TITLE: **PRIMARY STROKE CENTER DESIGNATION** EMS Policy No. **4811**

PURPOSE:

The purpose of this policy is to establish requirements for designation as a Primary Stroke Center (PSC) in San Joaquin County.

AUTHORITY:

Health and Safety Code, Division 2.5, Section 1797.67, 1797.88, 1797.220, 1798, and 1798.170; California Code of Regulations, Title 22, Division 9, Chapter 7.2.

DEFINITIONS:

A. "Primary Stroke Center" or "PSC" means a hospital that treats acute stroke patients and identifies patients who may benefit from transfer to a higher level of care when clinically warranted and that meets the requirements for designation as set forth by the San Joaquin County EMS Agency.
B. "Clinical Stroke Team" means a team of healthcare professionals who provide care for the stroke patient and may include, but is not limited to, neurologists, neuro-interventionalists, neurosurgeons, anesthesiologists, emergency medicine physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, technologists.
C. "SJCEMSA" means the San Joaquin County Emergency Medical Services (EMS) Agency.
D. "Stroke" means a condition of impaired blood flow to a patient's brain resulting in brain dysfunction, most commonly through vascular occlusion or hemorrhage.
E. "Suspected Stroke Patient" means a potential acute stroke patient diagnosis based off an assessment from a prehospital personnel or member of a clinical stroke team.
F. "Telehealth" means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site.
G. "Door-to-CT" means the time interval as measured from the time the patient arrives at the hospital emergency department until initiation of Computer Tomography (CT) scanning or equivalent neuro-imaging.
H. "Door-to-needle" means the time interval as measured from the time the patient arrives at the hospital emergency department until initiation of thrombolytic therapy.

Approved: Signature on file
Medical Director

Signature on file
EMS Administrator

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POLICY:

It is the policy of SJCEMSA to require specific criteria for designation of Primary Stroke Centers in San Joaquin County.

PROCEDURE:

I. Designation Criteria:

A. Hospital Services:

1. Hold a special permit from the California Department of Public Health (CDPH) for Basic or Comprehensive Emergency Medical Services.
2. Maintain services available for diagnosis and treatment of suspected stroke patients 24 hours per day, 7 days per week, 365 days per year.
3. Have in place policies and procedures for the automatic acceptance of any suspected stroke patient being transferred from a non-PSC designated hospitals in San Joaquin County.
4. Maintain a valid and current certification by The Joint Commission as a PSC.
5. Acute care rehabilitation services.

B. Required Hospital Personnel:

1. PSC Medical Director
   a. The hospital shall designate a medical director who is a board-certified neurologist, neurosurgeon, interventional neuro-radiologist, or emergency physician who is board certified or board eligible in neurology, neurosurgery, endovascular neurosurgical radiology, or other board-certified physician with sufficient experience and expertise in managing patients with acute cerebral vascular disease as determined by the hospital credentials committee.
2. PSC Program Manager:
   a. A fulltime stroke program manager who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of Stroke patients and the administrative ability. The PSC program manager shall be designated by the hospital with the

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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.

3. Clinical Stroke Team:
   a. A clinical stroke team available to see in person or via telehealth a patient identified as a potential acute stroke patient and shall consist of:
      i. A neurologist, neurosurgeon, interventional neuro-radiologist who is board certified or board eligible in neurology, neurosurgery, endovascular neurosurgical radiology with sufficient experience and expertise in managing patients with acute cerebral vascular disease as determined by the hospital credentials committee. When telehealth is being used the clinical stroke team shall include an attending physician assigned to the patient capable of managing care.
      ii. A registered nurse, physician assistant or nurse practitioner capable of caring for acute stroke patients.
   b. A designated PSC shall have an on-call policy and monthly published call schedule of board certified neurologists, neurosurgeons, or interventional neuro-radiologists serving on the clinical stroke team.

C. Required Clinical Capabilities:

1. A clinical stroke team, available to see in person or via telehealth, a patient identified as a potential acute stroke patient within 15 minutes following the patient's arrival at the hospital's emergency department or within 15 minutes following a diagnosis of a patient's potential acute stroke.
2. CT scanning or equivalent neuro-imaging shall be initiated within twenty-five (25) minutes for suspected stroke patients.
3. Neuro-imaging studies shall be reviewed within forty five (45) minutes for suspected stroke patients by a physician with appropriate expertise.
   a. Other imaging shall be available within a clinically appropriate timeframe and shall at a minimum, include:
      i. Magnetic Resonance Imaging (MRI).
      ii. CTA and/or Magnetic resonance angiography (MRA)

iii. Trans Esophageal Endoscopy or Trans Tracheal Endoscopy.

