February 27, 2020

TO: Board of Fire Commissioners
FROM: Ralph M. Terrazas, Fire Chief
SUBJECT: WALL TIME REPORT

FINAL ACTION: Approved  Approved w/Corrections  Withdrawn
                Denied               Received & Filed  Other

SUMMARY
Wall Time, which is the time resulting from delays in transfer of patients at the Emergency Department (ED) due to overcrowding, has been an important issue for our Department as it makes ambulances unavailable for the next response.

RECOMMENDATION
That the Board:
Receive and file.

BACKGROUND
"Wall Time" occurs when emergency medical technicians (EMTs) or paramedics transport patients to the hospital and they cannot transfer their patients in a timely manner, forcing them to go out of service. The Department has been tracking this data to determine trends and develop policies and procedures to mitigate the impact of this problem.

ED overcrowding and improper triage of ambulance patients leads to prolonged Wall Time, which makes our ambulances unavailable to respond to the next emergency. The Emergency Medical Services Bureau (EMS Bureau) has worked with our hospital partners to try to address this problem through a variety of means. We have met with ED and hospital leaders to share data and discuss best practices to minimize Wall Time. We have also emphasized that unless patients who arrive by ambulance need continuous cardiac monitoring and/or they are a fall risk, they should be triaged to the waiting room and removed from our ambulance gurney.

There are several causes of Wall Time, including a steadily increasing volume of ambulance transports, busier EDs with fewer in-patient hospital beds (particularly during flu season), an increased number of admitted patients “boarding” in EDs, and an increasing number of psychiatric patients “boarding” in EDs awaiting transfer to a shrinking number of in-patient psychiatric beds.
Board of Fire Commissioners
Page 2

Since previous data has shown that Wall Time has increased each year, the Department has worked on several strategies to mitigate this growing problem. EMS Bureau leadership has met with our hospital partners which account for the majority of our Wall Time. In addition, we have met with EMS leadership at the County and State level to discuss this problem and work together to develop solutions.

During these meetings, we discussed various “best practices” to minimize Wall Time and enable our paramedics and EMTs to transfer care as quickly as possible and go available for the next call. Patients who were stable should be triaged off the ambulance stretcher and be sent to the triage area or ED waiting room. The ED should clear a bed for patients who require urgent evaluation or ongoing monitoring. EDs should have a process to allow patients with acute mental health issues to be transferred from EMS providers to a secure area, and finally, ED staff should actively work to release our ambulances in real time whenever this situation arises.

Methodology
Fire Stat compiled the Wall Time data by capturing the elapsed time from ambulance arrival at the hospital ED to the time the ambulance went available from the hospital. This data was captured from January 2017 through 2019.

Whenever our members are not available in an ED awaiting an open bed to transfer care of their patient, they go out of service/not available (“NAV-Beds”). This code is intended to be used only when the transfer time exceeds the allotted 30 minutes. This process was enacted in April 2018.

Results
The total number of hours that all LAFD ambulances were at the hospital transferring care for each year is shown below:

The cumulative number of hours decreased from 117,884 in 2017 to 103,219 in 2018. There was minimal change from 2018 to 2019 (104,693).

The mean duration of time spent at the hospital transferring patient care decreased from 36.25 minutes in 2017 to 30.77 minutes in 2018, and remained stable at 30.58 minutes in 2019.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL HOURS AT HOSP</th>
<th>MEAN # MIN. AT HOSP</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>117,884</td>
<td>36.25</td>
</tr>
<tr>
<td>2018</td>
<td>103,219</td>
<td>30.77</td>
</tr>
<tr>
<td>2019</td>
<td>104,693</td>
<td>30.58</td>
</tr>
</tbody>
</table>

Discussion
Since the Department now allows 30 minutes turnaround time at the hospital, which includes transfer of patient care, completion of documentation, and changing out the linens and cleaning the equipment, the mean time of just over 30 minutes means that Wall Time is not currently a significant issue for the Department on an aggregate basis.
However, the impact of Wall Time on the availability of LAFD resources has both a daily and seasonal variation and variable impact. When the number of ambulance transports increases, the number of hours of Wall Time increases. During periods of ED overcrowding, especially during seasonal influenza during the winter months, both transports and Wall Time increase.

The current policy is that when an ambulance is in at the hospital for more than 30 minutes, their status flashes on the resource controller’s screen at Metropolitan Fire Communications (MFC). The resource controller will contact the ambulance crew to ascertain their status if they are not NAV-Beds. If an ambulance is in at the hospital for more than 60 minutes, their status flashes in red and the resource controller dispatches an EMS Battalion Captain to the hospital to assist with making the ambulance available.

In addition, the implementation of Automated Vehicle Location (AVL) has provided our dispatchers with real-time situational awareness to ensure that ambulances accurately update their status. Previous to AVL, ambulances routinely returned to their first-in districts while still showing their status as “Hospital.” This artificially increased our reported Wall Time. Hence, the addition of AVL and our new procedures have led to a more accurate reporting of Wall Time and likely explain the significant decrease from 2017 to 2018. Since then, the data has remained relatively stable.

CONCLUSION
The Department continues to analyze Wall Time and develop policies and procedures to mitigate its impact on emergency ambulance availability. Daily and seasonal variations in terms of call load and transports will continue to impact Wall Time.

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