FORM SHALL ACCOMPANY PERSON WHEN TRANSFERRED OR DISCHARGED

Kansas – Missouri Transportable Physician Orders for Patient Preferences (TPOPP/POLST)

This Medical Order set is based on the patient's current medical condition and preferences. Any section not completed indicates default treatment for that section. The original form need not be present at the time of emergency. A copied, faxed or electronic version of this form is valid.

Last Name:	First Name, MI:	
Date of Birth:	Last 4 SSN or Patient ID#:	

A. CHECK ONE

CARDIOPULMONARY RESUSCITATION (CPR): Person has no pulse and is not breathing. If patient is not in cardiopulmonary arrest, follow orders in B and C.

☐ **Attempt Resuscitation/CPR**
(Selecting CPR in Section A requires selecting Full Treatment in Section B)

☐ **Do Not Attempt Resuscitation**
(DNAR/no CPR/Allow Natural Death)

B. CHECK ONE

INITIAL TREATMENT ORDERS: Follow these orders if patient has a pulse and/or is breathing.

Reassess and discuss treatments with patient and/or representative regularly to ensure patients care goals are met.

☐ **Full Treatments (required if CPR chosen in Section A).** **GOAL: Attempt to sustain life by all medically effective means.** Provide appropriate medical treatments as indicated in an attempt to prolong life, including intubation, advanced airway interventions, mechanical ventilation, and defibrillation/cardioversion, including intensive care.

☐ **Selective Treatments.** **GOAL: Attempt to restore functions while avoiding intensive care and resuscitation efforts (i.e., ventilator, defibrillation, and cardioversion).** May use non-invasive positive airway pressure, antibiotics and IV fluids as indicated. Avoid intensive care. Transfer to hospital if treatment needs cannot be met in current location.

☐ **Comfort-focused Treatments.** **GOAL: Attempt to maximize comfort through symptom management only; allow natural death.** Use oxygen, suction and manual treatment of airway obstruction as needed for comfort. Avoid treatments listed in full or selective treatments unless consistent with comfort goal. Transfer to hospital if comfort cannot be achieved in current setting.

C. CHECK ONE

MEDICALLY ADMINISTERED NUTRITION: Offer food by mouth if desired by patient, is safe and tolerated.

☐ Provide feeding through new or existing surgically-placed tubes
☐ Trial period for medically assisted nutrition but no surgically-placed tubes
☐ No medically assisted means of nutrition desired
☐ Not discussed or no decision made

D.

ADDITIONAL ORDERS OR INSTRUCTIONS FOR SECTIONS B AND C: Includes e.g., time trials, blood products, and other orders. [EMS Protocols may limit emergency responder ability to act on orders in this section.]

E. CHECK ALL THAT APPLY

INFORMATION AND SIGNATURES (E-Signed documents are valid)

Discussed with:

☐ Patient ☐ Agent/DPOA Health Care ☐ Parent of minor ☐ Legal guardian
☐ Patient Representative ☐ Other *(specify)*: _____

Signature of patient or recognized decision maker (all fields required): By signing this form, the patient/recognized decision maker voluntarily acknowledges that this treatment order is consistent with the known desires and/or best interest of the patient.

Print name:	Signature:	The most recently completed valid TPOPP/POLST form supersedes all previously completed TPOPP/POLST forms.
Address:	Relationship:	Phone:

Signature of authorized healthcare provider (all fields required): My signature below indicates to the best of my knowledge that these orders are consistent with the person's medical condition and preferences. (verbal orders are acceptable with follow up signature)

Print name of authorized provider and/or Physician:	Phone:
Signature of authorized provider:	Date:

HIPAA PERMITS DISCLOSURE TO HEALTH CARE PROFESSIONALS AND PROXY DECISION MAKERS AS NECESSARY FOR TREATMENT

Kansas-Missouri TPOPP
practicalbioethics.org

FORM SHALL ACCOMPANY PERSON WHEN TRANSFERRED OR DISCHARGED

Patient Last Name:	First Name, MI:	DOB:	Last 4 SSN/Patient ID#:

ADVANCE CARE DIRECTIVES & EMERGENCY CONTACTS

Review of Advance Directives (Check all that apply)

☐ Healthcare Directive (Living Will) ☐ Other Instructions or Documents
☐ Advance Directives Unavailable ☐ No Advance Directives Exist
☐ Appointment of Durable Power of Attorney for Health Care (Name):_____ (Phone):_____

Patient's Emergency Contact (if other than person signing form) and Provider(s)

Full Name: _____ Phone (voice __ text __): _____

Primary Care Provider Name: _____ Phone: _____
Hospice Care Agency (If Applicable) Name: _____ Phone: _____

Health Care Providers and Others Assisting with Form Preparation Process (Check all that apply)

☐ Social Worker ☐ Nurse ☐ Clergy ☐ Palliative Care Provider
☐ Health Care Agent ☐ Parent of Minor ☐ Family Member ☐ "Person of Care and Concern"
☐ Patient Advocate ☐ Legal Guardian ☐ Other: _____

Instructions for Completing TPOPP/POLST

- Completing a TPOPP/POLST form is always voluntary. TPOPP/POLST is a useful tool for the understanding of and implementation of physicians' orders that are reflective of the current medical condition and preferences of a patient. The orders are to be respected by all receiving providers in compliance with institutional policy. On admission to the hospital setting, a physician who will issue appropriate orders for that inpatient setting will assess the patient.
- TPOPP/POLST is a physician order set and as such does not replace Advance Directives but should serve to clarify them.
- TPOPP/POLST must be completed by a health care provider based on patient preferences and medical indications. Upon completion it must be signed by a physician, APRN, or PA in compliance with state law, regulation, and scope of practice; and by patient *(or representative)* to be valid.
- Photocopies and Faxes of signed TPOPP/POLST forms are valid. Use of original form is strongly encouraged. A copy shall be retained in patient's medical record and accompany the patient to all settings.

Using TPOPP/POLST

(Any incomplete section of TPOPP/POLST implies full treatment for that section).

- **SECTION A:**
  - If found pulseless and not breathing, no defibrillator *(including automated external defibrillators)* or chest compressions should be used on a person if "Do Not Attempt Resuscitation" is selected.
- **SECTION B:**
  - When comfort cannot be achieved in the current setting, the person, including someone with "Comfort-focused Treatments" should be transferred to a setting able to provide comfort *(e.g., treatment of a hip fracture)*.
  - Non-invasive positive airway pressure includes continuous positive airway pressure *(CPAP)*, bi-level positive airway pressure *(BiPAP)*, and bag valve mask *(BVM)* assisted respirations.

Reviewing TPOPP/POLST

- TPOPP/POLST form should be reviewed when:
  - The person is transferred from one care setting or care level to another, or
  - There is a substantial change in the person's health status, or
  - The person's treatment preferences change, or
  - The care provider changes.

Modifying and Voiding TPOPP/POLST

- A patient with capacity can, at any time, request alternative treatment or revoke a TPOPP/POLST by any means that indicates intent to revoke. It is recommended that revocation be documented by drawing a line through Sections A through D, writing "VOID" in large letters, and signing and dating.
- A legally recognized decision-maker may request to modify the orders, in collaboration with the physician/APRN/PA, based on the known desires of the patient or, if unknown, the patient's best interests.

For information, clinical guidance resources or to obtain more forms, contact: TPOPP@practicalbioethics.org

HIPAA PERMITS DISCLOSURE TO HEALTH CARE PROFESSIONALS AND PROXY DECISION MAKERS AS NECESSARY FOR TREATMENT

Kansas-Missouri TPOPP
practicalbioethics.org

AUTHORITY: section 190.618, RSMo 2016, and section 190.613, RSMo Supp. 2024. Original rule filed Jan. 9, 2009, effective Aug. 30, 2009. Amended: Filed May 22, 2024, effective Dec. 30, 2024.*

**Original authority: 190.613, RSMo 2023, and 190.618, RSMo 2007.*

19 CSR 30-40.710 Definitions and Abbreviations Relating to Stroke Centers

PURPOSE: This rule defines terminology related to stroke centers.

(1) As used in 19 CSR 30-40.720 and 19 CSR 30-40.730, the following terms shall mean —

(A) Acute — an injury or illness that happens or appears quickly and can be serious or life threatening;

(B) Anesthesiologist assistant (AA) — a person who —

1. Has graduated from an anesthesiologist assistant program accredited by the American Medical Association's Committee on Allied Health Education and Accreditation or by its successor agency;

2. Has passed the certifying examination administered by the National Commission on Certification of Anesthesiologist Assistants;

3. Has active certification by the National Commission on Certification of Anesthesiologist Assistants;

4. Is currently licensed as an anesthesiologist assistant in the state of Missouri; and

5. Provides health care services delegated by a licensed anesthesiologist;

(C) Board-admissible/board-eligible — a physician who is eligible to apply or has applied to a specialty board of the American Board of Medical Specialties, the American Osteopathic Association Board of Osteopathic Specialists, or the Royal College of Physicians and Surgeons of Canada and has received a ruling that he or she has fulfilled the requirements to take the examinations. Board certification is generally obtained within five (5) years of the first appointment;

(D) Board-certified — a physician who has fulfilled all requirements, has satisfactorily completed the written and oral examinations, and has been awarded a board diploma in a specialty field by the American Board of Medical Specialties, the American Osteopathic Association Board of Osteopathic Specialists, or the Royal College of Physicians and Surgeons of Canada;

(E) Catchment area — the surrounding area served by the institution (the stroke center).

(F) Certified registered nurse anesthetist (CRNA) — a registered nurse who —

1. Has graduated from a school of nurse anesthesia accredited by the Council on Accreditation of Education Programs of Nurse Anesthesia or its predecessor;

2. Has been certified as a nurse anesthetist by the Council on Certification of Nurse Anesthetists; and

3. Has been licensed in Missouri pursuant to Chapter 335, RSMo;

(G) Clinical staff — an individual that has specific training and experience in the treatment and management of stroke patients. Examples include: physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists;

(H) Clinical team — a team of healthcare professionals involved in the care of the stroke patient and may include, but not be limited to, neurologists, neuro-interventionalists, neurosurgeons, anesthesiologists, emergency medicine, and other stroke center clinical staff. The clinical team is part of the hospital program's stroke team;

(I) Continuing education — education approved or recognized by a national and/or state professional organization and/or stroke medical director;

(J) Continuing medical education (CME) — the highest level of continuing education for physicians that is approved or recognized by a national and/or state professional organization and/or stroke medical director;

(K) Core team — a subunit of the hospital stroke team consisting of a physician experienced in diagnosing and treating cerebrovascular disease (usually the stroke medical director) and at least one (1) other health care professional or qualified individual competent in stroke care as determined by the hospital (usually the stroke program manager/coordinator);

(L) Credentialed or credentialing — a hospital-specific system of documenting and recognizing the qualifications of medical staff and nurses and authorizing the performance of certain procedures and establishing clinical privileges in the hospital setting;

(M) Department — the Missouri Department of Health and Senior Services;

(N) Door-to-needle time — the time from arrival at the hospital door to initiation of lytic therapy to restore blood flow in an obstructed blood vessel;

(O) Emergency medical service regions — the six (6) regions in the state of Missouri that are defined in 19 CSR 30-40.302;

(P) Hospital — an establishment as defined by section 197.020.2, RSMo, or a hospital operated by the state;

(Q) Immediately available (IA) — being present at the bedside at the time of the patient's arrival at the hospital when prior notification is possible and no more than twenty (20) minutes from the hospital under normal driving and weather conditions;

(R) In-house (IH) — being on the hospital premises twenty-four (24) hours a day;

(S) Lytic therapy (also known as fibrinolysis/thrombolysis) — a 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.

(T) Missouri stroke registry — a statewide data collection system comprised of key data elements as defined in 19 CSR 30-40.730 that are used to compile and trend statistics of stroke patients in both pre-hospital and hospital settings, using a coordinated electronic reporting method provided by the department;

(U) Multidisciplinary team — a team of appropriate representatives of hospital units involved in the care of the stroke patient. This team supports the care of the stroke patient with the stroke team;

(V) Neurologist — a licensed physician with the appropriate specialty training.

(W) Neuro-interventionalist — a licensed physician with the appropriate specialty training;

(X) Neuro-interventional team — a team of physicians, nurses, and other clinical staff, and technical support that perform the neuro-interventions and who are part of the stroke clinical team;

(Y) Neurology service — an organizational component of the hospital specializing in the care of patients who have had strokes or some other neurological condition or disorder;

(Z) Patient — an individual who is sick, injured, wounded, diseased, or otherwise incapacitated or helpless, or dead, excluding deceased individuals being transported from or

between private or public institutions, homes, or cemeteries, and individuals declared dead prior to the time an ambulance is called for assistance;

(AA) Peer review system – the process the stroke center establishes for physicians to review stroke cases on patients who are admitted to the stroke center, transferred out of the stroke center, or die as a result of the stroke (independent of hospital admission or hospital transfer status);

(BB) Physician – a person licensed as a physician pursuant to Chapter 334, RSMo;

(CC) Promptly available (PA) – arrival at the hospital at the patient's bedside within thirty (30) minutes after notification of a patient's arrival at the hospital;

(DD) Protocol – a predetermined, written medical care guideline, which may include standing orders;

(EE) Qualified individual – a physician, registered nurse, advanced practice nurse, and/or physician assistant licensed in the state of Missouri who demonstrates administrative ability and shows evidence of educational and clinical experience in the care of cerebrovascular patients;

(FF) Regional outcome data – data used to assess the regional process for pre-hospital, hospital, and regional patient outcomes;

(GG) Repatriation – the process used to return a stroke patient to his or her home community from a level I or level II stroke center after his or her acute treatment for stroke has been completed. This allows the patient to be closer to home for continued hospitalization or rehabilitation and follow-up care as indicated by the patient's condition;

(HH) Reperfusion – the process of restoring normal blood flow to an organ or tissue that has had its blood supply cut off, such as after an ischemic stroke or myocardial infarction;

(II) Requirement (R) – a symbol used to indicate that a standard is a requirement for stroke center designation at a particular level;

(JJ) Review – the inspection of a hospital to determine compliance with the rules of this chapter;

(KK) Stroke – a sudden brain dysfunction due to a disturbance of cerebral circulation. The resulting impairments include but are not limited to paralysis, slurred speech, and/or vision loss. Ischemic strokes are typically caused by the obstruction of a cerebral blood vessel. Hemorrhagic strokes are typically caused by rupture of a cerebral artery;

(LL) Stroke call roster – a schedule that provides twenty-four (24) hours a day, seven (7) days a week neurology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of the stroke patients;

(MM) Stroke care – emergency transport, triage and acute intervention, and other acute care services for strokes that potentially require immediate medical or surgical intervention or treatment, and may include education, primary prevention, acute intervention, acute and sub-acute management, prevention of complications, secondary stroke prevention, and rehabilitative services;

(NN) Stroke center – a hospital that is currently designated as such by the department to care for patients with a stroke.

