LOUISIANA
EMERGENCY
RESPONSE
NETWORK

Date

Dear (Enter Name),

Thank you for your continued participation in the establishment and on-going development of the State systems of care for stroke and ST segment elevation myocardial infarction (STEMI). Due to your participation, the Louisiana Emergency Response Network (LERN) is fulfilling our legislative mandate which requires the LERN Board to work with the department of Health and Hospitals to develop and implement stroke and STEMI systems that are designed to promote rapid identification of, and access to, appropriate stroke and STEMI resources statewide.

In 2013, the LERN Board established requirements for Stroke Center Recognition and STEMI Receiving/Referral Center Recognition. We provided these requirements to every LERN participating hospital at which time the hospital CEO signed an affidavit regarding their ability to meet these criteria. The LERN Board exercised the provisions of R.S. 49:950 et seq., the Administrative Procedure Act, to promulgate LAC 48:I.Chapters 187 and 189 in order to codify the stroke and STEMI system requirements which include the necessity to, "submit proof of continued compliance every two years by submission of an affidavit by its CEO".

In order to comply with LAC 48:I.Chapters 187 and 189, each hospital CEO must sign a new affidavit. The information regarding the requirements for each level facility is enclosed. Please complete the paperwork and return to:

Louisiana Emergency Response Network
14141 Airline Highway, Building 1, Suite B
Baton Rouge, LA 70817

We included a copy of your current attestation to help facilitate completion of the new document. Currently there are 110 hospitals and eight off-site emergency departments participating across the State. Visit the LERN website at www.lern.la.gov for hospital attestations in each LDH region.

Best Regards,

Paige Hargrove
Executive Director

Sheryl Martin-Schild, MD, PhD, FANA, FAHA
Stroke Medical Director

Christopher J. White, MD, MACC, MSCAI, FAHA, FESC, ACP
STEMI Medical Director

<Enter Name of Hospital>

Please Check the LERN Hospital Level that correlates to your facility.

LERN Stroke Hospital Levels

_____ Comprehensive Stroke Center (CSC)

_____ Thrombectomy Capable Stroke Center (TSC)

_____ Certified Primary Stroke with Endovascular (PSC-E)*

_____ Primary Stroke Center (PSC)

_____ Acute Stroke Ready Hospital

_____ Stroke Bypass Hospital

***All Primary Stroke Centers with endovascular capability must collect the same data the Joint Commission requires the TSC centers to collect. PSC-E centers must submit this data to LERN on a quarterly basis.**

LERN STEMI Centers

_____ LERN STEMI Receiving Center

_____ LERN STEMI Referral Center

Attestation: The undersigned hereby attests that the facility meets all of the standards identified in the associated level checked by the CEO/COO and ensures 24-hour availability 365 days a year of the resources indicated in the level. The only exception for 24/7/365 requirement is endovascular coverage at a PSC-E. The undersigned also attests that the hospital can provide verification of the accuracy of the responses.

_____ _____

Print Name of Hospital CEO or COO **Date**

_____

Hospital CEO or COO Signature

OFF-SITE EMERGENCY DEPARTMENTS

Off Site Emergency Departments exist in many areas across the state. Off-site emergency departments are not considered hospitals, but are departments of a licensed hospital. Only hospitals can attest as a LERN CSC, TSC, PSC-E, PSC or Stroke Bypass Hospital. In order to have your off site emergency department included in the LERN ESF-8 portal and considered by the LCC for the routing of stroke patients when appropriate, please provide the name, location, and stroke capability for each of the off-site emergency departments operated under the main hospitals license.

