SAN FRANCISCO EMERGENCY **MEDICAL SERVICES AGENCY**

STEMI AND ROSC ("STAR") ~~RECEIVING CENTER~~ CRITICAL CARE SYSTEM STANDARDS

PUBLIC COMMENT NOVEMBER 2026

EFFECTIVE DATE: xx/xx/xx ***POLICY REFERENCE NO: 5016*** ***SUPERSEDES: 10/1/22***

1. DEFINITIONS

1.1. Get With The Guidelines-Coronary Artery Disease (GWTG-CAD): EMSA approved data registry for patients meeting a STEMI diagnosis.

1.2. Return of Spontaneous Circulation (ROSC): Post-cardiac arrest patients are those with a pulse, blood pressure ~~or have cardiac output directly observed with ultrasound.~~ These patients are eligible for ICU care and specialized treatment, such as therapeutic hypothermia and cardiac catheterization (if found to have a STEMI as the cause of the cardiac arrest).

1.3. Site Visits: On site evaluation of STAR capabilities by EMSA. Typically, by the EMSA Medical Director, EMSA Director, EMSA STEMI Coordinator or EMSA designee.

1.4. ST-Elevation Myocardial Infarction (STEMI): ~~An acute myocardial infarction that generates a ST segment elevation on a 12lead electrocardiogram (EKG).~~ "ST-Elevation Myocardial Infarction" or "STEMI" means a clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on Electrocardiogram (ECG) which meets diagnostic criteria for myocardial infarction.

1.5. ST Elevation Myocardial Infarction / Post **A**rrest with **R**OSC **(STAR)** Center: A licensed general acute care hospital (GACH) with a special permit for a cardiac catheterization laboratory and cardiovascular surgery from the California State Department of Health Services and ~~-~~designated as a STAR center by EMSA. ~~the County of San Francisco.~~

2. PURPOSE

2.1. ~~To establish standards for the designation of hospitals as approved receiving centers for STEMI~~ To establish minimum standards for the development, implementation, designation, operation, evaluation of ST-Elevation Myocardial Infarction (STEMI) and post-cardiac arrest patients with Return of Spontaneous Circulation (ROSC) called STAR Centers.

2.2. These standards ensure coordinated patient care for the assessment, triage, transport, treatment, and recovery of patients experiencing STEMI or cardiac arrest across the continuum of emergency medical services, from prehospital response through definitive hospital care and rehabilitation.

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3. POLICY

3.1. EMSA REQUIREMENTS AND RESPONSIBILITIES

3.1.1. For a state EMS Authority approved STEMI critical system of care, EMSA shall annually submit a STEMI critical care plan update

3.1.2. EMSA may establish additional requirements in addition to those mandated by statute and state minimum standards

3.1.3. Collecting and reporting STEMI patient care data, establishing and maintaining a QI process, and performing STEMI critical care system evaluation

3.1.4. EMSA will develop and implement a STEMI critical care system and shall establish a cardiac care committee which meets, at a minimum, twice a year and includes participation from public and private EMS provider agencies, 9-1-1-receiving GACHs, and STAR Centers within the local EMS system.

3.1.5. The STEMI or cardiac care committee will advise EMSA on STEMI and cardiac care policies and protocols and will participate in STEMI and cardiac care QI work

3.2. HOSPITAL REQUIREMENTS FOR STAR DESIGNATION

3.2.1. A licensed GACH meeting the requirements of this section may be designated by EMSA as a STAR center

3.2.2. Written agreements with ~~the San Francisco~~ EMSA ~~Agency~~ designating the GACH as:

3.2.2.1. An approved GACH for patients transported by EMS ambulances

3.2.2.2. STAR Designation

3.2.3. Pay all associated fees within thirty (30) days of invoice

3.2.4. Cardiovascular certification by Joint Commission or other nationally recognized body

3.2.4.1. Letter with certification date sent to EMSA from the receiving facility.

- Certification may be deferred for up to 5 years from the effective date of this policy or by direction of the EMSA Medical Director

3.2.5. Has an understanding that in the event the GACH has an Internal Disaster declaration, that all 9-1-1 ambulance traffic to the emergency department will be closed, resulting in no suspected STEMI or ROSC patients. See EMSA Policy # (5020 Diversion Policy)

3.2.6. Regular participation in the STAR Committee meetings-EMSA Policy # (1010 Advisory Committees)

3.2.7. In collaboration with EMS provider agencies and EMSA, STAR Centers shall develop a process for sharing patient outcome information of patients with a diagnosis of a STEMI and/or sustained ROSC.

3.2.8. The EMSA Medical Director may establish requirements for designation as a STEMI receiving center in addition to those required under this section.

3.3. Data Collection and Reporting Requirements;

3.3.1. STAR Centers shall submit STEMI data and CARES data to EMSA quarterly for the purposes of continuous quality improvement, training to enhance the level of care, and for required state data reporting.

3.3.2. **All** patients with a STEMI diagnosis meet the required entry into GWTG-CAD and that no sampling will be permitted.

