



to recommend or not recommend the plan for approval. If a majority of the committee votes to recommend the plan for approval, said recommendation shall constitute *prima facie* evidence that the plan meets the requirements of section 190.200.3, RSMo, and should be approved. The committee shall attach such conditions (such as regular analysis and reporting of medical outcomes to the committee) to its recommendation for approval as it deems appropriate to ensure that the plan continues to meet the requirements of Chapter 190, RSMo. If a majority of the committee votes to not recommend the plan, that decision, with an explanation of the reason(s) for the decision, shall be provided in writing to the plan's designee. A community or region receiving a non-recommendation by the committee may modify its plan according to the committee's reason(s) for non-recommendation and resubmit the plan within thirty (30) days directly to the committee.

(5) Following recommendation of a community-based or regional plan, the committee shall forward the plan to the Director of the Department of Health and Senior Services (director) for approval. The director shall have thirty (30) days to review the plan for its compliance with section 190.200.3, RSMo. At the conclusion of the review, the director shall approve or disapprove the plan. If the director disapproves the plan, the reason(s) for disapproval shall be provided in writing to the plan's designee along with the right to appeal the director's decision. The director's decision shall be the final agency action. A community or region whose plan is not approved by the director may modify its plan according to the director's reason(s) for disapproval and resubmit the plan within thirty (30) days directly to the committee and follow the approval process as outlined herein.

(6) Once a plan is approved by the director, the planning committee shall—

(A) Notify all agencies impacted by the plan of the manner in which emergency medical care is modified within the region based on the plan;

(B) Monitor per the plan the related medical and system outcomes and regional resources and capacity;

(C) Revise the plan when indicated based on medical and system outcomes, emerging clinical research or guidelines, or when revision is indicated based on changes in capacity or other related issues and submit through the approval process as outlined herein; and

(D) Notify the committee and department at least thirty (30) days before ceasing to use the plan.

AUTHORITY: section 192.006, RSMo 2000, and sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012, effective June 30, 2013.*

**Original authority: 192.006, RSMo 1993, amended 1995; 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002; and 190.241, RSMo 1987, amended 1998, 2008.*

19 CSR 30-40.780 Definitions and Abbreviations Relating to the Transport Protocol for Stroke and the Transport Protocol for ST-Segment Elevation Myocardial Infarction (STEMI) Patients

PURPOSE: This rule defines terminology related to the state transport protocol for stroke and the state transport protocol for STEMI.

(1) The following definitions and abbreviations shall be used in the interpretation of the rule in 19 CSR 30-40.790:

(A) Field is the specific area or location, outside of the hospital, where an injury, accident, or medical emergency occurs requiring immediate assistance of medical personnel for the purpose of treating or transporting the sick or injured to another location for treatment;

(B) Local and regional process is the process that has been established and agreed upon specifically pertaining to a local city, town, or small district, or a combination of localities forming a regional area. This is not the community-based or regional plan;

(C) Lytics are thrombolytic drugs, including recombinant tissue plasminogen activator, used to dissolve clots blocking flow in a blood vessel. These lytic/thrombolytic drugs are used in the treatment of acute ischemic stroke and acute myocardial infarction;

(D) Lytic/therapeutic window is the period of time during which lytics can be administered following the onset of symptoms in order to reduce brain or heart injury;

(E) Lytic therapy (fibrinolysis/thrombolysis) is drug therapy used to dissolve clots blocking flow in a blood vessel. It refers to drugs used for that purpose, including recombinant tissue plasminogen activator. This type of therapy can be used in the treatment of acute ischemic stroke and acute myocardial infarction;

(F) Lytic/thrombolytic ineligible patients are those patients identified as ineligible for lytic/thrombolytic therapy due to specific contraindications. An appropriate course of treatment will be utilized when lytic/thrombolytic therapy is contraindicated;

(G) Out of the lytic/therapeutic or potential therapeutic window is the period of time following the accepted time (lytic/therapeutic window and potential therapeutic window) frames for specific therapies for a patient suffering an ischemic stroke;

(H) Outside of the percutaneous coronary intervention (PCI) window is the period of time following the accepted time frame in which PCI is most advantageous and recommended;

(I) Percutaneous coronary intervention (PCI) is a procedure used to open or widen narrowed or blocked blood vessels to restore blood flow supplying the heart;

(J) Percutaneous coronary intervention (PCI) window is a time frame in which PCI is most advantageous and recommended;

(K) Potential therapeutic window is the period of time after the accepted window for lytic therapy has expired in which interventional therapy may be beneficial in restoring blood flow during an ischemic stroke; and

(L) Recombinant tissue plasminogen activator (t-PA also known as rt-PA) is a thrombolytic (clot-dissolving) agent, the goal of which is to destroy the thrombus (clot) within the blood vessel by stimulating fibrinolysis (clot breakdown) to allow restoration of blood flow.

AUTHORITY: sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012, effective June 30, 2013.*

**Original authority: 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002 and 190.241, RSMo 1987, amended 1998, 2008.*

19 CSR 30-40.790 Transport Protocol for Stroke and ST-Segment Elevation Myocardial Infarction (STEMI) Patients

PURPOSE: This rule establishes protocols for transporting suspected STEMI patients by severity and time of onset to the STEMI center where resources exist to provide appropriate care and suspected stroke patients by severity and time of onset to the stroke center where resources exist to provide appropriate care.

