Sierra – Sacramento Valley EMS Agency Program Policy			
Mechanical Chest Compression Devices			
	Effective: 06/01/2017	Next Review: 05/2020	**1106**
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PURPOSE:

A. Define the approval process for utilization of mechanical chest compression devices in the S-SV EMS region.

B. Identify the mechanical chest compression devices approved for use in the S-SV EMS region.

C. Establish the criteria for EMS personnel training and utilization of approved mechanical chest compression devices in the S-SV EMS region.

AUTHORITY:

A. California Health and Safety Code, Division 2.5.

B. California Code of Regulations, Title 22, Division 9.

POLICY:

A. EMS provider agencies shall obtain S-SV EMS approval prior to utilizing a mechanical chest compression device in the S-SV EMS region. The request for approval shall include the following minimum information:

1. A letter of request for approval from a chief officer, including justification of the need to utilize the device(s).

2. Proposed number and type of devices to be utilized.

3. Device funding source.

4. Geographical location(s) where the device(s) will be utilized.

5. Anticipated annual number of incidents when the device(s) will be utilized.

6. Proposed initial and ongoing training program, including the anticipated number of personnel to be trained on the use of the device(s).

7. Proposed plan for notifying appropriate allied agencies and hospitals of the device(s) use prior to implementation.

8. A copy of the provider's Continuous Quality Improvement Program (CQIP), including information on the CQI monitoring of the use of the mechanical chest compression device(s).

B. S-SV EMS shall have sole discretion on device approval which will be determined on an individual applicant basis. Approval considerations will be based on the following criteria:

1. Geographical location.

2. EMS response and transport times.

3. Manpower.

4. Anticipated utilization.

5. Device funding source.

6. Personnel maintenance of skills and QI.

7. Other considerations deemed appropriate by the S-SV EMS Agency.

C. The following mechanical chest compression devices have been approved for use in the S-SV EMS region:

1. Physio Control LUCAS 2 Chest Compression System.

2. Zoll AutoPulse.

D. EMS personnel may utilize an approved mechanical chest compression device for patients in cardiac arrest under the following conditions:

1. They are employed by and on duty with an EMS provider agency approved by S-SV EMS to utilize the device.

2. They successfully complete the approved training prior to utilizing the device.

3. They follow the indications, contraindications and device application procedure indicated in S-SV EMS Agency Pulseless Arrest Treatment Protocols.

4. They accompany any patient who the device is utilized on to the hospital (if transported), even if they are not the primary patient care provider.

E. Mechanical chest compression device maintenance:

1. All mechanical chest compression device approved providers shall have a maintenance program for the device.

2. The periodic preventative maintenance of all devices shall meet or exceed the criteria recommended by the manufacturer.

3. Individuals performing scheduled maintenance or repair shall possess the necessary credentials recommended by the manufacturer.

4. Providers shall immediately remove from service any device suspected of malfunctioning and manual CPR shall be resumed if necessary. Any malfunctioning device shall not be placed back into service until properly serviced or repaired by the manufacturer or manufacturer's authorized service program.

5. Any device suspected of malfunctioning, that may have adversely affected patient care shall be:

   - Immediately reported to an on-duty provider agency supervisor.
   - Immediately reported to the RN or physician staff at the receiving facility if the malfunctioning device impacted or has a potential to impact patient health and well-being.
   - Reported to S-SV EMS by the end of the next business day. This report shall include the provider's name, date of incident, type/model/serial number of device, patient's name, incident number, description of the incident, effect on patient care, all actions taken at the time of reporting, and current location of device.
   - Reported to the manufacturer by the end of the next business day. The device malfunction report submitted to the manufacturer shall not include any patient identifiable healthcare information.

6. Device maintenance records shall be subject to review and inspection by S-SV EMS upon request.

F. Allied agency/hospital notification:

Prior to implementation of the device, approved providers shall notify the appropriate allied agencies and local receiving hospitals of the use of the device.

G. Records/Data Collection:

1. A patient care report shall be completed for each patient on whom the device is applied. In addition to data normally recorded on the PCR, the report shall include specific information related to the use of the device, including:

- Time of patient collapse.
- Was cardiac arrest witnessed?
- Was bystander CPR performed?
- Total time of manual CPR prior to device application.
- Time of device application.
- Total time of device use.
- Did patient receive any AED or defibrillation shocks?
- Did the patient experience return of spontaneous circulation (ROSC) in the prehospital setting?

2. Documentation and data related to the use of the mechanical chest compression device(s) shall be made available to S-SV EMS upon request.

H. Quality Improvement:

1. All patient contacts involving the use of the mechanical chest compression device shall undergo chart review by provider QI personnel. Chart review shall include evaluation for appropriate clinical use and adherence to S-SV EMS policies and treatment protocols.

2. Any concerns or issues involving the use of the mechanical chest compression device shall be reported to S-SV EMS as soon as possible.

I. Prohibited Use:

Any EMS provider use of a mechanical chest compression device outside the limitations of this policy are prohibited and shall be reported to S-SV EMS as soon as possible.

CROSS REFERENCES:

A. Prehospital Documentation (605).

B. Continuous Quality Improvement Program (620).

C. Pulseless Arrest (C-1).