PURPOSE:

The purpose of this policy is to authorize the use of mechanical cardiopulmonary resuscitation (CPR) devices.

AUTHORITY:

Health and Safety Code, Division 2.5, Sections 1797.3, 1797.52, 1797.60, 1797.84, 1797.94, 1797.200, 1797.206, 1797.214, 1797.220; 1798, California Code of Regulations, Title 22, Division 9, Chapter 4, Sections 100145, 100146, 100148.

DEFINITIONS:

A. “EMS Service Provider” means an organization delivering emergency medical care as part of the San Joaquin County emergency medical services (EMS) system to the sick and injured at the scene of an emergency, during transport or inter-facility transfer.

B. “SJCEMSA” means the San Joaquin County Emergency Medical Services Agency, which is the designated local emergency medical services agency for San Joaquin County.

POLICY:

I. Authorized Devices:

   A. EMS Service Providers may use any manufacturer’s piston or plunger driven mechanical CPR device with current federal Food and Drug Administration (FDA) approval that is capable of meeting the requirements of this policy.

   B. Circumferential compression type mechanical CPR devices are not authorized.

II. Authorized Use:

   A. Performing external cardiac chest compressions in adult patients in cardiac arrest in accordance with manufacturer’s recommendations.

III. Prohibited Use and Contraindications for Use:

   A. Any contraindication specified by the manufacturer.

   B. Patient less than thirteen (13) years old, or any individual 42 kgs (90 lbs)
pounds) or less or any individual which when fitted with the device the compression piston does not make firm contact with the chest wall.
C. Patient with significant burns to the torso or back.
D. Patient with advanced pregnancy (>20 weeks).

IV. Operation of Mechanical CPR Devices:
A. Apply device consistent with minimally interrupted cardiac arrest principles without delaying compressions for greater than ten (10) seconds.
B. Apply device backboard and piston placement during pulse checks to prevent unnecessary pauses in CPR.
C. Arm placement may be performed during compressions as long as placement does not disrupt or delay chest compressions.
D. Do not interfere with defibrillations when applying or starting device.
E. Device may be removed if device interferes with extrication or patient movement.
F. Device shall be removed and manual compressions initiated if device malfunctions, device fault alarm cannot be cleared within ten (10) seconds, or device compressions are assessed as inadequate.
G. Once applied device shall remain on the patient unless there is a complication with device, resuscitation efforts have ceased, or until transfer of patient care at the emergency department.
H. Device shall remain in place if a patient experiences a return of spontaneous circulation (ROSC). If ROSC occurs prior to device placement, prehospital care personnel may apply device in case compressions become necessary during transport.
I. Application and use of device shall not delay or prevent the transfer of patient care to the transport paramedic.
J. EMS Service Providers are responsible for the retrieval of their own devices from the receiving hospital.

V. Data Collection and Reporting:
A. All devices shall be capable of recording, storing and transmitting data regarding device status and use. For devices in use prior to June 1, 2021, EMS Service Providers shall have two years from the effective date of this policy to comply with this provision.
B. EMS Service Providers shall report malfunctions and adverse events according to EMS Policy No. 6102, EMS Unusual Occurrence Process.