California Code of Regulations

TITLE 22. SOCIAL SECURITY

DIVISION 9. PRE-HOSPITAL EMERGENCY MEDICAL SERVICES

CHAPTER 7.2. STROKE CRITICAL CARE SYSTEM

The Emergency Medical Services Authority has illustrated changes to the original text in the following manner:
• Additions to the text proposed in 45-day comment period = double underline
• Deletions to the text proposed in 45-day public comment period = ~~strikeout~~

ARTICLE 1. DEFINITIONS

§ 100270.200. Board-certified

"Board-certified" means a physician who has fulfilled all of the Accreditation Council for Graduate Medical Education (ACGME) requirements in a specialty field of practice, and has been awarded a board diploma by an American Board of Medical Specialties (ABMS) ~~ACGME~~ approved program.

Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

§ 100270.201. Board-eligible

"Board-eligible" means a physician who has applied to a specialty board examination and has completed the requirements and received permission ~~rulling that he or she has fulfilled the requirements~~ to take the examination by ABMS. Board certification must be obtained within the allowed time ~~five (5) years~~ by ABMS from the first appointment.

Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

§ 100270.202. Clinical Stroke Team

"Clinical Stroke Team" means a team of healthcare professionals who provide care for the stroke patient and may include, but is not limited to, neurologists, neurointerventionalists, neurosurgeons, anesthesiologists, emergency medicine physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists.

30 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
31 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

32 **§ 100270.203. Continuing Medical Education**

33 "Continuing Medical Education" or "CME" means educational activities required for the
34 maintenance of a license and refers to the ~~highest level of~~ continuing education
35 approved or recognized by the national and/or state professional organization.

36 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
37 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

38 **§ 100270.204. Emergency Medical Services Authority**

39 "Emergency Medical Services Authority" or "EMS Authority" means the department in
40 California that is responsible for the coordination and the integration of all state activities
41 concerning Emergency Medical Services (EMS).

42 Note: Authority cited: Sections 1797.107 and 1797.54, Health and Safety Code.
43 Reference: Sections 1797.100, and 1797.103, Health and Safety Code.

44 ~~**§ 100270.205. Immediately Available**~~

45 ~~"Immediately Available" means:~~
46 ~~(a) unencumbered by conflicting duties or responsibilities,~~
47 ~~(b) responding without delay upon receiving notification, and~~
48 ~~(c) being physically available to the specified area of the hospital when the patient is~~
49 ~~delivered in accordance with local EMS agency policies and procedures.~~

50 ~~Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety~~
51 ~~Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.~~
52

53 **§ 100270.205. Local Emergency Medical Services Agency**

54 "Local Emergency Medical Services Agency" or "local EMS agency" means a county
55 health department, an agency established and operated by the county, an entity with
56 which the county contracts for the purposes of local emergency medical services

57 administration, or a joint-powers agency created for the administration of emergency
58 medical services by agreement between counties or cities and which is designated
59 pursuant to the California Health and Safety Code, Division 2.5, Chapter 4, Section
60 1797.200.

61 Note: Authority cited: Sections 1797.94, 1797.107, 1797.176, and 1797.200, Health and
62 Safety Code. Reference: Section1797.94, Health and Safety Code.

63 **§ 100270.206. Protocol**

64 "Protocol" means a predetermined, written medical care guideline, which may include
65 standing orders.

66 Note: Authority cited: Sections 1797.107, 1797.176, 1797.220, and 1798.150, Health
67 and Safety Code. Reference: Sections 1797.103 and 1797.176, Health and Safety
68 Code.

69 **§ 100270.207. Stroke**

70 "Stroke" means a condition of impaired blood flow to a patient's brain resulting in brain
71 dysfunction, most commonly through vascular occlusion or hemorrhage.

72 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
73 Code. Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

74 **§ 100270.208. Stroke Call Roster**

75 "Stroke Call Roster" means a schedule of licensed health professionals available
76 twenty-four (24) hours a day, seven (7) days a week for the care of stroke patients.

77 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
78 Code. Reference: Sections 1797.103 and 1797.220, Health and Safety Code.