1. A level I stroke center is a receiving center staffed and equipped to provide total care for every aspect of stroke care, including care for those patients with complications, that also functions as a resource center for the hospitals within that region, and conducts research.

2. A level II stroke center is a receiving center staffed and equipped to provide care for a large number of stroke patients within the region.

3. A level III stroke center is a referral center staffed and equipped to initiate lytic therapy and initiate timely transfer to a higher level of care. The level III stroke center also provides prompt assessment, indicated resuscitation, and appropriate emergency intervention for stroke patients. A level III stroke center may admit and monitor patients as in-patients if there are designated stroke beds and an established relationship exists with a level I or level II stroke center through which the level I or level II stroke center provides medical direction and oversight for those stroke patients kept at the level III stroke center under that relationship.

4. A level IV stroke center is a referral center in an area considered rural or where there are insufficient hospital resources to serve the patient population requiring stroke care. A level IV stroke center provides prompt assessment, indicated resuscitation, appropriate emergency intervention, and arranges and expedites transfer to a higher level stroke center as needed;

(OO) Stroke medical director – a physician designated by the hospital who is responsible for the stroke service and performance improvement and patient safety programs related to stroke care;

(PP) Stroke program – an organizational component of the hospital specializing in the care of stroke patients;

(QQ) Stroke program manager/coordinator – a qualified individual designated by the hospital with responsibility for monitoring and evaluating the care of stroke patients and the coordination of performance improvement and patient safety programs for the stroke center in conjunction with the stroke medical director;

(RR) Stroke team – a component of the hospital stroke program consisting of the core stroke team and the clinical stroke team;

(SS) Stroke unit – the functional division or facility of the hospital that provides care for stroke patients admitted to the stroke center;

(TT) Symptom onset-to-treatment time – the time from symptom onset to initiation of therapy to restore blood flow in an obstructed blood vessel;

(UU) Telemedicine – the use of medical information exchanged from one (1) site to another via electronic communications to improve patient's health status. A neurology specialist will assist the physician in the center in rendering a diagnosis. This may involve a patient "seeing" a specialist over a live, remote consult or the transmission of diagnostic images and/or video along with patient data to the specialist;

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

(WW) Transfer agreement – a document which sets forth the rights and responsibilities of two (2) hospitals regarding the inter-hospital transfer of patients; and

(XX) Virtual review – a type of review conducted through the use of secure virtual video and audio conferencing and secure file transfers in order to determine compliance with the rules of this chapter.

AUTHORITY: sections 192.006 and 190.185, RSMo 2016, and section 190.241, RSMo Supp. 2022. Original rule filed Nov. 15, 2012, effective June 30, 2013. Emergency amendment filed Nov. 21, 2022, effective Dec. 7, 2022, expires June 4, 2023. Amended: Filed Nov. 21, 2022, effective June 30, 2023.*

**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, 2016, 2017, 2022.*

19 CSR 30-40.720 Stroke Center Designation Application and Review

PURPOSE: This rule establishes the requirements for participation in Missouri's stroke center program.

(1) Participation in Missouri's stroke center program is voluntary and no hospital shall be required to participate. No hospital shall hold itself out to the public as a state-designated stroke center unless it is designated as such by the Department of Health and Senior Services (department). Hospitals desiring stroke center designation shall apply to the department either through the option outlined in section (2) or section (3). Only those hospitals found to be in compliance with the requirements of the rules of this chapter shall be designated by the department as stroke centers.

(2) Hospitals requesting to be reviewed and designated as a stroke center by the department shall meet the following requirements:

(A) An application for stroke center designation shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a fair determination of eligibility for review and designation in accordance with the rules of this chapter. The stroke center review and designation application form, included herein, is available at the Health Standards and Licensure (HSL) office, or online at the department's website at 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. The application for stroke center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation or expiration of the current designation.

(B) Both sections A and B of the stroke center review and designation application form, included herein, shall be complete before the department will arrange a date for the review. The department shall notify the hospital/stroke center of any apparent omissions or errors in the completion of the stroke center review and designation application form. When the stroke center review and designation application form is complete, the department shall contact the hospital/stroke center to arrange a date for the review.

(C) The hospital/stroke center shall cooperate with the department in arranging for a mutually suitable date for any announced reviews;

(D) The department may conduct an on-site review, a virtual review, or a combination thereof on the hospitals/stroke centers. For announced reviews that are scheduled with the hospitals/stroke centers, the department will make the hospitals/stroke centers aware at least ninety (90) days prior to the scheduled review whether the department intends that the review will be conducted on-site and/or virtually. Due to unforeseen circumstances, the department may need to change whether the review is conducted onsite and/or virtually less than ninety (90) days before the announced review. The department will contact the hospitals/stroke centers to make the hospitals/stroke centers aware of any changes about how the review will be conducted, either on-site and/or virtually, and/or when the review will be conducted with as much advance notice as possible prior to the date of the announced review. The different types of reviews to be conducted on hospitals/stroke centers seeking stroke center designation by the department include –

1. An initial review shall occur on a hospital applying to be initially designated as a stroke center. An initial review shall include interviews with designated hospital staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter. This review may occur on-site and/or virtually.

2. A validation review shall occur on a designated stroke center applying for renewal of its designation as a stroke center. Validation reviews shall occur no less than every three (3) years. A validation review shall include interviews with designated stroke center staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter. This review may occur on-site and/or virtually; and

3. A focus review shall occur on a designated stroke center in which an initial or validation review was conducted and substantial deficiency(ies) were cited. A review of the physical plant will not be necessary unless a deficiency(ies) was cited in the physical plant in the preceding validation review. The focus review team shall be comprised of a representative from the department and may include a qualified contractor(s) with the required expertise to evaluate corrections in areas where deficiencies were cited. This review may occur on-site and/or virtually;

(E) Stroke center designation shall be valid for a period of three (3) years from the date the stroke center/hospital is designated. Expiration of the designation shall occur unless the stroke center applies for validation review within this three- (3-) year period and the department is unable to conduct a review before the designation expires.

1. Stroke center designation shall be site specific and non-transferable when a stroke center changes location.

2. Once designated as a stroke center, a stroke center may voluntarily surrender the designation at any time without giving cause, by contacting the department in writing. In these cases, the application and review process shall be completed again before the designation may be reinstated;

(F) For the purpose of reviewing previously designated stroke centers and hospitals applying for stroke center designation, the department shall use review teams consisting of qualified contractors. These review teams shall consist of one (1) stroke coordinator or stroke program manager who has experience in stroke care and one (1) emergency medicine physician also experienced in stroke care. The review team shall also consist of at least one (1) and no more than two (2) neurologist(s)/neuro-interventionalist(s) who are experts in stroke care. One (1) representative from the department will also be a participant of the review team. This representative shall coordinate the review with the hospital/stroke center and the other review team members.

1. Any individual interested in becoming a qualified contractor to conduct reviews shall –

A. Send the department a curriculum vitae (CV) or résumé that includes his or her experience and expertise in stroke care and whether an individual is in good standing with his or her licensing boards. A qualified contractor shall be in good standing with his or her respective licensing boards.

B. Provide the department evidence of his or her previous site survey experience (state and/or national designation

survey process); and

C. Submit a list to the department that details any ownership he or she may have in a Missouri hospital(s), whether he or she has been terminated from any Missouri hospital(s), any lawsuits he or she has currently or had in the past with any Missouri hospital(s), and any Missouri hospital(s) for which his or her hospital privileges have been revoked.

2. Qualified contractors for the department shall enter into a written agreement with the department indicating, that among other things, they agree to abide by Chapter 190, RSMo, and the rules in this chapter, during the review process;

(G) Out-of-state review team members shall conduct levels I and II hospital/stroke center reviews. Review team members are considered out-of-state review team members if they work outside of the state of Missouri. In-state review team members may conduct levels III and IV hospital/stroke center reviews. Review team members are considered in-state review team members if they work in the state of Missouri. In the event that out-of-state reviewers are unavailable, levels I and II stroke center reviews may be conducted by in-state reviewers from Emergency Medical Services (EMS) regions as set forth in 19 CSR 30-40.302 other than the region being reviewed with the approval of the director of the department or his/her designee. When utilizing in-state review teams, levels I and II hospital/stroke centers shall have the right to refuse one (1) in-state review team or certain members from one (1) in-state review team.

(H) Hospitals/stroke centers shall be responsible for paying expenses related to the cost of the qualified contractors to review their respective hospitals/stroke centers during initial, validation, and focus reviews. The department shall be responsible for paying the expenses of its representative. Costs of the review to be paid by the hospital/stroke center include —

1. An honorarium shall be paid to each qualified contractor of the review team whether the review occurs on-site or virtually. Qualified contractors of the review team for levels I and II stroke center reviews shall be paid one thousand four hundred fifty dollars ($1,450) per reviewer. Qualified contractors of the review team for levels III and IV stroke center reviews shall be paid one thousand dollars ($1,000) per reviewer. This honorarium shall be paid to each qualified contractor of the review team at the time the site survey begins if on-site or prior to the review beginning if the review is conducted virtually;

2. Airfare shall be paid for each qualified contractor of the review team, if applicable;

3. Lodging shall be paid for each qualified contractor of the review team, unless the review is conducted virtually. The hospital/stroke center shall secure the appropriate number of hotel rooms for the qualified contractors and pay the hotel directly; and

4. Incidental expenses, if applicable, for each qualified contractor of the review team shall not exceed two hundred fifty dollars ($250) and may include the following:

A. Airport parking;

B. Checking bag charges;

C. Meals during the review; and

D. Mileage to and from the review if no airfare was charged by the reviewer. If the reviewer solely participated virtually in the review and did not travel by vehicle to the review, then no mileage shall be paid. Mileage shall be paid at the federal mileage rate for business miles as set by the Internal Revenue Service (IRS). Federal mileage rates can be found at the website www.irs.gov;

(I) Hospitals/stroke centers being reviewed through a virtual survey shall do the following:

1. Provide an audio and videoconferencing platform to be used for the hospital/stroke center virtual review;

2. Provide a live tour of the hospital;

3. Ensure the video and audio conferencing service used during the review is compliant with state and federal laws for protected health information;

4. Assign an on-site visit coordinator for the review. The on-site visit coordinator role cannot be fulfilled by the stroke program manager. This on-site visit coordinator will be responsible for the logistical aspects of the virtual review. Responsibilities include, at least, the following:

A. Scheduling the videoconferencing meetings;

B. Sending out calendar invitations;

C. Providing electronic medical record (EMR) access to designated individuals;

D. Ensuring all required participants are on the videoconferencing line for the various parts of the review; and

E. Sending separate calendar invitations for each section of the virtual review to hospital staff, qualified contractors, and the department;

5. Assign one (1) staff navigator per qualified contractor to help remotely navigate the EMR, the patient performance improvement patient safety (PIPS) documentation, and supporting documentation. The staff navigator role cannot be fulfilled by the stroke program manager, the stroke program medical director, the stroke program registrar, or the on-site visit coordinator for the review. The individuals designated as the staff navigators shall be familiar with navigating through the EMR;

6. Provide the department with requested patient care report information for the review through a method that is compliant with state and federal laws for protected health information no later than thirty (30) days prior to the virtual review;

7. Provide the department with requested medical records, PIPS documentation, registry report, and all supporting documentation at least seven (7) days prior to the virtual visit through a method that is compliant with state and federal laws for protected health information;

8. Schedule a pre-review call with the qualified contractors, the department, the stroke program medical director, the stroke program manager, the staff navigators, and the on-site visit coordinator approximately one (1) week prior to the virtual review;

9. Test the functionality of the audio and videoconferencing service for the live tour of the hospital prior to the pre-review call; and

10. Provide a list of attendees for the review meeting and their roles to the review team and the department prior to the virtual review;

(J) The department may conduct an on-site review of the hospital prior to the virtual review to ensure that the hospital meets the requirements for stroke designation;

(K) Upon completion of a review, the qualified contractors from the review team shall submit a report of their findings to the department. This report shall state whether the specific standards for stroke center designation have or have not been met and if not met, in what way they were not met. This report shall detail the hospital/stroke center's strengths, weaknesses, deficiencies, and recommendations for areas of improvement. This report shall also include findings from patient chart audits and a narrative summary of the following areas: prehospital, hospital, stroke service, emergency department, operating room, angiography suites, recovery room, clinical lab, intensive care unit, rehabilitation, performance improvement

and patient safety programs, education, outreach, research, chart review, and interviews. The department shall have the final authority to determine compliance with the rules of this chapter;

(L) The department shall return a copy of the report to the chief executive officer, the stroke medical director, and the stroke program manager/coordinator of the hospital/stroke center reviewed. Included within the report shall be notification indicating whether the hospital/stroke center has met the criteria for stroke center designation or has failed to meet the criteria for the stroke center designation requested. Also, if a focus review of the stroke center is required, the time frame for this focus review will be shared with the chief executive officer, the stroke medical director, and the stroke program manager/coordinator of the stroke center reviewed;

(M) When the hospital/stroke center is found to have deficiencies, the hospital/stroke center shall submit a plan of correction to the department. The plan of correction shall include identified deficiencies, actions to be taken to correct deficiencies, time frame in which the deficiencies are expected to be resolved, and the person responsible for the actions to resolve the deficiencies. A plan of correction form shall be completed by the hospital and returned to the department within thirty (30) days after notification of review findings and designation. If a focus review is required, then the stroke center shall be allowed a minimum period of six (6) months to correct deficiencies;

(N) A stroke center shall make the department aware in writing within thirty (30) days if there are any changes in the stroke center's name, address, contact information, chief executive officer, stroke medical director, or stroke program manager/coordinator;

(O) Failure of a hospital/stroke center to provide all medical records and quality improvement documentation necessary for the department to conduct a stroke review in order to determine if the requirements of 19 CSR 30-40.730 have been met shall result in the revocation of the hospital/stroke center's designation as a stroke center;

(P) Any person aggrieved by an action of the Department of Health and Senior Services affecting the stroke center designation pursuant to Chapter 190, RSMo, including the revocation, the suspension, or the granting of, refusal to grant, or failure to renew a designation, may seek a determination thereon by the Administrative Hearing Commission under Chapter 621, RSMo. It shall not be a condition to such determination that the person aggrieved seek reconsideration, a rehearing, or exhaust any other procedure within the department; and

(Q) The department may deny, place on probation, suspend, or revoke such designation in any case in which it has determined that there has been a substantial failure to comply with the provisions of Chapter 190, RSMo, or any rules or regulations promulgated pursuant to this chapter. If the Department of Health and Senior Services has determined that a hospital is not in compliance with such provisions or regulations, it may conduct additional announced or unannounced site reviews of the hospital to verify compliance. If a stroke center fails two (2) consecutive on-site reviews because of substantial noncompliance with standards prescribed by sections 190.001 to 190.245, RSMo, or rules adopted by the department pursuant to sections 190.001 to 190.245, RSMo, its center designation shall be revoked.

