



California EMS System Core Quality Measures Report Calendar Year 2020

Emergency Medical Services Authority
California Health and Human Services Agency

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BACKGROUND

Data and quality improvement (QI) leaders from local EMS agencies (LEMSAs), LEMSA medical directors, hospitals, prehospital EMS providers, and the California Emergency Medical Services Authority (EMSA) joined together to develop the California EMS System Core Quality Measures Project. The project's measures focus on evidence-based processes and treatments for a condition or illness. Each year, the task force updates these measures according to data system changes and operational considerations. Core quality measures are intended to help EMS systems improve the quality of patient care by focusing measurement specifications on key processes and results of care. The [California EMS Systems Core Quality Measures Instruction Manual \(EMSA #SYS 100-04\)](#) defines the specific data elements and provides instructions for reporting each performance measure. The EMS system quality improvement regulations (CCR, Title 22, Division 9, Chapter 12) define the reporting requirements for local EMS agencies, EMS service providers, and base hospitals in their role as part of the EMS system. These requirements include, but are not limited to, the implementation of an EMS Quality Improvement Program and the use of defined indicators to assess the local EMS system as found in EMSA #SYS 100-04.

For the 2020 calendar year, EMSA requested that each LEMSA use the National Emergency Medical Services Information System (NEMSIS) Version 3.4.0 standard to report data for six performance measures. The six measures are:

- TRA-2: Transport of Trauma Patients to a Trauma Center
- HYP-1: Treatment Administered for Hypoglycemia
- STR-1: Prehospital Screening for Suspected Stroke Patients
- PED-3: Respiratory Assessment for Pediatric Patients
- RST-4: 911 Requests for Services That Included a Lights and/or Sirens Response
- RST-5: 911 Requests for Services That Included a Lights and/or Sirens Transport

LEMSA participation in the California Emergency Medical Services Information System (CEMSIS) is required consistent with HSC 1797.102. The LEMSAs execute their core quality measure reports from their local database and submit aggregate results to EMSA. Since each of the 33 LEMSAs maintains their own EMS database and each is dependent on their EMS provider agencies to submit data, there is variability in their capability to report core quality measures and some intrinsic variation in the results exists.

METHODOLOGY

For the 2020 calendar year, EMSA requested that all LEMSAs use the specifications in the [*California EMS Systems Core Quality Measures Instruction Manual \(EMSA #SYS 100-04\)*](#) when executing their data reports and to refrain from using any custom elements or fields specific to their local jurisdiction or EMS providers. The specifications were drafted by a work group consisting of EMSA and LEMSA representatives. The revised specifications from the local jurisdictions and recommendations from previous reporting years were finalized in July 2021. These specifications were incorporated into the most current version of the Core Quality Measures Instruction Manual. Adherence to the consensus specifications is critical to maintaining the integrity of this statewide assessment. LEMSA questions and comments regarding the specifications are an essential part of the Core Quality Measure improvement process. Universal fidelity to the consensus specifications is key to meaningfully comparing the reported results throughout the State of California.

LIMITATIONS AND CHALLENGES

Quality measure analysis depends on the development of compatible data systems and standardized data collection regimes at various levels of the EMS system. Commonly understood data measures are essential to quality improvement efforts and to data driven medical decision making. The demonstrated commitment of all of California's EMS decision makers to meaningful quality measures promises to provide our State's citizens with the reliable medical quality assurance that they have come to expect from mature healthcare sectors. Ongoing efforts to improve the quality and validity between CEMSIS and LEMSA data will increase the reliability and usability of the measure results. Limitations and challenges to reporting the measures are enumerated below.

Non-Responses to Core Quality Measures Request

All 33 LEMSAs in California were contacted to provide core quality measure information to EMSA by a set date. For the 2020 reporting year, 25 of the 33 LEMSAs provided a formal response to EMSA's request for information. One additional LEMSA responded via email to EMSA's request, but was unable to provide data to EMSA by the deadline. The remaining LEMSAs did not provide a response to the request. Of the 33 LEMSAs, 25 reported at least one measure for 2020 data. Most participating LEMSAs (23 of 25) reported data for 6 of the 6 measures.

