STROKE SYSTEM TRIAGE AND PATIENT DESTINATION

**Purpose:** To describe the San Mateo County stroke system and triage policy and provide an overview of data collection and system quality improvement for the San Mateo County stroke system.

This system is designed to provide timely, appropriate care to patients who have symptoms of acute stroke.

Acute stroke patients will be transported to a Primary Stroke Center (PSC), Thrombectomy Capable Stroke Center (TSC), or a Comprehensive Stroke Center (CSC) in accordance with San Mateo County EMS policy.

**Authority:** Health and Safety Code, Division 2.5, Section 1797.220 and 1798.

**Definitions:**

1. Acute stroke patient is defined as a patient who meets assessment criteria for an acute stroke in accordance with San Mateo County’s patient care protocols, and last known well time (LKWT) is within 24 hours.
2. Primary Stroke Center (PSC) is a hospital that has successfully completed and maintains The Joint Commission accreditation as a PSC and enters into a memorandum of understanding (MOU) with San Mateo County relative to be a PSC. These centers have the ability to treat stroke patients less than 3.5 hours.
3. A Comprehensive Stroke Center (CSC) is a hospital that has successfully completed and maintains The Joint Commission accreditation as a CSC and enters into an MOU with San Mateo County relative to be a stroke center. These centers have the ability to treat both ischemic and hemorrhagic stroke beyond the 3.5-hour window.
4. A Thrombectomy Capable Stroke Center (TSC) is a primary stroke center with the ability to perform mechanical thrombectomy for an ischemic stroke patient and meets the designation requirements by The Joint Commission and enters into an MOU with San Mateo County relative to be a TSC. These centers have the ability to treat ischemic strokes beyond 3.5 hours.
5. Mobile Stroke Unit (MSU) is an organized group of healthcare providers with highly specialized equipment, who are available to respond and provide a higher level on-scene stroke care. A MSU is approved by the EMS Agency to be deployed in the prehospital setting to provide rapid assessment of a suspected stroke patient utilizing a mobile computed tomography (CT) scanner able to transmit images to a remote hospital site. If indicated, the MSU may also administer intravenous tissue plasminogen activase (Alteplase), hemostatic agents, blood pressure medications and other treatments.

**APPROVED:**

Nancy A. Lapolla, MPH, EMS Director
Gregory H. Gilbert, MD, EMS Medical Director
Stroke Centers Serving San Mateo County

Primary Stroke Centers (PSC):
1. Kaiser Redwood City
2. Kaiser South San Francisco
3. Mills-Peninsula
4. Sequoia Hospital
5. Seton Hospital (Daly City)
6. Stanford Health Care

Thrombectomy-Capable Stroke Center (TSC):
1. Kaiser Redwood City
2. Mills-Peninsula
3. Stanford Health Care

Comprehensive Stroke Centers (CSC):
4. Kaiser Redwood City
5. Stanford Health Care

Procedure:

A. Criteria for the assessment, identification and treatment of an acute stroke patient are based on San Mateo County paramedic protocols.
1. Patients identified by the paramedic/MSU as having a LKWT or at patient’s normal baseline within the last 3.5 hours or beyond 9 hours will be transported to a PSC.
2. Patients identified by the paramedic as having a LKWT or at patient’s normal baseline time between the past 3.5 hours and 9 hours will be transported to a CSC or TSC. Where patients usually get their care can be considered in destination.
3. If there is any question as to the status of the patient with acute symptoms of a stroke transport to the nearest PSC.
4. If the LKWT is unknown or exceeds 24 hours, the patient should be transported to the closest or requested stroke center, either primary, thrombectomy capable, or comprehensive.
5. Obtain best family contact and cell phone number to be provided to the stroke center.

B. Notification of the Stroke Center
1. The EMS crew shall notify the Stroke Center as soon as possible during the call.
2. EMS verbal report: As soon as feasible, the crew from the scene will contact the intended stroke center and inform them an acute stroke patient is enroute to that facility. It is recommended that the report be started with the statement “This is a Stroke Alert”.
3. The report shall include EMS Stroke/ALOC ringdowns per Routine Medical Care Protocol.

C. Diversion by a Stroke Center
1. Stroke centers will not close to acute stroke patients except for the following:
   a. Failure of all CT scanners in the Stroke Center
   b. Declared internal disaster
2. If a Stroke Center must close to stroke patients, the nurse leader or equivalent will call San Mateo County Public Safety Communications (SMC-PSC) at (650) 363-4981 and request a system wide notification.

D. Documentation

1. A completed patient care record (ePCR) shall be left at the Stroke Center for all stroke patients before the paramedic leaves the receiving hospital.

E. Transferring an acute stroke patient to a higher level of care. See also the Inter-facility (Facilities 4) policy.

1. Patients found to have a large vessel occlusion (LVO) should be expeditiously transferred to a CSC or TSC if the patient meets inclusion criteria for clot retrieval.

2. In the event that an acute stroke patient needs to be transferred to a higher level of stroke care, the emergency department should:
   b. Notify the receiving CSC or TSC of the intent to transfer the patient, using the term “SIR” (Stroke Interventional Radiology) and provide as complete a report as possible.
   c. Use the microwave line and request an interfacility transport. If unable to use the microwave line, San Mateo County PSC can be contacted at (650) 363-4981. Request a paramedic ambulance to transport the patient to the receiving CSC or TSC. The ambulance will arrive shortly.

3. If initiated patient care exceeds the paramedic scope of practice, qualified medical or nursing staff should accompany the patient in the 911 ambulance or a Critical Care Transport (CCT) unit is required.
   a. It is recommended that the medical staff or RN perform a neurological exam every 15 minutes enroute and follow their routine hospital procedures for care of the patient.

4. Provide the ambulance crew with as complete a record as possible (verbal essential, written if possible). Do not delay transport of the patient. A complete written patient report can be faxed to the receiving stroke center prior to patient arrival at CSC or TSC.

5. In the event that a non-stroke center emergency department receives an acute stroke patient by 911 ambulance, the hospital should notify the EMS agency.

F. Stroke System Quality Improvement (See Stroke System Mission and Purpose Statement)

1. Each designated stroke hospital, EMS system participant, and the EMS agency will have representatives on the Stroke Quality Improvement Committee.

G. Data Collection

1. Hospitals should input data into Get with the Guidelines or equivalent.
2. EMS agency staff will review hospital and EMS data and provide reports to be presented to the Stroke Quality Improvement Committee.