(3) Hospitals seeking stroke center designation by the department based on their current certification or verification as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program shall meet the following requirements:

(A) An application for stroke center designation by the department for hospitals that have been certified or verified as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a determination of eligibility for review and designation in accordance with the rules of this chapter. The application for stroke certified hospital designation form, included herein, is available at the Health Standards and Licensure (HSL) office, or online at the department's website at 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. The application for stroke center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation;

(B) Both sections A and B of the application for stroke certified hospital designation form, included herein, shall be complete before the department designates a hospital/stroke center. The department shall notify the hospital/stroke center of any apparent omissions or errors in the completion of the application for stroke certified hospital designation form. Upon receipt of a completed and approved application, the department shall designate such hospital as follows:

1. The department shall designate a hospital a level I stroke center if such hospital has been certified as a comprehensive stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program;

2. The department shall designate a hospital a level II stroke center if such hospital has been certified as a primary stroke center, thrombectomy-capable stroke center, thrombectomy ready stroke center, or primary plus stroke center by either the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program; or

3. The department shall designate a hospital a level III stroke center if such hospital has been certified as an acute stroke-ready center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program;

(C) Within thirty (30) days of any changes or receipt of a certificate or verification, the hospital shall submit to the department proof of certification or verification as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program and the names and contact information of the medical director of the stroke center and the program manager of the stroke center. A certificate or verification as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program shall accompany the application for stroke certified hospital designation form. A hospital shall report to the department in writing within thirty (30) days of the date the hospital no longer is certified or verified as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program for which the hospital used to receive its corresponding designation with the department as a stroke center, whether because the hospital voluntarily surrendered this certificate or verification or because the hospital's certificate or verification was suspended or revoked by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program or expired;

(D) Any hospital designated as a level III stroke center that is certified or verified by the Joint Commission, DNV-GL

Healthcare or Healthcare Facilities Accreditation Program as an acute stroke-ready center shall have a formal agreement with a level I or level II stroke center designated by the department for physician consultative services for evaluation of stroke patients for thrombolytic therapy and the care of the patient post-thrombolytic therapy;

(E) Participate in local and regional emergency medical services systems for purposes of providing training, sharing clinical educational resources, and collaborating on improving patient outcomes;

(F) The designation of a hospital as a stroke center pursuant to section (3) shall continue if such hospital retains certification as a stroke center by the Joint Commission, DNV-GL Healthcare, or Healthcare Facilities Accreditation Program; and

(G) The department may remove a hospital's designation as a stroke center if requested by the hospital or the department determines that the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program certification or verification has been suspended or revoked. Any decision made by the department to withdraw the designation of a stroke center that is based on the revocation or suspension of a certification or revocation by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program shall not be subject to judicial review.

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
SECTION OF HEALTH STANDARDS AND LICENSURE

APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION

SECTION A

In accordance with the requirements of the Chapter 190 RSMo and the applicable regulations, this application is hereby submitted for review and designation as a stroke center. Please complete all information applicable to the requested designation level.	Designation Level Requested ☐ I ☐ II ☐ III ☐ IV

Joint Commission Certification
☐ Primary Stroke Center ☐ Comprehensive Stroke Center

HOSPITAL INFORMATION

Name Of Hospital (Name To Appear On Designation Certificate)		Telephone Number
Address (Street And Number)	City	Zip Code

PROFESSIONAL INFORMATION

Chief Executive Officer	Chairman/President Of Board Of Trustees
Stroke Medical Director	Stroke Program Manager
Medical Director of Emergency Medicine	Medical Director of Intensive Care Unit

RESOURCE INFORMATION

Stroke Caseload	Stroke Team Activations	CT Scan Capability ☐ FULL ☐ PARTIAL ☐ NONE	MRI Capability ☐ FULL ☐ PARTIAL ☐ NONE
Neurosurgical Capability or Transfer Plan	ICU or NICU Beds	Stroke Unit Beds	Stroke Rehab ☐ INPATIENT ☐ OUTPATIENT
Neurologists	Neurosurgeons	Neuro-Interventionalists	Emergency Department (ED) Physicians
Anesthesiologists/ CRNAs & AAs	Angiography Suites	Avg number of patients who received neuro-intervention **(not required for initial review)**	Avg number of patients who received thrombolytics in the past 24 months **(not required for initial review)**

CERTIFICATION

We, the undersigned, hereby certify that the information provided in this application for stroke center review and designation is true and accurate; and give assurance of the intent and ability of the hospital to comply with regulations promulgated under the Chapter 190, RSMo.

We further certify that the hospital will comply with all recommendations for improvement contained in the stroke center site review reports prepared by the Missouri Department of Health and Senior Services.

Date of application_____

Signed_____
Chairman/President of Board of Trustees,
Owner, or one Partner of Partnership

Signed_____
Hospital Chief Executive Officer

Signed_____
Stroke Medical Director

Signed_____
Director of Emergency Medicine

MO 580 EMS

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
SECTION OF HEALTH STANDARDS AND LICENSURE
APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION

SECTION B

Please attach the following documentation to the application form. **Name of Hospital:**

- ☐ Hospital organizational chart depicting the relationship of the stroke services to other services and defining the organizational structure of the stroke service.
- ☐ Job descriptions and CV for the stroke medical director and stroke coordinator/program manager.
- ☐ A narrative description of the administrative commitment for the stroke center, including how stroke center designation relates to the overall mission of the hospital.
- ☐ A current board resolution supporting the stroke center.
- ☐ A narrative description of the catchment area for the stroke center.
- ☐ A narrative description of the prehospital system including the hospital's participation in medical control, quality assurance, and education of the emergency medicine personnel.
- ☐ Hospital diversion policy.
- ☐ List of the stroke medical director and stroke program coordinator or program manager (core stroke team) indicating the neuro-cerebrovascular related continuing education for each over the past three (3) years. (Do not send continuing education information about the clinical stroke team. This should be available at the time of the review.)
- ☐ Multidisciplinary team policy.
- ☐ List of all neurologists, neurosurgeons, neuro-interventionalists and emergency department physicians and indicate stroke-related CME for each over the past three (3) years.
- ☐ List of physicians and plan for supervised relationship between Level III and higher level stroke center where stroke patients are admitted for care in a Level III center if applicable (this list and plan are only required for Level III centers with a supervised relationship with a Level I or Level II center).
- ☐ Narrative description of the system for notifying/activating stroke team.
- ☐ One-call stroke team activation protocol.
- ☐ Copies of all transfer agreements pertaining to stroke.
- ☐ Policy for consultation for physical medicine and rehabilitation, physical therapy, occupational therapy and speech therapy.
- ☐ Protocols on post-discharge and post-transfer follow-up for stroke patients.
- ☐ A narrative description of the stroke quality improvement (QI) processes utilized by the hospital (Do not send copies of QI minutes or documents. These should be available at the time of review.)
- ☐ Examples of stroke-related educational, outreach, and research projects undertaken by the hospital.
- ☐ Summary of source of stroke information for Table 1 on next page. Table 1 is only required to be filled out by a stroke center which is applying for renewal of its designation prior to a validation review. Table 1 is not required to be filled out by a hospital requesting an initial review and designation.
- ☐ Verification of Primary or Comprehensive Joint Commission certified center (e.g. certificate).

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
SECTION OF HEALTH STANDARDS AND LICENSURE
APPLICATION FOR STROKE CENTER REVIEW AND DESIGNATION

Table 1. Ischemic Stroke Numbers for Past Two (2) Years

Table 1 is only required to be filled out by a stroke center which is applying for renewal of its designation prior to a validation review.

A	B	C	D	E
Indicate year[1] Provide two years of data	Stroke cases[2] / Transfers[3]	Stroke cases eligible for NI[4] / Received NI[5]	Stroke cases eligible for Lytics[6] / Received lytics[7]	Stroke deaths[8]
For example: 2011	53 / 22	14 / 8	25 / 12	2
Total				
Average/Year				

[1] Include data for the last two (2) years of hospital data. Indicate time frame in months if it is other than January to December.
[2] Include all stroke patients, independent of hospital admission or hospital transfer status. To include walk-ins, transfers, EMS transports, admitted patients, and patients that die. Include all stroke patients that have ICD-9-principal diagnosis code of 433.01, 433.10, 433.11, 433.21, 433.31, 433.81, 433.91, 434.00, 434.01, 434.11, 434.91, 436.00, 430.00 and 431.00
[3] Provide number of all stroke patients transferred to this hospital from another hospital.
[4] Provide number of stroke patients eligible for neuro-intervention (NI).
[5] Provide number of stroke patients that received neuro-intervention (NI).
[6] Provide number of stroke patients that are eligible for thrombolytics.
[7] Provide number of stroke patients that received thrombolytics.
[8] Include all deaths, ED and inpatient, independent of hospital admission or hospital transfer status.

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
SECTION OF HEALTH STANDARDS AND LICENSURE

APPLICATION FOR STROKE CERTIFIED HOSPITAL DESIGNATION

SECTION A

In accordance with the requirements of the Chapter 190, RSMo, and the applicable regulations, this application is hereby submitted for designation as a stroke center. Please complete all information.	ORGANIZATION'S STRO E IDENTIFICATION NO.

CURRENT STROKE CERTIFICATION ORGANIZATION

☐ The Joint Commission ☐ DNV-GL Healthcare ☐ Healthcare Facilities Accreditation Program

CURRENT STROKE CERTIFICATION LEVEL

☐ Comprehensive Stroke Center ☐ Thrombectomy–Capable Stroke Center ☐ Thrombectomy–Ready Stroke Center
☐ Primary Plus Stroke Center ☐ Primary Stroke Center ☐ Acute Stroke-Ready Center

HOSPITAL INFORMATION

NAME OF HOSPITAL (NAME TO APPEAR ON DESIGNATION CERTIFICATE)		TELEPHONE NUMBER
ADDRESS (STREET AND NUMBER)	CITY	ZIP CODE

PROFESSIONAL INFORMATION

CHIEF EXECUTIVE OFFICER	CHAIRMAN/PRESIDENT OF BOARD OF TRUSTEES
STROKE MEDICAL DIRECTOR (NAME, EMAIL, AND CONTACT PHONE NUMBER)	STROKE PROGRAM MANAGER (NAME, EMAIL, AND CONTACT PHONE NUMBER)

SECTION B

The following should be submitted to the department as indicated:

☐ Proof of stroke certification with the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program.

If applying for Acute Stroke-Ready/Level III Stroke Center designation, the following should be submitted to the Department:

☐ Formal agreement with Level I or Level II stroke center for physician consultative services for evaluation of stroke patients for thrombolytic therapy and the care of the patients' post-thrombolytic therapy.

CERTIFICATION

We, the undersigned, hereby certify that:

A. Within thirty (30) days of any changes or receipt of a certificate or verification, we will submit to the department proof of stroke certification with the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program.
B. Within thirty (30) days, we will submit to the department any changes in the names and/or contact information of our medical director and the program manager of our stroke center.
C. Within thirty (30) days of the date that our hospital is no longer certified or verified by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program, whether because we voluntarily surrendered our certification or verification or because our certification or verification has been suspended or revoked by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program or expired, we will report this change in writing to the department.
D. We will participate in local and regional emergency medical services systems for purposes of providing training, sharing clinical educational resources, and collaborating on improving patient outcomes.
E. We understand that our designation as a stroke center by the department shall continue only if our hospital remains certified as a stroke center by the Joint Commission, DNV-GL Healthcare or Healthcare Facilities Accreditation Program.

SIGNATURE OF CHAIRMAN/PRESIDENT OF BOARD OF TRUSTEES, OWNER, OR ONE PARTNER OF PARTNERSHIP	
SIGNATURE OF HOSPITAL CHIEF EXECUTIVE OFFICER	
SIGNATURE OF STROKE MEDICAL DIRECTOR	
SIGNATURE OF DIRECTOR OF EMERGENCY MEDICINE	DATE

MO 580-3189 (10-2022)

*AUTHORITY: sections 190.185 and 192.006, RSMo 2016, and section 190.241, RSMo Supp. 2022. Original rule filed Nov. 15, 2012, effective June 30, 2013. Emergency amendment filed Aug. 7, 2017, effective Aug. 17, 2017, expired Feb. 22, 2018. Amended: Filed Aug. 7, 2017, effective March 30, 2018.** Emergency amendment filed Nov. 21, 2022, effective Dec. 7, 2022, expires June 4, 2023. Amended: Filed Nov. 21, 2022 effective June 30, 2023.*

**Original authority: 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002; 190.241, RSMo 1987, amended 1998, 2008, 2016, 2017, 2022; and 192.006, RSMo 1993, amended 1995.*

***Pursuant to Executive Order 21-07, 19 CSR 30-40.720, subsections (2)(A) and (2)(B) and section (3) was suspended from April 2, 2020 through May 1, 2021. Pursuant to Executive Order 21-09, 19 CSR 30-40.720, paragraph (2)(D)2. and subsections (2)(F) and (2)(G) was suspended from April 2, 2020 through December 31, 2021.*

19 CSR 30-40.730 Standards for Stroke Center Designation

PURPOSE: This rule establishes standards for level I, II, III, and IV stroke center designation.