Partial System Representation

Only a portion of the actual EMS business conducted in California is represented in this report; the values reported by the LEMSAs do not represent 100% of the providers in the State. Some LEMSAs reported that not all providers in their region were represented in their reporting for various reasons, or the providers were not using the proper data elements or values specified in the 2020 Core Quality Measures Instruction Manual.

TABLES AND CHARTS GENERATED FROM CORE QUALITY MEASURES REPORTS

LEMSAs Reporting Data for Core Quality Measures 2009-2020

The table shows which LEMSAs submitted data for years 2009-2020.

For the 2020 reporting year, 25 LEMSAs reported information for at least one measure. If a LEMSA submitted a value for any of the measures found in the [California EMS System Core Quality Measures Instruction Manual \(EMSA #SYS 100-04\)](#), the cell associated with that data year is populated with a check mark “✓” and shaded light blue. For LEMSAs that did not submit any core quality measure data to EMSA, the cell for that corresponding year appears blank.

LEMSA Participation in the 2020 Core Quality Measures Report

The map of California shows which LEMSAs (single county and multi-county EMS agencies) submitted data for 2020. These regions are shaded light yellow. LEMSA participation in the California Core Quality Measures Report decreased by 3% from the 2019 to 2020 reporting calendar year. 76% (25 of 33) of LEMSAs participated in the 2020 Core Quality Measures Report by providing data for at least one measure. 92% (23 of 25) of participating LEMSAs reported data for all measures (6 of 6) requested.

2020 Core Quality Measures Aggregate Values for California

The aggregate values table includes the total number of LEMSAs that reported a value for each measure (response count), the percentage of LEMSAs that reported a value for each measure (response rate), the aggregate numerator total (subpopulation) of all responses, the aggregate denominator total (population) of all responses, and the mean (average) and median reported value for each measure.

2020 Core Quality Measures Results – Charts and Tables

This report includes the LEMSA responses to the measures as they were reported to EMSA. Each measure includes a column chart based on the reported values provided by the LEMSAs and the mean and median values for all submissions. Additionally, there are two tables provided for each measure. The first table includes all of the reported values for the measure, and the second table includes the LEMSA response count, response rate, numerator, denominator, and the mean and median values for all responses. The charts and tables are populated directly from the values provided by the LEMSAs. The blue text box includes a brief evaluation on the measure and responses from LEMSAs. A link to the corresponding measure specifications is also provided for reference.

