


LOS ANGELES FIRE DEPARTMENT

KRISTIN M. CROWLEY
FIRE CHIEF

July 20, 2023

BOARD OF FIRE COMMISSIONERS
FILE NO. 23-067

TO: Board of Fire Commissioners

FROM: Kristin M. Crowley, Fire Chief

SUBJECT: THERAPEUTIC VAN PILOT PROGRAM UPDATE

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 Withdrawn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

On October 13, 2021, the Los Angeles City Council approved the Los Angeles City Fire Department (LAFD) to enter into an agreement with the Los Angeles County (LAC) Department of Mental Health (DMH) to conduct a therapeutic transport pilot program. Additionally, on June 21, 2023, the City Council adopted a motion to extend the pilot from July 1, 2023, to June 30, 2024. The purpose of the pilot is to determine the feasibility and safety of transferring care of a patient experiencing an isolated non-violent mental health crisis from the care of a responding LAFD paramedic or emergency medical technician (EMT) to DMH staff for transport to a Psychiatric Urgent Care Center (PUCC) or specialized mental health emergency room. Furthermore, the pilot tests the feasibility of DMH therapeutic vans being dispatched by LAFD Metropolitan Fire Communications (MFC) and responding out of LAFD fire stations.

Observations of the pilot thus far indicate that EMTs and paramedics can safely transfer care of a patient experiencing an isolated psychiatric emergency to DMH staff for transport to a PUCC in a finite number of instances. However, the Therapeutic Van's narrow focus of services combined with the Therapeutic Van staff's inability to conduct a medical assessment or provide emergency medical services is a limiting factor when responding to a 911 call for service. In 2023, on average fewer than four patients each day meet the narrow criteria established for transport by a Therapeutic Van.

While the LAFD encountered over 18,000 patients in 2022 where the provider impression (PI) was a behavioral or psychiatric crisis, early observations of the pilot program indicate that in the vast majority of calls received for a mental health crisis, the patient is also experiencing a medical problem, drug overdose, or had associated violent behavior requiring law enforcement. A paramedic or EMT cannot transfer care to a Therapeutic Van in these instances. The Therapeutic Van may treat and transport LAFD patients experiencing a non-violent mental health crisis with or without suicidal ideation who do not require transport to a hospital emergency department and have no other medical complaints.

During the next phase of the pilot, the LAFD and DMH will continue to work together in response to calls to 911 for psychiatric emergency services. However, the DMH staff will also explore proactive outreach to patients outside of calls to 911 for service. Also, the LAFD will explore the ability to expand the number of Advanced Provider Response Units (APRUs) to better respond to and evaluate patients experiencing a mental health crisis who require a higher level of medical clearance to allow transport to a PUC than an EMT or paramedic can perform.

RECOMMENDATION

That the Board:
Receive and transmit this report to the City Council.

FISCAL IMPACT

The cost associated with the pilot program, outside of the work product produced by current staff and owned or repurposed resources, is the reimbursement to DMH for the salary and overtime incurred by the clinical driver. While the City of Los Angeles has not received a DMH invoice for reimbursement, below is a projected expense to the City through June 2023.

THERAPEUTIC VAN PROJECTED COSTS - PILOT START TO END OF FISCAL YEAR 2022/2023													
VAN	DATE IN SERVICE	TOTAL # OF DRIVERS	DRIVERS PER DAY	HOURLY RATE	OT RATE	WEEKS IN SERVICE	DAYS IN SERVICE	NUMBER OF HOLIDAYS	TOTAL REAL DAYS WORKED	TOTAL REAL HRS WORKED	TOTAL OT PAID	TOTAL STRAIGHT TIME PAID	TOTAL PER PAY PERIOD
TV4	1/30/2022	4	2	\$34.08	\$51.12	72	504	17	487	11688	\$29,445.12	\$398,327.04	\$427,772.16
TV59	3/6/2022	4	2	\$34.08	\$51.12	68	476	16	460	11040	\$27,809.28	\$376,243.20	\$404,052.48
TV77	5/16/2022	4	2	\$34.08	\$51.12	58	406	15	391	9384	\$23,719.68	\$319,806.72	\$343,526.40
TV94	8/8/2022	4	2	\$34.08	\$51.12	46	322	12	310	7440	\$18,812.16	\$253,555.20	\$272,367.36
TV40	9/26/2022	4	2	\$34.08	\$51.12	39	273	11	262	6288	\$15,949.44	\$214,295.04	\$230,244.48
											\$1,562,227.20	\$1,677,962.88	