AGENCY NOTE:
I-R, II-R, III-R, or IV-R after a standard indicates a requirement for level I, II, III, or IV stroke centers respectively.
I-IH, II-IH, III-IH, or IV-IH after a standard indicates an in-house requirement for level I, II, III, or IV stroke centers respectively.
I-IA, II-IA, III-IA, or IV-IA indicates an immediately available requirement for level I, II, III, or IV stroke centers respectively.
I-PA, II-PA, III-PA, or IV-PA indicates a promptly available requirement for level I, II, III, or IV stroke centers respectively.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome and expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) General Standards for Stroke Center Designation.

(A) The stroke center board of directors, administration, medical staff, and nursing staff shall demonstrate a commitment to quality stroke care. Methods of demonstrating the commitment shall include but not be limited to a board resolution that the hospital governing body agrees to establish policy and procedures for the maintenance of services essential for a stroke center; assure that all stroke patients will receive medical care at the level of the hospital's designation; commit the institution's financial, human, and physical resources as needed for the stroke program; and establish a priority admission for the stroke patient to the full services of the institution. (I-R, II-R, III-R, IV-R)

(B) Stroke centers shall agree to accept all stroke patients appropriate for the level of care provided at the hospital, regardless of race, sex, creed, or ability to pay. (I-R, II-R, III-R, IV-R)

(C) The stroke center shall demonstrate evidence of a stroke program. The stroke program shall be available twenty-four (24) hours a day, seven (7) days a week to evaluate and treat stroke patients. (I-R, II-R, III-R, IV-R)

1. The stroke center shall maintain a stroke team that at a minimum shall consist of –

A. A core team which provides administrative oversight and includes:

(I) A physician experienced in diagnosing and treating cerebrovascular disease (usually the stroke medical director); and (I-R, II-R, III-R, IV-R)

(II) At least one (1) other health care professional or qualified individual credentialed in stroke patient care (usually the stroke program manager/coordinator); (I-R, II-R, III-R, IV-R)

B. A stroke call roster that provides twenty-four (24) hours a day, seven (7) days a week neurology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of stroke patients. A level I stroke center call roster shall include but not be limited to the emergency department physician, neuro-interventionalist, neurologist, and others as appropriate. A level II stroke center call roster shall include, but not be limited to the emergency department physician, a physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease, and others as appropriate. The level III stroke center call roster shall include but not be limited to the emergency department physician and others as appropriate. A level IV stroke center call roster shall include but not be limited to the emergency department physician and other qualified individuals as appropriate. (I-R, II-R, III-R, IV-R)

(I) This coverage shall be available from notification of stroke patients according to the response requirements as set out below –

(a) Level I and II stroke centers shall have this coverage available within fifteen (15) minutes of notification of a stroke patient; and (I-R, II-R)

(b) Level III and IV stroke centers shall have a regional networking agreement with a level I or level II stroke center for telephone consult or telemedicine consultation available within fifteen (15) minutes of notification of a stroke patient; and (III-R, IV-R)

C. A clinical team appropriate to the center level designation that may include but not be limited to members of the stroke call roster, neurologists, physicians with expertise caring for stroke patients, neuro-interventionalists, neurosurgeons, anesthesiologists, intensivists, emergency departmen. physicians, and other stroke center clinical staff as applicable; (I-R, II-R, III-R, IV-R)

2. The stroke center shall have a peer review system to review stroke cases respective of the stroke center's designation; (I-R, II-R, III-R, IV-R)

3. The stroke team members shall have appropriate experience to maintain skills and proficiencies to care for stroke patients. The stroke center shall maintain evidence that it meets the following requirements by documenting the following.

A. A list of all stroke team members; (I-R, II-R, III-R, IV-R)

B. Position qualifications and completion of continuing education requirements by stroke team members as set forth in sections (1), (2), and (4) of this rule; (I-R, II-R, III-R, IV-R)

C. Management of sufficient numbers of stroke patients by the stroke team members in order to maintain their stroke skills; (I-R, II-R, III-R, IV-R)

D. Participation by the core team and members of the stroke call roster in at least half of the regular, ongoing stroke program peer review system meetings as shown in meeting attendance documents. The stroke medical director shall disseminate the information and findings from the peer review system meetings to the stroke call roster members and the core team and document such dissemination; (I-R, II-R, III-R, IV-R.

E. Participation by stroke team members in at least half of the regular, ongoing stroke program performance

improvement and patient safety meetings and documentation of such attendance in the meeting minutes and/or meeting attendance documents. The stroke medical director shall disseminate the information and findings from the performance improvement and patient safety meetings to the stroke team members and document such dissemination. If a stroke team member is unable to attend a stroke program performance improvement and patient safety meeting, then the stroke team member shall send an appropriate representative in his/her place; (I-R, II-R, III-R, IV-R)

F. Maintenance of skill levels in the management of stroke patients by the stroke team members as required by the stroke center and the stroke medical director and documentation of such continued experience; (I-R, II-R, III-R, IV-R)

G. Review of regional outcome data on quality of patient care by the stroke team members as part of the stroke center's performance improvement and patient safety process; and (I-R, II-R, III-R, IV-R)

H. Evidence of a written agreement between a level III stroke center and a level I or II stroke center when a level III stroke center has a supervised relationship with a physician affiliated with a level I or II stroke center. A level III stroke center which provides lytic therapy to stroke patients may have an established plan for admitting and caring for stroke patients under a supervised relationship with a physician affiliated with a level I or II stroke center. This supervised relationship shall consist of a formally established and pre-planned relationship between the centers in which a physician from a level I or level II center supervises a physician in a level III center in the evaluation of a stroke patient for lytic therapy and the care of the patient post-lytic therapy in certain circumstances where that level III center does not transfer the patient to a higher level stroke center. In this setting, management decisions, including but not limited to administration of lytic therapy, transfer or non-transfer of patient, and post-lytic therapy shall be made jointly between the supervising and supervised physicians. Care protocols and pathways for patients that fall into this category shall be established by both parties at the outset of the establishment of the relationship. This supervised relationship shall be established by written agreement and detail the supervision of patient care. This written agreement may also include but not be limited to observation of patient care, review of level III stroke center's patient encounters, review of level III center's outcomes, evaluation of the level III center's process pertaining to stroke patients, and lytic therapy and guidance on methods to improve process, performance, and outcomes; and

4. The stroke center shall maintain a multidisciplinary team, in addition to the stroke team, to support the care of stroke patients. (I-R, II-R, III-R, IV-R)

A. The multidisciplinary team shall include a suitable representative from hospital units as appropriate for care of each stroke patient. The hospital units represented on the multidisciplinary team may include but not be limited to: administration, emergency medical services, intensive care unit, radiology, pharmacy, laboratory, stroke unit, stroke rehabilitation, and discharge planning. (I-R, II-R, III-R, IV-R)

B. The multidisciplinary team members or their representatives shall attend at least half of the stroke program performance improvement and patient safety program meetings which shall be documented in the meeting minutes and/or meeting attendance documents. (I-R, II-R, III-R, IV-R)

(D) A level I stroke center shall provide the services of a neuro-interventional laboratory staffed twenty-four (24) hours a day, seven (7) days a week.

1. The staff of the neuro-interventional laboratory, referred to as the neuro-interventional laboratory team, shall consist of at least the following:

A. Neuro-interventional specialist(s); and (I-R/PA)

B. Other clinical staff as deemed necessary. (I-R/PA)

2. The stroke center neuro-interventional laboratory team shall maintain core competencies annually as required by the stroke center. (I-R/PA)

3. The hospital credentialing committee shall document that the neuro-interventional specialist(s) have completed appropriate training and conducted sufficient neuro-interventional procedures. (I-R/PA)

4. The stroke center neuro-interventional laboratory team shall remain up to date in their continuing education requirements which are set forth in section (4) of this rule. (I-R/PA)

5. Resuscitation equipment shall be available in the neuro-interventional lab. (I-R)

(E) It is recommended that a level I stroke center meet the volume for stroke patient cases that is required for eligibility by The Joint Commission in its Advanced Certification of Comprehensive Stroke Centers as posted on January 31, 2012, which is incorporated by reference in this rule and is available at The Joint Commission, One Renaissance Boulevard, Oakbrook Terrace, IL 60181 or on The Joint Commission's website at www.jointcommission.org. This rule does not incorporate any subsequent amendments or additions.

(F) The stroke center shall appoint a physician to serve as the stroke medical director. A stroke medical director shall be appointed at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. A level I stroke medical director shall have appropriate qualifications, experience, and training. A board-certified or board-admissible neurologist or other neuro-specialty trained physician is recommended. If the stroke medical director is board-certified or board-admissible, then one (1) of the following additional qualifications shall be met and documented. If the stroke medical director is not board-certified, then two (2) of the following additional qualifications shall be met and documented:

A. Completion of a stroke fellowship; (I-R)

B. Participation (as an attendee or faculty) in one (1) national or international stroke course or conference each year or two (2) regional or state stroke courses or conferences each year; or (I-R)

C. Five (5) or more peer-reviewed publications on stroke. (I-R)

2. A level II stroke medical director shall have appropriate qualifications, experience, and training. A board-certified or board-admissible physician with training and expertise in cerebrovascular disease is recommended. If the stroke medical director is board-certified or board-admissible, then one (1) of the following additional qualifications shall be met. If the stroke medical director is not board-certified, then two (2) of the following additional qualifications shall be met and documented:

A. Completion of a stroke fellowship; (II-R)

B. Participation (as an attendee or faculty) in one (1) national or international stroke course or conference each year or two (2) regional or state stroke courses or conferences each year; or (II-R)

C. Five (5) or more peer-reviewed publications on stroke. (II-R)

3. A level III and IV stroke medical director shall have the appropriate qualifications, experience, and training. A board-certified or board-admissible physician is recommended. If the stroke medical director is not board-certified or board-admissible, then the following additional qualifications shall be met and documented:

A. Complete a minimum of four (4) hours of continuing medical education (CME) in the area of cerebrovascular disease every year; and (III-R)

B. Attend one (1) national, regional, or state meeting every three (3) years in cerebrovascular disease. Continuing medical education hours earned at these meetings can count toward the four (4) required continuing medical education hours for level III stroke medical directors. (III-R)

4. The stroke medical director shall meet the department's continuing medical education requirements for stroke medical directors as set forth in section (4) of this rule. (I-R, II-R, III-R)

5. The stroke center shall have a job description and organizational chart depicting the relationship between the stroke medical director and the stroke center services. (I-R, II-R, III-R, IV-R)

6. The stroke medical director is encouraged to be a member of the stroke call roster. (I-R, II-R, III-R, IV-R)

7. The stroke medical director shall be responsible for the oversight of the education and training of the medical and clinical staff in stroke care. This includes a review of the appropriateness of the education and training for the practitioner's level of responsibility. (I-R, II-R, III-R, IV-R)

8. The stroke medical director shall participate in the stroke center's research and publication projects. (I-R)

(G) The stroke center shall have a stroke program manager/coordinator who is a registered nurse or qualified individual. The stroke center shall have a stroke program manager/coordinator at all times with no lapses. (I-R, II-R, III-R, IV-R)

1. The stroke center shall have a job description and organizational chart depicting the relationship between the stroke program manager/coordinator and the stroke center services. (I-R, II-R, III-R, IV-R)

2. The stroke program manager/coordinator shall –

A. Meet continuing education requirements as set forth in section (4) of this rule; and (I-R, II-R, III-R, IV-R)

B. Participate in the performance improvement and patient safety program. (I-R, II-R, III-R, IV-R)

(H) The stroke center shall have a specific and well-organized system to notify and rapidly activate the stroke team to evaluate patients presenting at the stroke center with symptoms suggestive of an acute stroke. (I-R, II-R, III-R, IV-R)

(I) The stroke center shall have a one- (1-) call stroke team activation protocol. This protocol shall establish the following:

1. The criteria used to triage stroke patients shall include but not be limited to the time of symptom onset; (I-R, II-R, III-R, IV-R)

2. The persons authorized to notify stroke team members when a suspected stroke patient is in route and/or when a suspected stroke patient has arrived at the stroke center; (I-R, II-R, III-R, IV-R)

3. The method for immediate notification and the response requirements for stroke team members when a suspected stroke patient is in route to the stroke center and/or when a suspected stroke patient has arrived at the stroke center; and (I-R/IA, II-R/IA, III-R/IA, IV-R/IA)

4. All members of the stroke call roster shall comply with the availability and response requirements per the stroke center's protocols and be in communication within fifteen (15) minutes of notification of the patient. If not on the stroke center's premises, stroke call roster members who are on call shall carry electronic communication devices at all times to permit contact by the hospital. It is recommended that one (1) member of the stroke team, per stroke center protocol, be at the patient's bedside within fifteen (15) minutes of notification of the patient. (I-R, II-R, III-R, IV-R)

(J) The stroke center shall have a fibrinolysis protocol for cases when fibrinolysis is achievable. (I-R, II-R, III-R)

(K) The stroke center shall have transfer agreements between referring and receiving facilities that address the following:

1. A one- (1-) call transfer protocol that establishes the criteria used to triage stroke patients and identifies persons authorized to notify the designated stroke center; and (I-R, II-R, III-R, IV-R)

2. A rapid transfer process in place to transport a stroke patient to a higher level of stroke care when needed. (II-R, III-R, IV-R)

(L) The stroke center shall have rehabilitation services that are directed by a physician with board certification in physical medicine and rehabilitation or by other properly trained individuals (e.g., neurologist experienced in stroke rehabilitation). (I-R, II-R)

(M) The stroke center shall have consults for physical medicine and rehabilitation, physical therapy, occupational therapy, and speech therapy requested and completed when deemed medically necessary within forty-eight (48) hours of admission. (I-R, II-R)

(N) The stroke center shall demonstrate that there is a plan for adequate post-discharge and post-transfer follow-up on stroke patients, including rehabilitation and repatriation, if indicated. (I-R, II-R, III-R, IV-R)

(O) The stroke center shall maintain a stroke patient log. The log information shall be kept for a period of five (5) years and made available to the Department of Health and Senior Services (department) during reviews for all stroke patients which contains the following:

1. Response times; (I-R, II-R, III-R, IV-R)
2. Patient diagnosis; (I-R, II-R, III-R, IV-R)
3. Treatment/actions; (I-R, II-R, III-R, IV-R)
4. Outcomes; (I-R, II-R, III-R, IV-R)
5. Number of patients; and (I-R, II-R, III-R, IV-R)
6. Benchmark indicators. (I-R, II-R, III-R, IV-R)

