RIVERSIDE COUNTY EMS AGENCY

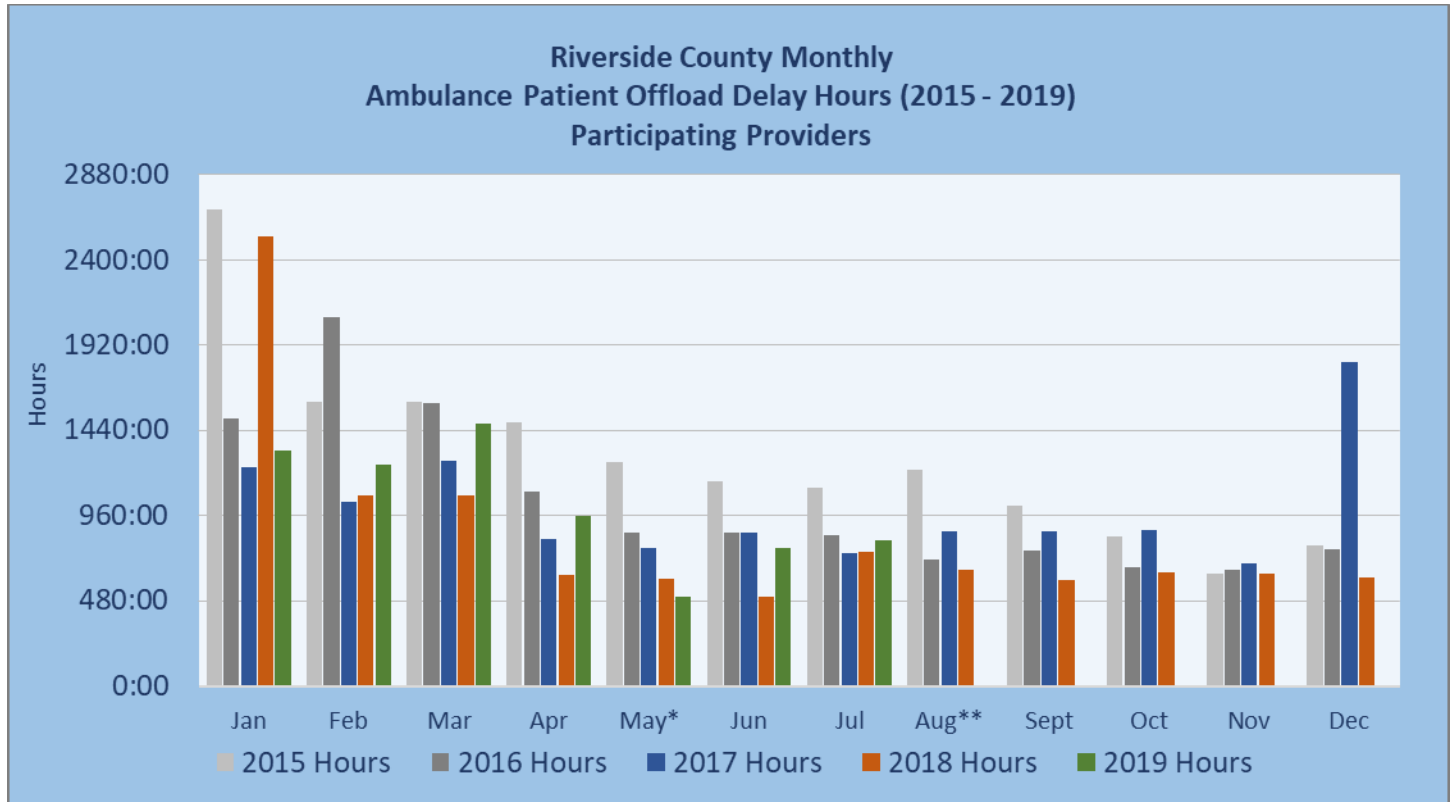# Ambulance Patient Offload Time

July 2019

Monthly Report

UPDATED AND REDESIGNED FOR 2019

Prepared by Sudha Mahesh, Riverside County EMS Agency – August 28, 2019

RIVERSIDE COUNTY AMBULANCE PATIENT OFFLOAD TIME

This chart represents total ambulance patient offload delay (APOD) time from hospitals within Riverside County. This chart includes only delays greater than 30 minutes, and only the time after the first 30 minutes is summed.