3.3.2.1. For ICD-10 codes, see Appendix A

3.3.2.2. For state EMS Authority elements see Appendix B

3.3.3. STEMI patient care data elements shall be collected and submitted to the EMS Authority, through EMSA via GWTG-CAD on a quarterly basis and within ninety (90) days of patient discharge. Data entry deadlines are as follows:

3.3.3.1. Quarter 1 due by the last day of quarter 2 (June 30)

3.3.3.2. Quarter 2 due by the last day of quarter 3 (September 30)

3.3.3.3. Quarter 3 due by the last day of quarter 4 (December 31)

3.3.3.4. Quarter 4 due by the last day of quarter 1 of the following year (March 31)

3.3.4. The EMSA Medical Director may establish additional data entry requirements.

4. INITIAL AND MAINTENANCE OF STAR DESIGNATION SITE VISITS

4.1. Site visits will be conducted by EMSA prior to initial and to maintain STAR Center designation, no less than 1 time every 2 years, or by the direction of the EMS Medical Director.

4.2. Site Visits will be coordinated with the EMSA STEMI coordinator and facility designee no less than 30 days prior to evaluation

4.3. The EMSA STEMI coordinator shall provide the site evaluation tool kit at the time of scheduling to the STAR facility designee.

4.4. The EMSA shall refer to Title 22, Division 9, Chapter 6, Subchapter 2, Article 4, § 100147.02 when conducting evaluation site visits.

4.5. STAR centers must be in compliance with § 3.2 of this policy prior to initial or to maintain STAR Center designation.

4.6. Any findings during the site visit will be provided in writing to the STAR Center within thirty (30) days of the evaluation.

4.7. If applicable the STAR Center will have ninety (90) days from the written findings to correct.

4.7.1. The facility may continue to operate as a STAR Center during this period, unless determined by the EMSA Medical Director that there exists an immediate threat to public health and safety.

5. Authority

~~**5.1.** Code of Federal Regulations, Title 45, Section 164.512 (b) (l) (i)~~

5.2. California Health and Safety Code, Division 2.5, § ~~Sections~~ 1797.270, 1797.202, 1797, 206, 1797.227 ~~1797.222, 1797.250,~~ 1797.252, 1798, and 1798.150

5.3. California Code of Regulations, Title 22, Chapter 6, Subchapter 2, Articles 1-5

5.4. San Francisco Business and Tax Regulations Code SEC. 249.8 (e)(1-2)

5.5. American Heart Association-Get With the Guidelines-Coronary Artery Disease

APPENDIX A: ICD-10 CODES THAT REQUIRE GWTG-CAD DATA ENTRY

STEMI	
Code	Short Description
I21.01-I21.09	ST elevation (STEMI) myocardial infarction of anterior wall
I21.11-I21.19	ST elevation (STEMI) myocardial infarction of inferior wall
I21.21-I21.29	ST elevation (STEMI) myocardial infarction of other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.9	Acute myocardial infarction, unspecified
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site

APPENDIX B: CALIFORNIA STATE EMS AUTHORITY ELEMENTS FOR DATA REPORTING

		Element ID
Identifiers	EMS Run Number	runnum
	Facility ID	FACILITY_DISPLAY_ID
Patient	Date of Birth	dob
	Age	age
	Patient Gender	sex
	Patient Race	race
Clinical Presentation	EMS First ECG Obtained Date Time	firstecgdt
ED Arrival	Emergency Department Acute Care Admission Time	arrdt
Treatment	Cath Lab Patient Arrival Time	ptarvch
	PCI Procedure Performed	primarypci
	First PCI Date Time	fstpci
	Reason No PCI	nperfpci
	Thrombolytics Administered	thromb
	Thrombolytics Administered Start Time	dosest
	Reason Thrombolytics Not Administered	nadmlytc
Discharge	Facility Discharge Time	disdate
	Referring Facility Arrival Time	outhosp
	Referring Facility Discharge Time	transout
	Name of Transferring Facility	transfac
	Facility Discharge Disposition	dishstst
	ICD-10 Diagnosis	I10prindx

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Policy Reference No.: 5016
Effective Date: October 1, 2022
Supersedes: January 7, 2013

STEMI AND ROSC ("STAR") RECEIVING CENTER STANDARDS

I. PURPOSE

To establish standards for the designation of hospitals as approved receiving centers for STEMI and post-cardiac arrest patients with Return of Spontaneous Circulation (ROSC) called STAR Centers.

II. DEFINITIONS

STEMI: An acute myocardial infarction that generates a ST segment elevation on a 12-lead electrocardiogram (EKG).

ST Elevation Myocardial Infarction / Post **A**rrest with **R**OSC (**STAR**) Center: A licensed general acute care hospital with a special permit for a cardiac catheterization laboratory and cardiovascular surgery from the California State Department of Health Services and designated as a STAR center by the County of San Francisco.

