Agenda Item

300 E. Chapman Avenue
Orange, CA 92866

City Council

Item #: 3.27. 4/13/2021 **File #:** 21-0158

TO: **Honorable Mayor and Members of the City Council**

THRU: **Rick Otto, City Manager**

FROM: **Sean deMetropolis, Fire Chief**

1. SUBJECT

Authorize purchase of ten LUCAS 3 Chest Compression Devices and ProCare LUCAS Prevent Service Plan from Stryker Medical as a sole source vendor.

2. SUMMARY

The Fire Department is seeking the sole-source purchase of ten Stryker LUCAS 3 Chest Compression devices, and the associated service plan, to replace aging equipment in the field and outfit recently acquired apparatus. The LUCAS 3 devices provide automated chest compression that are more efficient than human rescuers are able to perform. Orange County Emergency Medical Services requires the use of automated chest compression devices, over manual CPR, whenever a patient experiencing cardiac arrest is moved or transported.

3. RECOMMENDED ACTION

1. Authorize Stryker Medical as a sole source vendor.
2. Approve the purchase of ten LUCAS 3 Chest Compression Devices and ProCare LUCAS Prevent Service from Stryker Medical in an amount not to exceed $158,593.
3. Authorize the appropriation of $2,500 from the Prop 172 unreserved fund balance to expenditure account number 120.3022.56030.20105, Prop 172 - Auto Pulse Machine Replacement.

4. FISCAL IMPACT

The total expenditure for this purchase is $158,593 and will be funded in Auto Pulse Machine Replacement (20105) through:

Prop 172 (120)	$152,410
General Fund (100)	6,183
Total:	$158,593

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

6. DISCUSSION AND BACKGROUND

The Fire Department has used automated chest compression devices (ACCD) for eleven years. At the time of original purchase in 2010 and replacement purchase in 2015, the ZOLL Autopulse was

the only ACCD approved for use by the Orange County Emergency Medical Services (OCEMS) Medical Director. The use of an ACCD increases the survivability of cardiac arrest patients by providing efficient and consistent chest compressions without interruptions compared to those delivered by human rescuers. In 2018, OCEMS mandated the use of an ACCD for patients in cardiac arrest prior to movement or transport.

Orange City Fire Paramedics performed extensive field-testing on Rescue 1 and Rescue 6 with both units using the LUCAS 3 ACCD from November 2020 to February 2021. Both units carried a LUCAS 3 device and Paramedics overwhelmingly preferred the LUCAS 3 to the existing ZOLL Autopulse. Positive feedback included that the LUCAS was easier to carry, quicker to apply to the patient, easier to move the patient during operation, compressed at a rate consistent with current American Heart Association guidelines, and is simpler to clean afterwards. Additionally, several local hospitals have LUCAS 3 devices, which improved patient hand off in the Emergency Department. The LUCAS 3 also has wireless capability that can upload a detailed report after use that will assist in quality improvement and call review efforts. No negative feedback was received.

The unit cost of the LUCAS 3 is approximately $1,000 more per unit than replacing the existing ZOLL Autopulse. However, the operating cost of the LUCAS 3 disposable supplies is $80 less than the ZOLL Autopulse per use. The Fire Department used an ACCD 113 times in calendar year 2020. Using the LUCAS 3 exclusively during that time would have created a cost savings of $9,000. A net savings on medical supplies over the five-year life span of these devices would offset the higher initial purchase price of the LUCAS 3.

The ProCare LUCAS Prevent Service plan provides unlimited parts, labor, and travel, and allows machines to be repaired by a technician onsite. The service plan is renewable annually and allows for essential preventative maintenance inspections, ensuring the units are worthy of patient care. Currently, we have to ship ZOLL Autopulse to the factory for repairs.

Since 2010, the Fire Department placed ACCD on frontline Rescue Ambulances. The purchase of ten LUCAS 3 devices will redistribute an ACCD to every Orange City frontline Fire Engine and Truck with one in reserve. This deployment model from four units to nine will provide better coverage to the City by allowing rapid arrival of this lifesaving device from the nearest Fire Department Station. Surrounding agencies such as Anaheim Fire and Rescue and Orange County Fire Authority also use the LUCAS 3 ACCD on frontline Engines and Trucks. This will allow seamless automatic aid for Cardiac Arrest with Orange City Fire units. Staff has researched available competitive options and, with the approval of the City Manager, certifies the required materials are offered by only one vendor.

7. ATTACHMENTS

- Stryker Medical Sole Source Letter
- Quote from Stryker Medical for LUCAS 3 Purchase
- Quote from Styker Medical for LUCAS 3 Service Plan