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EMERGENCY MEDICAL SERVICES POLICIES and PROCEDURES

STROKE SYSTEM TRIAGE AND DESTINATION

I. Purpose: To outline the process of pre-hospital triage and transport of suspected acute stroke patients to facilities designated as an Acute Stroke Center (ASC).

II. Authority: California Health and Safety Code, Sections 1797.220 & 1798. California Code of Regulations, Title 22, Sections 100147, 100148, 100270.220 and 100270.222.

III. Definitions:

A. *Acute Stroke Center (ASC):* Hospitals are designated as an Acute Stroke Center (ASC), as defined in Policy 650 – Stroke Care System General Guidelines.
B. *Stroke Alert:* An early notification by EMS Personnel to the ASC that a patient is suffering a possible acute stroke.
C. *Large Vessel Occlusion (LVO):* The obstruction of a large cerebral artery that typically produces severe stroke symptoms.
D. *Large Vessel Occlusion (LVO) Alert:* An early notification by EMS Personnel to the ASC that a patient is possibly suffering from a severe form of a stroke.
E. *Stroke System Criteria:* A patient that meets "Stroke Alert" or "LVO Alert" criteria per SBCEMSA Policy 533-21 – Stroke.
F. *Subacute Stroke:* A patient with new stroke symptoms, but with a TLKW > 24 hours.
G. *Time Last Known Well (TLKW):* The date/time at which the patient was last known to be without signs and symptoms of the current suspected stroke.

IV. Policy:

A. *STROKE SYSTEM TRIAGE:*
1. A patient meeting criteria in each of the following sections (a, b, and c) shall be triaged into the Santa Barbara County Stroke System and transported to the appropriate facility per the procedure outlined below.
   a. Blood glucose level (BGL) is greater than sixty (60) OR patient continues to exhibit signs and symptoms of an acute stroke after prehospital treatment of abnormal blood glucose levels.
   b. Identification of *any* abnormal finding of the Cincinnati Stroke Scale (CSS):
      i. Facial Droop
         1) *Normal*: Both sides of face move equally
         2) *Abnormal*: One side of face does not move normally
      ii. Arm Drift
         1) *Normal*: Both arms move equally or not at all
         2) *Abnormal*: One arm drifts down compared to the other
      iii. Speech
         1) *Normal*: Patient uses correct words with no slurring
         2) *Abnormal*: Slurred or inappropriate words or mute
   c. Identification of *any* abnormal finding of the Vision, Aphasia, Neglect (VAN) Screen:
      i. Visual Disturbance
         1) *Normal*: Ability to see in all directions (up, down, left, right)

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2) *Abnormal*: There is vision loss (partial or complete)

ii. Aphasia

1) *Normal*: Ability to communicate clearly & understand simple commands

2) *Abnormal*: Inability to communicate clearly, is mute, or cannot understand commands

Note: Aphasia is NOT slurred speech

iii. Neglect

1) *Normal*: Ability to track surroundings & all peripheral sensation is intact

2) *Abnormal*: Looks to one side or ignores stimulus to one side of the body

2. First Responders will adhere to Policy 508 – Do Not Resuscitate/POLST Form Orders to establish information regarding Advanced Directives.

V. Procedure:

A. *Assessment:*

1. In patients with suspected stroke:
   a. Perform Cincinnati Stroke Scale (CSS);
   b. If patient has arm drift on CSS, immediately perform VAN assessment

B. *Stroke Alert*

1. If Cincinnati Scale is positive, but VAN is negative, and TLKW is < 24 hours, then patient is a Stroke Alert.

C. *LVO Alert*

1. If the patient has a positive VAN assessment (arm drift on CSS and a positive VAN screen), and TLKW is < 24 hours, then patient is a LVO Alert

D. *Cincinnati Positive and TLKW >24*

1. Subacute stroke, not an Alert, but shall be transported to the closest ASC.

E. *Transportation Considerations*

1. All Stroke Alerts and LVO Alerts in the north zone will be transported to the closest ASC
2. All Stroke Alerts in the south zone will be transported to the closest ASC, unless patient takes an anticoagulant and TLKW is < 4.5 hours (see below & flow chart on Attachment A).
3. Anticoagulant Use
   a. North Zone: All Stroke and LVO Alerts will be transported to the closest ASC regardless of anticoagulant use.
   b. South Zone:
      i. TLKW < 4.5 Hours:
         1) Transport to SBCH if patient takes an anticoagulant
      ii. TLKW 4.5 - 24 Hours:
         1) Transport Stroke Alert to closest ASC, LVO Alert to SBCH
      iii. TLKW > 24 Hours:
         1) Subacute Stroke (Not an Alert); transport to closest ASC

F. *Identification of a Stroke or LVO Alert:*

1. Upon identification of a patient meeting Stroke System Criteria, Base Hospital Contact will be established with the appropriate ASC and the appropriate alert will be activated.
   a. Patients may be taken directly to the CT scanner or the IR suite.
      i. Paramedic will give report to the nurse, transfer patient directly from gurney to the CT scanner platform or IR table and return to service.
      ii. If there is any delay, such as CT scanner not being readily available, the paramedic will not be expected to wait. The patient will be taken to a monitored bed and report given to a receiving nurse or physician as is customary.

G. *Destination Decision:*

1. Patients meeting Stroke System Criteria shall be transported to the appropriate ASC as outlined in Section E of this policy, and in Stroke Triage algorithm referenced below.