Riverside County Monthly
Ambulance Patient Offload Delay Hours (2015 - 2019)
Participating Providers

Legend: 2015 Hours, 2016 Hours, 2017 Hours, 2018 Hours, 2019 Hours

APOD times for years 2015 and 2016 (represented in grayscale) were measured using a different methodology. See page 6 for details.
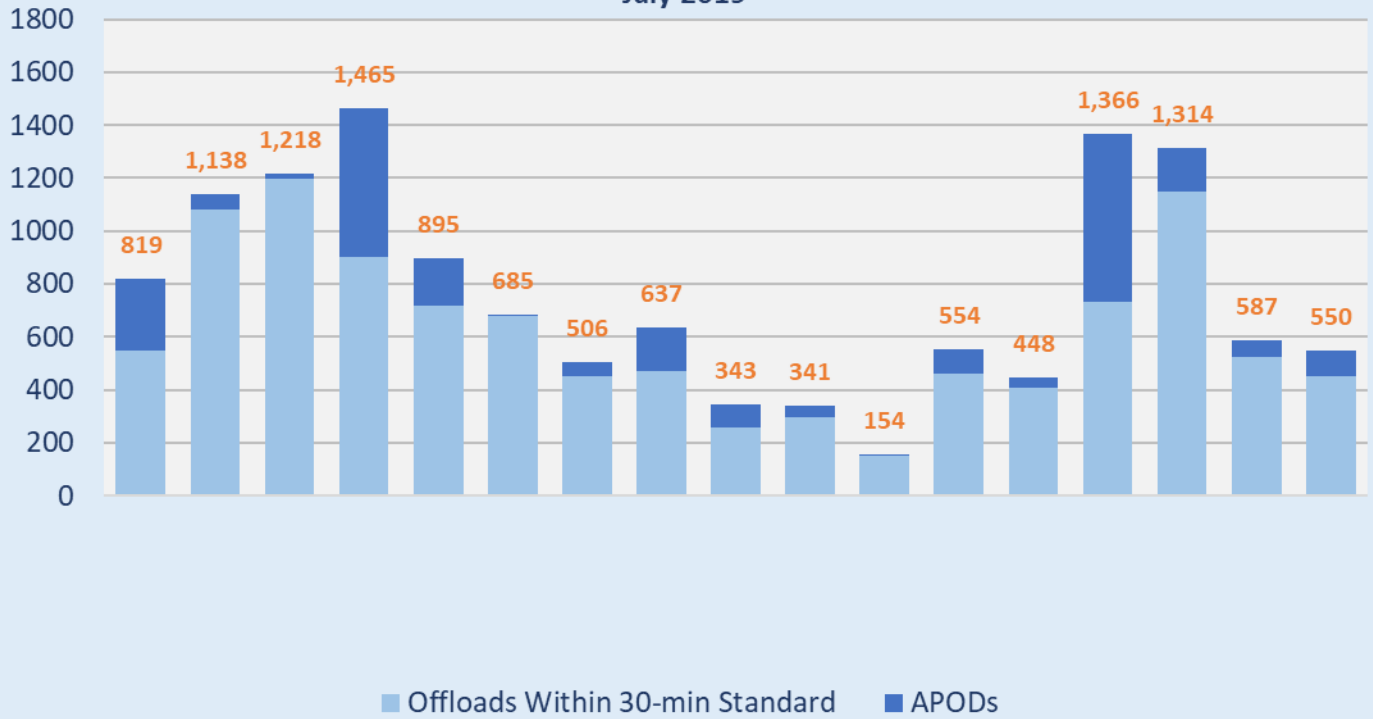**For May of 2016, actual totals may have been slightly higher than are reported due to a 3-day CAD outage.*
**Beginning August 2017, times represented include all participating providers. Prior to August, data included AMR responses only.
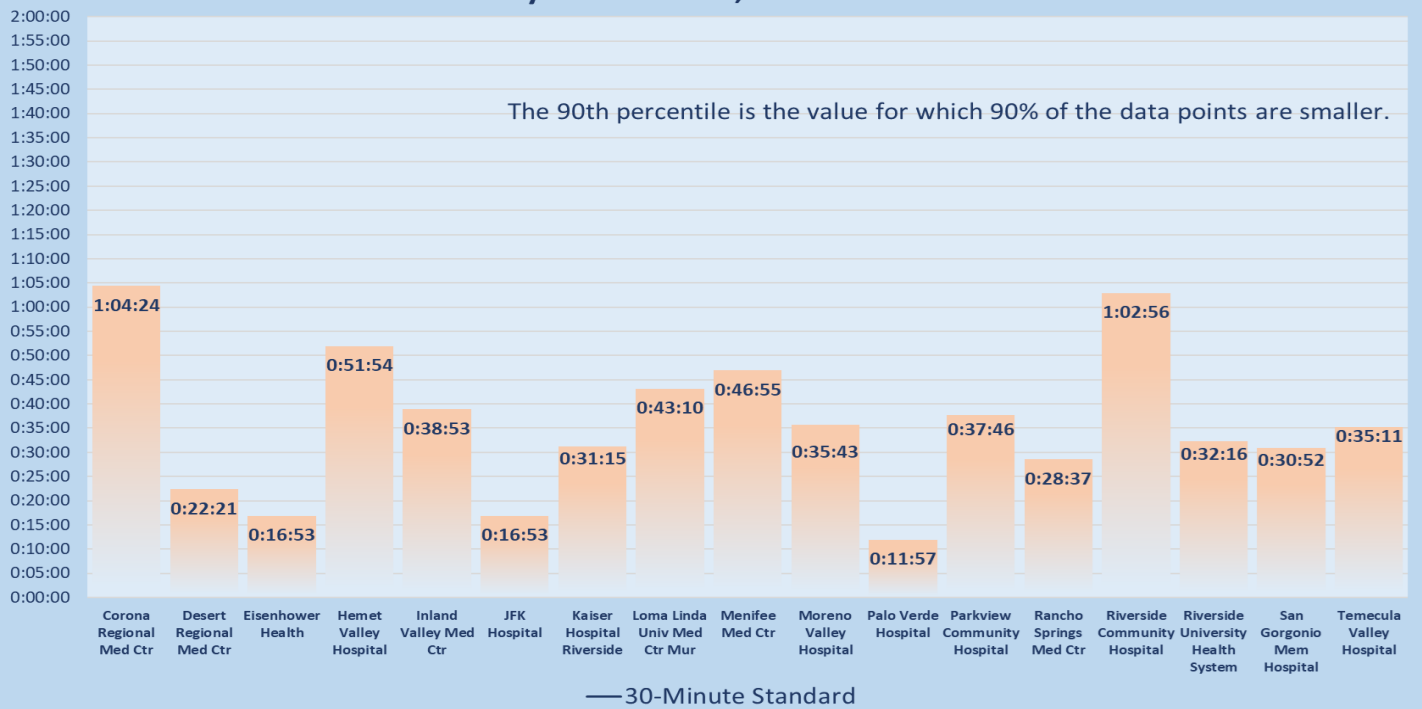
July 2019						
	ALS Transports	**APOT**	**APOD Hours**	**APODs**	**APOD Compliance**	**APOT - 1**
Corona Regional Med Ctr	819	418:44:09	141:54:28	273	66.7%	**1:04:24**
Desert Regional Med Ctr	1,138	250:04:32	13:50:45	56	95.1%	0:22:21
Eisenhower Health	1,218	197:30:43	2:39:46	21	98.3%	0:16:53
Hemet Valley Hospital	**1,465**	693:37:19	156:25:30	561	61.7%	0:51:54