1. Off Site Emergency Department Name: _____
   Location/Address: _____
   Stroke Champion/ Name/Email: _____
   Stroke Capable (Circle): Yes No
   Tele-stroke (Circle): Yes No
   If yes, who is the tele-stroke provider? _____

2. Off Site Emergency Department Name: _____
   Location/Address: _____
   Stroke Champion/ Name/Email: _____
   Stroke Capable (Circle): Yes No
   Tele-stroke (Circle): Yes No
   If yes, who is the tele-stroke provider? _____

3. Off Site Emergency Department Name: _____
   Location/Address: _____
   Stroke Champion/ Name/Email: _____
   Stroke Capable (Circle): Yes No
   Tele-stroke (Circle): Yes No
   If yes, who is the tele-stroke provider? _____

4. Off Site Emergency Department Name: _____
   Location/Address: _____
   Stroke Champion/ Name/Email: _____
   Stroke Capable (Circle): Yes No
   Tele-stroke(Circle): Yes No
   If yes, who is the tele-stroke provider? _____

<Enter Hospital Name>

Please provide the name of the Stroke and STEMI Champions at your hospital. If you do not have employees with these particular titles, please provide contact information for the most appropriate staff member to notify regarding any new information or changes regarding the stroke or STEMI systems.

Hospital Name: _____

Address: _____

City, State, Zip code: _____

Director of Stroke Program/Stroke Champion
Name: _____

Email Address: _____

Phone Number: _____

Director of STEMI Program/STEMI Champion

Name: _____

Email Address: _____

Phone Number: _____

Comprehensive Stroke Center Requirements

Must obtain Comprehensive Stroke Center Certification by the Joint Commission.

Facilities in this category will provide acute access to stroke care for their geographic area. EMS should not bypass a PSC, PSC-E or an Acute Stroke Ready Hospital where care can be delivered faster to reach such a CSC Hospital. EMS should only bypass a PSC or an Acute Stroke Ready Hospital if 1) the patient is <6 hours from the last seen normal time, 2) a screen for large vessel occlusion is positive, and 3) it would take <15 additional minutes of transportation time to reach a hospital with endovascular therapy (such as a CSC, TSC, or PSC-E). The CSC will provide support all Louisiana hospitals as a referral source for high level neurological critical care, medical, interventional, and surgical capabilities.

Program Concept	**CSC**
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. • Treatment of 20 SAH caused by aneurysm annually (40 over 2 years) • Capable of treating aneurysms by performing 15 endovascular coiling or microsurgical clipping procedures annually (30 over 2 years) • Administering IV thrombolytic therapy 25 times annually (50 times over 2 years) • CSCs will be required to meet a minimum mechanical thrombectomy volume as per TJC requirements.
Program Medical Director	Has extensive expertise; available 24/7
Acute Stroke Team	Available 24/7, at bedside within 15 minutes
Emergency Medical Services Collaboration	Access to protocols used by EMS, routing plans; records from transfer
Stroke Unit	Dedicated neuro intensive care beds for complex stroke patients available 24/7; on-site neurointensivist coverage 24/7
Initial Assessment of Patient	Emergency Department physician
Diagnostic Testing Capability	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE, TTE as indicated
Neurologist Accessibility	Meets concurrently emergent needs of multiple complex stroke patients; Written call schedule for attending physicians providing availability 24/7
Neurosurgical Services	24/7 availability: Neurointerventionist; Neuroradiologist; Neurologist; Neurosurgeon
Telemedicine	Available if necessary
Treatment Capabilities	IV thrombolytics; Endovascular therapy; Microsurgical neurovascular clipping of aneurysms; Neuroendovascular coiling of aneurysms; Stenting of extracranial carotid arteries; Carotid endarterectomy
Transfer protocols	For receiving transfers and circumstances for not accepting transferred patients
Staff Stroke Education Requirements	Nurses and other ED staff - 2 hours annually; Stroke nurses and core stroke team - 8 hours annually
Provision of Educational Opportunities	Sponsors at least 2 public educational opportunities annually; LIPs and staff present 2 or more educational courses annually for internal staff or individuals external to the comprehensive stroke center (e.g., referring hospitals)
Clinical Performance Measures	Standardized Measures: 8 core stroke measures and 10 comprehensive stroke measures for a total of 18
Research	Participates in patient-centered research that is approved by the IRB
Guidelines	Recommendations from Brain Attack Coalition for Comprehensive Stroke Centers, 2005

Thrombectomy Capable Stroke Center (TSC)

Must obtain Thrombectomy Capable Stroke Center Certification by the Joint Commission.