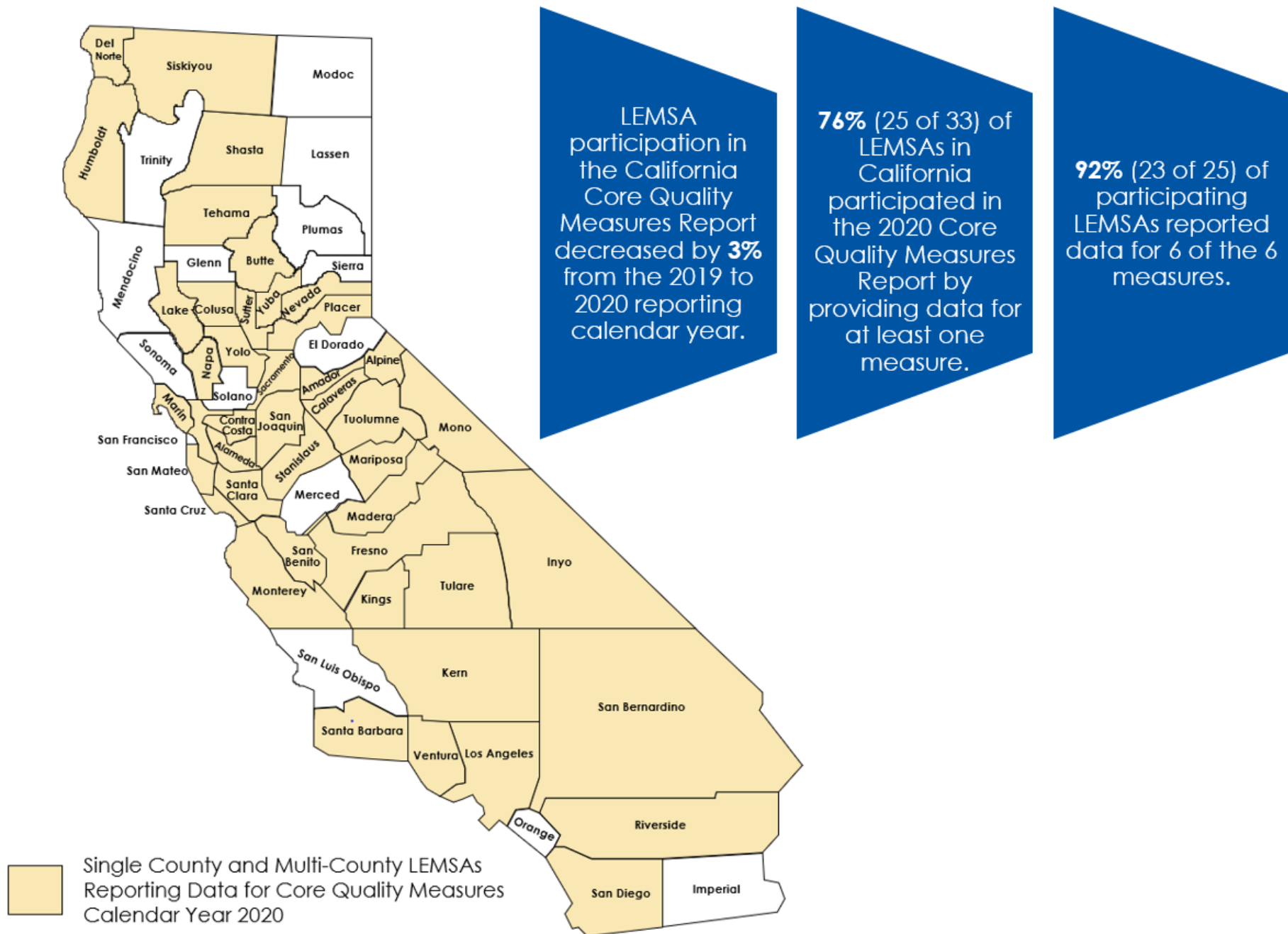
Appendix: Responses from LEMSAs for the 2020 Core Quality Measures Report

The appendix contains tables with the information provided by each LEMSA for the 2020 Core Quality Measures Report. All notes and feedback provided from the LEMSAs will be considered by EMSA for the 2021 reporting calendar year.

LEMSAs REPORTING DATA FOR CORE QUALITY MEASURES 2009-2020

Local EMS Agency	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alameda County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Central California EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Coastal Valleys EMS				✓	✓	✓	✓	✓	✓			
Contra Costa County EMS		✓	✓	✓	✓	✓	✓	✓	✓			✓
El Dorado County EMS				✓	✓	✓					✓	
Imperial County EMS												
Inland Counties EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kern County EMS		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Los Angeles County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Marin County EMS		✓	✓		✓	✓	✓	✓	✓			✓
Merced County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Monterey County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mountain-Valley EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Napa County EMS					✓	✓	✓	✓	✓	✓	✓	✓
North Coast EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Northern California EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Orange County EMS					✓	✓	✓	✓	✓		✓	
Riverside County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sacramento County EMS		✓	✓	✓	✓	✓			✓		✓	✓
San Benito County EMS					✓	✓	✓	✓	✓		✓	✓
San Diego County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Francisco EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Joaquin County EMS				✓	✓	✓	✓	✓	✓	✓	✓	✓
San Luis Obispo County EMS		✓	✓		✓	✓	✓	✓	✓			
San Mateo County EMS		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Santa Barbara County EMS	✓	✓	✓		✓	✓	✓	✓	✓			✓
Santa Clara County EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Santa Cruz County EMS	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Sierra-Sacramento Valley EMS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Solano County EMS				✓	✓	✓					✓	
Tuolumne County EMS		✓	✓	✓	✓	✓	✓		✓			✓
Ventura County EMS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Yolo County EMS					✓	✓	✓	✓	✓	✓	✓	✓
TOTAL PARTICIPANTS:	10	24	24	23	32	32	29	28	30	20	26	25