The City Council has budgeted 1.6 million dollars in the fiscal year 2023/2024. Below is the projected expense to the City for the extension of the pilot program from July 1, 2023, to June 30, 2024.

THERAPEUTIC VAN PROJECTED COSTS - PER YEAR													
VAN	TOTAL # OF DRIVERS	DRIVERS PER DAY	HOURLY RATE	OT RATE	WEEKS IN SERVICE	DAYS IN SERVICE	NUMBER OF HOLIDAYS	TOTAL REAL DAYS WORKED	TOTAL REAL HRS WORKED	TOTAL OT PAID	TOTAL STRAIGHT TIME PAID	TOTAL PER PAY PERIOD	
TV4	4	2	\$34.08	\$51.12	52	365	13	352	8448	\$21,265.92	\$287,907.84	\$309,173.76	
TV59	4	2	\$34.08	\$51.12	52	365	13	352	8448	\$21,265.92	\$287,907.84	\$309,173.76	
TV77	4	2	\$34.08	\$51.12	52	365	13	352	8448	\$21,265.92	\$287,907.84	\$309,173.76	
TV94	4	2	\$34.08	\$51.12	52	365	13	352	8448	\$21,265.92	\$287,907.84	\$309,173.76	
TV40	4	2	\$34.08	\$51.12	52	365	13	352	8448	\$21,265.92	\$287,907.84	\$309,173.76	
											\$1,439,539.20	\$1,545,868.80	

DISCUSSION

The pilot program placed five Therapeutic Vans into service at five fire stations throughout the City. Each van is intended to operate 24 hours a day, seven days a week (excluding LAC holidays), utilizing four 12-hour shifts made up of 20 DMH workers. A DMH licensed psychiatric technician, a peer support specialist, and a

clinical driver staff each Therapeutic Van. The cost of the driver is reimbursed to the DMH by the City during the pilot program. In addition, the LAFD has provided temporary office quarters, dispatch services, and radio equipment to DMH staff.

The first DMH Therapeutic Van went into service on January 30, 2022, at Fire Station 4 in the downtown Los Angeles area, operating 24 hours a day, seven days a week (excluding LAC holidays). Unfortunately, the deployment of subsequent Therapeutic Vans was delayed due to DMH staffing challenges; however, as of September 26, 2022, all five planned Therapeutic Vans have been deployed. Due to DMH staffing shortages, not all Therapeutic Vans have had 24-hour staffing (see the chart below).

The five Therapeutic Vans are deployed as follows:

T VAN UNIT	LOCATION	DATE IN SERVICE	HOURS OF SERVICE
T Van 4	Fire Station 4 Downtown	January 30, 2022	24 hours
T Van 59	Fire Station 59 West Los Angeles	March 6, 2022	24 hours
T Van 77	Fire Station 77 San Fernando Valley	May 16, 2022	12 hours AM
T Van 94	Fire Station 94 Crenshaw District	August 8, 2022	12 hours AM 4 days/week, 24 hours 3 days/week
T Van 40	Fire Station 40 Harbor	September 26, 2022	12 hours AM

From the pilot program's inception through June 1, 2023, the Therapeutic Vans have been dispatched to 5,878 incidents alongside LAFD paramedics and EMTs. The Therapeutic Vans respond non-emergency, either at the time of dispatch based on information gathered by the LAFD emergency medical dispatcher or at the request of paramedics or EMTs on the scene of an incident. LAFD members perform an initial medical assessment, and when the patient meets appropriate criteria, transfer care of the patient to the DMH Therapeutic Van staff. The Therapeutic Van staff can either treat and release the patient in limited cases or transport them to a PUC.

