

XII. APPENDIX D: STEMI DESIGNATION REQUIREMENTS

Level I+ STEMI Center (Cardiogenic Shock Capable)

Designation Criteria for Level I STEMI Center Plus Cardiogenic Shock Capable

1. Personnel

- 1.1 The center has organizational and administrative support for the program.
- 1.2 The center has a Cardiac Care Coordinator that has sufficient resources to complete required tasks.
- 1.3 The center has a defined rapid response team that responds to cardiac emergencies within the facility.
- 1.4 The center has a defined cardiac care team that responds to cardiac emergencies within the Emergency Department (ED).
- 1.5 The center has a Cardiac Care Medical Director that is board-certified in cardiology or emergency medicine.
- 1.6 The center has physicians in the ED 24/7 who are board-certified or board-eligible in emergency medicine.
- 1.7 The center has an interventional cardiologist on-site within 30 minutes of STEMI activation.
- 1.8 The center has cardiac catheterization (cath) lab staff on-site within 30 minutes of STEMI activation.

2. Training and Education

- 2.1 The physicians, advanced practice providers, and registered nurses (RNs) on the rapid response and cardiac care teams are current in Advanced Cardiac Life Support (ACLS) or equivalent.
- 2.2 All center ED RNs are current in ACLS training or equivalent.
- 2.3 All center staff must complete annual education on the signs and symptoms of Acute Coronary Syndrome (ACS) and the process to activate emergency systems.
- 2.4 The Cardiac Care Medical Director must have a minimum of 18 hours in 3 years of cardiac-related continuing education.
- 2.5 The Cardiac Care Coordinator must have a minimum of 18 hours in 3 years of education addressing ACS.
- 2.6 RNs on the cardiac care team complete annual education or training in identifying dysrhythmias, symptoms of ACS, and current American Heart Association (AHA) ACS guidelines.

2.7 The center offers tobacco cessation, nutrition, and other heart-healthy education for its employees and the community at least annually.

2.8 The center provides annual public education on cardiovascular disease prevention, risk factors, the signs and symptoms of heart attack, and the importance of learning CPR and 911 activation.

2.9 The center provides assistance with training and clinical education for Emergency Medical Services (EMS) agencies in coordination with the EMS Medical Directors, as needed and upon request.

3. STEMI Services

3.1 The center's pharmacy is adequately staffed by qualified personnel to ensure effective medication management services 24/7.

3.2 The center has Food and Drug Administration (FDA)-approved fibrinolytic therapy available 24/7.

3.3 The center has a Targeted Temperature Management (TTM) process that follows current AHA guidelines.

3.4 The center has a process for activating the cardiac care team for patients who arrive via EMS and patients who "walk-in".

3.5 The center has a written process for: ACS, STEMI, triage for "walk-ins" presenting with symptoms of ACS, fibrinolytic therapy, initiation of post arrest care based on current AHA guidelines, and transfer guidelines.

3.6 The center has cardiac surgery capabilities or a transfer process with a cardiac surgery center via an appropriately trained EMS agency.

3.7 The center collaborates with EMS agencies on ACS care.

3.8 The center has an intensive or critical care unit.

3.9 The center has a process map outlining the flow from patient's first medical contact for EMS, ED "walk-ins", and transfer through cath lab arrival.

3.10 The center has written agreements or an auto-accept process to accept all STEMI referrals.

3.11 The center has a no-divert policy for all patients who meet STEMI activation criteria and a backup plan with a communication strategy for situations when the hospital's cardiac care resources are temporarily unavailable.

4. Minimum Requirements

4.1 The center performs the minimum procedural volume:

- a. annual PCI institutional volume equal to or greater than 400;
- b. annual primary PCI institutional volume equal to or greater than 36;
- c. annual PCI provider volume equal to or greater than 50; and
- d. annual primary PCI provider volume equal to or greater than 11.

4.2 The center has the following support resources:

a. advanced hemodynamic resources with biventricular support;
b. cardiac surgery on-site;
c. cardiogenic shock support team;
d. comprehensive post arrest care including TTM;
e. intensive care units that support cardiothoracic and coronary patients;
f. locally available cardiac rehabilitation services; and
g. agreement with an air medical agency trained in the transport of advanced circulatory support patients or processes to support hospital staff assisted transport.

5. Performance Measurement and Quality Improvement

5.1 The center participates in the Idaho TSE Registry. At least 80% of cases are submitted within 180 days of hospital discharge. Participation in a national registry and CARES is recommended, but not required.
5.2 The center participates in their Regional TSE Committee.
5.3 The center must have a Performance Improvement (PI) program to ensure optimal care and continuous improvement of care.
5.4 The PI program is supported by a reliable method of internal data collection that consistently gathers valid and objective information necessary to analyze and identify opportunities for improvement.
5.5 System and process issues, clinical care issues, and all admission and transfer decisions must be reviewed by the PI program.
5.6 The STEMI program must use current clinical practice guidelines derived from evidence-based validation resources to achieve benchmark goals.
5.7 All process and outcome measures must be documented in a written PI plan.
5.8 The process of analysis occurs at regular intervals (at least quarterly) to meet the needs of the program.
5.9 The process demonstrates problem resolution (loop closure).
5.10 The center is able to identify the STEMI patient population for review.
5.11 The center's PI program must work with transferring facilities to provide and obtain feedback on all transferred patients.
5.12 The PI review is inclusive of all STEMI admissions and transfers.
5.13 Delays in cath lab team response time must be monitored and reviewed for cause of delay and opportunities for improvement.
5.14 The center achieves first medical contact-to-device time in less than 90 minutes in 85% of EMS and "walk-in" cases. This excludes cases with a transport time more than 30 minutes.
5.15 The program has a goal for transfer patients of door-to-door-to-device (D2D2D) in less than 120 minutes with processes in place to work with transferring EMS agencies.