79 **§ 100270.209. Stroke Care**

80 "Stroke Care" means emergency transport, triage, acute intervention and other acute
81 care services for stroke patients that potentially require immediate medical or surgical
82 intervention treatment, and may include education, primary prevention, acute

83 intervention, acute and subacute management, prevention of complications, secondary
84 stroke prevention, and rehabilitative services.

85 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
86 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
87 Code.

88 **100270.210. Stroke Critical Care System**

89 "Stroke Critical Care System" means a subspecialty care component of the EMS
90 system developed by a local EMS agency. This critical care system links pre-hospital
91 and hospital care to deliver treatment to stroke patients who potentially require
92 immediate medical or surgical intervention.

93 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
94 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
95 Code.

96 **§ 100270.211. Stroke Medical Director**

97 "Stroke Medical Director" means a board-certified physician designated by the hospital
98 who is responsible for the stroke service, performance improvement, and patient safety
99 programs related to the Stroke Critical Care System.

100 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
101 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
102 Code.

103 **§ 100270.212. Stroke Program Manager/Coordinator**

104 "Stroke Program Manager/Coordinator" means a registered nurse or qualified individual
105 designated by the hospital with the responsibility for monitoring and evaluating the care
106 of stroke patients and the coordination of performance improvement and patient safety
107 programs for the stroke center in conjunction with the stroke medical director.

108 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
109 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
110 Code.

111 **§ 100270.213. Stroke Program**

112 "Stroke Program" means an organizational component of the hospital specializing in the
113 care of stroke patients.

114 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
115 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
116 Code.

117 **§ 100270.214. Stroke Team**

118 "Stroke Team" means the clinical stroke team, support personnel, and administrative
119 staff.

120 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
121 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
122 Code.

123 **§ 100270.215. Telehealth ~~Telemedicine~~**

124 ~~"Telemedicine" means the use of medical information exchanged from one site to~~
125 ~~another via electronic communications to manage and improve a patient's health status.~~
126 ~~A neurology specialist will assist the physician in the center in rendering a diagnosis.~~
127 ~~This may involve a patient "seeing" a specialist over a live, remote consult or the~~
128 ~~transmission of diagnostic images and/or video along with patient data to the specialist.~~
129 "Telehealth" means the mode of delivering health care services and public health via
130 information and communication technologies to facilitate the diagnosis, consultation,
131 treatment, education, care management, and self-management of a patient's health
132 care while the patient is at the originating site and the health care provider is at a distant
133 site.

134 Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
135 Code. Reference: Sections 1797.103, 1797.176, and 1797.220, Health and Safety
136 Code. California Business and Professions Code Sec. 2290.5

137 **ARTICLE 2. LOCAL EMS AGENCY STROKE CRITICAL CARE SYSTEM**
138 **REQUIREMENTS**

139 **§ 100270.216. General Requirements and Timeframes**
140 (a) The local EMS agency may develop and implement a Stroke Critical Care System.
141 (b) Each local EMS agency implementing a Stroke Critical Care System shall submit
142 to the EMS Authority a Stroke System Plan in accordance with the requirements in
143 section 100270.222.
144 (c) A new Stroke Critical Care System that starts after the effective date of these
145 regulations shall have the Stroke System Plans approved by the EMS Authority prior to
146 implementation. The EMS Authority shall notify the local EMS agency of approval or
147 disapproval of its Stroke System Plan within 30 days of receipt of the Plan. If the EMS
148 Authority disapproves a plan, it shall provide a written notification including the
149 reason(s) for the disapproval and the corrective action items required.
150 (d) The local EMS agency shall provide a corrected plan to the EMS Authority within
151 60 days of receipt of the disapproval letter.
152 (e) A local EMS agency that is currently operating a Stroke Critical Care System
153 implemented prior to the effective date of these regulations, shall submit, to the EMS
154 Authority, a Stroke System Plan as an addendum to its annual EMS Plan update, or
155 within 180 days of the effective date of these regulations - whichever comes first.
156 (f) After the approval of the plan, the local EMS agency shall submit an update to its
157 Stroke System Plan as part of its annual EMS Plan update, consistent with the
158 requirements in section 100270.217.
159 (g) No health care facility shall advertise in any manner or otherwise hold itself out to
160 beaffiliated with the Stroke Critical Care System or a stroke center unless they have
161 been designated by the local EMS agency, in accordance with this Chapter.

