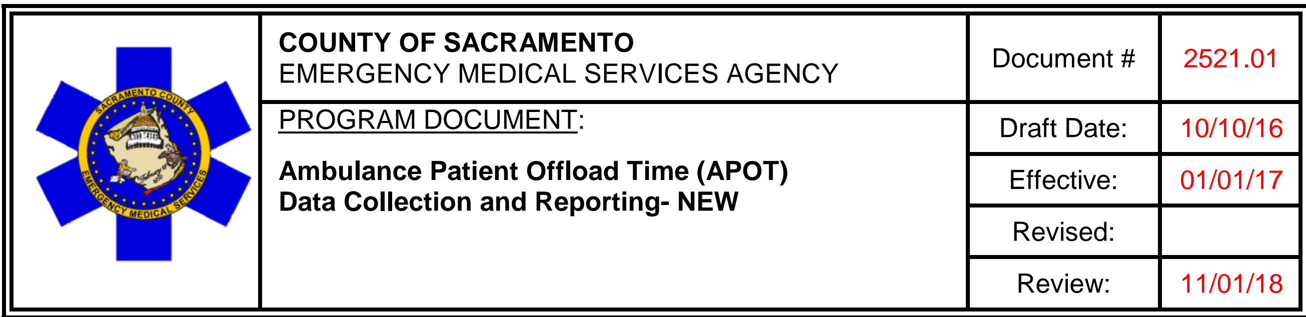

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	2521.01
	PROGRAM DOCUMENT: **Ambulance Patient Offload Time (APOT) Data Collection and Reporting- NEW**	Draft Date:	10/10/16
		Effective:	01/01/17
		Revised:	
		Review:	11/01/18

EMS Medical Director EMS Administrator

Purpose:

A. To provide standardized methodologies for Ambulance Patient Offload Time (APOT) data collection and reporting to Sacramento County Emergency Medical Services Agency (SCEMSA) in accordance with 1797.125 Health and Safety Code (AB 1223 (O'Donnell, 2015).
B. Use statewide standard methodology for calculating and reporting APOT developed by EMSA.
C. Establish criteria for the reporting of, and quality assurance follow-up for a non-standard patient offload time.

Authority:

A. California Health and Safety Code, Division 2.5 Section 1797.120, 1797.225
B. AB 1223 (O'Donnell, 2015)

Background:

A. Health and Safety Code 1797.120 now requires EMSA to develop a standard methodology for calculation of, and reporting by, a LEMSA of ambulance patient offload time.
B. Health and Safety Code 1797.225 establishes that a LEMSA may adopt policies and procedures for calculating and reporting ambulance offload time. Those policies and procedures must be based on the statewide standard methodology developed pursuant to 1797.120. LEMSAs that adopt patient off-loading policies and procedures must also establish criteria for reporting and quality assurance follow-up for a non-standard patient off load time

Definitions:

A. **Ambulance arrival at the Emergency Department (ED) -** the time ambulance stops at the location outside the hospital ED where the patient will be unloaded from the ambulance.
B. **Ambulance Patient Offload Time (APOT)** - the time interval between the arrival of an ambulance patient at an ED and the time the patient is transferred to the ED gurney, bed, chair or other acceptable location and the emergency department assumes the responsibility for care of the patient .
C. **Ambulance Patient Offload Time (APOT) Standard** – the time interval standard established by the LEMSA within which an ambulance patient that has arrived in an ED should be transferred to an ED gurney, bed, chair or other acceptable location and the ED assumes the responsibility for care of the patient.
D. **Non-Standard Patient Offload Time** – the ambulance patient offload time for a patient exceeds a period of time designated by the LEMSA. (See Standards below).

