



MEMO

To: Missouri Ambulance Service Managers and Administrators

From: Terry Ellsworth, Chief, Bureau of Emergency Medical Services

Date: May 2, 2018

Re: STEMI (ST Elevation Myocardial Infarction) Center Designations and Transport Protocol

The Missouri Department of Health and Senior Services has reviewed all hospitals which had applied for STEMI center designation by the initial deadline. The Department will issue certificates for STEMI center designation to those hospitals which have been approved to be designated by the Department.

As of May 15, 2018, all hospitals which have been issued a STEMI center certificate of designation by the Department may begin holding themselves out as a Missouri STEMI center at the approved level designated by the Department. The names of these hospitals will be posted on the Department's website to reflect STEMI center designation and the level of STEMI center designation at <http://health.mo.gov/living/healthcondiseases/chronic/tcdsystem/designatedhospitals.php>.

On May 15, 2018, the Bureau of EMS will begin the enforcement of Section 190.243.1, RSMo. (Cum.Supp.2013), which provides that "patients who suffer a STEMI, as defined by Section 190.100, shall be transported to a STEMI center".

19 CSR 30-40.790 establishes protocols for all ground and air ambulances to follow when transporting suspected STEMI patients. However, Section 190.200.3, RSMo. (Cum.Supp.2013) provides that these regulatory requirements relevant to the transport of STEMI patients may be waived by the proper submission and approval of a "community-based or regional transport plan".

It is important to understand that a waiver is not available to any service until the community-based or regional transport plan has been approved as indicated in 19 CSR 30-40.770. In the absence of an approved plan, compliance with the requirements set out in Section 190.243 RSMo and 19 CSR 30- 40.790 will be required.

As of this time, three (3) community-based or regional transport plans have been approved by the Department of Health and Senior Services.

If you have any questions about the transportation of STEMI patients by emergency medical services, please feel free to contact me at (573) 751-6356

www.health.mo.gov

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(2) All ground and air ambulances shall use the following state transport protocol for suspected STEMI patients except in those circumstances listed in sections (3), (4) and (5) of this algorithm:

STEMI TRANSPORT PROTOCOL

Step 1

Assess life threatening conditions—serious airway or respiratory compromise or immediate life threatening condition that cannot be managed in the field.

Yes

No

Transport to nearest appropriate facility for stabilization prior to transport to a STEMI center. Consider air/ground/facility options for timely and medically appropriate care (particularly in non-urban areas).

Step 2

Assess Vital Signs and Electrocardiogram (ECG).

- ECG (Equipment & ECG recommended if capable) identifies ST elevation in two contiguous leads or new or presumed new Left Bundle Branch Block
- Patient has **two of the following three signs of cardiogenic shock**
 - Hypotension, systolic blood pressure <90 mmHg
 - Respiratory distress, RR <10 or >29
 - Tachycardia, heart rate > 100 BPM

Yes

Transport to Level I STEMI center according to local and regional process: consider time for transport, patient condition, and air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas).

