2015

ODEMSA Regional STEMI Guidelines

STEMI Steering Committee
Old Dominion EMS Alliance, Inc.
1421 Johnston Willis Dr.
Richmond, VA 23235
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These guidelines will be used to determine when to consider direct transport of an Acute ST Elevation Myocardial Infarction (STEMI) patient to an Emergency Percutaneous Coronary Intervention Center (PCI). The guidelines ONLY apply to STEMI patients. It is recognized that the guidelines may increase transport times and bypass some hospitals with patients classified as serious or critical. However, each Acute MI case is unique and transport or transfer considerations are impacted by the specific needs of the patient. These Regional Transport Guidelines may help in making decisions, but should not dictate those decisions.

1. TRANSPORT OF THE ACUTE STEMI PATIENT FROM THE SCENE

1.1 A 12 lead EKG, **obtained within 10 minutes of patient contact**, will be used to diagnose Acute STEMI in the prehospital setting. The focused goal is to direct STEMI patients to designated hospitals that can provide primary interventional cardiac catheterization capabilities.

1.2. Patients with airway obstruction, uncontrollable airway, or with CPR in progress should be taken immediately to the closest hospital. In patients who have had a return of spontaneous circulation (ROSC) from a cardiac arrest, and have an EKG consistent with a STEMI, transportation to the closest Emergency PCI center should occur.

1.3 Ideally, patients should be transported to the closest appropriate Emergency PCI Center. When there are questions about hospital destination in an out-of-hospital STEMI situation, the prehospital Attendant-in-Charge (AIC) should contact their medical control hospital for destination guidance.

1.3.1. Considerations for hospital destination, including bypass, should include the emergent needs of the Acute STEMI patient and the ability of the on-scene AIC to care for those needs. Transporting to Emergency PCI Centers decreases mortality, even if the patient is hypotensive.

1.3.2 Attendant-in-Charge (AIC) will notify the receiving hospital of the incoming Patient with Acute STEMI **within 5 minutes of obtaining and interpreting the 12-lead EKG**. Activation can be based on ECG readout or identification of ST elevation by provider interpretation, monitor interpretation, or transmission.

1.4. Destinations, including bypass and mode of transport, may be affected by hospital capabilities, patient information, and other factors such as:

1.4.1. The level of training and experience of the prehospital providers compared with the need of the Acute MI patient.

1.4.2 If the actual transport time required to transport to an Emergency PCI Center is greater than 45 minutes, consider aeromedical transport. In using rotary wing resources, weather conditions and availability of the resources must be considered. Decreasing time from diagnosis to definitive treatment (PCI) is essential.

1.4.3. Patient preference may play a factor in the decision of hospital destination.

1.3 Designated Emergency PCI Centers will have the service available on a 24 hour per day basis and will not

divert STEMI patients unless there is a catastrophic event affecting hospital operations.

2. TRANSFER FROM LOCAL TO EMERGENCY PCI CENTER

2.1. The final decision on an Acute MI patient's transfer from a Non-Emergency PCI Hospital to an Emergency PCI center must be made by a physician at the Local Hospital. This decision may be made in consultation with other local physicians, an Emergency Physician or Interventional Cardiologist at the Emergency PCI Center, and the patient/family. These Regional Transport Guidelines may help in making the decision, but does not dictate the decision.

2.2. All transfers must be made in accordance with the Emergency Treatment and Active Labor Act (EMTALA) or the Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA).

2.3. The Non-Emergency PCI Hospital should notify the Emergency PCI Center as soon as possible through their designated transfer procedures.

2.4. The Physician at the Non-Emergency PCI Hospital will decide if the Patient can be sufficiently stabilized prior to transport.

2.5. The decision to transfer is based on the resources needed by the Acute MI Patient and must be done rapidly as possible. Once the decision has been made, the patient should be transferred to an Emergency PCI Center by the most efficient and effective means available. Time from diagnosis to treatment is critical.

2.6. Any consideration for aeromedical transport should be based on the time of transport involved, road and weather conditions, and medical equipment requirements.

2.7 Minimum stabilization of an Acute MI patient for transfer must include:

2.7.1. Controlled airway.

2.7.2. Arrhythmias treated as best as possible.

2.7.3. Hypotension treated with fluids/inotropic/pressor support. If stroke symptoms are present, transfer to an Emergency PCI Center with acute stroke capabilities should be considered.