H. *Destination Exceptions:*
1. Patients meeting Stroke System Criteria shall be transported to the appropriate ASC, as outlined above, except in the following cases:
   a. Stroke patients that become a cardiac arrest with ROSC shall be treated and transported to the nearest STEMI Receiving Center per SBCEMSA policy;
   b. The nearest ASC is incapable of accepting a Stroke Alert patient due to CT or Internal Disaster diversion, transport to the next closest ASC.
   c. The patient requests transport to an alternate ASC, not extending the transport by more than twenty (20) minutes.
      i. The receiving ASC hospital will be notified of location AND patient request. Update original ASC to change in destination, *only* if prior contact was made.

I. *Documentation:*
1. Care and findings related to an acute stroke patient shall be documented in the electronic patient care reporting (ePCR) system in accordance with SBCEMSA policy, including the 3 specific Stroke Criteria met, and Destination Decision for Stroke Triage.
2. Name and contact phone number of the person confirming TLKW (Time Last Known Well) will be noted in the ePCR and will be communicated in report to hospital personnel at transfer of care (if not available, will be documented as “Not Available”).

VI. References:

A. Policy 508 Do Not Resuscitate - DNR
B. Policy 533 (applicable section(s)) BLS, EMT-OS, and ALS Treatment Protocols
C. Policy 540 Physician Orders for Life Sustaining Treatment (POLST) Form
D. Policy 622 Hospital Service Area
E. Policy 640 Cardiac and STEMI Care System General Guidelines
F. Policy 641 Stemi Center Standards
G. Policy 650 Stroke Care System General Guidelines
H. Policy 700 Electronic Patient Care Report Documentation - EPCR

VII. Attachments:

A. Attachment A – Stroke Triage Algorithm

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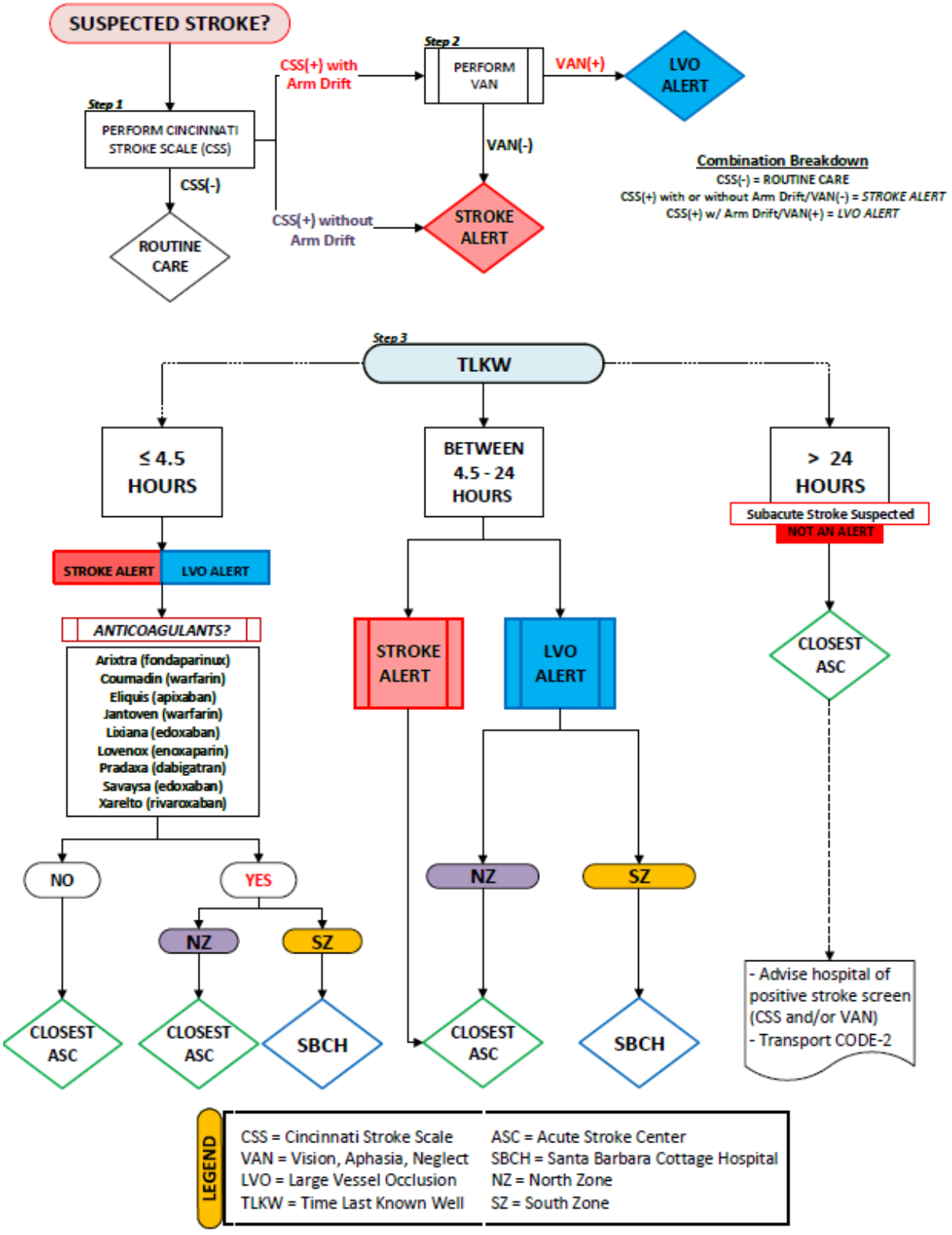
SANTA BARBARA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

STROKE SYSTEM TRIAGE AND DESTINATION

Attachment A



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