E. **Ambulance transport** – the transport of a patient from the prehospital EMS system by emergency ambulance to an approved EMS receiving hospital. This includes Inter-facility transports, 7-digits response, and other patient transports to the ED.
F. **APOT 1** – an ambulance patient offload time interval process measure. This metric is a continuous variable measured in minutes and seconds then aggregated and reported at the 90th percentile.
G. **APOT 2** - an ambulance patient offload time interval process measure. This metric demonstrates the incidence of ambulance patient offload times that exceed a twenty (20) minute reporting goal reported in reference to 60, 120 and 180 minute time intervals, expressed as a percentage of total EMS patient transports.
H. **Ambulance Patient Offload Delay (APOD)** - the occurrence of a patient remaining on the ambulance gurney and/or the emergency department has not assumed responsibility for patient care beyond the LEMSA approved APOT standard. (Synonymous with non-standard patient offload time).
I. **Clock Start** – the timestamp that captures when APOT begins. This is captured in the NEMSIS 3.4 data set as the time the patient/ambulance arrives at destination/receiving hospital (eTimes.11) and stops at the location outside the hospital ED where the patient will be unloaded from the ambulance.
J. **Clock Stop** – the timestamp that captures when APOT ends. This is captured in the NEMSIS 3.4 data set as destination patient transfer of care date/time (e.Times.12).
K. **Emergency Department (ED) Medical Personnel** – an ED physician, mid-level practitioner (e.g. Physician Assistant, Nurse Practitioner) or Registered Nurse (RN).
L. **EMS Personnel** – Public Safety First Responders, EMTs, AEMTs, EMT-II and/or paramedics responsible for out of hospital patient care and transport consistent with the scope of practice as authorized by their level of credentialing.
M. **Transfer of Patient Care** – the transition of patient care responsibility from EMS personnel to receiving hospital ED medical personnel. (See criteria below in Measurement Methods).
N. **Verbal Patient Report** – The face to face verbal exchange of key patient information between EMS personnel and ED medical personnel provided that is presumed to indicate transfer of patient care.
O. **Written EMS Report**– The written report supplied to ED medical personnel that details patient assessment and care that was provided by EMS personnel. Electronic report (ePCR) is now required by Health and Safety Code 1797.227.

Standard Offload Time: APOT

Receiving hospitals have a responsibility to ensure policies and processes are in place that facilitates the rapid and appropriate transfer of patient care from EMS personnel to the ED medical personnel within 20 minutes of arrival at the ED.

Non-Standard Offload Time: Extended Delay:

APOD occurs when patient offload time is exceeded. SCEMSA shall collect and report the percentage of patients that are delayed by 21-60 minutes, 61-120, 121-180 minutes, and delays greater than 180 minutes to EMSA.
If APOD occurs the hospital should make every attempt to:

A. Provide a safe area in the ED within direct sight of ED medical personnel where the ambulance crew can temporarily wait while the hospital's patient remains on the ambulance gurney.
B. Inform the attending paramedic or EMT of the anticipated time for the offload of the patient.

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C. Extended offload times reported during an MCI or other large incident(s) response will be taken into consideration.

EMS personnel are directed to do the following to prevent APOD:

A. Provide the receiving hospital ED with the earliest possible notification that the patient is being transported to their facility.
B. Provide a verbal patient report to the ED medical personnel within 20 minutes of arrival to the ED.
C. Contact the EMS organization's on duty supervisor, or other designated contact for direction if the ED medical personnel do not offload the patient within the 20 minute local ambulance patient offload time standard.
D. Obtain a signature from the ED medical personnel as soon as patient care has been transferred.
E. Work cooperatively with the receiving hospital staff to transition patient care within the timeframes established by this policy.
F. EMS personnel are responsible for immediately returning to response ready status once patient care has been transferred to ED medical personnel and the patient has been offloaded from the ambulance gurney.

Direction of EMS Personnel:

EMS personnel shall continue to provide patient care prior to the transfer of patient care to the designated receiving hospital ED medical personnel. All patient care shall be documented according to SCEMSA policies. Medical Control and management of the EMS system, including EMS personnel, remain the responsibility of the Local EMS Agency Medical Director and all care provided to the patient must be pursuant to SCEMSA protocols and policies.[1]

Patient Care Responsibility:

The responsibility for patient care belongs to the designated receiving hospital once the patient arrives on hospital grounds.[2] Receiving hospitals should implement processes for ED medical personnel to immediately triage and provide the appropriate emergency medical care for ill or injured patients upon arrival to the ED by ambulance.

Transfer of Patient Care:

Patients under the care of EMS personnel upon arrival at the hospital the ED medical personnel should make every attempt to accept a verbal patient report and offload the patient to a hospital bed or other suitable sitting or reclining device at the earliest possible time not to exceed 20 minutes. During triage by ED medical personnel, EMS personnel will provide a verbal patient report containing any pertinent information necessary for the ongoing care of the patient. Transfer of patient care is completed once the ED medical staff has accepted a verbal patient report and the patient have been transferred to a hospital bed and a signature obtained from medical ED personnel. If transfer of care and patient offloading from the ambulance gurney exceeds the 20 minute standards, it will be documented and tracked as APOD.