DMH Therapeutic Van's scope of services highlights include:

- Treat and transport LAFD patients experiencing a non-violent mental health crisis with or without suicidal ideation who do not require transport to the Emergency Department and have no other medical complaints.
- DMH Therapeutic Van personnel can place patients on a psychiatric hold.
- DMH Therapeutic Van personnel can transport patients to a PUC rather than hospital emergency rooms.
- DMH Therapeutic Van personnel are not trained or equipped to deal with violent or dangerous patients.
- DMH Therapeutic Van personnel are not trained to treat medical emergencies.

Therapeutic Van Pilot Program Data

Pilot data through June 1, 2023, indicates that out of the 5,878 times a DMH Therapeutic Van has been dispatched, roughly 46% of the time, patients have been transported by the Therapeutic Van rather than an LAFD rescue ambulance (RA). Approximately 70% of the time, a Therapeutic Van arrives on the scene the patient is transported by DMH staff rather than an LAFD RA. As of June 1, 2023, DMH Therapeutic Van has completed 1,714 transports of patients initially assessed by LAFD units due to a call to 911 for service to a PUC. Year-to-date, on average, less than four transports per day are provided by Therapeutic Vans.

LAFD / DMH Therapeutic Vans - Activity Summary 2022/2023

Los Angeles County - DMH TVs	TV4/OCB			TV59/OVB			TV77/OVB			TV94/OVB			*TV40/OVB		
	2022	2023 *YTD	Total	2022	2023 *YTD	Total	2022	2023 *YTD	Total	2022	2023 *YTD	Total	2022	2023 *YTD	Total
Total Days Staffed	327	146	473	245	73	318	223	146	369	141	146	287	86	125	211
Inc. with PI of Behavioral/Psychiatric Crisis (by Bureau)	6120	2689	8809	2783	1374	4157	4474	3183	7657	2962	2978	5940	1894	2980	4874
Inc. with Therapeutic Van Dispatched	1537	562	2099	378	85	463	189	110	299	272	302	574	48	25	73
Inc. with Therapeutic Van On Scene	1138	366	1504	234	54	288	124	64	188	167	173	340	33	17	50
Inc. with Therapeutic Van On Scene with Person(s) Experiencing Homelessness	660	179	839	84	18	102	24	15	39	58	54	112	10	5	15
Inc. with Therapeutic Van On Scene AND TV Transported	828	270	1098	155	39	194	65	42	107	135	142	277	27	11	38
Inc. with Therapeutic Van On Scene AND RA Transported	169	42	211	37	6	43	23	6	29	16	14	30	4	4	8
Inc. with Therapeutic Van On Scene AND Patient not Transported by either TV or LAFD RA	143	54	197	44	8	52	34	16	50	16	17	33	2	2	4
Inc. with Therapeutic Van On Scene AND TV Transported AND Sentinel Event (24h 9-1-1 rekindle or 2' transport from Exodus to ED)	3	0	3	2	0	2	0	0	0	1	0	1	0	0	0
Average number Therapeutic Van Dispatched per shift (24 hrs.)	4.7	3.85	4.44	1.54	1.16	1.46	0.85	0.75	0.81	1.93	2.07	2.00	0.56	0.20	0.20
Average number Therapeutic Van On Scene per shift (24 hrs.)	3.48	2.51	3.18	0.96	0.74	0.91	0.56	0.44	0.51	1.18	1.18	1.18	0.38	0.14	0.24
Average number of Patients transported by Therapeutic Van per shift	2.53	1.85	2.32	0.63	0.53	0.61	0.29	0.29	0.29	0.96	0.97	0.97	0.31	0.09	0.18
Average percentage of time Therapeutic Van Transported vs. Dispatched	54%	48%	52%	41%	46%	42%	34%	38%	36%	50%	47%	48%	56%	44%	52%
Average percentage of time Therapeutic Van Transported vs. On Scene	73%	74%	73%	66%	72%	67%	52%	66%	57%	81%	82%	81%	82%	65%	76%

Therapeutic Van Pilot Program Observations

No detrimental patient outcomes have been observed among the 5,878 responses and 1,714 patient transports completed by DMH Therapeutic Vans. Seven patients transported by a DMH Therapeutic Van to a PUC facility have required a secondary response and transport to an Emergency Room for a subsequent medical complaint. However, after inquiries into each case of secondary transport, there have been no known adverse clinical outcomes.