LEMSA PARTICIPATION IN THE 2020 CORE QUALITY MEASURES REPORT



2020 CORE QUALITY MEASURES RESULTS

Considerations for the information presented in the following tables and charts:

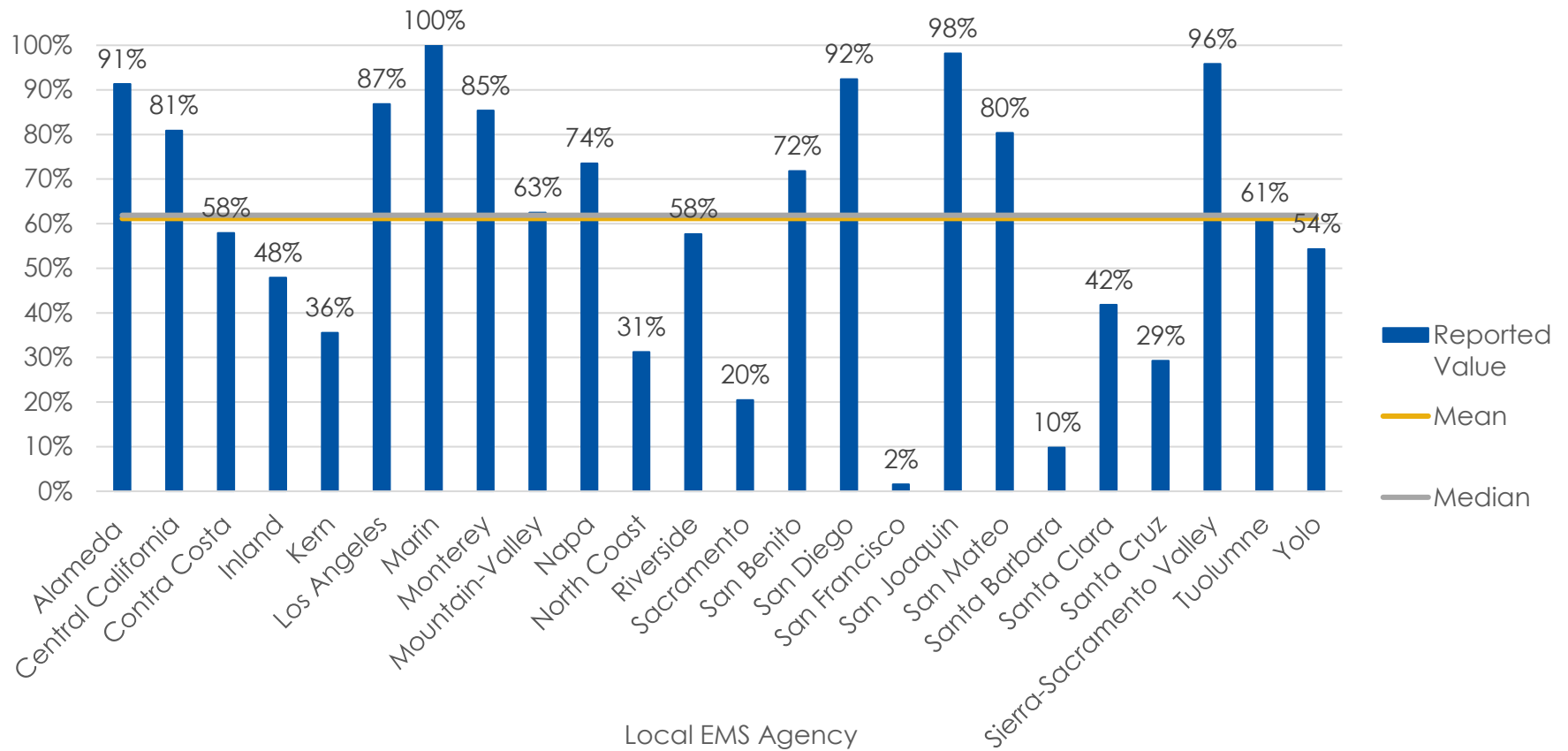
- Non-responding LEMSAs did not indicate why they were unable to report information on the measures. One LEMSAs cited changes in staffing and limited resources as barriers to reporting 2020 data.
- Adjustments to the measures will be made for the 2021 reporting year to provide clarification on the intent of the measures and to report EMS performance in the field more accurately.
- Multiple factors impact the validity and analysis of these retrospective data, including but not limited to incomplete documentation, documentation not reflective of services provided prior to ambulance arrival, inability to collect hospital outcome data, inconsistent data dictionary definitions between local jurisdictions, LEMSAs policy not aligning with indicator specifications causing a misrepresentation of patient volume and/or EMS performance, and geographic resource disparities.
- These retrospective data have not been validated. These limitations caution against comparison between jurisdictions and limit the reliability of the aggregate values.