Measurement Methods:

A. Clock Start (eTimes.11):
The time the ambulance arrives at the ED and stops at the location outside the hospital ED where the patient will be unloaded from the ambulance.
B. Clock Stop (times. 12):
When the patient is transferred to the emergency department gurney, bed, chair or other acceptable location and the emergency department has assumed the responsibility for care of the patient.

[1]Medical Care of EMS patients awaiting transfer of care to hospital staff-Letter Addendum1
[2]Emergency Medical Treatment and Active Labor Act (EMTLA), 42 US Code of Federal Regulations

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1. Transfer of care criteria:
   - Verbal patient report is given by transporting EMS personnel and acknowledged by ED medical personnel;
   - ED medical personnel signs ePCR or other patient care form (Completion of ePCR is not a requirement).

Data Collection and Documentation:

A. EMS providers shall implement digital CAD data migration into ePCR platforms and report data to SCEMSA in real time or at least once per twenty-four (24) hour period.

Reporting to EMSA: By SCEMSA: SCEMSA staff will complete reports to EMSA based on EMSA guidelines.

A. **APOT-1:** The number reported is the APOT in minutes for transfer of care of 90% of ambulance patients and the number of ambulance runs included in the report.
B. **APOT-2:** The number reported is the percentage of ambulance patients transported by EMS personnel that experience an ambulance patient offload delay beyond twenty (20) minutes, which has been set as a target standard for statewide reporting consistency and to exclude rapid APOT from being combined with more extended times. Time intervals will be reported by sixty (60) minute intervals up to one hundred eighty (180) minutes then any APOT exceeding one hundred eighty (180) minutes.

Appendix A: Section 1
Section 1797.225 is added to the Health and Safety Code, to read:
1797.225.
(a) A local EMS agency may adopt policies and procedures for calculating and reporting ambulance patient offload time, as defined in subdivision (b) of Section 1797.120.
(b) A local EMS agency that adopts policies and procedures for calculating and reporting ambulance patient offload time pursuant to subdivision (a) shall do all of the following:
(1) Use the statewide standard methodology for calculating and reporting ambulance patient offload time developed by the authority pursuant to Section 1797.120.
(2) Establish criteria for the reporting of, and quality assurance follow-up for, a nonstandard patient offload time, as defined in subdivision (c).
(c) (1) For the purposes of this section, a “nonstandard patient offload time” means that the ambulance patient offload time for a patient exceeds a period of time designated in the criteria established by the local EMS agency pursuant to paragraph (2) of subdivision (b).
(3) “Nonstandard patient offload time” does not include instances in which the ambulance patient offload time exceeds the period set by the local EMS agency due to acts of God, natural disasters, or manmade disasters.

Appendix B: Section 1.
Set Measure ID# APOT-1
Section 2.
Set Measure ID# APOT-2

Cross Reference: PD# 2522 Electronic Health Record and Data Policy

AMBULANCE PATIENT OFFLOAD TIME

MEASURE SET	Ambulance Patient Offload Time	
SET MEASURE ID #	APOT-1	
PERFORMANCE MEASURE NAME	Ambulance Patient Offload Time for Emergency Patients	
Description	What is the 90th percentile for on Ambulance Patient Offload Time at the Hospital Emergency Department?	
Type of Measure	Process	
Reporting Value and Units	Time (Minutes and Seconds)	
Continuous Variable Statement (Population)	Time (in minutes) from time ambulance arrives at the hospital until the patient is transferred to hospital emergency department care.	
Inclusion Criteria	**Criteria**	**Data Elements**
	• All events for which eResponse.05 "type of service requested" has value 2205001 "911 response (Scene),"; • All events in eDisposition.21 was Transport to Hospital-Emergency Department was made and has value of 4221003; • eTimes.11 "Patient Arrived at Destination Date/Time" values are logical and present AND • All events for which eResponse.05 "type of service requested" has value 2205001 "911 response (Scene),"; • eTimes.11 "Patient Arrived at Destination Date/Time" values are logical and present	• Type of Service Requested (eResponse.05) • Type of Destination (eDisposition.21) • Patient Arrived at Destination Date/Time (eTimes.11) • Destination Patient Transfer of Care Date/Time (eTimes.12)
Exclusion Criteria	**Criteria**	**Data Elements**
	None	
Indicator Formula Numeric Expression	The formula is the 90th Percentile of the given numbers or distribution in their ascending order.	
Example of Final Reporting Value (number and units)	19 minutes, 34 seconds (19:34)	