162 Note: Authority cited: Sections 1797.107, 1797.173, 1797.176, 1797.250, and 1798.150,
163 Health and Safety Code. Reference: Sections 1797.105, 1797.176, and 1797.220,
164 Health and Safety Code.

165 **§ 100270.217. ~~State~~ Stroke System Plan Requirements**

166 The Stroke System Plan submitted to the EMS Authority shall include, at a minimum,
167 the following components:
168 (a) the names and titles of the local EMS agency personnel who have a role in the
169 Stroke Critical Care System,
170 (b) ~~copies~~ verification of agreements with hospitals for designation of stroke facilities
171 with the list of stroke hospital contracts with expiration dates,
172 (c) description or copy of the local EMS agency's stroke patient identification and
173 destination policies,
174 (d) description or copy of the method of field communication to the receiving hospital
175 specific to stroke patients, designed to expedite time-sensitive treatment on arrival,
176 (e) description or copy of policy that facilitates the inter-facility transfer of stroke
177 patients,
178 (f) description of the method of data collection from the EMS providers and
179 designated stroke hospitals to the local EMS agency and the EMS Authority,
180 (g) a copy of all written agreements with neighboring local EMS agencies to provide
181 stroke care,
182 (h) description of the integration of stroke into existing Quality Improvement QI
183 Committee or description of any stroke specific QI committee, and
184 (i) description of programs to conduct or promote public education specific to Stroke
185 ~~and Cardiac Care~~.

186 Note: Authority cited: Sections 1797.103, 1797.105, 1797.107, 1797.176, 1797.220,
187 1797.250, 1798.150, 1798.170, and 1798.172, Health and Safety Code. Reference:
188 Sections 1797.176, and1797.220, Health and Safety Code.

189 **§ 100270.218. Stroke System Plan Updates**

190 The local EMS agency shall submit a Stroke System Plan update as part of its annual
191 EMS plan update. The update shall include, at a minimum, the following:
192 (a) any changes in the Stroke Critical Care System since submission of the prior
193 annual plan update or the Stroke System Plan addendum,
194 (b) status of Stroke System Plan goals and objectives,
195 (c) Stroke Critical Care System performance improvement activities, and
196 (d) progress on addressing action items and recommendations provided by the EMS
197 Authority within the Stroke System Plan or status report approval letter if applicable.

198 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.250, 1797.254,
199 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.176,
200 1797.220, 1797.222, and 1798.170, Health and Safety Code.

201 **ARTICLE 3. PRE-HOSPITAL STROKE CRITICAL CARE SYSTEM REQUIREMENTS**

202 **§ 100270.219. EMS Personnel and Early Recognition**
203 (a) The local EMS agency shall ensure that pre-hospital stroke assessment and
204 treatment training is available for pre-hospital emergency medical care personnel as
205 determined by the local EMS agency.~~as part of accreditation~~
206 (b) The local EMS agency shall require the use of a validated pre-hospital stroke-
207 screening algorithm for early recognition and assessment.
208 (c) The local EMS agency's protocols for the use of online medical direction shall be
209 utilized for suspicious or complex findings.
210 (d) The pre-hospital treatment policies for stroke-specific basic life support (BLS),
211 advanced life support (ALS), and limited advanced life support (LALS) shall be
212 developed according to scope of practice and local accreditation.
213 (e) Pre-hospital findings of suspected stroke patients, as defined by the local EMS
214 agency, will be communicated to the Stroke Center of Care facility in advance of arrival,
215 according to the local EMS agency's Stroke System Plan.

216 Note: Authority cited: Sections 1797.92, 1797.103, 1797.107, 1797.176, 1797.189(a)
217 (2), 1797.206, 1797.214, and 1798.150, Health and Safety Code. Reference: Sections
218 1797.176, 1797.220, 1798.150, and 1798.170, Health and Safety Code.

219 **ARTICLE 4. HOSPITAL STROKE CARE REQUIREMENTS**

220 Any stroke center designated by the local EMS agency prior to implementation of these
221 regulations may continue to operate. Upon re-designation by the local EMS agency at
222 the next regular interval, stroke centers shall be re-evaluated to meet the criteria
223 established in these regulations.