Program Concept	TSC
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care. Organization must have performed mechanical thrombectomy and post-procedure care for at least 15 patients with ischemic stroke over the past 12 months (or 30 over past 24 months). Neurointerventionists who routinely take call to perform mechanical thrombectomy must: -Be CAST certified; ***OR*** -Completed ACGME/equivalent residency in neurosurgery/neurology/radiology; -Completed ACGME/CAST/UCNS/equivalent stroke/neurocritical care/neuroradiology fellowship; -Completed neuroendovascular training (CAST accredited or similarly rigorous program); -Performed 15 mechanical thrombectomies over the past 12 months (or 30 over past 24 months) (procedures performed at hospitals other than the one applying for TSC certification can be included)
Program Medical Director	Neurology background with ability to provide clinical and administrative guidance to program
Acute Stroke Team	Available 24/7, at bedside within 15 minutes
Emergency Medical Services Collaboration	Access to protocols used by EMS, routing plans; records from transfer
Stroke Unit	Dedicated neuro intensive care beds for complex stroke patients available 24/7; on-site critical care coverage 24/7
Initial Assessment of Patient	Emergency Department physician
Diagnostic Testing Capability	CT, MRI, labs, CTA, MRA, catheter angiography 24/7; other cranial and carotid duplex ultrasound, TEE as indicated
Neurologist Accessibility	24/7 via in person or telemedicine; written call schedule for attending physicians providing availability 24/7
Neurosurgical Services	Within 2 hours; OR is available 24/7 in TSCs providing neurosurgical services
Telemedicine	Available if necessary
Treatment Capabilities	IV thrombolytics; Mechanical thrombectomy, IA thrombolytics
Transfer protocols	For neurosurgical emergencies
Staff Stroke Education Requirements	Nurses and other ED staff – 2 hours annually; Stroke nurses and core stroke team – 8 hours annually
Provision of Educational Opportunities	Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public
Clinical Performance Measures	Standardized Measures: 8 PSC stroke measures as well as 5 ischemic hemorrhagic CSTK measures for a total of 13.
Research	N/A
Guidelines	AHA/ASA Focused Update for the Early Management of Patients with Acute Ischemic Stroke Regarding Endovascular Treatment, 2015

Primary Stroke Center with Endovascular (PSC-E)* and PSC Requirements

Must obtain Primary Stroke Center Certification by the Joint Commission, DNV or by the Healthcare Facilities Accreditation Program (HFAP).

*PSC-E must also meet the following additional requirements:

- Personnel: Physician credentialed to perform mechanical thrombectomy
- Collect and submit quarterly to LERN the same data Joint Commission requires the Thrombectomy Stroke Capable centers to collect.

Program Concept	PSC and PSC-E
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.
Program Medical Director	Sufficient knowledge of cerebrovascular disease
Acute Stroke Team	Available 24/7, at bedside within 15 minutes
Emergency Medical Services Collaboration	Access to protocols used by EMS
Stroke Unit	Stroke unit or designated beds for the acute care of stroke patients
Initial Assessment of Patient	Emergency Department physician
Diagnostic Testing Capability	CT, MRI (if used), labs 24/7; CTA and MRA (to guide treatment decisions), at least one modality for cardiac imaging when necessary
Neurologist Accessibility	24/7 via in person or telemedicine
Neurosurgical Services	Within 2 hours; OR is available 24/7 in PSCs providing neurosurgical services
Telemedicine	Available if necessary
Treatment Capabilities	IV thrombolytics and medical management of stroke
Transfer protocols	For neurosurgical emergencies
Staff Stroke Education Requirements	ED staff – a minimum of twice a year; core stroke team at least 8 hours annually
Provision of Educational Opportunities	Provides educational opportunities to prehospital personnel; Provides at least 2 stroke education activities per year to public
Clinical Performance Measures	Standardized Measures: 8 core stroke measures
Research	N/A
Guidelines	Recommendations from Brain Attack Coalition for Primary Stroke Centers, 2011

Acute Stroke Ready Hospital (ASRH) Requirements
(Formerly LERN Level 3 Stroke Hospital)

Certification by an external certifying body is not required, but the LERN Board does recognize certifications from HFAP and the Joint Commission.