2020 CORE QUALITY MEASURES AGGREGATE VALUES FOR CALIFORNIA

Measure ID	TRA-2	HYP-1	STR-1	PED-3	RST-4	RST-5
LEMSA Response Count*	24	25	24	25	23	24
Response Rate (n=33)	73%	76%	73%	76%	70%	73%
Numerator Total	27971	23340	40453	7744	2039892	382556
Denominator Total	47836	34343	48504	8412	2698480	1879645
Mean (Average)	61%	69%	80%	92%	73%	19%
Median	62%	76%	88%	95%	75%	8%

*LEMSA Response Count is defined as the number of LEMSAs that submitted a reported value for a measure.

TRA-2: TRANSPORT OF TRAUMA PATIENTS TO A TRAUMA CENTER



TRA-2 Description: Percentage of trauma patients meeting CDC Step 1 or 2 or 3 criteria that were transported to a trauma center originating from a 911 response.

LEMSA	Numerator (Subpopulation)	Denominator (Population)	Reported Value
Alameda County	1497	1639	91%
Central California	1590	1966	81%
Contra Costa County	1657	2861	58%
Inland Counties	2505	5230	48%
Kern County	1050	2955	36%
Los Angeles County	7811	8994	87%
Marin County	20	20	100%
Monterey County	344	403	85%
Mountain-Valley	75	120	63%
Napa County	250	340	74%
North Coast	54	173	31%
Riverside County	3095	5364	58%
Sacramento County	541	2643	20%
San Benito County	84	117	72%
San Diego County	921	997	92%
San Francisco	17	1070	2%
San Joaquin County	109	111	98%
San Mateo County	1121	1395	80%
Santa Barbara County	341	3482	10%
Santa Clara County	1694	4053	42%
Santa Cruz County	115	393	29%
Sierra-Sacramento Valley	2704	2822	96%
Tuolumne County	19	31	61%
Yolo County	357	657	54%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County, Ventura County