224 **§ 100270.220. Comprehensive Stroke Centers**

225 Hospitals designated as Comprehensive Stroke Centers by the local EMS agency shall
226 have the following minimum criteria in addition to the requirements for being Primary
227 Stroke Centers explained in this chapter.
228 (a) Neuro-endovascular diagnostic and therapeutic procedures available twenty-four
229 (24) hours a day, seven (7) days a week.
230 (b) Advanced imaging, including but not limited to, computed tomography (CT),
231 angiography, magnetic resonance imaging (MRI), and diffusion-weighted magnetic
232 resonance imaging, available twenty-four (24) hours a day, seven (7) days a week.
233 (c) Intensive care unit (ICU) beds with licensed independent practitioners with the
234 expertise and experience to provide neuro-critical care twenty-four (24) hours a day,
235 seven (7) days a week.
236 (d) Written policies and procedures for comprehensive stroke services that are
237 reviewed at least every two (2) years, revised as needed, and implemented.
238 (e) Data-driven QI, including collection and monitoring of standardized comprehensive
239 stroke center performance measures
240 (f) Stroke patient research program
241 (g) Satisfy the following staff qualifications:
242 (1) a neurosurgical team capable of assessing and treating complex stroke and
243 stroke-like syndromes,
244 (2) a neuroradiologist with a current Certificate of Added Qualifications in
245 Neuroradiology on staff,
246 (3) a physician with neuro-interventional angiographic training and skills on staff as
247 deemed by the hospital's credentialing process,

248 ~~(4) a physician with current Certificate of Added Qualifications in vascular~~
249 ~~neurology on staff.~~
250 (4) a qualified neuroradiologist, board-certified by the American Board of Radiology or
251 the American Osteopathic Board of Radiology, and
252 (5) a qualified vascular neurologist, board-certified by the American Board of
253 Psychiatry and Neurology or the American Osteopathic Board of Neurology and
254 Psychiatry.
255 (h) In the event that tele-radiology is used, all staffing and staff qualification
256 requirements contained in § 100270.223 shall remain in effect and shall be documented
257 by the hospital.
258 (i) Provide comprehensive rehabilitation services either on-site or by written transfer
259 agreement with another health care facility licensed to provide such services.
260 (j) Written transfer agreements with primary stroke centers in region to accept transfer
261 of patients with complex strokes when clinically warranted.
262 (k) Comprehensive Stroke Center shall at a minimum, provide guidance and
263 continuing medical education to hospitals designated as Primary Stroke Centers with
264 which they have transfer agreements.
265 (l) Additional requirements may be included at the discretion of the local EMS agency
266 medical director.

267 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220,
268 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.204,
269 1797.220, and1797.222, Health and Safety Code.

270 **§ 100270.221. Primary Stroke Centers**
271 Hospitals to be designated by the local EMS agency as a Primary Stroke Center shall
272 meet the following minimum criteria to provide care for stroke patients in the emergency
273 department and those patients that are admitted:
274 (a) adequate staff, equipment, and training to perform rapid evaluation, triage and
275 treatment for the stroke patient in the emergency department;
276 (b) standardized stroke care protocol;

277 (c) twenty-four (24) hours a day, seven (7) days a week stroke diagnosis and
278 treatment capacity; and
279 (d) a quality improvement system, including data collection;
280 (e) continuing education in Stroke care provided for staff physicians, staff nurses, staff
281 allied health personnel, and EMS personnel;
282 (f) public education on stroke and inllness prevention; and
283 (g) any additional requirements included at the discretion of the local EMS agency
284 medical director;

285 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.220, 1798.150,
286 1798.167, and 1798.172, Health and Safety Code. Reference: Sections 1797.176,
287 1797.220, 1798.150, and 1798.170, Health and Safety Code.
288