(P) The stroke center shall have a helicopter landing area. (I-R, II-R, III-R, IV-R)

(Q) Stroke centers shall enter data into a stroke registry as follows:

1. Stroke centers shall submit data into the department's Missouri stroke registry on each stroke patient who is admitted to the stroke center, transferred out of the stroke center, or dies as a result of the stroke (independent of hospital admission or hospital transfer status). The data required to be submitted into the Missouri stroke registry by the stroke centers is listed and explained in the document entitled "Time Critical Diagnosis Stroke Center Registry Data Elements," dated March 1, 2012, which is incorporated by reference in this rule and is available at the Missouri Department of Health and Senior Services, PO Box 570, Jefferson City, MO 65102-0570 or on the department's website at www.health.mo.gov. This rule does not incorporate any subsequent amendments or additions. The data shall be submitted electronically into the Missouri stroke registry via the department's website at www.health.mo.gov; or (I-R, II-R, III-R, IV-R)

2. Stroke centers shall submit data into a national data registry or data bank capable of being used by the stroke center to perform its ongoing performance improvement and patient

safety program requirements for its stroke patients. The stroke center shall submit data for each data element included in the national data registry or data bank's data system; (I-R, II-R, III-R, IV-R)

3. The data required in paragraphs (1)(Q)1. and 2. above shall be submitted electronically into the stroke registry on at least a quarterly basis for that calendar year. Stroke centers have ninety (90) days after the quarter ends to submit the data electronically into the stroke registry; (I-R, II-R, III-R, IV-R)

4. The data submitted by the stroke centers shall be complete and current; and (I-R, II-R, III-R, IV-R)

5. The data shall be managed in compliance with the confidentiality requirements and procedures contained in section 192.067, RSMo. (I-R, II-R, III-R, IV-R)

(R) A stroke center shall maintain a diversion protocol for the stroke center that is designed to allow best resource management within a given area. The stroke center shall create criteria for diversion in this diversion protocol and shall detail a performance improvement and patient safety process in the diversion protocol to review and validate the criteria for diversion created by the stroke center. The stroke center shall also collect, document, and maintain diversion information that includes at least the date, length of time, and reason for diversion. This diversion information shall be readily retrievable by the stroke center during a review by the department and shall be kept by the stroke center for a period of five (5) years. (I-R, II-R, III-R, IV-R)

(2) Medical Staffing Standards for Stroke Center Designation.

(A) The stroke center's medical staff credentialing committee shall provide a delineation of privileges for neurologists, neurosurgeons, and neuro-interventionalists, as applicable to the stroke center. (I-R, II-R)

(B) The stroke center shall credential and shall have the following types of physicians available as listed below.

1. A neurologist shall be available for consultation within fifteen (15) minutes of patient notification; (I-R)

2. A physician with experience and expertise in diagnosing and treating patients with cerebrovascular disease shall be available for consultation within fifteen (15) minutes of patient notification; (II-R)

3. A neurosurgeon as follows:

A. Neurosurgeon and back-up coverage on the call roster; (I-R/PA)

B. Neurosurgeon and back-up coverage on the call roster or available within two (2) hours by transfer agreement if not on staff; and (II-R/PA)

C. The neurosurgery staffing requirement may be fulfilled by a surgeon who has been approved by the chief of neurosurgery for care of stroke patients and shall be capable of initiating measures to stabilize the patient and perform diagnostic procedures; (I-R, II-R)

4. A neuro-interventional specialist; (I-R/PA)

5. An emergency department physician; (I-R/IH, II-R/IH, III-R/IH; IV-R/IA)

6. An internal medicine physician; (I-R/PA, II-R/PA, III-R/PA)

7. A diagnostic radiologist; and (I-R/IA, II-R/IA, III-R/IA)

8. An anesthesiologist. (I-R/PA, II-R/PA)

A. Anesthesiology staffing requirements may be fulfilled by anesthesiology residents, certified registered nurse anesthetists (CRNA), or anesthesia assistants capable of assessing emergent situations in stroke patients and of providing any indicated treatment including induction of anesthesia. When anesthesiology residents or CRNAs are used to fulfill availability requirements, the staff anesthesiologist on call will be advised and promptly available and present for all operative interventions and emergency airway conditions. The CRNA may proceed with life preserving therapy while the anesthesiologist is in route under the direction of the neurosurgeon, including induction of anesthesia. An anesthesiologist assistant shall practice only under the direct supervision of an anesthesiologist who is physically present or immediately available as this term is defined in section 334.400, RSMo. (I-R, II-R)

(3) Standards for Hospital Resources and Capabilities for Stroke Center Designation.

(A) The stroke center shall meet emergency department standards listed below. (I-R, II-R, III-R, IV-R)

1. The emergency department staffing shall meet the following requirements:

A. The emergency department in the stroke center shall provide immediate and appropriate care for the stroke patient; (I-R, II-R, III-R, IV-R)

B. A level I stroke center shall have a medical director of the emergency department who shall be board-certified or board-admissible in emergency medicine by the American Board of Medical Specialties, the American Osteopathic Association Board of Osteopathic Specialists, or the Royal College of Physicians and Surgeons of Canada; (I-R)

C. A level II stroke center shall have a medical director of the emergency department who shall be a board-certified or board-admissible physician; (II-R)

D. A level III and IV stroke center shall have a medical director of the emergency department who is recommended to be a board-certified or board-admissible physician; (III-R, IV-R)

E. There shall be an emergency department physician credentialed for stroke care by the stroke center covering the emergency department twenty-four (24) hours a day, seven (7) days a week; (I-R/IH, II-R/IH, III-R/IH, IV-R/IA)

F. The emergency department physician who provides coverage shall be current in continuing medical education in the area of cerebrovascular disease; (I-R)

G. There shall be a written policy defining the relationship of the emergency department physicians to other physician members of the stroke team; (I-R, II-R, III-R, IV-R)

H. Registered nurses in the emergency department shall be current in continuing education requirements as set forth in section (4) of this rule; (I-R)

I. All registered nurses assigned to the emergency department shall be determined to be credentialed in the care of the stroke patient by the stroke center within one (1) year of assignment and remain current in continuing education requirements as set forth in section (4) of this rule; and (I-R, II-R, III-R, IV-R)

J. The emergency department in stroke centers shall have written care protocols for identification, triage, and treatment of acute stroke patients that are available to emergency department personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R, IV-R)

2. Nursing documentation for the stroke patient shall be on a stroke flow sheet approved by the stroke medical director and the stroke program coordinator/manager. (I-R, II-R, III-R, IV-R)

3. The emergency department shall have at least the following equipment for resuscitation and life support available to the unit:

A. Airway control and ventilation equipment including:

(I) Laryngoscopes; (I-R, II-R, III-R, IV-R)

(II) Endotracheal tubes; (I-R, II-R, III-R, IV-R)

(III) Bag-mask resuscitator; (I-R, II-R, III-R, IV-R)

(IV) Sources of oxygen; and (I-R, II-R, III-R, IV-R)

(V) Mechanical ventilator; (I-R, II-R, III-R)

B. Suction devices; (I-R, II-R, III-R, IV-R)

C. Electrocardiograph (ECG), cardiac monitor, and defibrillator; (I-R, II-R, III-R, IV-R)

D. Central line insertion equipment; (I-R, II-R, III-R)

E. All standard intravenous fluids and administration devices including intravenous catheters and intraosseous devices; (I-R, II-R, III-R, IV-R)

F. Drugs and supplies necessary for emergency care; (I-R, II-R, III-R, IV-R)

G. Two- (2-) way communication link with emergency medical service (EMS) vehicles; (I-R, II-R, III-R, IV-R)

H. End-tidal carbon dioxide monitor; and (I-R, II-R, III-R, IV-R)

I. Temperature control devices for patient and resuscitation fluids. (I-R, II-R, III-R IV-R)

4. The stroke center emergency department shall maintain equipment following the hospital's preventive maintenance schedule and document when this equipment is checked. (I-R, II-R, III-R, IV-R)

(B) The stroke center shall have a designated intensive care unit (ICU). (I-R, II-R)

1. The intensive care unit shall ensure staffing to provide appropriate care of the stroke patient. (I-R, II-R)

A. The stroke center intensive care unit shall have a designated intensive care unit medical director who has twenty-four (24) hours a day, seven (7) days a week access to a physician knowledgeable in stroke care and who meets the stroke call roster continuing medical education requirements as set forth in section (4) of this rule. (I-R, II-R)

B. The stroke center intensive care unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week who is not the emergency department physician. This physician shall have access to a physician on the stroke call roster. (I-R/IA, II-R/IA)

C. The stroke center intensive care unit shall have a one to one (1:1) or one to two (1:2) registered nurse/patient ratio used for critically ill patients requiring intensive care unit level care. (I-R, II-R)

D. The stroke center intensive care unit shall have registered nurses in the intensive care unit who are current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R)

E. The stroke center intensive care unit shall have registered nurses in the intensive care unit who meet at least the following core credentials for care of stroke patients on a yearly basis:

(I) Care of patients after thrombolytic therapy; (I-R, II-R)

(II) Treatment of blood pressure abnormalities with parenteral vasoactive agents; (I-R, II-R)

(III) Management of intubated/ventilated patients; (I-R, II-R)

(IV) Detailed neurologic assessment and scales (e.g., National Institutes of Health Stroke Scale, Glasgow Coma Scale); (I-R, II-R)

(V) Care of patients with intracerebral hemorrhage and subarachnoid hemorrhage at all level I centers and all level II centers with neurosurgical capability; (I-R, II-R)

(VI) Function of ventriculostomy and external ventricular drainage apparatus in all level I centers and all level II centers with neurosurgical capability; and (I-R, II-R)

(VII) Treatment of increased intracranial pressure in all level I centers and all level II centers with neurosurgical capability. (I-R, II-R)

2. The stroke center intensive care unit shall have written care protocols for identification and treatment of acute stroke patients which are available to intensive care unit personnel, reviewed annually, and revised as needed. (I-R, II-R)

3. The stroke center intensive care unit shall have intensive care unit beds for stroke patients or, if space is not available in the intensive care unit, the stroke center shall make arrangements to provide the comparable level of care until space is available in the intensive care unit. (I-R, II-R)

4. The stroke center intensive care unit shall have equipment available for resuscitation and to provide life support for the stroke patient. This equipment shall include at least the following:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator; (I-R, II-R)

B. Oxygen source with concentration controls; (I-R, II-R)

C. Cardiac emergency cart, including medications; (I-R, II-R)

D. Telemetry, ECG capability, cardiac monitor, and defibrillator; (I-R, II-R)

E. Electronic pressure monitoring and pulse oximetry; (I-R, II-R)

F. End-tidal carbon dioxide monitor; (I-R, II-R)

G. Patient weighing devices; (I-R, II-R)

H. Drugs, intravenous fluids, and supplies; and (I-R, II-R)

I. Intracranial pressure monitoring devices. (I-R, II-R)

5. The intensive care unit shall check all equipment according to the hospital preventive maintenance schedule and the stroke center shall document when it is checked. (I-R, II-R)

(C) Level I and level II stroke centers shall provide a stroke unit. A level III stroke center that has an established plan for admitting and caring for stroke patients under a supervised relationship with a level I or II stroke center pursuant to subparagraph (1)(C)3.H. above shall also provide a stroke unit. (I-R, II-R, III-R)

1. The stroke center shall have a designated medical director for the stroke unit who has access to a physician knowledgeable in stroke care and who meets the stroke call roster continuing medical education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

2. The stroke center stroke unit shall have a physician on duty or available twenty-four (24) hours a day, seven (7) days a week who is not the emergency department physician. This physician shall have access to a physician on the stroke call roster. (I-R/IA, II-R/IA, III-R/IA)

3. The stroke center stroke unit shall have registered nurses and other essential personnel on duty twenty-four (24) hours a day, seven (7) days a week. (I-R, II-R, III-R)

4. The stroke center stroke unit shall have registered nurses who are current in continuing education requirements as set forth in section (4) of this rule. (I-R, II-R, III-R)

5. The stroke center stroke unit shall annually credential registered nurses that work in the stroke unit. (I-R, II-R, III-R)

6. The stroke center stroke unit shall have written care protocols for identification and treatment of acute stroke patients (e.g., lytic and post-lytic management, hemorrhagic conversion according to current best evidence) which are available to stroke unit personnel, reviewed annually, and revised as needed. (I-R, II-R, III-R)

7. The stroke center stroke unit shall have equipment to support the care and resuscitation of the stroke patient that

includes at least the following:

A. Airway control and ventilation equipment including:

(I) Laryngoscopes, endotracheal tubes of all sizes; (I-R, II-R, III-R)

(II) Bag-mask resuscitator and sources of oxygen; and (I-R, II-R, III-R)

(III) Suction devices; (I-R, II-R, III-R)

B. Telemetry, electrocardiograph, cardiac monitor, and defibrillator; (I-R, II-R, III-R)

C. All standard intravenous fluids and administration devices and intravenous catheters; and (I-R, II-R, III-R)

D. Drugs and supplies necessary for emergency care. (I-R, II-R, III-R)

8. The stroke center stroke unit shall maintain equipment following the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R, III-R)

(D) The stroke center shall provide radiological and diagnostic capabilities. (I-R, II-R, III-R)

1. The radiological and diagnostic capabilities shall include a documented mechanism for prioritization of stroke patients and timely interpretation to aid in patient management. (I-R, II-R, III-R)

2. The radiological and diagnostic capabilities shall include the following equipment and staffing capabilities:

A. Angiography with interventional capability available twenty-four (24) hours a day, seven (7) days a week; (I-R/PA)

B. Cerebroangiography technologist on call and available within thirty (30) minutes for emergent procedures, and on call and available within sixty (60) minutes for routine procedures, and available twenty-four (24) hours a day, seven (7) days a week; (I-R)

C. In-house computerized tomography; (I-R/IA, II-R/IA, III-R/IA)

D. Computerized tomography perfusion; (I-R/IA)

E. Computerized tomography angiography; (I-R/IA)

F. Computerized tomography technologist; (I-R/IH, II-R/IH, III-R/IA)

G. Magnetic resonance imaging; (I-R, II-R)

H. Magnetic resonance angiogram/magnetic resonance venography; (I-R, II-R)

I. Magnetic resonance imaging technologist on call and available within sixty (60) minutes, twenty-four (24) hours a day, seven (7) days a week; (I-R, II-R)

