

February 6, 2018

LOS ANGELES FIRE DEPARTMENT



RALPH M. TERRAZAS
FIRE CHIEF

January 22, 2018

BOARD OF FIRE COMMISSIONERS
FILE NO. 18-012

TO: Board of Fire Commissioners

FROM:  Ralph M. Terrazas, Fire Chief

SUBJECT: FAST RESPONSE VEHICLE/ADVANCED PROVIDER RESPONSE UNIT

FINAL ACTION:	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Corrections	<input type="checkbox"/> Withdrawn
	<input type="checkbox"/> Denied	<input type="checkbox"/> Received & Filed	<input type="checkbox"/> Other

SUMMARY

The Los Angeles Fire Department (LAFD) has implemented specialized Emergency Medical Services (EMS) resources, including the Fast Response Vehicles (FRVs) and the Advanced Provider Response Units (APRUs). These resources have been shown to improve the timeliness and quality of patient care, while simultaneously improving operational efficiency by increasing the availability of other LAFD resources.

The LAFD's first FAST RESPONSE VEHICLE (FRV) was placed into service on September 21, 2015. It was initially funded through the Mayor's Innovation Fund as a six month pilot project. The goals of the FRV were to decrease response times, provide more rapid treatment for patients with time-critical medical emergencies, and perform on-scene triage and thus cancel fire companies and paramedic ambulances when appropriate. The FRVs are modified brush patrol vehicles. These are multi-purpose rigs which carry a full complement of basic and advanced life support equipment and medications, and also carry water and hoses for fire suppression.

RECOMMENDATION

That the Board:
Receive and file.

FINDINGS

Fast Response Unit

The primary purpose of the FRV is to ensure a rapid response to incidents requiring immediate intervention and also to provide immediate triage of patients. The FRV accomplishes these goals by providing a rapid ALS response and by its ability to replace and release other resources, making them available for other EMS and fire

incidents. The LAFD currently operates FR9 downtown and FR91 in Sylmar. Of the incidents to which these resources are dispatched, 94% are primarily EMS and the remaining 6% are fire related. Since its inception, the FRVs have frequently been the first EMS resource on scene and initiated life-saving interventions. The FRVs have also been first on scene at multiple fire incidents and minimized fire damage as a result.

Since its implementation in October 2015, the FRVs have averaged 6.2 responses/shift. Each shift is 10 hours, 9 hours of which the FRV is available for response. Thus, the FRV responds to 0.7 incidents/hour, which makes them among the busiest resources in the department. The FRVs have responded to approximately 4300 incidents, of which they arrived on scene first 60% of the time.

Advanced Provider Response Unit

The primary purpose of the APRU is to respond to patients with low acuity medical complaints, and patients who could benefit from mental health and social services outreach. The APRU's ability to provide Advanced Provider care and transport to alternative destinations provides improved quality of care to the patients and increases the availability of other LAFD resources for urgent incidents. The APRU resources have the ability to treat patients without transporting them to a hospital emergency department, or to transport the patients to alternative destinations such as the Exodus Mental Health Urgent Care Centers or the David Murphy Sobering Center (Sobering Center). This ability to divert patients from hospital emergency departments is the reason multiple healthcare systems in the City are willing to subsidize the cost of these resources.

The first APRU was placed into service in January 2016. The APRU was deployed in Battalion 13, which encompasses the South Los Angeles area. This battalion was selected since it is a chronically underserved population and it also accounts for the highest percentage of the LAFD's EMS call load.

From January 2016 through September 2017 the APRU has responded to 1038 incidents, of which the APRU evaluated patients in 876 incidents. Of these 876 incidents, 756 (86%) were for low acuity patients, 20 incidents involved scheduled visit with an LAFD 911-high-utilizer, and 99 incidents were for patients with primary mental health complaints requesting psychiatric evaluation.

Of the 756 low-acuity 911-patients, 365 (48.3%) were treated and released on scene by the APRU Nurse Practitioner; 381 (50.4%) were treated but required transport by another LAFD ambulance to the ED; and 10 (1.3%) were transported non-emergency to the ED by the APRU team.

Involvement of the APRU resulted in an average of 1.35 resources being released on scene.

Eighteen high-utilizer patients with greater than five 911-calls in the 90 days prior to APRU contact had a scheduled visit by the APRU team and were referred to a social worker. Of these 18 patients, 12 (66.7%) showed decreased 911 utilization in the ensuing 90 days, 1 (5.6%) showed no change, and five patients (27.8%) showed increased 911 utilization. Examples of social work interventions included contacting the patient's primary care provider or in-network case manager, coordinating medication reconciliation, enrolling patients in courses for diabetes education, helping patients to obtain scheduled asthma medication refills, linking to clinic transportation resources, and referring clients to in home and senior support services.

CONCLUSION

The specialized EMS resources (FRVs and APRUs) have given the LAFD the ability to provide more appropriate care to patients by providing a better level of care based upon the needs of the patients, while simultaneously increasing the availability of other LAFD resources. We look forward to expanding these resources in order to provide a more service-oriented and efficient EMS delivery system.

Board Report prepared by Marc Eckstein, M.D., MPH, EMS Bureau.