289 **§ 100270.222. Evaluation of Primary Stroke Centers**

290 The local EMS agency shall is to ensure evaluation of the Primary Stroke Center occurs
291 as part of their Stroke Critical Care System including assessment of the following
292 minimal criteria:
293 (a) The hospital shall be committed to supporting the Stroke Critical Care System.
294 (a) An acute stroke team, available to see in person or via telemedicine telehealth, a
295 patient identified as a potential acute stroke patient within 15 minutes following the
296 patient's arrival at the hospital's emergency department or within 15 minutes following a
297 diagnosis of a patient's potential acute stroke.
298 (b) Written policies and procedures for stroke services that are reviewed at least every
299 two (2) years, revised more frequently as needed, and implemented. These policies and
300 procedures shall include written protocols and standardized orders for emergency care
301 of stroke patients.
302 (c) Data-driven, continuous quality improvement including collection and monitoring of
303 standardized performance measures.
304 (d) Neuro-imaging services capability that is available twenty-four (24) hours a day,
305 seven (7) days a week, such that imaging shall be performed initiated within twenty-five
306 (25) minutes following order entery emergency department arrival. Such studies shall be

307 reviewed by a physician with appropriate expertise, such as a board-certified radiologist,
308 board-certified neurologist, a board-certified neurosurgeon, or residents who interpret
309 such studies as part of their training in an ACGME-approved radiology, neurology, or
310 neurosurgery training program within ~~twenty (20) minutes of study completion~~ forty-five
311 (45) minutes of emergency department arrival.
312 (1) Neuro-imaging services shall, at a minimum, include computerized tomography
313 (CT) scanning or magnetic resonance imaging (MRI), as well as interpretation of the
314 imaging.
315 (2) In the event that tele-radiology is used in image interpretation, all staffing and staff
316 qualification requirements contained in this sub-chapter shall remain in effect and shall
317 be documented by the hospital.
318 (3) For the purpose of this sub-section, a qualified radiologist shall be board certified
319 by the American Board of Radiology or the American Osteopathic Board of Radiology.
320 (4) For the purpose of this sub-section, a qualified neurologist shall be board certified
321 by the American Board of Psychiatry and Neurology or the American Osteopathic
322 Board of Neurology and Psychiatry.
323 (5) For the purpose of this sub-section, a qualified neurosurgeon shall be board
324 certified by the American Board of Neurological Surgery.
325 (e) Laboratory services capability that is available twenty-four (24) hours a day, seven
326 (7) days a week, such that services may be performed within forty-five (45) minutes
327 following ~~order entry~~ emergency department arrival.
328 (f) Neurosurgical services that are available, including operating room availability,
329 either directly or under agreement with a comprehensive or primary stroke center, within
330 two (2) hours following admission of acute stroke patients to the primary stroke center.
331 (g) Acute care rehabilitation services.
332 (h) Transfer arrangements with one or more higher level of care centers when
333 clinically warranted.
334 (i) There shall be a physician director of a primary stroke center, who may also serve
335 as a physician member of a stroke team, who is board-certified in neurology or
336 neurosurgery or other board certified physician with sufficient experience and expertise

337 dealing with cerebral vascular disease as determined by the hospital credentials
338 committee.
339 (j) At a minimum, an acute care stroke team shall consist of:
340 (1) a neurologist, neurosurgeon, interventional neuroradiologist, or emergency
341 physician who is board certified or board eligible in neurology, neurosurgery,
342 endovascular neurosurgical radiology, or other board-certified physician with sufficient
343 experience and expertise in managing patients with acute cerebral vascular disease as
344 determine by the hospital credentials committee; and
345 (2) a registered nurse, physician assistant or nurse practitioner who has demonstrated
346 competency, as determined by the physician director described in above, in caring for
347 acute stroke patients.
348 (k) Local EMS agencies may identify thrombectomy capable primary stroke centers
349 and preferentially triage and transport patients to those centers.

350 Note: Authority cited: Sections 1797.102, 1797.103, 1797.107, 1797.176, 1797.204
351 1797.220, 1797.250, 1797.254, 1798.150, and 1798.172, Health and Safety Code.
352 Reference: Sections 1797.104, 1797.176, and 1797.204, 1797.220, 1797.222,
353 1798.170, Health and Safety Code.