Sampling	No
Aggregation	Yes
Minimum Data Values	Not Applicable
Data Collection Approach	☐ Retrospective data sources for required data elements include administrative data and pre-hospital care records. ☐ Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.
Suggested Display Format & Frequency	Process control or run chart by month
Suggested Statistical Measures	90th Percentile Measurement. Aggregate measure of central tendency and quantile (fractile) measurement to determine the span of frequency distributions.
Trending Analysis	Yes
Benchmark Analysis	(TBD)
Reporting Notes	Report aggregate values by: 1) LEMSA (using total denominator), 2) Broken out by individual hospital Report the 90 percentile time calculated and the denominator (number of transports) Report Quarterly, within 2 months of the end of the quarter: • June 1 for period of January 1 through March 31; • September 1 for period of April 1 through June 30; • December 1 for period of July 1 through September 30; • March 1 for period of October 1 through December 31 Statute allows the LEMSA to set their standard target time; however, the workgroup recommends a target time of 20 minutes, which EMSA will use for the data display.

AMBULANCE PATIENT OFFLOAD TIME—EXTENDED DELAY

MEASURE SET	Extended Ambulance Patient Offload Time	
SET MEASURE ID #	APOT-2	
PERFORMANCE MEASURE NAME	Duration of Ambulance Patient Offload Time for Emergency Patients	
Description	2.1: What percentage of patients transported by EMS personnel experience a transfer between 20-60 minutes of arrival at the Hospital Emergency Department? 2.2: What percentage of patients transported by EMS personnel experience a transfer of care between 61-120 minutes after arrival at the Hospital Emergency Department? 2.3: What percentage of patients transported by EMS personnel experience a transfer of care between 121-180 minutes after arrival at the Hospital Emergency Department? 2.4: What percent of patients transported by EMS personnel experience a transfer of care more than 180 minutes after arrival in the Hospital Emergency Department.	
Type of Measure	Process	
Reporting Value and Units	(%) Percentage	
Denominator Statement (population)	Number of patients who were transported to a hospital emergency department by EMS Personnel.	
Denominator Inclusion Criteria	**Criteria**	**Data Elements**
	• All events for which eResponse.05 "type of service requested" has value 2205001 "911 response (Scene),"; • All events in eDisposition.21 was Transport to Hospital-Emergency Department was made and has value of 4221003; • eTimes.11 "Patient Arrived at Destination Date/Time" values are logical and present	• Type of Service Requested (eResponse.05) • Type of Destination (eDisposition.21) • Patient Arrived at Destination Date/Time (eTimes.11)
Exclusion Criteria	**Criteria**	**Data Elements**
	None	

<table>
<tr><td>Numerator Statement (sub-population)</td><td colspan="2">2.1: Number of patients who were transported to a hospital emergency department by EMS Personnel and had their care transferred within 20-60 minutes after their arrival to the Emergency Department.

2.2: Number of patients who were transported to a hospital emergency department by EMS Personnel and had their care transferred 61-120 minutes after their arrival to the Emergency Department.

2.3: Number of patients who were transported to a hospital emergency department by EMS Personnel and had their care transferred 121-180 minutes after their arrival to the Emergency Department.

2.4: What percent of patients transported by EMS personnel experience a transfer of care more than 180 minutes after arrival in the Hospital Emergency Department.</td></tr>
<tr><td>Numerator Inclusion Criteria</td><td><u>Criteria</u></td><td><u>Data Elements</u></td></tr>
<tr><td></td><td>• All events for which eResponse.05 “type of service requested” has value 2205001 “911 response (Scene),”;
• All events in eDisposition.21 was Transport to Hospital-Emergency Department was made and has value of 4221003;
• eTimes.11 “Patient Arrived at Destination Date/Time” values are logical and present

AND

• eTimes.12 “Destination Patient Transfer of Care Date/Time” values are logical and present

Transferred to hospital care must include:

