunction with the Westchester Regional Advanced Life Support Protocols:

Procedure

For all adult patients, if the historical/physical findings are consistent with an acute myocardial infarction, AND the 12 lead EKG reveals 1mm ST elevation in 2 or more contiguous leads or left bundle branch block, the paramedic shall:

1. Implement the appropriate treatment procedures in accordance with the Westchester Regional Advanced Life Support Protocols;
2. Acquire, interpret and transmit (if capability exists) a 12 Lead EKG to the closest regionally approved medical control facility;
3. Contact the closest regionally approved medical control facility as soon as practical to request appropriate medical control orders, discuss EKG findings and patient destination with an online medical control (OLMC) physician;
4. If approved by OLMC, transport the patient to the closest appropriate 24-hour cardiac catheterization (STEMI) facility, unless one of the following conditions exists:
 - o The patient is in extremis;
 - o The patient has an unmanageable airway;
 - o The patient has other medical conditions (Trauma, Burns, CVA) that warrant transport to the closest appropriate hospital emergency department;
5. Notify the receiving STEMI facility in accordance with the EMS agency's approved activation /communication procedure.



Westchester Regional EMS Council

Until additional hospital destination options offering interventional cardiac services exist within the Westchester Region, the following hospitals may receive STEMI patients from the Westchester Region:

Westchester Medical Center (Valhalla, NY)
White Plains Hospital Center (White Plains, NY)
Montefiore Medical Center – Moses and Einstein (Bronx, NY)
NY Presbyterian Hospital – Columbia (Manhattan, NY)
St. Luke's Hospital (Manhattan, NY)
Danbury Hospital (Danbury CT)
Greenwich Hospital (Greenwich, CT)
Good Samaritan Hospital (Suffern, NY)
Englewood Hospital (Englewood, NJ)
Orange Regional Medical Center (Middletown, NY)
Vassar Brothers Hospital (Poughkeepsie, NY)

In an effort to ensure optimal implementation, Paramedic Agency Medical Directors must approve an agency's participation in this program by completing a collaborative agreement verifying the following:

- Notification of the agency's participation in the program is made to those STEMI facilities that the agency will be transporting to;
- Assurance that agency paramedics are competent in the acquisition, recognition and transmission of 12 lead EKGs;
- A procedure for the paramedic agency to communicate 12 lead EKG findings from the field to Medical Control has been established;
- A communication procedure for the paramedic agency to activate the receiving STEMI facility has been established and conveyed to the agency's affiliated paramedics.
- Specific patient data resulting from all cases where redirection of a patient to a STEMI facility occurred will be made available by the STEMI facility, reviewed by the Agency Medical Director and reported to the REMAC.

The Westchester REMAC STEMI TAG is available to assist service medical directors with program implementation.

Please refer all questions regarding this advisory to the Regional EMS Office Staff. Your anticipated cooperation is appreciated.

Issued by:

Dr. Nicholas DeRobertis, MD, FACEP
Chair, Westchester Regional Emergency Medical Advisory Committee
Regional Medical Director, Westchester Regional EMS Council



**Westchester Regional Emergency Medical Advisory Committee
STEMI TRANSPORT PROGRAM COLLABORATIVE AGREEMENT**

**Between a Westchester Regional Paramedic Agency and Agency Medical Director for Participation in the
Westchester Regional STEMI Transport Program**

The following agreement stands between the _____
(Participating Paramedic Agency) and Dr. _____, (Agency
Medical Director), authorizing the agency's participation in the Westchester STEMI Transport Procedure
Program and the agency's affiliated paramedics to transport adult patients directly to the closest 24-hour
cardiac catheterization (STEMI) facility in accordance with Westchester REMAC approved policies and
procedures. The following conditions are required for program participation by the agency:

1. The agency and its affiliated paramedics shall utilize the Westchester REMAC Paramedic Protocols in conjunction with any REMAC STEMI Transport Program policy or procedure in effect, or any future superseding policy or procedure.
2. The agency shall establish in consultation with the Agency Medical Director and regionally approved Medical Control Facility a mechanism where by 12 Lead EKG information shall be communicated from the field to the Online Medical Control Physician (OLMC) through 12 Lead EKG transmission and / or paramedic recognition.
3. The agency shall identify, at a minimum, the two closest available 24-hour STEMI facilities and shall develop in consultation with each participating STEMI facility a written procedure (to be attached) that describes:
 - a. The activation / communication procedure to alert the receiving STEMI facility of the transport and any necessary patient information;
 - b. The specific patient receiving point / location (i.e. ER vs. Cath Lab) and access process;
 - c. The patient data tracking procedure including facility contact personnel and numbers.
4. The agency shall participate in any related Quality Improvement (QI) projects established by the NYSDOH BEMS, the State Emergency Medical Advisory Committee (SEMAC) and/or the Westchester REMAC.
5. Prior to the implementation of the STEMI Transport program, the agency shall first file with the REMAC this completed collaborative agreement, and any aforementioned attachments.

The responsibilities of the Agency Medical Director shall include, but not be limited to the following:

1. Provide agency affiliated personnel with the appropriate initial instruction and continuing education in the assessment of Myocardial Infarction to include STEMI, Left Bundle Branch Block, 12 Lead ECG recognition, and the proper use of the REMAC STEMI Transport Program procedure.
2. Ensure agency affiliated personnel are familiar with the information regarding which STEMI facilities are appropriate for patient transport and their respective activation, communication, patient receiving, and data collection procedures.
3. Review all instances where a patient is transported directly to a STEMI facility as a result of REMAC STEMI Program procedures, provide appropriate quality assurance feedback, and report such instances to the REMAC.

Signature of EMS Agency Executive Officer

Date

Signature of Agency Medical Director

Date

REMAC STEMI PROGRAM 2/10

*** STANDING ORDERS**

1. Initiate Routine Medical Care
2. Obtain a **12 LEAD EKG** as directed in each cardiac sub-protocol.
3. Follow the appropriate sub-protocol (**a**):
 - a) **Acute Coronary Syndrome: M – 4.1**
 - b) **Acute Pulmonary Edema / Congestive Heart Failure: M - 4.2**
 - c) **Bradycardia : M – 4.3**
 - d) **Narrow Complex Tachycardia - Unstable: M – 4.4**
 - e) **Narrow Complex Tachycardia - Stable: M – 4.5**
 - f) **Wide Complex Tachycardia - Unstable: M - 4.6**
 - g) **Wide Complex Tachycardia - Stable: M – 4.7**

FOR ALL CARDIAC RELATED PRESENTING PROBLEMS

☑ NOTE

- a. Remember to search for and treat (if possible) any likely contributing factors: Hypovolemia, Hypoxia, Hydrogen Ion (Acidosis), Hypo/Hyperkalemia, Hypoglycemia, Hypothermia, Toxins, Tamponade, Tension Pneumothorax, Thrombosis, and Trauma.

*** STANDING ORDERS**

1. Obtain a **12 LEAD EKG**
2. If chest pain is present, administer **NITROGLYCERIN** 0.4 mg sublingual tablets or spray (**a**); May be repeated every 5 minutes if SBP remains greater than or equal to 100 mmHg.
3. **ASPIRIN** 81 mg tablets (up to 4 tablets) if the patient has not taken aspirin in the past 24 hours.

☎ MEDICAL CONTROL OPTIONS

- Repeat of any of the above standing orders
- **MORPHINE SULFATE** 2 - 5 mg IV; repeated as directed.

☑ NOTE

- a. **NITROGLYCERIN** should be given with caution to patients taking erectile dysfunction (ED) medications (i.e. Viagra, Cialis, Levitra), or suspected inferior wall or right ventricle (RV) myocardial infarctions (MI)