Inland Valley Med Ctr	895	306:28:11	42:37:05	179	80.0%	0:38:53
JFK Hospital	685	100:24:37	0:43:21	7	**99.0%**	0:16:53
Kaiser Hospital Riverside	506	147:24:24	14:13:33	55	89.1%	0:31:15
Loma Linda Univ Med Ctr Mur	637	251:57:20	36:02:30	165	74.1%	0:43:10
Menifee Med Ctr	343	139:23:44	32:42:09	84	75.5%	0:46:55
Moreno Valley Hospital	341	105:54:31	13:05:12	42	87.7%	0:35:43
Palo Verde Hospital	**154**	**14:16:53**	**0:01:49**	**2**	98.7%	**0:11:57**
Parkview Community Hospital	554	184:05:49	21:59:44	95	82.9%	0:37:46
Rancho Springs Med Ctr	448	116:27:18	6:02:12	40	91.1%	0:28:37
Riverside Community Hospital	1,366	**814:44:43**	**277:00:11**	**634**	**53.6%**	1:02:56
Riverside University Health System	1,314	424:22:29	29:34:58	167	87.3%	0:32:16
San Gorgonio Mem Hospital	587	170:31:14	11:17:24	62	89.4%	0:30:52
Temecula Valley Hospital	550	186:19:18	18:14:38	100	81.8%	0:35:11
Grand Total	**13,020**	**4522:17:14**	**818:25:15**	**2,543**	**80.5%**	**0:40:31**

