STROKE CRITICAL CARE SYSTEM DESIGNATION

I. PURPOSE

To establish standards for the designation of an acute care hospital as a Stroke Receiving Center.

II. POLICY

Hospital requirements for Inland Counties Emergency Medical Agency (ICEMA) Stroke Receiving Center designation:

- Must be a full service general acute care hospital approved by ICEMA as a 9-1-1 receiving hospital.
- Must have certification as an Acute Ready, Primary, Thrombectomy Capable, or Comprehensive Stroke Center by The Joint Commission (TJC), Healthcare Facilities Accreditation Program (HFAP), or Det Norske Veritas (DNV) and proof of re-certification every two (2) years.
- Must be in compliance with all requirements listed in the California Code of Regulations, Title 22, Division 9, Chapter 7.2, Stroke Critical Care System for the requested level of designation.

III. STAFFING REQUIREMENTS

The hospital will have the following positions filled for all levels of designation prior to becoming a Stroke Receiving Center.

- Medical Directors

  The hospital shall designate two (2) physicians with hospital privileges as co-directors who are responsible for the medical oversight and ongoing performance of the Stroke Receiving Center program. One (1) physician shall be board certified or board eligible by the American Board of Medical Specialties or American Osteopathic Association, neurology or neurosurgery board. The co-director shall be a board certified or board eligible emergency medicine physician.

- Stroke Program Manager

  The hospital shall designate a qualified Stroke Program Manager. This individual is responsible for monitoring and evaluating the care of Stroke patients, the coordination of performance improvement and patient safety programs for the Stroke critical care system in conjunction with the Stroke medical director. The Stroke Program Manager must be trained or certified in critical care nursing or have at least two (2) years dedicated to Stroke patient management experience.

- On-Call Physicians Specialists/Consultants

  On-call physicians, consultants, and staff must be promptly available within 30 minutes from notification. A daily roster must include the following: on-call physician, consultants, and staff:

  - Radiologist experienced in neuroradiologic interpretations.

- On-call Neurologist and /or tele-neurology services available twenty-four (24) hours per day; seven (7) days per week.

- Registrar

  To ensure accurate and timely data submission, hospitals must have a dedicated registrar to submit required data elements.

  - Depending on the volume, this position may be shared between specialty cares.

  - Failure to submit data as outlined above may result in probation, suspension, fines or rescission of Stroke Receiving Center Designation.

IV. INTERNAL STROKE RECEIVING CENTER POLICIES

All levels of designation must have internal policies for the following:

- Stroke Team alert response policy upon EMS notification of a “Stroke Alert”.
- Rapid assessment of stroke patient by Emergency and Neurology Teams.
- Prioritization of ancillary services including laboratory and pharmacy with notification of “Stroke Alert”.
- Arrangement for priority bed availability in Acute Stroke Unit or Intensive Care Unit (ICU) for “Stroke Alert” patients.
- A process for the treatment and triage of simultaneously arriving stroke patients.
- If neurosurgical services are not available in-house, the Stroke Receiving Center must have a rapid transfer agreement in place with a hospital that provides this service. Stroke Receiving Centers must promptly accept rapid transfer requests. Additionally, the Stroke Receiving Center must have a rapid transport agreement in place with an ICEMA approved EMS transport provider for that Exclusive Operation Area (EOA).
- Acknowledgement that stroke patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).
- Emergent thrombolytic and tele-neurology protocol to be used by Neurology, Emergency, Pharmacy and Critical Care Teams.
- An alert/communication system for notification of incoming stroke patients, available 24 hours per day, seven (7) days per week (i.e., in-house paging system).

V. DATA COLLECTION

Designated Stroke Receiving Centers shall report all required data as determined by ICEMA and the Stroke Committee.

VI. CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRAM

Stroke Receiving Centers shall develop an on-going CQI program which monitors all aspects of treatment and management of stroke patients and identify areas needing improvement. The program must, at a minimum, monitor the following:

- Morbidity and mortality related to procedural complications.
- Review of all transfers.
- Tracking door-to-intervention times and adherence to minimum performance standards.
- Active participation in ICEMA Stroke CQI Committee and Stroke regional peer review process. This will include a review of selected medical records as determined by CQI indicators and presentation of details to peer review committee for adjudication.
- Provide Continuing Education (CE) opportunities twice per year for referral hospitals and EMS field personnel in areas of pathophysiology, assessment, triage and management for stroke patients and report annually to ICEMA.
- Lead public stroke education and illness prevention efforts and report annually to ICEMA.