Facilities in this category will provide timely access to stroke care but may not be able to meet all the criteria specified in CSC, TSC, and PSC-E guidelines. These centers will provide acute stroke care in urban and rural areas where transportation and access to time-sensitive treatment are limited and is intended to recognize those models of care delivery that have shown utility including "drip-and-ship" and telemedicine. Because the effectiveness of treatment is time-dependent, ASRH centers should not be bypassed to go to a more distant LERN CSC, TSC, PSC-E or PSC Hospital unless 1) the patient is <6 hours from the last seen normal time, 2) a screen for large vessel occlusion is positive, and 3) it would take <15 additional minutes of transportation time to reach a hospital with endovascular therapy.

Program Concept	**Acute Stroke Ready Hospital**
Eligibility	General eligibility requirements; use of a standardized method of delivering care centered on evidence-based guidelines for stroke care.
Emergency Department	Physician staffed 24/7: Perform initial ER physician evaluation within 10 minutes of patient arrival
CT Scan	Ability to perform CT on site within 25 minutes of patient arrival and interpret within 45 minutes of arrival, 24/7
Labs	Ability to draw and report results of appropriate lab work within 45 minutes of patient arrival 24/7
Neurological Expertise	Access to neurological expertise by phone or telemedicine within 15 minutes of arrival.
Proficiency in delivery of tPA	a. Ensure that tPA can be delivered within 60 minutes from arrival. Documentation of ongoing efforts to reduce the median time from arrival to tPA, in recognition of the new target door-to-needle time of 45min (AHA Target Stroke). b. Timely transfer of appropriate patients for unavailable services, such as endovascular and neurosurgical procedures to an appropriate higher level of care.
Personnel	Emergency Physician
Infrastructure	Emergency Room, If the hospital does not have an ICU then patient transfer should be considered after tPA administration.
Written care protocols and order sets for stroke, including guidelines, algorithms for management of tPA-related and other hemorrhagic strokes and angioedema, critical care pathways, NIH Stroke Scale training.	
Written documentation of a plan for secondary transfer to CSC, TSC, PSC-E, PSC , or other appropriate facility, if resources deemed necessary are not available at the primary destination site.	
Quality of stroke care demonstrated by submission of required data elements to LERN on a quarterly basis.	

*Please note that the LERN Acute Stroke Ready criteria are based on the Joint Commission's (TJC) Acute Stroke Ready Hospital requirements but do not include all of TJC criteria. In addition to the above requirements, The Joint Commission has several additional requirements for certification as an Acute Stroke Ready Hospital which can be found at https://www.jointcommission.org/stroke_certification_programs_program_concept_comparison/

Stroke Bypass Hospital Requirements
(Formerly LERN Level 4 Stroke Hospital)

1. These facilities are considered a Non-Stroke Hospital. EMS should not bring patients exhibiting signs or symptoms of stroke to a Stroke Bypass Hospital except for instances where the clinical situation requires stopping at the closest emergency department.

2. Transfer protocol in place for transfer to higher levels of care with a written and agreed upon relationship with a CSC, TSC, PSC-E, PSC or ASRH.

Criteria	Stroke Bypass Hospital	Acute Stroke Ready Hospital	PSC	PSC-E	TSC	CSC
Physician staffed ER 24/7	X	X	X	X	X	X
CT scan available <25 minutes		X	X	X	X	X
CT scan available 24/7		X	X	X	X	X
Lab < 45 minutes		X	X	X	X	X
Proficient tPA delivery		X	X	X	X	X
Neurological expertise		X	X	X	X	X
Vascular neurology						X
Neurosurgery <2 h			X	X	X	
Neurosurgery < 30 min						X
Interventional				X	X	X
Research						X
Training programs						X
Stroke unit			X	X	X	X
ICU		If no ICU – should consider drip and ship	X	X	X	X
NICU						X
Quality control		Submission of required data to LERN	GWTG/JC/ LERN	GWTG/JC/ LERN	GWTG/JC	GWTG/JC
Protocols for stroke care		X		X	X	X