The medical assessment that LAFD responding paramedics and EMTs conduct utilizing the pilot programs screening checklist appears to identify appropriate patients for the DMH Therapeutic Van approximately 70% of the time. The remaining 30% of the instances where the Therapeutic Van arrives on scene and does not take over the care of the patient causes an LAFD resource in some instances to remain at the incident longer than in times when the Therapeutic Van is not involved.

The ability of the LAFD to house the DMH Therapeutic Vans at fire stations has proven to be a significant logistical challenge. Due to the limited facility space within existing fire stations, temporary trailers repurposed from the City's COVID-19 pandemic

response effort have been used to house the Therapeutic Van staff. Unfortunately, these trailers are now well past their usable service life and will not be sustainable to house the DMH Therapeutic Van staff beyond the pilot phase.

Deployment locations were initially determined based on the proximity to PUCG facilities, LAFD fire station parking lot available space, and Los Angeles County Supervisor Districts.

Therapeutic Van Pilot Program Findings

EMTs and paramedics can safely transfer care of a patient experiencing an isolated psychiatric emergency to DMH staff for transport to a PUCG in a finite number of instances. However, the Therapeutic Van's narrow focus of services combined with the Therapeutic Van staff's inability to conduct a medical assessment or provide emergency medical services is a limiting factor when responding to a 911 call for service. In all instances when the LAFD dispatches a Therapeutic Van, an LAFD resource must respond as the primary unit. In all cases where the LAFD responds to a call for a psychiatric emergency, an EMT, paramedic, nurse practitioner, or physician assistant must conduct a medical assessment. Additionally, the LAFD found that in the vast majority of 911 calls for service it receives for a mental health emergency, the patient was also experiencing a medical problem or drug overdose, which requires a medical practitioner, or had associated violent behavior requiring law enforcement. When a patient is experiencing a mental health crisis associated with a medical emergency, drug overdose, or violence, the DMH Therapeutic Van cannot take over the patient's care.

The Therapeutic Van pilot program data reinforces that after LAFD resources have identified an appropriate patient and completed the medical checklist, transport to the PUCG is an effective disposition for persons experiencing a mental health crisis. Alternate destination transports can also decrease emergency room ambulance patient offload times (APOT). However, the Therapeutic Van pilot program is only one possible method to ultimately transport a person experiencing an isolated mental health emergency to a PUCG. The majority of the patients the LAFD encounters that are experiencing a mental health emergency require medical attention, and only in some cases can an LAFD paramedic approve transport to a PUCG. However, the LAFD APRU personnel have a wider scope of practice, potentially allowing them to medically clear a broader number of patients for transport to PUCGs than a paramedic.

Currently, the LAFD can transport patients experiencing an isolated psychiatric emergency who are cleared by an APRU nurse practitioner or physician assistant with a firefighter/paramedic to some Exodus PUCGs. The Exodus facilities are able to accept these patients without a psychiatric hold based on their ability to write the hold themselves. The DMH Therapeutic Van staff have agreements with several other facilities and are able to transport to these facilities due to the Therapeutic Van staff's ability to write the psychiatric hold. The LAFD is exploring the ability for LAFD APRU advanced practitioners to be granted the ability to write a psychiatric hold, which would allow LAFD resources to transport to a larger number of PUCGs that do not have the ability to write a psychiatric hold internally.