• Hospital Emergency Department Triage completed
• Patient is moved from the Pre-hospital EMS equipment to the hospital Emergency Department Equipment.</td><td>• Type of Service Requested (eResponse.05)
• Type of Destination (eDisposition.21)
• Patient Arrived at Destination Date/Time (eTimes.11)
• Destination Patient Transfer of Care Date/Time (eTimes.12)</td></tr>
<tr><td>Exclusion Criteria</td><td><u>Criteria</u></td><td><u>Data Elements</u></td></tr>
<tr><td></td><td>None</td><td></td></tr>
</table>

Indicator Formula Numeric Expression	The formula is to divide (/) the numerator (N) by the denominator (D) and then multiply (x) by 100 to obtain the (%) value the indicator is to report. Therefore the indicator expressed numerically is N/D =%	
Example of Final Reporting Value (number and units)	15%	
Sampling	No	
Aggregation	Yes	
Minimum Data Values	Not Applicable	
Data Collection Approach	• Retrospective data sources for required data elements include administrative data and pre-hospital care records. • Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.	
Suggested Display Format &Frequency	Process control or run chart by month	
Suggested Statistical Measures	Mean (x); Mode (m)	
Trending Analysis	Yes	
Reporting Notes	Report aggregate values by: 1) LEMSA (using total denominator), 2) Broken out by individual hospital Report the % calculated and the denominator used to calculate (number of runs) Report Quarterly, within 2 months of the end of the quarter: • June 1 for period of January 1 through March 31; • September 1 for period of April 1 through June 30; • December 1 for period of July 1 through September 30; • March 1 for period of October 1 through December 31	

Addendum 1

Health and Human Services
Sherri Z. Heller, Ed.D., Director

County of Sacramento

Divisions
Behavioral Health Services
Child Protective Services
Departmental Administration
Primary Health Services
Public Health
Senior and Adult Services

TO: Sacramento County EMS receiving hospital Emergency Department Chiefs and Nurse Managers

RE: Medical care of EMS patients awaiting transfer of care to hospital staff

May 13, 2016

Dear ED Chief and Nurse Manager,

Increasing Emergency Department (ED) and emergency medical services (EMS) volume has clearly stressed our Emergency Medical Care Delivery System, and we have seen increased average times between ambulance arrival to the ED and transfer of care to hospital staff ("wall times"). We have also seen efforts to provide patient care by ED staff during this waiting period. Among other concerns, there have been requests to take patients for radiologic studies before they are off EMS gurneys. While we are all trying to find creative ways to do what is best for patients, we must also comply with the California Code of Regulations, for paramedic and emergency medical technician (EMT) scope of practice.

While awaiting transfer to hospital stretchers and transfer of care to hospital staff, patients remain legally under the care of Sacramento County EMS Agency (SCEMSA) accredited paramedics and licensed EMTs, and their care must comply with existing regulation. In order to meet California Code of Regulations, for paramedic and EMT scope of practice, and to mitigate potential risk to the attending paramedic or EMT, only the following can occur during the waiting period before care is transferred to hospital stretcher:

1. Ongoing scope of care may be continued as appropriate. Examples for paramedics include continuing IV fluids or bronchodilators. Examples for EMTs include continued oxygen therapy and vital sign monitoring.
2. Diagnostic procedures shall be limited to procedures necessary to triage patients to an appropriate area within an emergency department. These procedures include: basic vital signs, 12-Lead EKG and finger stick Blood Glucose Level (BGL) reassessment.
3. EMS Crews shall not be utilized to transport patients on EMS gurneys to other areas of the hospital (i.e., radiology, CT etc.) for treatment or diagnostic procedures.

4. At no time are patients to receive any care which is outside paramedic or EMT scope of practice (medication, procedure, intervention) while they remain on EMS gurneys, unless a physician is assuming care, **and will stay with the patient,** until they are transferred to a hospital stretcher (consistent with SCEMSA physician on scene policy 2039).
5. If patient status deteriorates, or changes so that they require assessment or care by hospital staff which is beyond the attending personnel's scope of practice, a hospital physician shall be required to remain at the patient side until the patient can be transferred to a hospital stretcher. At that time, that patient shall receive priority to available hospital stretchers.

Please feel free to contact me if you have questions or wish to discuss or comment. Thank you for your time.

Hernando Garzon, MD
Medical Director, Sacramento County EMSA
garzonh@saccounty.net

CC: MOC/OOC