GWTG= Get with the Guidelines, American Heart and Stroke Association; JC= Joint Commission

References:

1. The Joint Commission Web Site
2. Alberts MJ, Latchaw RE, et al. Revised and updated recommendations for the establishment of Primary Stroke Centers. Stroke 2011; 42: 2651-2665.
3. Alberts MJ, Latchaw RE, et al. Recommendations for comprehensive stroke centers. Stroke 2005; 36:1597-1618.
4. Acker JE III, Pancioli AM, et al. Implementation strategies for emergency medical services within stroke systems of care. Stroke 2007; 116: 3097-3115.
5. Schwamm LH, Holloway RG, et al. A review of evidence for use of telemedicine within stroke systems of care. Stroke 2009; 40: 2616-2634.
6. Schwamm LH, Audebert HJ, et al. Recommendations for the implementation of telemedicine within stroke systems of care. Stroke 2009; 40: 2635-2660.
7. Schwamm LH, Panicioli A, et al. Recommendations for the establishment of stroke systems of care. Stroke 2005; 36: 690-703.
8. Alberts MJ, Latchaw RE, et al. Revised and updated recommendations for the establishment of primary stroke centers. Stroke 2011; 42: 2651-2665.
9. Demaerschalk BM. Seamless integrated stroke telemedicine systems of care: A potential solution for acute stroke care delivery delays and inefficiencies. Stroke 2011; 42: 1507-8.

LOUISIANA
EMERGENCY RESPONSE NETWORK

STEMI-RECEIVING CENTER REQUIREMENTS

Each STEMI-Receiving Center in Louisiana should:

1) Have recognized hospital champion(s) for STEMI care.

2) Have 24/7 Cardiac Catheterization Lab (CCL) availability within 30 minutes of notification (including interventional cardiologist present at start of the case).

3) Have single call pre-hospital activation of CCL by paramedic or ED Physician for those patients transported by emergency medical services.

4) Accept all STEMI patients regardless of bed availability (from EMS and STEMI Referral Centers).

5) Have on- call cardiac surgery back up or a pre-designated surgical back up site.

6) Meet hospital procedural volume standards as delineated by the American Heart Association and ensure annual interventional cardiologist volume as delineated by the American Heart Association. May choose an alternate pathway for procedural volumes to include:

   a. Evaluation of low volume operators Risk Adjusted Mortality Index (RAMI) by participating in the NCDR registry or GWTG-CAD registry with local quality over-sight, or

   b. Develop internal quality program to evaluate low volume operators and indicate quality program specifics in attestation.

7) Have on-going multidisciplinary team meetings to evaluate outcomes and quality improvement data for all STEMI patients. Operational issues should be reviewed, problems identified, and solutions implemented.

8) Provide concurrent feedback to EMS and STEMI Referral Centers (including data sharing with EMS or referral Center at the end of case, quarterly meetings to review cases, and data exchange with the EMS/STEMI Referral Center).

9) Participate in the LERN STEMI workgroup to contribute to the development and management of a regional STEMI System of Care plan.

10) Demonstrate commitment to the Emergency Department (ED) and Cardiac Catheterization Lab having adequate staff, equipment, and training to perform rapid evaluation, triage, and treatment for STEMI patients.

11) Demonstrate commitment to developing and/or refining ED and Cardiac Catheterization Lab transfer protocol to be in compliance with the regional STEMI systems of care plan.

12) Develop a plan with local prehospital providers to ensure inter-hospital transfers and fibrinolytic-ineligible patients receive highest priority response and are communicated en-route to bypass STEMI Referral Centers (where appropriate).

13) Participate in state-wide data collection, quality improvement efforts, and feedback to ensure optimal STEMI care is delivered in Louisiana.

STEMI-Referral Center Requirements

If your facility does not meet the requirements of a STEMI-Receiving Center, then by default the facility is classified as a STEMI Referral Center.