2.7.4. Transport on cardiac monitor with IV's established via ALS unit.

3. Emergency PCI Centers (See Appendix A)

3.1 Hospitals that wish to participate in the policy must share all requested quality measures related to STEMI patients with ODEMSA and EMS agencies. Data will be blinded by ODEMSA and shared periodically with the intent to improve the overall system. Blinded data may be used for research and publication, if approved by the ODEMSA STEMI Steering Committee.

3.2 The policies and procedures of the STEMI guidelines will be developed and managed by the ODEMSA STEMI Steering Committee. Minimum compliance expectations will be set by a subcommittee of the

ODEMSA STEMI Steering Committee referred to as the ODEMSA STEMI Quality Group. Compliance expectations will be developed for the different phases of care such as PSAP, EMS, ED, and inpatient care. The subcommittee will involve area experts within the phases of care and/or create work groups to develop the expectations.

3.2.1 The STEMI Steering Committee will be comprised of one clinical representative from each Emergency PCI Center. In addition, one administrative representative each from Bon Secours, VCUHS, HCA Health system, and Community Health System will be on the committee to represent hospital administration. EMS shall be represented by one EMS representative per planning district and an additional 2 at large members from EMS agencies.

3.2.1.1 An Emergency PCI Hospital will be considered a voting member if the previous fiscal year's clinical activity fulfill the AHA's definition of an Expert Center. Those facilities that do not meet the criteria will have non-voting representation within the STEMI Steering Committee.

3.2.1.2 All decisions voted on by the committee must pass with more than 51% approval by all voting members, including those not present.

3.2.2 The STEMI Steering Committee shall report directly to the Medical Control Committee (See Appendix B).

3.2.3 The ODEMSA STEMI Quality group shall be comprised of a cardiologist from each of the major hospital systems (HCA, Bon Secours, Community Health System, and VCUHS) as well as an independent cardiologist not affiliated with hospitals in the area affected by the guidelines.

3.2.3.1 The ODEMSA STEMI Quality Group shall be given un-blinded data for review.

3.2.3.2 All decisions voted on by the group must pass with more than 51% approval by all voting members, including those not present

3.2.3.3 Appeals to decisions by the Quality group will go to the STEMI Steering Committee. Appeals must be in writing and be presented to ODEMSA within 30 days of the Quality group's written decision. In order to overrule the Quality Group's decision, a greater than 75% vote of voting members, including those not present of the ODEMSA STEMI Steering Committee must be achieved.

3.3 Emergency PCI Center designated hospitals that fall below compliance expectations for two quarters will be placed on a probationary status and must provide a performance improvement plan within 30 days of written notification. Failure to provide the plan will result in removal of STEMI designation. The plan must meet approval of the STEMI Quality group. If after two additional quarters, the hospital does not demonstrate compliance, Emergency PCI Center designation shall be removed. Appeals will be brought to the ODEMSA STEMI Steering Committee as described in section 3.2.3.3.

4. System Performance Improvement

4.1 To maintain the integrity of the performance improvement and protect patient and provider privacy, all data

will be kept confidential. All reasonable efforts will be taken to sanitize records and maintain patient anonymity. The ODEMSA STEMI Quality Group will review patient data and copies of medical records as needed and provide feedback and recommendations to the ODEMSA STEMI Steering Committee in order to improve the system. The STEMI Quality Group will request what data they need for analysis.

4.2 **Virginia State Laws**

45 CFR 164.501 and 45 CFR 164.506 provides EMS personnel with the authority to receive protected health information for purposes of transport and subsequently permits EMS personnel to disclose protected health information to another health care provider such as a hospital for continued patient treatment.

45 CFR 164.501 of the Privacy Rule defines treatment as the provision, coordination or management of health care and related services by one or more health care providers, including the coordination or management of health care by a health care provider with a third party; consultation between health care providers relating to a patient or the referral of a patient for health care from one health care provider to another. 45 CFR 164.506 specifically states that a covered entity may disclose protected health information for treatment activities of a health care provider.