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

(A) Step 1—Assess for life threatening conditions (serious airway or respiratory compromise or immediate life threatening conditions that cannot be managed in the field).



1. If there are life threatening conditions, transport the patient to the nearest appropriate facility for stabilization prior to transport to a stroke center. Consider air/ground/facility options for timely and medically appropriate care (particularly in non-urban areas).

2. If there are no life threatening conditions, go to step 2 below in subsection (1)(B); and

(B) Step 2—Assess the duration of onset of symptoms (time last known well).

1. Group 1—If the patient is within the lytic/therapeutic window then transport to a level I, II, or III stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes, then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

2. Group 2—If the patient is within the potential therapeutic window then transport to a level I stroke center or transport to a level I, II, or III stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

3. Group 3—If the patient is out of the lytic/therapeutic and potential therapeutic windows, then transport to a level I, II, III, or IV stroke center according to local and regional process. Consider the time for transport, the patient's condition, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), and the treatment windows. Continue to reassess the patient. If the patient's condition changes, then start back with subsection (1)(A) and follow the state stroke protocol outlined in section (1) starting from subsection (1)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

(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 rule:

(A) Step 1—Assess for life threatening conditions (serious airway or respiratory compromise or immediate life threatening conditions that cannot be managed in the field).

1. If there are life threatening conditions, then transport the patient to the 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).

2. If there are no life threatening conditions, then go on to step 2 below in subsection (2)(B) and assess vital signs and perform an electrocardiogram (ECG) if the ground or air ambulance has that capability. An electrocardiogram and electrocardiogram equipment are recommended;

(B) Step 2—Determine if the patient's vital signs and the electrocardiogram identifies the following:

1. ST-elevation in two (2) contiguous leads or new or presumed new left bundle branch block; and

2. The patient has two (2) of the following three (3) signs of cardiogenic shock:

A. Hypotension where systolic blood pressure is less than ninety millimeters of mercury (90 mmHG);

B. Respiratory distress where respirations are less than ten (10) or greater than twenty-nine (29) per minute; or

C. Tachycardia where the heart rate is greater than one hundred beats per minute (100 BPM);

3. If the patient has an electrocardiogram with ST-elevation in two (2) contiguous leads or new or presumed new left bundle branch block and two (2) of the three (3) signs of cardiogenic shock then transport to a level I STEMI center according to local and regional process. Consider the time for transport, the patient's condition, and the air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas);

4. If initial transport from the scene to a level I STEMI center is prolonged, then consider transporting to the nearest appropriate facility for stabilization prior to transport to a level I STEMI center;

5. Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) above and follow the state STEMI protocol outlined in section

(2) starting from subsection (2)(A) and on according to the patient's condition;

6. Consider out-of-state transport based on local and regional process for the bi-state region;

7. Communicate electrocardiogram findings to the hospital;

8. If the patient has a positive electrocardiogram but is negative for signs of cardiogenic shock, then go to step 3 in subsection (2)(C) below; and

(C) Step 3—Calculate the estimated time from STEMI identification with the patient to expected percutaneous coronary intervention (PCI) with the patient in order to determine whether the patient is within the percutaneous coronary intervention window. Communicate electrocardiogram findings to the hospital. If no ST-elevation or new or presumed new left bundle branch block then consider a fifteen-(15-) lead electrocardiogram, if available.

1. Group 1—If the patient is within the PCI window or the patient has had chest pain longer than twelve (12) hours or the patient is lytic/thrombolytic ineligible then transport to a level I or level II STEMI center according to local and regional process. Consider the time for transport, the air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), the patient's condition, and all treatment windows. Consider the ischemic time and the potential role for lytics (within the lytic window) at an intervening STEMI center in route to the percutaneous coronary intervention center if approaching longer times within the percutaneous coronary intervention window. Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) and follow the state STEMI protocol outlined in section (2) starting from subsection (2)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

2. Group 2—If the patient is outside the percutaneous coronary intervention window and within the lytic/therapeutic window, or outside both windows and the patient has no other known complications, then transport to the STEMI center (level I, II, III, or IV) according to local and regional process. Consider the time for transport, air/ground/hospital options for timely and medically appropriate care (particularly in non-urban areas), the patient's condition, and all the treatment windows. Consider the lytic window and the potential for STEMI center lytic administration when determining the destination(s). Continue to reassess the patient. If the patient's condition changes, then start back at subsection (2)(A) above and follow



the state STEMI protocol outlined in section (2) starting from subsection (2)(A) and on according to the patient's condition. Consider out-of-state transport based on local and regional process for bi-state regions.

(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 in this rule 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 this rule. Copies of flow charts of an 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.

AUTHORITY: sections 190.185 and 190.241, RSMo Supp. 2012. Original rule filed Nov. 15, 2012, effective June 30, 2013.*

**Original authority: 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002 and 190.241, RSMo 1987, amended 1998, 2008.*