J. Extracranial ultrasound; (I-R, II-R)

K. Equipment and clinical staff to evaluate for vasospasm available within thirty (30) minutes for emergent evaluation, and available within sixty (60) minutes for routine evaluation, and available twenty-four (24) hours a day, seven (7) days a week; (I-R)

L. Transthoracic echo; (I-R, II-R)

M. Transesophageal echo; and (I-R, II-R)

N. Resuscitation equipment available to the radiology department. (I-R, II-R, III-R)

3. The radiological and diagnostic capabilities shall include adequate physician and nursing personnel available with monitoring equipment to fully support the acute stroke patient and provide documentation of care during the time the patient is physically present in the radiology department and during transportation to and from the radiology department. (I-R, II-R, III-R)

4. The radiological and diagnostic capabilities shall include the stroke center maintaining all radiology and diagnostic equipment according to the hospital preventive maintenance schedule and documenting when it is checked. (I-R, II-R, III-R)

(E) All level I stroke centers shall have operating room personnel, equipment, and procedures. Those level II stroke centers with neurosurgical capability shall also meet operating room personnel, equipment, and procedure requirements. (I-R, II-R)

1. Operating room staff shall be available twenty-four (24) hours a day, seven (7) days a week. (I-R/PA, II-R/PA)

2. Registered nurses shall annually maintain core competencies as required by the stroke center.

3. Operating rooms shall have at least the following equipment:

A. Operating microscope; (I-R, II-R)

B. Thermal control equipment for patient and resuscitation fluids; (I-R, II-R)

C. X-ray capability; (I-R, II-R)

D. Instruments necessary to perform an open craniotomy; (I-R, II-R)

E. Monitoring equipment; and (I-R, II-R)

F. Resuscitation equipment available to the operating room. (I-R, II-R)

4. The operating room shall maintain all equipment according to the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R)

(F) All level I stroke centers shall meet post-anesthesia recovery room (PAR) requirements listed below. Those level II stroke centers with neurosurgical capability shall also have a post-anesthesia recovery room and meet the requirements below –

1. The stroke center post-anesthesia recovery room shall have registered nurses and other essential personnel on call and available within sixty (60) minutes twenty-four (24) hours a day, seven (7) days a week; (I-R, II-R)

2. The stroke center post-anesthesia recovery room's registered nurses shall annually maintain core competencies as required by the stroke center; (I-R, II-R)

3. The stroke center post-anesthesia recovery room shall have at least the following equipment for resuscitation and to provide life support for the stroke patient:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes of all sizes, bag-mask resuscitator, sources of oxygen, and mechanical ventilator; (I-R, II-R)

B. Suction devices; (I-R, II-R)

C. Telemetry, ECG capability, cardiac monitor, and defibrillator; (I-R, II-R)

D. All standard intravenous fluids and administration devices, including intravenous catheters; and (I-R, II-R)

E. Drugs and supplies necessary for emergency care; and (I-R, II-R)

4. The stroke center post-anesthesia recovery room shall maintain all equipment according to the hospital preventive maintenance schedule and document when it is checked. (I-R, II-R)

(G) The stroke center shall have clinical laboratory services available twenty-four (24) hours a day, seven (7) days a week that meet the following requirements:

1. Written protocol to provide timely availability of results; (I-R, II-R, III-R, IV-R)

2. Standard analyses of blood, urine, and other body fluids; (I-R, II-R, III-R, IV-R)

3. Blood typing and cross-matching; (I-R, II-R, III-R)

4. Coagulation studies; (I-R, II-R, III-R, IV-R)

5. Comprehensive blood bank or access to a community central blood bank and adequate hospital blood storage facilities; (I-R, II-R, III-R)

6. Blood bank or access to a community central blood bank

and adequate hospital blood storage facilities; (IV-R)

7. Blood gases and pH determinations; (I-R, II-R, III-R, IV-R)

8. Blood chemistries; and (I-R, II-R, III-R, IV-R)

9. Written protocol for prioritization of the stroke patient with other time critical patients. (I-R, II-R, III-R, IV-R)

(H) The stroke center shall have support services to assist the patient's family from the time of entry into the facility to the time of discharge and records to document that these services were provided. (I-R, II-R, III-R, IV-R)

(I) The stroke center shall have a stroke rehabilitation program or a plan to refer those stroke patients that require rehabilitation to another facility or community agency that can provide necessary services. (I-R, II-R, III-R)

(4) Continuing Medical Education (CME) and Continuing Education Standards for Stroke Center Designation.

(A) The stroke center shall ensure that staff providing services to stroke patients receives required continuing medical education and continuing education and document this continuing medical education and continuing education for each staff member. The department shall allow up to one (1) year from the date of the hospital's initial stroke center designation for stroke center staff members to complete all of the required continuing medical education and continuing education if the stroke center staff complete and document that at least half of the required continuing medical education and/or continuing education hours have been completed for each stroke center staff member at the time of on-site initial application review. The stroke center shall submit documentation to the department within one (1) year of the initial designation date that all continuing medical education and continuing education requirements for stroke center staff members have been met in order to maintain the stroke center's designation. (I-R, II-R, III-R)

(B) The stroke call roster members shall complete the following continuing education requirements:

1. Level I core team members of the stroke call roster shall complete a minimum of eight (8) hours of continuing education in cerebrovascular disease every year, and it is recommended that a portion of those hours shall be on stroke care. All other members of the stroke call roster in level I stroke centers shall complete a minimum average of eight (8) hours of continuing education in cerebrovascular disease every year, except for physicians who are emergency medicine board certified or board eligible through the American Board of Emergency Medicine (ABEM) or the American Osteopathic Board of Emergency Medicine (AOBEM) and who are practicing in the emergency department. This continuing education shall be reviewed for appropriateness to the practitioner's level of responsibility by the stroke medical director; and (I-R)

2. Level II core team members of the stroke call roster shall complete a minimum of eight (8) hours of continuing education in cerebrovascular disease every year, and it is recommended that a portion of those hours be in stroke care.

(C) The stroke medical director shall complete the following continuing medical education requirements:

1. Level I and level II stroke medical directors shall complete a minimum of eight (8) hours of continuing medical education every year in the area of cerebrovascular disease; and (I-R, II-R)

2. Level III stroke medical directors shall complete a minimum of four (4) hours of continuing medical education every year in the area of cerebrovascular disease. (III-R)

(D) The stroke center's stroke program manager/coordinator shall complete the following continuing education requirements:

1. Level I program managers/coordinators shall –

A. Complete a minimum of eight (8) hours of continuing education every year in cerebrovascular disease. This continuing education shall be reviewed by the stroke medical director for appropriateness to the stroke program manager/coordinator's level of responsibility; and (I-R)

B. Attend one (1) national, regional, or state meeting every two (2) years focused on the area of cerebrovascular disease. If the national or regional meeting provides continuing education, then that continuing education may count toward the annual requirement; (I-R)

2. Level II program managers/coordinators shall –

A. Complete a minimum average of eight (8) hours of continuing education every year in cerebrovascular disease. This continuing education shall be reviewed for appropriateness by the stroke medical director to the stroke program manager/coordinator's level of responsibility; and (II-R)

B. Attend one (1) national, regional, or state meeting every three (3) years focused on the area of cerebrovascular disease. If the national, regional, or state meeting provides continuing education, then that continuing education may count toward the annual requirement; and (II-R)

3. Level III center program managers/coordinators shall complete a minimum average of four (4) hours of continuing education in cerebrovascular disease every year. This continuing education shall be reviewed by the stroke medical director for appropriateness to the stroke program manager/coordinator's level of responsibility. (III-R)

(E) Emergency department personnel in stroke centers shall complete the following continuing education requirements:

1. Emergency department physicians in stroke centers shall complete –

A. Level I emergency department physicians providing stroke coverage shall complete a minimum of two (2) hours of continuing medical education in cerebrovascular disease every year, except for physicians who are emergency medicine board certified or board eligible through the American Board of Emergency Medicine (ABEM) or the American Osteopathic Board of Emergency Medicine (AOBEM) and who are practicing in the emergency department; and (I-R)

2. Registered nurses assigned to the emergency departments in stroke centers shall complete –

A. Level I registered nurses shall complete a minimum of two (2) hours of cerebrovascular disease continuing education every year; and (I-R)

B. Registered nurses shall maintain core competencies in the care of the stroke patient annually as determined by the stroke center. Training to maintain these competencies may count toward continuing education requirements. (I-R, II-R, III-R, IV-R)

(F) Registered nurses assigned to the intensive care unit in the stroke centers who care for stroke patients shall complete the following continuing education requirements:

1. Level I intensive care unit registered nurses shall complete a minimum of eight (8) hours of cerebrovascular related continuing education every year; and (I-R)

2. The stroke medical director shall review the continuing education for appropriateness to the practitioner's level of responsibility. (I-R)

(G) Stroke unit registered nurses in the stroke centers shall complete the following continuing education requirements:

1. All level I stroke unit registered nurses shall complete a minimum of eight (8) hours of cerebrovascular disease continuing education every year; and (I-R)

2. The stroke medical director shall review the continuing

education for appropriateness to the practitioner's level of responsibility. (I-R)

(5) Standards for Hospital Performance Improvement and Patient Safety, Outreach, Public Education, and Training Programs for Stroke Center Designation.

(A) The stroke center shall maintain an ongoing performance improvement and patient safety program designed to objectively and systematically monitor, review, and evaluate the quality, timeliness, and appropriateness of patient care; resolve problems; and improve patient care. (I-R, II-R, III-R, IV-R)

1. The stroke center shall collect, document, trend, maintain for at least five (5) years, and make available for review by the department at least the following data elements:

A. Door-to-needle time; (I-R, II-R, III-R)

B. Number of patients presenting within the treatment window; and (I-R, II-R, III-R)

C. Number of eligible patients treated with thrombolytics. (I-R, II-R, III-R)

2. The stroke center shall at least quarterly conduct a regular morbidity and mortality review meeting which shall be documented in the meeting minutes and/or the meeting attendance documents. (I-R, II-R, III-R, IV-R)

3. The stroke center shall review the reports generated by the department from the Missouri stroke registry. (I-R, II-R, III-R, IV-R)

4. The stroke center shall conduct monthly reviews of pre-hospital stroke care including inter-facility transfers. (I-R, II-R, III-R, IV-R)

5. The stroke center shall participate in the emergency medical services regional system of stroke care in its respective emergency medical services region as defined in 19 CSR 30-40.302. (I-R, II-R, III-R, IV-R)

6. The stroke center shall document review of its cases of stroke patients who received U.S. Food and Drug Administration-approved thrombolytics and who remained at the referring hospital greater than ninety (90) minutes prior to transfer. (I-R, II-R, III-R)

7. The stroke center shall document its review of cases of stroke patients who did not receive U.S. Food and Drug Administration-approved thrombolytics and who remained greater than sixty (60) minutes at the referring hospital prior to transfer. (II-R, III-R, IV-R)

8. The stroke center shall review and monitor the core competencies of the physicians, practitioners, and nurses and document these core competencies have been met. (I-R, II-R, III-R, IV-R)

(B) The stroke center shall establish a patient and public education program to promote stroke prevention and stroke symptoms awareness. (I-R, II-R, III-R, IV-R)

(C) It is recommended that level I, II, and III stroke centers establish a professional education outreach program in catchment areas to provide training and other supports to improve care of stroke patients. (I-R, II-R, III-R)

(D) Each stroke center shall establish a training program for professionals on caring for stroke patients in the stroke center that includes at least the following:

1. A procedure for training nurses and clinical staff to be credentialed in stroke care; (I-R, II-R, III-R, IV-R)

2. A mechanism to assure that all nurses providing care to stroke patients complete a minimum of required continuing education as set forth in section (4) of this rule to become credentialed in stroke care; and (I-R, II-R, III-R, IV-R)

3. The content and format of any stroke continuing education courses developed and offered by the stroke center shall be developed with the oversight of the stroke medical director. (I-R, II-R, III-R, IV-R)

(E) The stroke center shall provide and monitor timely feedback to the emergency medical service providers and referring hospital, if involved. This feedback shall include, at least, diagnosis, treatment, and disposition of the patients. It is recommended that the feedback be provided within seventy-two (72) hours of admission to the hospital. When emergency medical services does not provide patient care data on patient arrival or in a timely fashion (recommended within three (3) hours of patient delivery), this time frame shall not apply. (I-R, II-R, III-R, IV-R.

(F) Stroke centers shall be actively involved in local and regional emergency medical services systems by providing training and clinical educational resources. (I-R, II-R, III-R, IV-R)

(6) Standards for the Programs in Stroke Research for Stroke Center Designation.

(A) Level I stroke centers shall support an ongoing stroke research program as evidenced by any of the following.

1. Production of evidence-based reviews of the stroke program's process and clinical outcomes; (I-R)

2. Publications in peer-reviewed journals; (I-R)

3. Reports of findings presented at regional, state, or national meetings; (I-R)

4. Receipt of grants for study of stroke care; (I-R)

5. Participation in multi-center studies; and (I-R)

6. Epidemiological studies and individual case studies. (I-R)

(B) The stroke center shall agree to cooperate and participate with the department in developing stroke prevention programs. (I-R, II-R, III-R, IV-R)

AUTHORITY: sections 192.006 and 190.185, RSMo 2016, and section 190.241, RSMo Supp. 2022. Original rule filed Nov. 15, 2012, effective June 30, 2013. Emergency amendment filed Nov. 21, 2022, effective Dec. 7, 2022, expires June 4, 2023. Amended: Filed Nov. 21, 2022, effective June 30, 2023.*

**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, 2016, 2017, 2022.*

19 CSR 30-40.740 Definitions and Abbreviations Relating to ST-Segment Elevation Myocardial Infarction (STEMI) Centers

PURPOSE: This rule defines terminology related to STEMI centers.