45 CFR 164.520 would not require EMS personnel to administer the Notice of Privacy Practices to a patient in transport. That can be done by the treating facility when it is practical to do so. *The HIPAA Privacy Rule also requires that covered entities must provide patients with a Notice of Privacy Practices. However, 45 CFR 164.520 provides specific direction related to the administration of notice. 45 CFR 164.520 (i) (B) states that a covered health care provider that has a direct treatment relationship with an individual must provide the notice in an emergency treatment situation, as soon as reasonably practicable after the emergency treatment situation.*

Appendix A

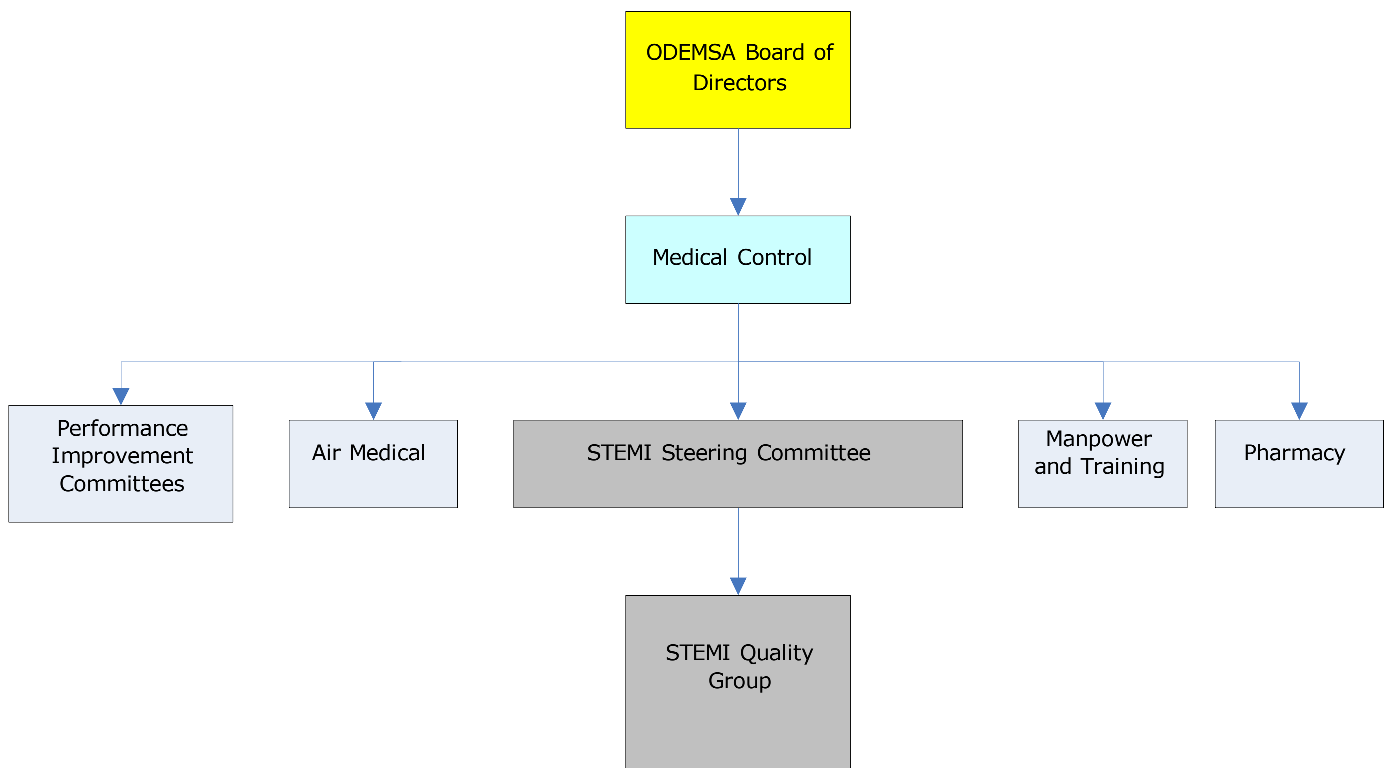
Listing of Emergency Percutaneous Coronary Intervention Centers

ODEMSA Hospital	Emergency Department Phone Number
Bon Secours St Mary's Hospital	804-281-8184
Memorial Regional Medical Center	804-764-6732
Henrico Doctor's Hospital Forest campus	804-289-4605
CJW Medical Center – Chippenham campus	804-323-8911
VCU Medical Center	804-828-3989
Southside Regional Medical Center	804-765-5625
St Francis Medical Center	804-594-7950
McGuire VA Medical Center	804-675-5527

