I. PURPOSE
To rapidly identify and transport, suspected acute stroke patients, to the appropriate Primary Stroke Center (PSC) for rapid evaluation and treatment.

II. DEFINITIONS

**Stroke:** A rapidly developing loss of brain function due to disturbance in the blood supply to the brain. Strokes may be ischemic (due to an occlusion in the blood flow to the brain) or hemorrhagic (due to a blood vessel rupture causing bleeding into or around the brain).

**Suspected Acute Stroke Patient:** A patient who meets the stroke alert criteria for acute stroke in accordance with Contra Costa County’s EMS prehospital care guidelines.

**Cincinnati Stroke Scale (CSS):** A validated prehospital screening tool used to identify the presence of a stroke in a patient. The scale tests for facial droop, arm drift and speech. If any one of the three tests shows abnormal findings, the patient is considered to have an abnormal CSS.

**Primary Stroke Center (PSC):** Hospitals that meet Contra Costa EMS Primary Stroke Center designation criteria in accordance with EMS policy and have entered into a PSC written agreement.

**Stroke Alert Criteria:** A suspected stroke patient who demonstrates: 1) an abnormal Cincinnati Stroke Scale; 2) symptoms of less than four hours from time last seen normal.

**Stroke Alert:** A prehospital early “notification” of the closest PSC that a suspected acute stroke patient will be arriving. The Stroke Alert acts to activate the PSC response team to ready equipment and personnel to respond to the patient’s need for rapid evaluation and intervention prior to patient arrival. The prehospital stroke alert includes verbal verification that the PSC CT is operational.

**CT Diversion:** CT diversion is defined as an “inoperable” CT and is to be reliably communicated by all hospitals via ReddiNet, in accordance with EMS policy on hospital diversion.

III. STROKE SYSTEM TRIAGE
Appropriate triage of the suspected acute stroke patient using stroke alert criteria relies on rapid prehospital care:
- Recognition of signs and symptoms or stroke using CSS.
- Determination of last time seen without stroke symptoms of less than four hours.
- Optimal scene times of 10 minutes or less followed by direct and rapid PSC transport.
- Early and reliable communication of Stroke Alert.
- Compliance with the Contra Costa Prehospital Treatment Guidelines for Stroke.

IV. DESTINATION
Suspected acute stroke patients shall be transported to the appropriate PSC within the following parameters:
- Patients shall be transported to the closest PSC unless they request another facility.
- A PSC that is not the closest PSC facility is acceptable but only if the estimated additional transport time does not exceed 15 minutes.
- If the closest PSC facility is on CT diversion then the patient shall be taken to the next closest PSC.

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1 ReddiNet: Rapid Emergency Digital Data Information Network.
- Acute stroke patients in cardiac arrest or with an unmanageable airway shall be transported to the closest basic emergency department.
- Patients may request an out-of-county PSC if all above conditions are met and EMS personnel have verified the out-of-county PSC CT operability prior to leaving the scene.

V. STROKE ALERT/PATIENT REPORT
As soon as a suspected stroke patient is identified, the appropriate destination shall be determined and a Stroke Alert promptly communicated to the PSC. The Stroke Alert is to contain the following brief essential information using the SBAR (Situation, Background, Assessment, Rx/Recap) report standard:

**Situation:** Identify the call as a Stroke Alert and verify CT operability, estimated time of arrival in minutes, patient age, gender and urgent concerns.

**Background:** State time patient last seen without stroke symptoms, CSS, pertinent history.

**Assessment:** Blood glucose and pertinent vital signs (VS) and physical exam findings.

**RX/Recap:** Prehospital treatment given and patient response.

VI. EMERGENCY DEPARTMENT REPORT
Patient handoff report should repeat stroke alert SBAR report and include the following additional information:

- Patient identification
- Presenting complaint
- Additional background information
- Past medical history
- Advanced directives if known
- Allergy and medication history including high-risk medications (e.g. anticoagulants, insulin)
- Previous history of stroke or thrombolytic therapy
- Neurologist, if known

VII. LIST OF DESIGNATED PRIMARY STROKE CENTERS
This policy will list a chart of the in-county and out-of-county stroke centers when finalized in January 2012.