354 **§ 100270.223. Acute Stroke Ready Hospitals ~~(Satellite Stroke Centers)~~**
355 Acute Stroke Ready Hospitals (Satellite Stroke Centers) are able to provide the
356 minimum level of care for stroke patients in the emergency department, which are
357 paired with one or more hospitals with higher level of services. In these hospitals, the
358 necessary emergency department neurological expertise may be provided in person or
359 through ~~telemedicine~~ telehealth. The local EMS agency is responsible for evaluation of
360 Acute Stroke Ready Hospitals as part of their Stroke Critical Care System, which
361 includes assessment of the following structural components:
362 (a) An acute stroke team available to see, in person or via ~~telemedicine~~ telehealth, a
363 patient identified as a potential acute stroke patient within thirty (30) minutes following
364 the patient's arrival at the hospital's emergency department.
365 (b) Written policies and procedures for emergency department stroke services that are
366 reviewed, revised as needed, and implemented at least every three (3) years.

367 (c) Emergency department policies and procedures shall include written protocols and
368 standardized orders for emergency care of stroke patients.
369 (d) Data-driven, QI including collection and monitoring of standardized performance
370 measures.
371 (e) Neuro-imaging services capability that is available twenty-four (24) hours a day,
372 seven (7) days a week, such that imaging shall be performed and reviewed by physician
373 within sixty (60) minutes following ~~order entry~~ emergency department arrival. Such
374 studies shall be reviewed by a physician with appropriate expertise, such as a board-
375 certified radiologist, board-certified neurologist, a board-certified neurosurgeon, or
376 residents who interpret such studies as part of their training in an ACGME-approved
377 radiology, neurology, or neurosurgery training program. ~~, within forty-five (45) minutes of~~
378 ~~patient arrival at the emergency department.~~
379 (1) Neuro-imaging services shall, at a minimum, include computerized tomography
380 (CT) scanning or magnetic resonance imaging (MRI), as well as interpretation of the
381 imaging.
382 (2) In the event that tele-radiology is used in image interpretation, all staffing and staff
383 qualification requirements contained in this sub-section shall remain in effect and shall
384 be documented by the hospital.
385 (3) For the purpose of this sub-section, a qualified radiologist shall be board-certified
386 by the American Board of Radiology or the American Osteopathic Board of Radiology.
387 (4) For the purpose of this sub-section, a qualified neurologist shall be board-certified
388 by the American Board of Psychiatry and Neurology or the American Osteopathic Board
389 of Neurology and Psychiatry.
390 (5) For the purpose of this sub-section, a qualified neurosurgeon shall be board-
391 certified by the American Board of Neurological Surgery.
392 (f) Laboratory services at a minimum, including blood testing, electrocardiography and
393 x-ray services ~~capability~~, available twenty-four (24) hours a day, seven (7) days a week
394 and able to be ~~perform~~ completed and reviewed by physician within sixty (60) minutes
395 following ~~order entry~~ emergency department arrival.
396 (g) Neurosurgical services that are available, including operating room availability,
397 either directly or under agreement with a Primary or Comprehensive Stroke Center,

398 within three (3) hours following admission of acute stroke patients to the Satellite Stroke
399 Center.
400 (h) Transfer arrangements with one or more primary or comprehensive stroke
401 center(s) that facilitate transfer of patients with strokes to the stroke center(s) for care
402 when clinically warranted.
403 (i) There shall be a director of the Satellite Stroke Center, who may also serve as a
404 member of a stroke team, who is a physician or advanced practice nurse who maintains
405 at least six (6) hours per year of educational time in cerebrovascular disease;
406 (j) Acute care stroke team for Satellite Stroke Center at a minimum shall consist of a
407 nurse and a physician with training and expertise in acute stroke care.
408 (k) Additional requirements may be included at the discretion of the local EMS agency
409 medical director.

410 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220,
411 1798.150, and 1798.172, Health and Safety Code. Reference: Sections 1797.204,
412 1797.220, and1797.222, Health and Safety Code.

413 **§ 100270.224. EMS Receiving Hospitals (Non-designated for Stroke Critical Care**
414 **Services)**
415 Hospitals that are not designated shall do the following at minimum, in cooperation with
416 Stroke Receiving Centers and the local EMS agency in their jurisdictions:
417 (a) Participate in the local EMS agency's QI system, including data submission as
418 determined by the local EMS agency medical director;
419 (b) Participate in the inter-facility transfer agreements to ensure access to the Stroke
420 Critical Care System for potential stroke patient.