VII. PERFORMANCE STANDARDS

Designated Stroke Receiving Centers must comply with the California Code of Regulations, Title 22, Division 9, Chapter 7.2, Stroke Critical Care System, ICEMA policies, and the Performance Measures set forth by the accrediting agencies identified in Section II, that exist and may change in the future.

VIII. AMBULANCE PATIENT OFFLOAD DELAY

- All designated facilities shall maintain compliance with ICEMA APOD Policy 8100.

IX. DESIGNATION LEVELS

- The Stroke Receiving Center applicant shall submit a Letter of Intent to ICEMA, outlining the purpose of the application, proposed timeline, and intended goals.
- **Acute Stroke Ready Hospital**: A hospital able to provide the minimum level of critical care services for stroke patients in the emergency department and are paired with one or more hospitals with a higher level of stroke services.
- **Primary Stroke Center:** A hospital that treats acute stroke patients and identifies patients who may benefit from transfer to a higher level of care when clinically warranted.
- **Thrombectomy-Capable Stroke Center:** A primary stroke center with the ability to perform mechanical thrombectomy for the ischemic stroke patient when clinically warranted.
- **Comprehensive Stroke Center:** A hospital with specific abilities to receive, diagnose, and treat all stroke cases and provide the highest level of care for stroke patients.

Acute Stroke Ready Hospitals

To be considered for Acute Stroke Ready hospital designation, multiple variables will be taken into consideration and will be determined by the ICEMA Medical Director:

- What are the current needs of the community?
- How will this impact the overall care in the system?
- What is the location of the hospital, is there a prolonged distance to a primary thrombectomy or comprehensive stroke center?

The hospital must meet the following minimum criteria:

- Written transfer agreements.
- Written policies and procedures for emergent stroke services to include written protocols and standardized orders.
- A data-driven, continuous quality improvement process.
- Neuro imaging services (CT or MRI) with interpretation of imaging available 24 hours a day, seven (7) days a week, and 365 days a year.
- Laboratory services to include blood testing, electrocardiography, and x-ray services 24 hours a day, seven (7) days a week and 365 days a year.
- Provide IV thrombolytic treatment.
- A clinical Stroke Team available to see patient (in person or by tele-health) within 20 minutes of arrival to ED.

Primary Stroke Centers

- Stroke diagnosis and treatment capacity 24 hours a day, seven (7) days a week.
- A clinical Stroke Team available to see in person or via telehealth, a patient identified as a potential stroke patient within 15 minutes following patient's arrival.
- Neuro imaging services capability that is available 24 hours a day, seven (7) days a week.
- Two (2) CT scanners and one (1) MRI scanner.
- Neuro imaging initiated within 25 minutes following arrival to ED.
- Laboratory services that are available 24 hours a day, seven (7) days a week.

Thrombectomy Capable Centers (in addition to Primary Stroke Center Requirements)

- The ability to perform mechanical thrombectomy for the treatment of ischemic stroke 24 hours a day, seven (7) days a week.
- Neuro interventionalist.

- Neuro radiologist.
- The ability to perform advanced imaging 24 hours a day, seven (7) days a week.

Comprehensive Centers (in addition to Primary and Thrombectomy Center Requirements)

- Neuro-endovascular diagnostic and therapeutic procedures available 24 hours a day, seven (7) days a week.
- Advanced imaging available 24 hours a day, seven (7) days a week.
- A stroke patient research program.
- A neurosurgical team capable of assessing and treating complex stroke and stroke-like syndromes.
- A written call schedule for attending neurointerventionalist, neurologist, or neurosurgeon providing availability 24 hours a day, seven (7) days a week.

X. DESIGNATION

ICEMA designation as an Acute Stroke Ready Hospital, Primary, Thrombectomy Capable, or Comprehensive Stroke Center will be determined based on need and volume in the community. Designation will not be determined by current accreditation only; however, Stroke Receiving Centers must be accredited at least at an equivalent designation level being requested.

- The Stroke Receiving Center applicant shall be designated by ICEMA after satisfactory review of written documentation, a potential site survey and completion of an agreement between the hospital and ICEMA.
- Documentation of current certification as an Acute Ready Hospital, Primary Stroke Center Thrombectomy Capable Stroke Center or Comprehensive Stroke Center by TJC, HFAP or DNV.
- Initial designation as a Primary, Thrombectomy, Capable or Comprehensive Stoke Center shall be in accordance with terms outlined in the agreement.
- Failure to comply with the approved agreement, or ICEMA policy may result in probation, suspension, fines or rescission of the Stroke Receiving Center designation.

XI. REFERENCE

Number	Name
8050	Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only)
8100	Ambulance Patient Offload Delay (APOD)