Key		High	Low

Riverside County Hospitals
Transports and APODs
July 2019

Bar chart with values (Offloads Within 30-min Standard and APODs):

- 819
- 1,138
- 1,218
- 1,465
- 895
- 685
- 506
- 637
- 343
- 341
- 154
- 554
- 448
- 1,366
- 1,314
- 587
- 550

Legend: ■ Offloads Within 30-min Standard ■ APODs

July 2019 APOT 1, 90th Percentile

The 90th percentile is the value for which 90% of the data points are smaller.

Hospital	90th Percentile
Corona Regional Med Ctr	1:04:24
Desert Regional Med Ctr	0:22:21
Eisenhower Health	0:16:53
Hemet Valley Hospital	0:51:54
Inland Valley Med Ctr	0:38:53
JFK Hospital	0:16:53
Kaiser Hospital Riverside	0:31:15
Loma Linda Univ Med Ctr Mur	0:43:10
Menifee Med Ctr	0:46:55
Moreno Valley Hospital	0:35:43
Palo Verde Hospital	0:11:57
Parkview Community Hospital	0:37:46
Rancho Springs Med Ctr	0:28:37
Riverside Community Hospital	1:02:56
Riverside University Health System	0:32:16
San Gorgonio Mem Hospital	0:30:52
Temecula Valley Hospital	0:35:11

—— 30-Minute Standard

Data for this report has been collected from ePCRs (electronic patient care records) via FirstWatch® and are available after they have been completed by the provider. There is, therefore, an inherent latency to the availability of these records. Due to this latency, subsequent reports may feature higher aggregate numbers than earlier reports for the same reporting period. The difference is insignificant (averaging less than .07%) and does not impact overall compliance.

APOT AND APOD TRENDS

The first table below shows the **monthly averages** in *Transports, APOT, APOD Hours, and APODs* for the previous 12 months: ***August 2018 through the end of the present month***. Also included are the minimum and maximum APODs during the same 12-month period.

The bottom table shows a three-month comparison of **actuals** for *Transports, APODs, and APOD Hours*.

	Monthly Average over last 12 Months					
	Avg Transports	Avg APOT	Avg APOD Hours	Avg APODs	Min of APODs	Max of APODs
Corona Regional Med Ctr	737	327:58:08	85:55:11	214	152	310
Desert Regional Med Ctr	1,096	249:29:04	14:48:00	59	33	112
Eisenhower Health	1,300	223:33:27	3:21:22	24	10	61
Hemet Valley Hospital	1,386	619:04:03	129:11:35	460	341	565
Inland Valley Med Ctr	859	267:45:55	39:05:18	123	56	179
JFK Hospital	590	88:36:54	1:21:52	10	3	22
Kaiser Hospital Riverside	519	168:40:18	21:56:58	76	41	128
Loma Linda Univ Med Ctr Mur	629	317:22:42	89:22:57	219	110	304
Menifee Med Ctr	317	125:24:27	29:45:37	70	35	98
Moreno Valley Hospital	335	107:45:56	15:19:57	50	29	72
Palo Verde Hospital	**158**	**15:10:10**	**0:45:55**	**3**	**0**	**6**
Parkview Community Hospital	482	184:59:39	37:06:12	101	62	157
Rancho Springs Med Ctr	446	123:05:24	9:48:58	43	28	80
Riverside Community Hospital	**1,448**	**849:21:39**	**286:30:59**	**631**	**346**	**806**
Riverside University Health System	1,277	476:44:21	58:42:10	262	167	423
San Gorgonio Mem Hospital	566	167:23:03	11:11:51	63	39	97
Temecula Valley Hospital	543	179:06:08	19:08:24	88	57	137