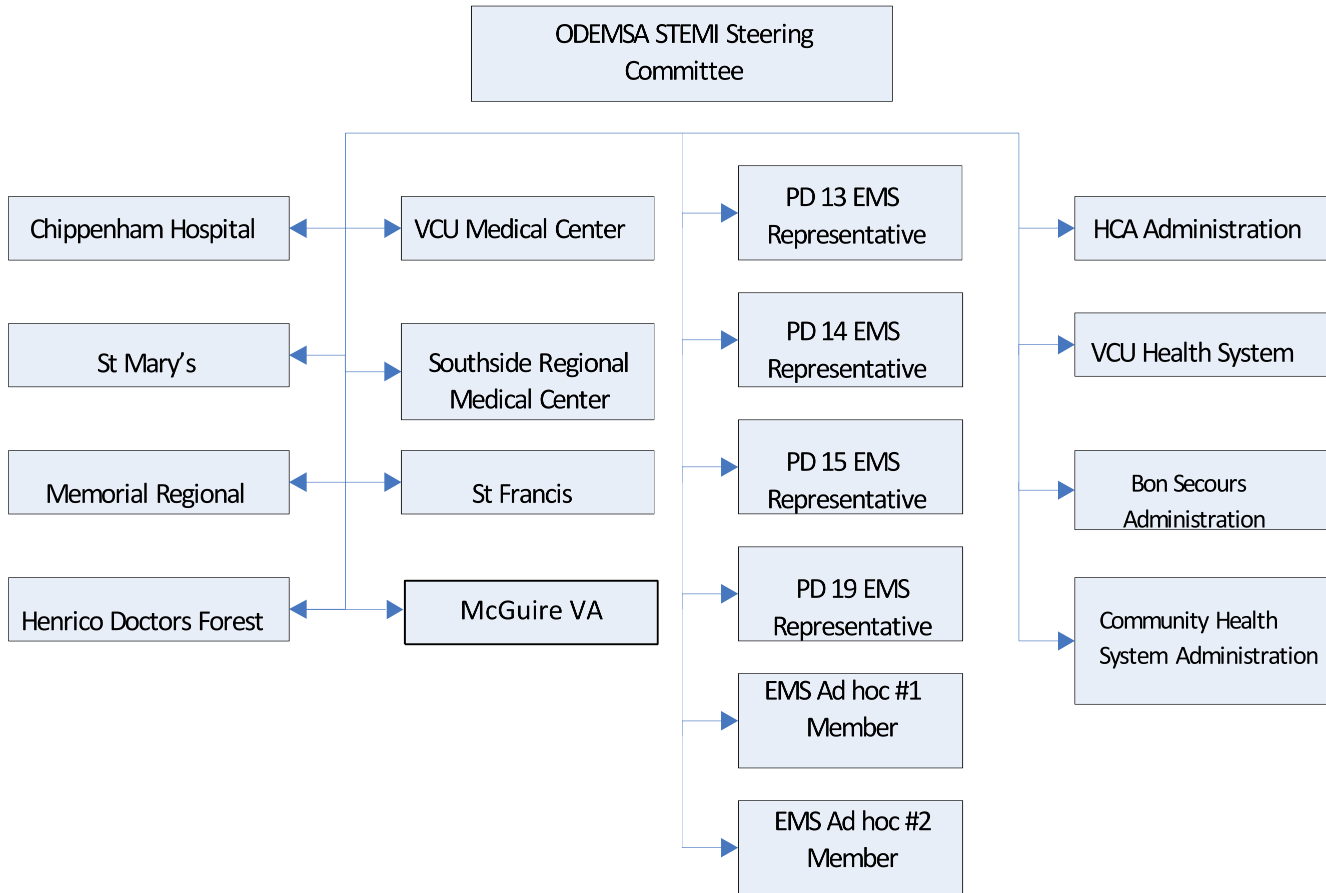
Non-ODEMSA hospitals	Emergency Department Phone Number
Lynchburg General Hospital	434-200-3027
Martha Jefferson Hospital	434-654-7150
Sentara Williamsburg Regional Medical Center	757-984-7155
University of Virginia Health System	434-924-9287
Spotsylvania Regional Medical Center	540-4980-4960
Mary Washington Hospital	540-373-0348

Appendix B

1. ODEMSA STEMI Care Organization Chart



2. **ODESMA STEMI Steering Committee**



3. **ODEMSA STEMI Quality Group**