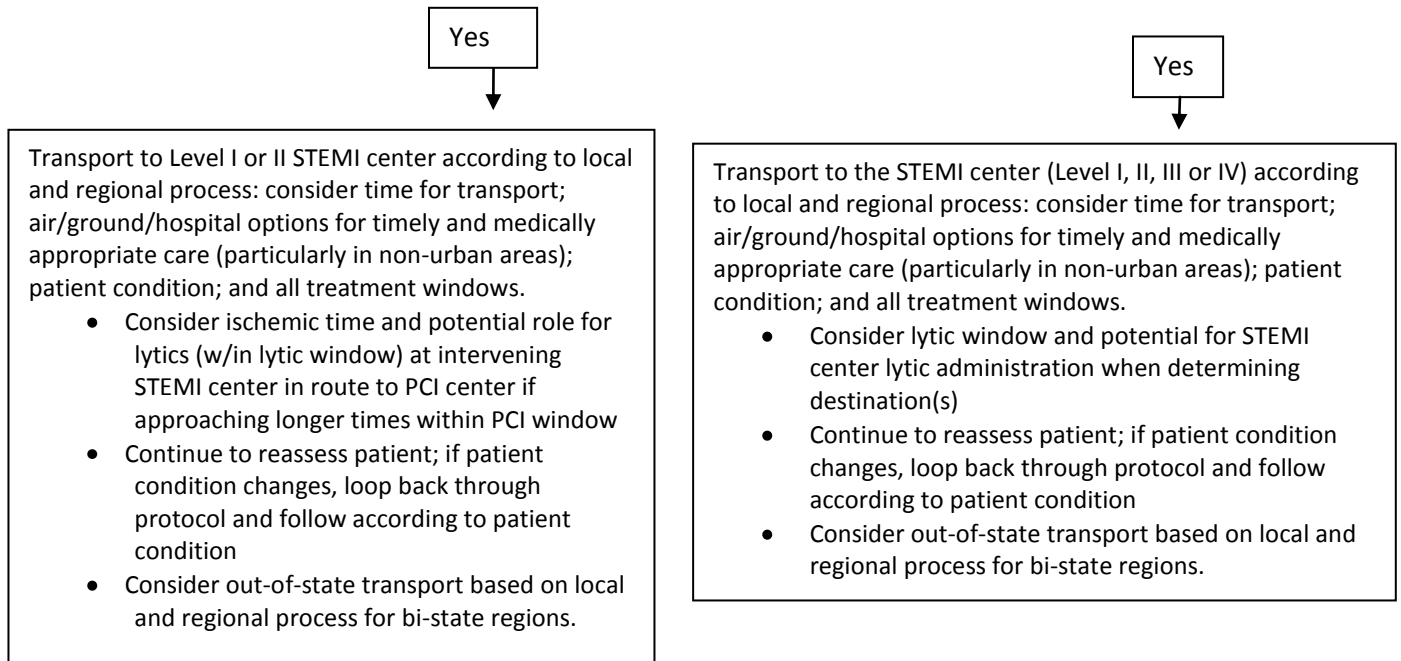
- If initial transport from scene to Level I STEMI center is prolonged, consider transport to nearest appropriate facility for stabilization prior to transport to Level I STEMI Center
- Continue to reassess patient; if patient condition changes, loop back through protocol and follow according to patient condition
- Consider out-of-state transport based on local and regional process for bi-state region. Communicate ECG findings to hospital.

Positive ECG; Negative for signs of cardiogenic shock

Step 3

Calculate estimated time from STEMI identification to Percutaneous Coronary Intervention (PCI). Communicate ECG findings to hospital. *(If no ST-elevation or new or presumed new left bundle branch block, consider 15-lead ECG, if available)*

<p>Group 1</p> <p>Within PCI Window OR Chest Pain > 12 hours OR Lytic/Thrombolytic Ineligible</p>	<p>Group 2</p> <p>Outside PCI window and within lytic Window, OR outside both windows AND No other known complications</p>
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- (3) When initial transport from the scene of illness or injury to a STEMI or stroke center would be prolonged, the STEMI or stroke patient may be transported to the nearest appropriate facility for stabilization prior to transport to a STEMI or stroke center.
- (4) Nothing in this rule shall restrict an individual patient's right to refuse transport to a recommended destination. All ground and air ambulances shall have a written process in place to address patient competency and refusal of transport to the recommended destination.
- (5) Ground and air ambulances are not required to use the state transport protocols when the ambulance is using a community-based or regional plan that has been approved by the department pursuant to section 190.200.3, RSMo that waives the requirements of 19 CSR 30-40.790. Copies of flow charts of this algorithm depicting the stroke and STEMI state transport protocols are available at the Health Standards and Licensure (HSL) office, online at the department's website www.health.mo.gov or may be obtained by mailing a written request to the Missouri Department of Health and Senior Services, HSL, PO Box 570, Jefferson City, MO 65102-0570 or by calling (573) 751-6400.