	Transports and APODs: 3-Month Comparison								
	May 2019			June 2019			July 2019		
	Transports	APODS	APOD Hours	Transports	APODS	APOD Hours	Transports	APODS	APOD Hours
Corona Regional Med Ctr	705	170	57:38:57	771	202	81:10:46	819	273	141:54:28
Desert Regional Med Ctr	1,083	33	6:48:27	1,098	65	14:59:18	1,138	56	13:50:45
Eisenhower Health	1,293	15	2:32:36	1,276	18	2:55:59	1,218	21	2:39:46
Hemet Valley Hospital	1,416	**452**	**105:24:58**	1,375	492	138:53:10	**1,465**	561	156:25:30
Inland Valley Med Ctr	829	128	37:36:48	851	165	77:08:18	895	179	42:37:05
JFK Hospital	597	9	0:39:16	638	6	**1:28:45**	685	7	0:43:21
Kaiser Hospital Riverside	515	86	22:38:18	535	108	32:55:41	506	55	14:13:33
Loma Linda Univ Med Ctr Mur	623	198	62:16:39	627	218	64:41:45	637	165	36:02:30
Menifee Med Ctr	319	76	22:11:19	338	98	41:20:26	343	84	32:42:09
Moreno Valley Hospital	328	39	9:59:19	338	56	23:25:49	341	42	13:05:12
Palo Verde Hospital	**169**	**2**	**0:17:59**	**162**	**0**		**154**	**2**	**0:01:49**
Parkview Community Hospital	454	64	14:50:40	480	92	31:02:45	554	95	21:59:44
Rancho Springs Med Ctr	431	46	7:02:32	454	31	6:48:04	448	40	6:02:12
Riverside Community Hospital	**1,472**	346	71:51:11	**1,461**	**580**	**175:38:20**	1,366	**634**	**277:00:11**
Riverside University Health System	1,337	216	38:02:46	1,255	205	34:22:00	1,314	167	29:34:58
San Gorgonio Mem Hospital	588	65	12:42:15	563	86	17:33:37	587	62	11:17:24
Temecula Valley Hospital	573	110	29:56:16	586	128	34:29:18	550	100	18:14:38
	12,732	2,055	502:30:16	12,808	2,550	778:54:01	13,020	2,543	818:25:15

APOD hours only include the time after the 30-minute standard has elapsed.

Key	High	Low

APOD AMBULANCE REDIRECTION

On March 20, 2019, Riverside County EMS Agency activated Provisional Policy 6104 (http://www.remsa.us/policy/6104.pdf) to allow provisional redirection of Ambulances from hospitals that have extended Ambulance Patient Offload Delay (APOD)--to the closest most appropriate hospital that does not have extended APOD. Extended APOD is a patient remaining on an ambulance gurney for 90 minutes or greater after arrival at a hospital. The table below shows the ambulance diversions that occurred during the month of July 2019.

	Occurences of APOD Redirection
Corona Regional Medical Center	10
Loma Linda University Medical Center--Murrieta	1
Menifee Valley Medical Center	3
Riverside Community Hospital	21
Inland Valley Medical Center	2
Hemet Valley Medical Center	2
Grand Total	**39**

EMERGENCY TREATMENT SERVICES

Transports to ETS do not meet the EMSA definitions for APOT (see page 6); therefore, they are not being included with the APOT aggregates. Comprising over 3% of overall transports, the number of transports to ETS is significant enough to impact the EMS system and, therefore, warrants reporting.

July 2019 - Emergency Treatment Services				
	Transports to ETS	Total Offload Time	APOD Hours	APODs	APOD Compliance
Emergency Treatment Services	408	185:46:57	33:40:53	134	67.2%

Transports and APODs at ETS: 3-Month Comparison								
	May 2019			**June 2019**			**July 2019**		
	Transports	APODs	APOD Hours	Transports	APODs	APOD Hours	Transports	APODs	APOD Hours
Emergency Treatment Services	478	200	61:24:53	416	169	44:11:36	408	134	33:40:53

APOT AND APOD DEFINITIONS

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.[1] The Clock Start (eTimes.11) is the time of patient arrival at the destination (hospital), and the Clock Stop (eTimes.12) is time the care of the patient is transferred.[2] REMSA obtains both times from the ePCR.

APOT -1 Specifications
Criteria: All 911 transports to a hospital emergency department for which the patient arrival and transfer dates and times are "logical and present."[3]
Method: Aggregate of all transfer times and reported at the 90th percentile (the value for which 90% of the times are shorter).