(1) For the purposes of 19 CSR 30-40.750 and 19 CSR 30-40.760 the following terms shall mean –

(A) Acute – an injury or illness that happens or appears quickly and can be serious or life-threatening;

(B) Anesthesiologist assistant (AA) – a person who –

1. Has graduated from an anesthesiologist assistant program accredited by the American Medical Association's Committee on Allied Health Education and Accreditation or by its successor agency;

2. Has passed the certifying examination administered by the National Commission on Certification of Anesthesiologist Assistants;

3. Has active certification by the National Commission on Certification of Anesthesiologist Assistants;

4. Is currently licensed as an anesthesiologist assistant in the state of Missouri; and

5. Provides health care services delegated by a licensed anesthesiologist;

(C) Board-admissible/board-eligible – a physician who has applied to a specialty board of the American Board of Medical Specialties, the American Osteopathic Association Board of Osteopathic Specialists, or the Royal College of Physicians and Surgeons of Canada and has received a ruling that he or she has fulfilled the requirements to take the examinations. Board certification is generally obtained within five (5) years of the first appointment;

(D) Board-certified – a physician who has fulfilled all requirements, has satisfactorily completed the written and oral examinations, and has been awarded a board diploma in a specialty field by the American Board of Medical Specialties, the American Osteopathic Association Board of Osteopathic Specialists, or the Royal College of Physicians and Surgeons of Canada;

(E) Cardiac catheterization laboratory – the setting within the hospital where percutaneous coronary interventions are done. Specialized staff, equipment, and protocol must be in place;

(F) Cardiac catheterization team – physicians and clinical staff who perform percutaneous coronary interventions and who are part of the clinical STEMI team;

(G) Cardiogenic shock – a life threatening condition in which the heart muscle does not pump enough blood to meet the body's needs;

(H) Cardiologist – a licensed physician with appropriate specialty training;

(I) Cardiology Service – an organizational component of the hospital specializing in the care of patients who have had STEMIs or some other cardiovascular condition or disorder;

(J) Catchment area – the surrounding area served by the institution (the STEMI center);

(K) Certified registered nurse anesthetist (CRNA) – a registered nurse who –

1. Has graduated from a school of nurse anesthesia accredited by the Council on Accreditation of Educational Programs of Nurse Anesthesia or its predecessor;

2. Has been certified as a nurse anesthetist by the Council on Certification of Nurse Anesthetists; and

3. Has been licensed in Missouri pursuant to Chapter 335, RSMo;

(L) Clinical staff – an individual that has specific training and experience in the treatment and management of STEMI patients. Examples include physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists;

(M) Clinical team – a team of health care professionals involved in the care of the STEMI patient and may include but not be limited to cardiologists, interventional cardiologists, cardiovascular surgeons, anesthesiologists, emergency medicine, and other STEMI center clinical staff. The clinical team is part of the hospital's STEMI team;

(N) Contiguous leads – the electrical cables that attach the electrodes on the patient to the electrocardiograph recorder and which are next to one another. They view the same general area of the heart;

(O) Continuing education – education approved or recognized by a national and/or state professional organization and/or STEMI medical director;

(P) Continuing medical education (CME) – the highest level of continuing education for physicians that is approved by a national and/or state professional organization and/or STEMI medical director;

(Q) Core team – a subunit of the hospital STEMI team which consists of a physician experienced in diagnosing and treating STEMI (usually the STEMI medical director) and at least one (1) other health care professional or qualified individual competent in STEMI care as determined by the hospital (usually the STEMI program manager/coordinator);

(R) Credentialed or credentialing – a hospital-specific system of documenting and recognizing the qualifications of medical staff and nurses and authorizing the performance of certain procedures and establishing clinical privileges in the hospital setting;

(S) Department – the Missouri Department of Health and Senior Services;

(T) Door-to-balloon-time – the time from arrival at the hospital door to percutaneous coronary intervention balloon inflation for the purpose of restoring blood flow in an obstructed coronary artery in the cardiac catheterization lab. This term is commonly abbreviated as D2B;

(U) Door-to-device-time – the time from patient arrival at the hospital to the time the device is in the affected cardiac blood vessel;

(V) Door-to-needle-time – the time from arrival at the hospital door to initiation of lytic therapy to restore blood flow in an obstructed blood vessel;

(W) Electrocardiogram (ECG/EKG) – a recorded tracing of the electrical activity of the heart. The heart rate, heartbeat regularity, size and chamber position, presence of any prior heart attack, current injury, and the effects of drugs or devices (i.e., pacemaker can be determined). An abnormal ECG pattern is seen during a heart attack because damaged areas of the heart muscle do not conduct electricity properly;

(X) Emergency medical service regions – the six (6) regions in the state of Missouri which are defined in 19 CSR 30-40.302;

(Y) First medical contact – a patient's initial contact with a health-care provider either pre-hospital, which could be contact with emergency medical service personnel or another medical provider, or in the hospital;

(Z) First medical contact to balloon or device time – the time from a patient's first medical contact with a health-care provider to the time when the balloon is inflated or the device is in the affected cardiac blood vessel;

(AA) First medical contact to hospital door time – the time from a patient's first medical contact with a health-care provider to the time when the patient arrives at the hospital door;

(BB) Hospital – an establishment as defined by section 197.020.2, RSMo, or a hospital operated by the state;

(CC) Immediately available (IA) – being present at bedside at the time of the patient's arrival at the hospital when prior notification is possible and no more than twenty (20) minutes from the hospital under normal driving and weather conditions;

(DD) In-house (IH) – being on the hospital premises twenty-four (24) hours a day;

(EE) Intermediate care unit – the functional division or facility of the hospital that provides care for STEMI patients admitted to the STEMI center;

(FF) Interventional cardiologist – a licensed cardiologist with the appropriate specialty training;

(GG) Lytic therapy (fibrinolysis/thrombolysis) – 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;

(HH) Mentoring relationship – a relationship in which a high volume percutaneous coronary interventions operator, often described as performing one hundred fifty (150) or more procedures per year, serves as a mentor for an operator who performs less than eleven (11) primary percutaneous coronary interventions per year;

(II) Missouri STEMI registry – a statewide data collection system comprised of key data elements as identified by the Department of Health and Senior Services used to compile and trend statistics of STEMI patients both pre-hospital and hospital, using a coordinated electronic reporting method provided by the Missouri Department of Health and Senior Services;

(JJ) Multidisciplinary team – a team of appropriate representatives of hospital units involved in the care of the STEMI patient. This team supports the care of the STEMI patient with the STEMI team;

(KK) Patient – an individual who is sick, injured, wounded, diseased, or otherwise incapacitated or helpless, or dead, excluding deceased individuals being transported from or between private or public institutions, homes, or cemeteries, and individuals declared dead prior to the time an ambulance is called for assistance;

(LL) Peer review system – is the process the STEMI center establishes for physicians to review STEMI cases on patients that are admitted to the STEMI center, transferred out of the STEMI center, or die as a result of the STEMI (independent of hospital admission or hospital transfer status);

(MM) Percutaneous coronary intervention (PCI) – is a procedure used to open or widen narrowed or blocked blood vessels to restore blood flow supplying the heart. A primary percutaneous coronary intervention is one that is generally done on an emergency basis for a ST-elevation myocardial infarction (STEMI). Treatment occurs while the blood clot is still forming – usually within twenty-four (24) hours of onset, but ideally within two (2) hours of symptoms onset. An elective percutaneous coronary intervention is one that is done on a non-urgent basis to reduce signs and symptoms of angina;

(NN) Percutaneous coronary intervention window – the time frame in which percutaneous coronary intervention is most advantageous and recommended;

(OO) Phase I cardiac rehabilitation – an inpatient program that provides an individualized exercise and education plan for patients with cardiac illnesses;

(PP) Physician – a person licensed as a physician pursuant to Chapter 334, RSMo;

(QQ) Promptly available (PA) – arrival at the hospital at the patient's bedside within thirty (30) minutes after notification of a patient's arrival at the hospital;

(RR) Protocol – a predetermined, written medical care guideline, which may include standing orders;

(SS) Qualified individual – a physician, registered nurse, advanced practice registered nurse, and/or physician assistant that demonstrates administrative ability and shows evidence of educational preparation and clinical experience in the care of STEMI patients and is licensed by the state of Missouri;

(TT) Regional outcome data – data used to assess the regional process for pre-hospital, hospital, and regional patient outcomes;

(UU) Repatriation – the process used to return a STEMI patient to his or her home community from a level I or level II STEMI designated hospital after his or her acute treatment for STEMI has been completed. This allows the patient to be closer to home for continued hospitalization or rehabilitation and follow-up care as indicated by the patient's condition;

(VV) Reperfusion – the process of restoring normal blood flow to an organ or tissue that has had its blood supply cut off, such as after an ischemic stroke or myocardial infarction;

(WW) Requirement (R) – a symbol to indicate that a standard is a requirement for STEMI center designation at a particular level;

(XX) Review – is the inspection of a hospital to determine compliance with the rules of this chapter;

(YY) ST-elevation myocardial infarction (STEMI) – a myocardial infarction for which the electrocardiogram shows ST-segment elevation, usually in association with an acutely blocked coronary artery. A STEMI is one type of heart attack that is a potentially lethal condition for which specific therapies, administered rapidly, reduce mortality and disability. The more time that passes before blood flow is restored, the more damage that is done to the heart muscle;

(ZZ) STEMI call roster – a schedule that provides twenty-four (24) hours a day, seven (7) days a week cardiology service coverage. The call roster identifies the physicians or qualified individuals on the schedule that are available to manage and coordinate emergent, urgent, and routine assessment, diagnosis, and treatment of the STEMI patients;

(AAA) STEMI care – education, prevention, emergency transport, triage, acute care, and rehabilitative services for STEMI that requires immediate medical or surgical intervention or treatment;

(BBB) STEMI center – a hospital that is currently designated as such by the department to care for patients with ST-segment elevation myocardial infarctions.

1. A level I STEMI center is a receiving center staffed and equipped to provide total care for every aspect of STEMI care, including care for those patients with complications. It functions as a resource center for the hospitals within that region and conducts research.

2. A level II STEMI center is a receiving center staffed and equipped to provide care for a large number of STEMI patients within the region.

3. A level III STEMI center is primarily a referral center that provides prompt assessment, indicated resuscitation, and appropriate emergency intervention for STEMI patients to stabilize and arrange timely transfer to a Level I or II STEMI center, as needed.

4. A level IV STEMI center is a referral center in an area considered rural or where there are insufficient hospital resources to serve the patient population requiring STEMI care. The level IV STEMI center provides prompt assessment, indicated resuscitation, appropriate emergency intervention, and arranges and expedites transfer to a higher level STEMI center as needed;

(CCC) STEMI identification – a diagnosis is made on a basis of symptoms, clinical examination, and electrocardiogram changes, specifically ST-segment elevation;

(DDD) STEMI medical director – a physician designated by the hospital who is responsible for the STEMI service and performance improvement and patient safety programs related to STEMI care;

(EEE) STEMI program – an organizational component of the hospital specializing in the care of STEMI patients;

(FFF) STEMI program manager – a qualified individual designated by the hospital with responsibility for monitoring and evaluating the care of STEMI patients and the coordination of performance improvement and patient safety programs for the STEMI center in conjunction with the physician in charge of STEMI care;

(GGG) STEMI team – a component of the hospital STEMI

program which consists of the core team and the clinical team;

(HHH) Symptom onset-to-treatment time – the time from symptom onset to initiation of therapy to restore blood flow in an obstructed blood vessel;

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

(JJJ) Transfer agreement – a document which sets forth the rights and responsibilities of two (2) hospitals regarding the inter-hospital transfer of patients; and

(KKK) Virtual review – a type of review conducted through the use of secure virtual video and audio conferencing and secure file transfers in order to determine compliance with the rules of this chapter.

AUTHORITY: sections 192.006 and 190.185, RSMo 2016, and section 190.241, RSMo Supp. 2022. Original rule filed Nov. 15, 2012, effective June 30, 2013. Emergency amendment filed Nov. 21, 2022, effective Dec. 7, 2022, expires June 4, 2023. Amended: Filed Nov. 21, 2022, effective June 30, 2023.*

**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, 2016, 2017, 2022.*

19 CSR 30-40.750 ST-Segment Elevation Myocardial Infarction (STEMI) Center Designation Application and Review

PURPOSE: This rule establishes the requirements for participation in Missouri's STEMI center program.

(1) Participation in Missouri's STEMI center program is voluntary and no hospital shall be required to participate. No hospital shall hold itself out to the public as a state-designated STEMI center unless it is designated as such by the Department of Health and Senior Services (department). Hospitals desiring STEMI center designation shall apply to the department either through the option outlined in section (2) or section (3). Only those hospitals found to be in compliance with the requirements of the rules of this chapter shall be designated by the department as STEMI centers.

(2) Hospitals requesting to be reviewed and designated as a STEMI center by the department shall meet the following requirements:

(A) An application for STEMI center designation shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a fair determination of eligibility for review and designation in accordance with the rules of this chapter. The STEMI center review and designation application form, included herein, is available at the Health Standards and Licensure (HSL) office, online at the department's website at 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. The application for STEMI center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation or expiration of the current designation;

(B) Both sections A and B of the STEMI center review and designation application form, included herein, shall be complete before the department will arrange a date for the review. The department shall notify the hospital/STEMI center of any apparent omissions or errors in the completion of the STEMI center review and designation application form. When the STEMI center review and designation application form is complete, the department shall contact the hospital/STEMI center to arrange a date for the review.

(C) The hospital/STEMI center shall cooperate with the department in arranging for a mutually suitable date for any announced reviews;

(D) The department may conduct an onsite review, a virtual review, or a combination thereof on the hospitals/STEMI centers. For announced reviews that are scheduled with the hospitals/STEMI centers, the department will make the hospitals/STEMI centers aware at least ninety (90) days prior to the scheduled review whether the department intends that the review will be conducted onsite and/or virtually. Due to unforeseen circumstances, the department may need to change whether the review is conducted onsite and/or virtually less than ninety (90) days before the announced review. The department will contact the hospitals/STEMI centers to make the hospitals/STEMI centers aware of any changes about how the review will be conducted, either onsite and/or virtually, and/or when the review will be conducted with as much advance notice as possible prior to the date of the announced review. The different types of reviews to be conducted on hospitals/STEMI centers seeking STEMI center designation by the department include –

1. An initial review shall occur on a hospital applying to be initially designated as a STEMI center. An initial review shall include interviews with designated hospital staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter. This review may occur onsite and/or virtually.