4. If teleradiology is used in image interpretation, all staffing and staff qualification shall remain in effect and be documented by the hospital.
5. Laboratory services capability that is available twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, such that services may be performed within forty-five (45) minutes following the patient's arrival at the hospital's emergency department or within forty-five (45) minutes following a diagnosis of a patient's potential acute stroke.

D. Required Hospital Policies:

1. Process in place for the treatment of simultaneously arriving potential stroke patients.
2. Written policies to assure reliable notification of prehospital personnel of CT inoperability consistent with SJCEMSA destination policy.
3. Contingency plans in the event of disruption to CT services.
4. If the PSC has no neurosurgical / neurointerventional radiology capability, the PSC must have policies in place that ensure emergency transport of the patient to a facility capable of providing neurosurgical / neurointerventional radiologist services within two (2) hours of decision to transfer to a higher level of care.
5. If the PSC has no neurosurgical / neurointerventional radiology capability, the PSC must have a written transfer agreement with one or more hospitals with an accreditation as a Comprehensive Stroke Center from The Joint Commission.
6. Standardized stroke care pathway.

E. Quality Improvement Program:

1. Written internal quality improvement plan/program that minimally reviews and collects 100 percent of outcome data for stroke patients receiving tissue plasminogen activator (tPA) or tenecteplase (TNK) that includes:
   a. Sentinel event, system organization issue review and resolution processes.
   b. In-hospital mortality for patients receiving tPA or TNK.
   c. Patient deaths related to administration of tPA or TNK.

d. Patient complications related to administration of tPA or TNK.

2. Participation in prehospital stroke related educational activities.
3. Participation in community stroke prevention activities and educational outreach.
4. The PSC shall participate in SJCEMSA's quality improvement processes related to the Stroke System of Care.
5. Establish a stroke quality improvement committee that reviews stroke processes, outcomes, individual cases, and quality assurance supporting patient safety on an ongoing basis with at least quarterly meetings. An SJCEMSA representative shall be assigned to attend all aspects of such meetings.

II. PSC Program Evaluation:

A. The SJCEMSA shall evaluate ongoing PSC program(s) based upon the following minimum standards:

1. Clinical Process Performance Standards.
   a. Door-to-CT time of less than 25 minutes.
   b. Door-to-Needle time of ninety (90) minutes of arrival at hospital emergency department.
   c. Outcome measures and process will be assessed initially in the survey process and monitored on an ongoing basis.
2. Data Collection, Submission, and Reporting:
   a. Submission of data to SJCEMSA as specified in EMS Policy No. 6382, in a manner and form approved by SJCEMSA, by no later than sixty (60) days from the end of each month.
   b. Enrollment and participation in the California Stroke Registry / California Coverdell Program (CSR/CCP).
3. Have and agree to utilize and maintain a dedicated telephone line in the emergency department for communications with prehospital emergency medical care personnel.
4. Have and agree to utilize EMResource™ on a dedicated computer in the emergency department for reporting facility status and participating in receiving patients from multi-casualty incidents (MCIs).
5. The hospital's ability to consistently avoid ambulance patient offload delays and transfer of care in the emergency department for all ambulance patients in accordance with SJCEMSA requirements.
6. The hospital's compliance with the terms of the PSC agreement

and SJCEMSA policies, procedures and protocols.

III. Designation Process:

A. Designation as a PSC is open to all acute care hospitals in San Joaquin County that can meet criteria for designation when a system need has been determined by SJCEMSA. Interested acute care hospitals may apply for PSC designation by submitting a complete PSC application packet to the EMS Agency. PSC application packets will be made available upon request to the SJCEMSA.

B. The SJCEMSA shall review the PSC application and arrange a site survey to evaluate the applicant's PSC program.

C. The SJCEMSA shall notify applicants of compliance with SRC designation criteria no later 60 days following the site survey. SJCEMSA will offer applicants meeting criteria an opportunity to enter into a written agreement designating their acute care hospital as a PSC for a period up to 3 years. SJCEMSA will provide applicants not meeting criteria with a written summary of deficiencies.

D. Designation is contingent upon payment of the annual PSC designation and monitoring fee established by San Joaquin County. Failure to pay the designation and monitoring fee shall result in the automatic suspension of PSC designation.

E. SJCEMSA may deny, suspend, or revoke the designation of a PSC for failure to maintain compliance with designation criteria or the failure of the acute care hospital to comply with any of the SJCEMSA policies, procedures, or protocols.