421 Note: Authority cited: Sections 1797.88, 1797.103, 1797.107, 1797.176, 1797.220,
422 1798.100, 1798.150, and 1798.172, Health and Safety Code. Reference: Sections
423 1797.176, 1797.220, and1798.150, 1798.170, Health and Safety Code.

424 **ARTICLE 5. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATION**

425 **§ 100270.225. Data Management**

426 (a) The local EMS agency shall implement a standardized data collection and
427 reporting process for Stroke Critical Care Systems.
428 (1) The system shall include the collection of both pre-hospital and hospital patient
429 care data, as determined by the local EMS agency.
430 (2) The pre-hospital stroke patient care elements shall be complaint with the most
431 current version of the California EMS Information Systems (CEMSIS) database, the
432 National EMS Information System (NEMSIS) and the hospital stroke patient care
433 elements shall be compliant with the most current national standards published by the
434 U.S. Centers for Disease Control and Prevention, Paul Coverdell National Acute Stroke
435 Program Resource Guide.
436 ~~The prehospital and hospital stroke patient care elements selected by the local EMS~~
437 ~~agency shall be compliant with the most current version of the California EMS~~
438 ~~Information Systems (CEMSIS) data base, the National EMS Information System~~
439 ~~(NEMSIS) and national standards published by the U.S. Centers for Disease Control~~
440 ~~and Prevention, Paul Coverdell National Acute Stroke Program Resource Guide, dated~~
441 ~~October 24, 2016.~~
442 (3) All hospitals that receive stroke patients shall participate in the local EMS agency
443 data collection process in accordance with local EMS agency policies and procedures.
444 (4) Stroke data ~~required~~ shall be collected and submitted by the local EMS agency to
445 the EMS Authority ~~data management system through data submission~~ on no less than a
446 quarterly basis.

447 Note: Authority cited: Sections. 1797.102, 1797.103, 1797.107, 1797.176, 1797.204,
448 1797.220, 1797.227, 1798.150, and 1798.172. Health and Safety Code. Reference:
449 Section 1797.220, 1797.222, 1797.204.

450 **§ 100270.226. Quality Improvement Process**

451 Each Stroke Critical Care System shall have a quality improvement process to include
452 structure, process, and outcome evaluations which focus on improvement efforts to
453 identify root causes of problems, intervene to reduce or eliminate these causes, and
454 taking steps to correct the process. This process shall include, at a minimum:
455 (a) a detailed audit of all stroke-related deaths, major complications, and transfers;

456 (b) a multidisciplinary stroke QI Committee including both pre-hospital and hospital
457 members;
458 (c) participation in the stroke data management system;
459 (d) compliance with the California Evidence Code, Section 1157.7 to ensure
460 confidentiality, and a disclosure-protected review of selected stroke cases.

461 Note: Authority cited: Sections 1797.103, 1797.107, 1797.176, 1797.204, 1797.220, and
462 1798.150, Health and Safety Code. Reference: Sections 1797.176, 1797.204,
463 1797.220, and 1798.150, Health and Safety Code.

464 **§ 100270.227. Stroke Critical Care System Evaluation**
465 (a) The local EMS agency is responsible for on-going performance evaluations of the
466 local or regional Stroke Critical Care System.
467 (b) The local EMS agency shall be responsible for the development of a quality
468 improvement process pursuant to Section 100270.226.
469 (c) The local EMS agency shall be responsible for ensuring that designated Stroke
470 Centers and other hospitals that treat stroke patients participate in the quality
471 improvement process contained in Section 100270.226, as well as pre-hospital
472 providers involved in the Stroke Critical Care System.

473 Note: Authority cited: Sections 1797.102, 1797.103, 1797.107, 1797.176, 1797.204,
474 1797.220, 1797.250, 1797.254, 1798.150, and 1798.172. Health and Safety Code.
475 Reference: Section 1797.104, 1797.176, 1797.204, 1797.220, 1797.222, 1798.170
476 Health and Safety Code.