Ambulance Patient Offload Delay (APOD)
Any delay in ambulance patient offload time (APOT) that exceeds the local ambulance patient offload time standard of 25/30 minutes (Riverside County EMS Agency applies a 30-minute standard). This shall also be synonymous with "non-standard patient offload time" as referenced in the Health and Safety Code.[4] If the transfer of care and patient offloading from the ambulance gurney exceeds the 30 minute standard, it will be documented and tracked as APOD.[5]
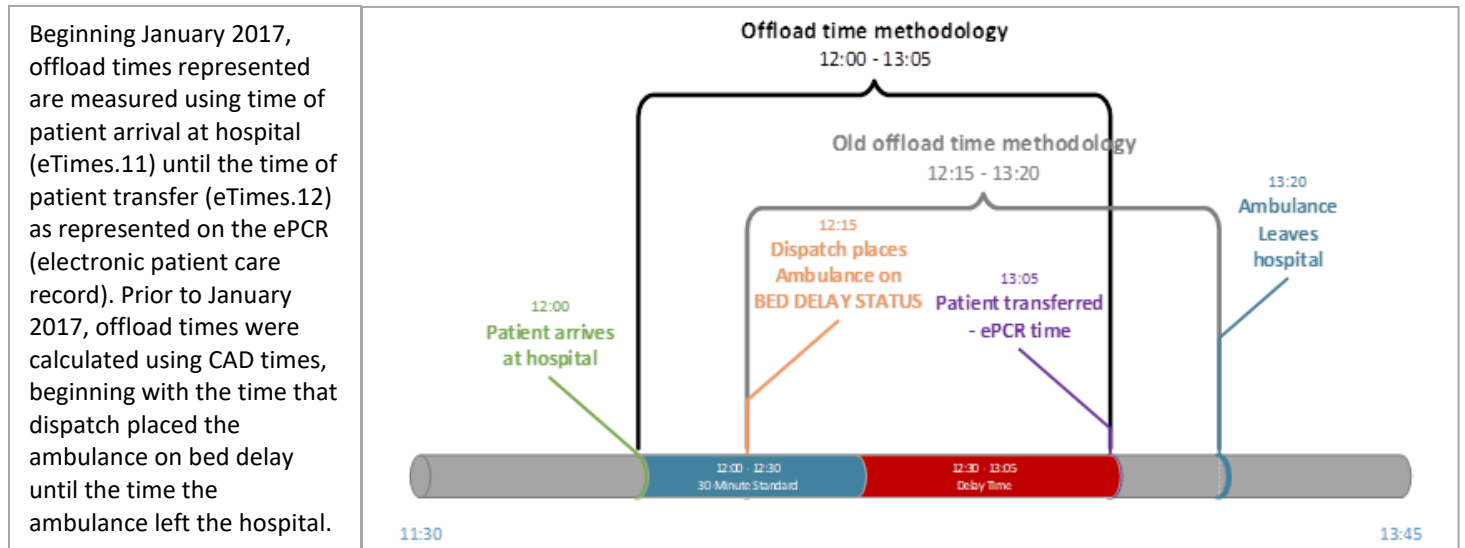
APOD Compliance
A frequency comparision between the total number of transports and those resulting in APOD.

Data Definitions
Data in this report includes all transports to the 17 hospitals monitored by REMSA in the respective month relative to the date and time the incident originates (eTimes.03--Dispatch Notified Date/Time). *For example, if an incident originates on June 30, and the patient is subsequently transferred to the care of an emergency department on July 1, that incident will be included in the month of June.*

Canceled calls, calls for which both arrival and transfer times are not present, and calls with erroneous/negative offload times are excluded. Certain incidents with offload times exceeding six hours and 12 hours are verified for accuracy, and incidents are excluded if the timeline cannot be validated.

Beginning January 2017, offload times represented are measured using time of patient arrival at hospital (eTimes.11) until the time of patient transfer (eTimes.12) as represented on the ePCR (electronic patient care record). Prior to January 2017, offload times were calculated using CAD times, beginning with the time that dispatch placed the ambulance on bed delay until the time the ambulance left the hospital.	

[1] Health and Safety Code Division 2.5, Chapter 3, Article 1, Section 1797.120(b)
[2] Ambulance Patient Offload Time (APOT) Standardized Methods for Data Collection and Reporting, approved by EMS Commission 12/14/2016.
[3] Ibid., APOT-1 Specifications.
[4] REMSA Policy 9101.6. http://www.remsa.us/policy/9101.pdf
[5] REMSA Policy 4204, Transfer of Patient Care. http://www.remsa.us/policy/4204.pdf