CONCLUSION

Based on the observations and findings associated with the Therapeutic Van pilot program thus far, it is recommended that during the next phase of the pilot, the following additional items will be explored:

1. The DMH will explore the use of telemedicine between the Therapeutic Van staff and a DMH psychiatrist.
2. The DMH will explore the administration of medications ordered by a psychiatrist via telemedicine.
3. The DMH will operate Therapeutic Van 4 and Therapeutic Van 94 from the DMH headquarters at 510 S. Vermont Avenue, Los Angeles, CA 90020, to determine the impact on responses from a DMH facility versus an LAFD facility. The LAFD will continue to dispatch these resources to a like service area as in the first phase of the pilot program.
4. The DMH will explore a proactive patient outreach operation conducted by personnel assigned to Therapeutic Vans 40, 59, and 77 outside of calls to 911 for service. The LAFD and DMH will analyze the impact this proactive approach has on the availability of Therapeutic Vans for response to 911 calls for service.
5. The LAFD and DMH will explore alternate or more effective deployment locations for Therapeutic Van 40.
6. The LAFD will analyze the current dispatch algorithms associated with the Therapeutic Van response for effectiveness.

Additionally, the LAFD will determine the feasibility of expanding the deployment of APRUs which are staffed by a nurse practitioner or physician assistant with a firefighter/paramedic. The staff assigned to the APRUs can provide advanced medical assessments and treatments, clear patients for transport to a Sober Center or Pucc, provide treatment in place resolutions for low acuity medical problems and make referrals to allied agencies for patients with elevated social risk factors. The LAFD is also researching the ability to train and authorize advanced providers to write psychiatric holds, allowing transport to a broader number of Puccs.

The LAFD and the City of Los Angeles have undertaken multiple pilot initiatives to address individual types of calls to 911 for non-traditional fire and emergency medical services, many of which overlap. The APRU is a multifunctional emergency response unit that can provide workload relief to rescue ambulances and fire companies, improve resource availability, improve response times, provide advanced medical care, and more appropriately respond to calls for psychiatric emergencies, serial inebriate patients, low acuity medical complaints, and navigate referrals to allied agencies.

Board report prepared by Tyler J. Dixon, Assistant Chief, Emergency Medical Services Bureau.

Attachment

Attachment 1

Types of Los Angeles City Fire Department (LAFD) Emergency Medical Services Units and Los Angeles County Department of Mental Health (DMH) Units

Legend

EMT	Emergency Medical Technician
PM	Paramedic
LPT	Licensed Psychiatric Technician
PEER	Peer support
Driver	Non-clinical van driver
AP	Advanced Provider: Nurse Practitioner or Physician Assistant

LAFD EMT Fire Company (4 EMTs)

- Basic Life Support

LAFD Paramedic Fire Company (1 PM, 3 EMTs)

- Basic Life Support
- Initial Advanced Life Support

LAFD EMT Rescue Ambulance (2 EMTs)

- Basic Life Support
- Can transport to a hospital

LAFD Paramedic Rescue Ambulance (2 PM)

- Basic Life Support
- Advanced Life Support
- Can transport to a hospital

LAFD Fast Response Vehicles (1 PM, 1 EMT)

- Basic Life Support
- Initial Advanced Life Support

LAFD Fast Response Vehicles (2 PM)

- Basic Life Support
- Advanced Life Support
- Tactical Emergency Medical Support Training

DMH Therapeutic Van (1 LPT, 1 Peer, 1 Driver)

- No medical capabilities
- Can transport some isolated mental health emergencies without a medical complaint or violence to a Psychiatric Urgent Care Center after a PM conducts a medical assessment
- Can write a psychiatric hold

LAFD Advanced Provider Response Unit (1 PM, 1 AP)

- Basic Life Support
- Advanced Life Support
- Nurse Practitioner (NP) or Physician Assistant (PA)
- Scope of practice above a paramedic or nurse
- Able to treat and release low acuity patients on scene rather than transport them to a hospital
- Able to write a prescription and provide medications on scene
- Ability to medically clear patients for Psychiatric Urgent Care Centers beyond the scope of a paramedic or Therapeutic Van staff

- Able to medically clear patients for transport to a Sober Center beyond the scope of a Paramedic
- Able to provide follow-up care to EMS high-volume utilizers
- Able to refer patients with increased social/medical risk factors to additional services
- Able to make referrals to allied agencies
- Able to clear a patient for law enforcement booking
- Carry advanced medical equipment beyond the inventory of a Paramedic Rescue Ambulance