Return of Spontaneous Circulation (ROSC) Post-cardiac arrest patients are those with a pulse, blood pressure or have cardiac output directly observed with ultrasound. These patients are eligible for ICU care and specialized treatment, such as therapeutic

hypothermia and cardiac catheterization (if found to have a STEMI as the cause of the cardiac arrest).

III. POLICY

A. The EMS Medical Director shall designate a STAR Receiving Center based on the standards set forth in policy.

B. Designated STAR Receiving Centers shall agree to comply with all applicable EMS Agency Policies and procedures.

C. A hospital must demonstrate all of the following to become a designated STAR Receiving Center for the EMS system:

1. Written agreements with the San Francisco EMS Agency designating the hospital as:
   a) An approved receiving destination for patients transported by EMS ambulances.
   b) An approved destination for STEMI and post-cardiac arrest patients. STAR receiving centers have two months after obtaining the initial designation to complete this written agreement.
2. Licensure as a Comprehensive or Basic Emergency Department (ED)
3. A special permit for a Cardiac Catheterization Laboratory from the California State Department of Health Services (DHS) as well as a special permit issued by DHS for Cardiovascular Surgery Service.
4. Accreditation by the Joint Commission on Accreditation of Health Care Organizations.
5. STAR program description that includes an organizational chart, programmatic goals and objectives, and a Quality Assurance program for both STEMI and postcardiac arrest patients.
6. Data reporting procedures for the data elements listed in Appendix A.
7. Assigned Program coordinators:
   a) One interventional cardiologist.
   b) One nursing administrator (selected from Interventional Cardiology or Emergency Department or Intensive Care Unit).
   c) Both program coordinators must actively participate in meetings of a STAR Committee which reports to the EMS Advisory Committee (EMSAC).
8. A single point of contact responsible for reporting the data elements listed in Appendix A to the EMS Agency. (This point of contact may be from a service line or department responsible for quality and/or administration of patients treated by Interventional Cardiology, ED or ICU, and does not need to be either a physician or a nurse administrator).

~~IV. INITIAL APPLICATION FOR STAR DESIGNATION~~

~~A. Interested hospitals shall submit a written request for STAR receiving center status along with documentation of their eligibility for the STAR Receiving Center designation by compliance with standards listed in Section IV.~~

~~B. STAR Receiving Centers must pay all applicable fees at a time designated by the EMS Agency. The San Francisco Business and Tax Regulations Code SEC. 249.8 (e)(1-2) authorizes the payment of regulatory fees to the City and County of San Francisco for hospitals that receive STEMI patients through EMS ambulance services.~~

~~C. Approval or denial of the STAR receiving center designation shall be made in writing by the EMS Agency to the requesting Hospital within one month after receipt of the request and all required documentation.~~

~~D. The EMS Agency reserves the right to do an initial site survey to assure compliance with the standards listed in this policy.~~

~~V. MAINTENANCE OF STAR DESIGNATION~~

~~A. Each receiving hospital will complete a self-assessment at least once every two years to ensure compliance with EMS Agency requirements. The self assessment may be performed concurrent with JCAHO review.~~

~~B. A STAR Receiving Center shall comply with the data collection, record keeping and quality improvement standards. Data requirements may be revised periodically by Policy Reference No.: 5016 Effective Date: October 1, 2022 the STAR Committee with recommendations made to the EMS Agency Medical Director.~~

~~C. A STAR Receiving Center shall participate in data collection registries, programs, applications, and processes as specified by EMS Agency Medical Director. Data shall be submitted to meet all guidelines and deadlines.~~

~~D. A STAR Receiving Center shall promote relevant SF EMS Agency, STAR Committee programs to its staff and constituency.~~

~~E. Regular participation of the STAR Program coordinators in the STAR Committee meetings.~~

~~F. STAR Receiving Centers must pay all applicable fees at a time designated by the EMS Agency. The San Francisco Business and Tax Regulations Code SEC. 249.8 (e)(1-2) authorizes the payment of regulatory fees to the City and County of San Francisco for hospitals that receive STEMI patients through Ambulance Service Providers.~~

~~G. The EMS Agency may deny, suspend, or revoke the approval of a STAR Receiving Center for failure to comply with any applicable policies, procedures, or regulations. Requests for review or appeal of such decisions shall be brought to the Medical Director of the EMS Agency. Second requests for review or appeal of~~

~~the EMS Agency Medical Director decision may be submitted to the San Francisco Director of Health.~~

~~H. The EMS Agency reserves the right to do periodic site surveys to assure compliance with the standards listed in this policy.~~

~~VI. AUTHORITY~~

~~A. Code of Federal Regulations, Title 45, Section 164.512 (b) (l) (i)~~

~~B. California Health and Safety Code, Division 2.5, Sections 1797.222, 1797.250, 1797.252, 1798, and 1798.150~~

~~C. California Code of Regulations, Title 22, Sections 100169, 70411-70419, and 70451 – 70459~~

~~D. Joint Commission on Accreditation of Health Care Organizations, Emergency Department Standards~~

E. ~~San Francisco Business and Tax Regulations Code SEC. 249.8 (e)(1~~-2