2. A validation review shall occur on a designated STEMI center applying for renewal of its designation as a STEMI center. Validation reviews shall occur no less than every three (3) years. A validation review shall include interviews with designated STEMI center staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter. This review may occur on-site and/or virtually; and

3. A focus review shall occur on a designated STEMI center in which an initial or validation review was conducted and substantial deficiency(ies) were cited. A review of the physical plant will not be necessary unless a deficiency(ies) was cited in the physical plant in the preceding validation review. The focus review team shall be comprised of a representative from the department and may include a qualified contractor(s) with the required expertise to evaluate corrections in areas where deficiencies were cited. This review may occur on-site and/or virtually;

(E) STEMI center designation shall be valid for a period of three (3) years from the date the STEMI center/hospital is designated. Expiration of the designation shall occur unless the STEMI center applies for validation review within this three- (3-) year period and the department is unable to conduct a review before the designation expires.

1. STEMI center designation shall be site specific and non-transferable when a STEMI center changes location.

2. Once designated as a STEMI center, a STEMI center may voluntarily surrender the designation at any time without giving cause, by contacting the department in writing. In these

cases, the application and review process shall be completed again before the designation may be reinstated;

(F) For the purpose of reviewing previously designated STEMI centers and hospitals applying for STEMI center designation, the department shall use review teams consisting of qualified contractors. These review teams shall consist of one (1) STEMI coordinator or STEMI program manager who has experience in STEMI care and one (1) emergency medicine physician experienced in STEMI care. The review team shall also consist of at least one (1) and no more than two (2) cardiologist(s)/interventional cardiologist(s) who are experts in STEMI care. One (1) representative from the department will also be a participant of the review team. This representative shall coordinate the review with the hospital/STEMI center and the other review team members.

1. Any individual interested in becoming a qualified contractor to conduct reviews shall —

A. Send the department a curriculum vitae (CV) or résumé that includes his or her experience and expertise in STEMI care and whether an individual is in good standing with his or her licensing boards. A qualified contractor shall be in good standing with his or her respective licensing boards;

B. Provide the department evidence of his or her previous site survey experience (state and/or national designation survey process); and

C. Submit a list to the department that details any ownership he or she may have in a Missouri hospital(s), whether he or she has been terminated from any Missouri hospital(s), any lawsuits he or she has currently or had in the past with any Missouri hospital(s), and any Missouri hospital(s) for which his or her hospital privileges have been revoked.

2. Qualified contractors for the department shall enter into a written agreement with the department indicating, that among other things, they agree to abide by Chapter 190, RSMo, and the rules in this chapter, during the review process;

(G) Out-of-state review team members shall conduct levels I and II hospital/STEMI center reviews. Review team members are considered out-of-state review team members if they work outside of the state of Missouri. In-state review team members may conduct levels III and IV hospital/STEMI center reviews. Review team members are considered in-state review team members if they work in the state of Missouri. In the event that out-of-state reviewers are unavailable, levels I and II STEMI center reviews may be conducted by in-state reviewers from Emergency Medical Services (EMS) regions as set forth in 19 CSR 30-40.302 other than the region being reviewed with the approval of the director of the department or his/her designee. When utilizing in-state review teams, levels I and II hospital/STEMI centers shall have the right to refuse one (1) in-state review team or certain members from one (1) in-state review team;

(H) Hospitals/STEMI centers shall be responsible for paying expenses related to the costs of the qualified contractors to review their respective hospitals/STEMI center during initial, validation, and focus reviews. The department shall be responsible for paying the expenses of its representative. Costs of the review to be paid by the hospital/STEMI center include —

1. An honorarium shall be paid to each qualified contractor of the review team whether the review occurs on-site or virtually. Qualified contractors of the review team for level I and II STEMI center reviews shall be paid one thousand four hundred fifty dollars ($1,450) per reviewer. Qualified contractors of the review team for level III and IV STEMI center reviews shall be paid one thousand dollars ($1,000) per reviewer. This honorarium shall be paid to each qualified contractor of the review team at the time the site survey begins if on-site or prior to the review beginning if the review is conducted virtually;

2. Airfare shall be paid for each qualified contractor of the review team, if applicable;

3. Lodging shall be paid for each qualified contractor of the review team, unless the review is conducted virtually. The hospital/STEMI center shall secure the appropriate number of hotel rooms for the qualified contractors and pay the hotel directly; and

4. Incidental expenses, if applicable, for each qualified contractor of the review team shall not exceed two hundred fifty dollars ($250) and may include the following:

A. Airport parking;

B. Checking bag charges;

C. Meals during the review; and

D. Mileage to and from the review if no airfare was charged by the reviewer. If the reviewer solely participated virtually in the review and did not travel by vehicle to the review, then no mileage shall be paid. Mileage shall be paid at the federal mileage rate for business miles as set by the Internal Revenue Service (IRS). Federal mileage rates can be found at the website www.irs.gov;

(I) Hospitals/STEMI centers being reviewed through a virtual survey shall do the following:

1. Provide a videoconferencing platform to be used for the hospital/STEMI center virtual review;

2. Provide a live tour of the hospital;

3. Ensure the videoconferencing platform used during the review is compliant with state and federal laws for protected health information;

4. Assign an on-site visit coordinator for the review. The on-site visit coordinator role cannot be fulfilled by the STEMI program manager. This on-site visit coordinator will be responsible for the logistical aspects of the virtual review. Responsibilities include, at least, the following:

A. Scheduling the videoconferencing meetings;

B. Sending out calendar invitations;

C. Providing electronic medical record (EMR) access to designated individuals;

D. Ensuring all required participants are on the videoconferencing line for the various parts of the review; and

E. Sending separate calendar invitations for each section of the virtual review to hospital staff, qualified contractors, and the department;

5. Assign one (1) staff navigator per qualified contractor to help remotely navigate the EMR, the patient performance improvement patient safety (PIPS) documentation, and supporting documentation. The staff navigator role cannot be fulfilled by the STEMI program manager, the STEMI program medical director, the STEMI program registrar, or the on-site visit coordinator for the review. The individuals designated as the staff navigators shall be familiar with navigating through the EMR;

6. Provide the department with requested patient care report information for the review no later than thirty (30) days prior to the virtual review;

7. Provide the department with requested medical records, PIPS documentation, registry report, and all supporting documentation at least seven (7) days prior to the virtual visit through a method that is compliant with state and federal laws for protected health information;

8. Schedule a pre-review call with the qualified contractors, the department, the STEMI program medical director, the STEMI program manager, the staff navigators and the on-site visit coordinator approximately one (1) week prior to the virtual

review;

9. Test the functionality of the videoconferencing platform for the live tour of the hospital prior to the pre-review call; and

10. Provide a list of attendees for the review meeting and their roles to the review team and the department prior to the virtual review;

(J) The department may conduct an on-site review of the hospital prior to the virtual review process to ensure that the hospital meets the requirements for STEMI center designation;

(K) Upon completion of a review, the qualified contractors from the review team shall submit a report of their findings to the department. This report shall state whether the specific standards for STEMI center designation have or have not been met and if not met, in what way they were not met. This report shall detail the hospital/STEMI center's strengths, weaknesses, deficiencies, and recommendations for areas of improvement. This report shall also include findings from patient chart audits and a narrative summary of the following areas: prehospital, hospital, STEMI service, emergency department, operating room, angiography suites, recovery room, clinical lab, intensive care unit, rehabilitation, performance improvement and patient safety programs, education, outreach, research, chart review, and interviews. The department shall have the final authority to determine compliance with the rules of this chapter;

(L) The department shall return a copy of the report to the chief executive officer, the STEMI medical director, and the STEMI program manager/coordinator of the hospital/STEMI center reviewed. Included within the report shall be notification indicating whether the hospital/STEMI center has met the criteria for STEMI center designation or has failed to meet the criteria for STEMI center designation as requested. Also, if a focus review of the STEMI center is required, the time frame for this focus review will be shared with the chief executive officer, the STEMI medical director, and the STEMI program manager/coordinator of the STEMI center reviewed;

(M) When the hospital/STEMI center is found to have deficiencies, the hospital/STEMI center shall submit a plan of correction to the department. The plan of correction shall include identified deficiencies, actions to be taken to correct deficiencies, time frame in which the deficiencies are expected to be resolved, and the person responsible for the actions to resolve the deficiencies. A plan of correction form shall be completed by the hospital and returned to the department within thirty (30) days after notification of review findings and designation. If a focus review is required, the STEMI center shall be allowed a minimum period of six (6) months to correct deficiencies;

(N) No hospital shall hold itself out as a STEMI center designated by the department until given written approval by the department. The department shall give written approval to the hospitals to begin holding themselves out as designated STEMI centers by the department after all initial STEMI reviews have been completed for those hospitals which applied for STEMI review and designation with the department during the first round of applications and the time for plans of corrections have expired;

(O) A STEMI center shall make the department aware in writing within thirty (30) days if there are any changes in the STEMI center's name, address, contact information, chief executive officer, STEMI medical director, or STEMI program manager/coordinator;

(P) Failure of a hospital/STEMI center to provide all medical records and quality improvement documentation necessary for the department to conduct a STEMI review in order to determine if the requirements of 19 CSR 30-40.760 have been met shall result in the revocation of the hospital/STEMI center's designation as a STEMI center;

(Q) Any person aggrieved by an action of the department affecting the STEMI center designation pursuant to Chapter 190, RSMo, including the revocation, the suspension, or the granting of, refusal to grant, or failure to renew a designation, may seek a determination by the Administrative Hearing Commission under Chapter 621, RSMo. It shall not be a condition to such determination that the person aggrieved seek reconsideration, a rehearing, or exhaust any other procedure within the department; and

(R) The department may deny, place on probation, suspend, or revoke such designation in any case in which it has determined that there has been a substantial failure to comply with the provisions of Chapter 190, RSMo, or any rules or regulations promulgated pursuant to this chapter. If the department has determined that a hospital is not in compliance with such provisions or regulations, it may conduct additional announced or unannounced site reviews of the hospital to verify compliance. If a STEMI center fails two (2) consecutive on-site reviews because of substantial noncompliance with standards prescribed by sections 190.001 to 190.245, RSMo, or rules adopted by the department pursuant to sections 190.001 to 190.245, RSMo, its center designation shall be revoked.

(3) Hospitals seeking STEMI center designation by the department based on their current certification or verification as a STEMI center by the Joint Commission, American Heart Association, or American College of Cardiology shall meet the following requirements:

(A) An application for STEMI center designation by the department for hospitals that have been certified or verified as a STEMI/chest pain center by the Joint Commission, American Heart Association, or American College of Cardiology shall be made upon forms prepared or prescribed by the department and shall contain information the department deems necessary to make a determination of eligibility for review and designation in accordance with the rules of this chapter. The application for STEMI certified hospital designation form, included herein, is available at the Health Standards and Licensure (HSL) office, or online at the department's website at 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. The application for STEMI center designation shall be submitted to the department no less than sixty (60) days and no more than one hundred twenty (120) days prior to the desired date of the initial designation or expiration of the current designation;

(B) Both sections A and B of the application for STEMI certified hospital designation form, included herein, shall be complete before the department designates a hospital/STEMI center. The department shall notify the hospital/STEMI center of any apparent omissions or errors in the completion of the application for STEMI certified hospital designation form. Upon receipt of a completed and approved application, the department shall designate such hospital as follows:

1. The department shall designate a hospital as a level I STEMI center if such hospital has been certified as a comprehensive cardiac center by the Joint Commission;

2. The department shall designate a hospital as a level II STEMI center if such hospital has been certified as any of the following:

A. Mission Lifeline Percutaneous Coronary Intervention (PCI)/STEMI receiving center by the American Heart Association;

B. Chest pain center with PCI center by the American College of Cardiology;

C. Chest pain with PCI and resuscitation center by the American College of Cardiology;

D. Primary Heart Attack Center by the Joint Commission; or

E. Comprehensive Heart Attack Center by the Joint Commission;

3. The department shall designate a hospital as a level III STEMI center if such hospital has been certified as any of the following:

A. Mission Lifeline non/PCI STEMI referral center by the American Heart Association;

B. Chest pain center by the Joint Commission;

C. Acute Heart Attack Ready Center by the Joint Commission;

D. Primary Acute Myocardial Infarction (AMI) center by the Joint Commission; or

E. Chest pain center by the American College of Cardiology;

(C) No hospital shall hold itself out as a STEMI center designated by the department until given written approval by the department. The department shall give written approval to the hospitals to begin holding themselves out as designated STEMI centers by the department. This does not prohibit the hospitals from holding themselves out as certified STEMI/chest pain centers by the Joint Commission, the American Heart Association, or the American College of Cardiology;

(D) Within thirty (30) days of any changes or receipt of a certificate or verification, the hospital shall submit to the department proof of certification as a STEMI/chest pain center by the Joint Commission, the American Heart Association, or the American College of Cardiology and the names and contact information of the medical director of the STEMI/chest pain center and the program manager of the STEMI/chest pain center. A certificate or verification as a STEMI center by the Joint Commission, the American Heart Association, or the American College of Cardiology shall accompany the application for STEMI certified hospital designation form. A hospital shall report to the department in writing within thirty (30) days of the date the hospital no longer is certified or verified as a STEMI center by the Joint Commission, the American Heart Association, or the American College of Cardiology for which the hospital used to receive its corresponding designation by the department as a STEMI center, whether because the hospital voluntarily surrendered this certificate or verification, or because the hospital's certificate or verification was suspended or revoked by the Joint Commission, the American Heart Association, or the American College of Cardiology or expired.

(E) Participate in local and regional emergency medical services systems for purposes of providing training, sharing clinical educational resources, and collaborating on improving patient outcomes;

(F) The designation of a hospital as a STEMI center pursuant to section (3) shall continue if such hospital retains certification as a STEMI center by the Joint Commission, the American Heart Association, or the American College of Cardiology; and

(G) The department may remove a hospital's designation as a STEMI center if requested by the hospital or the department determines that the Joint Commission, the American Heart Association, or the American College of Cardiology certification or verification has been suspended or revoked. The department may also remove a hospital's designation as a STEMI center if the department determines the hospital's certification or verification with the Joint Commission, the American Heart Association, or the American College of Cardiology has expired. Any decision made by the department to withdraw the designation of a STEMI center that is based on the revocation or suspension of a certification or verification by the Joint Commission, the American Heart Association, or the American College of Cardiology shall not be subject to judicial review.