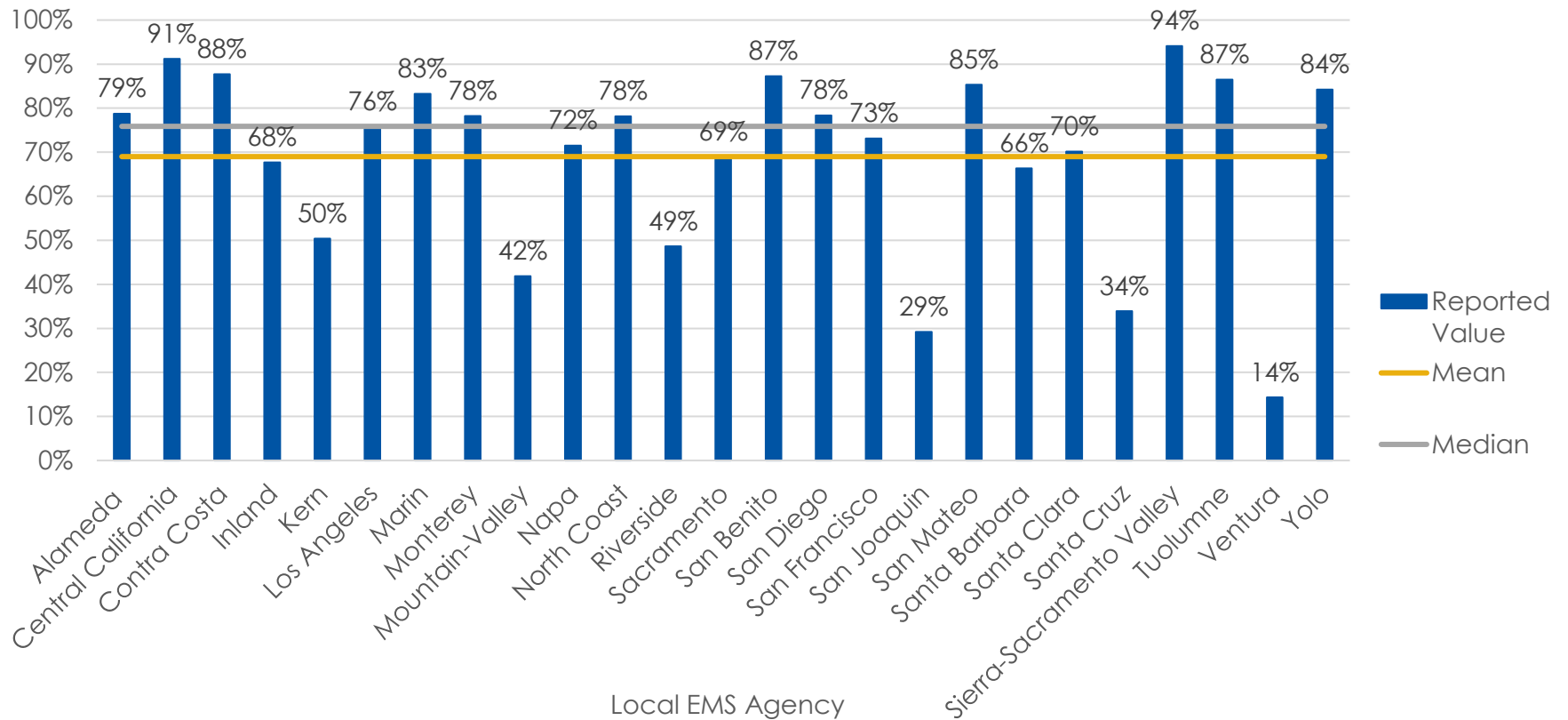
Response Count	24
Response Rate (n=33)	73%
Numerator Total	27971
Denominator Total	47836
Mean	61%
Median	62%

Of the 24 LEMSAs reporting TRA-2 data for 2020, the mean (average) value of the data set was 61% and the median value was 62%.

At least eight LEMSAs noted documentation issues, primarily with the collection or mapping of NEMSIS data elements eDisposition.23 (Hospital Capability), eInjury.03 (Trauma Center Criteria), and eInjury.04 (Vehicular, Pedestrian, or Other Injury Risk Factor). Several LEMSAs reported that the measure value improves significantly when using custom fields or criteria. The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for TRA-2](#)

HYP-1: TREATMENT ADMINISTERED FOR HYPOGLYCEMIA



HYP-1 Description: Percentage of patients that received treatment to correct their hypoglycemia originating from a 911 response.

LEMSA	Numerator (Subpopulation)	Denominator (Population)	Reported Value
Alameda County	1190	1511	79%
Central California	1810	1984	91%
Contra Costa County	994	1133	88%
Inland Counties	2161	3192	68%
Kern County	1271	2523	50%
Los Angeles County	6856	9036	76%
Marin County	154	185	83%
Monterey County	366	468	78%
Mountain-Valley	344	822	42%
Napa County	108	151	72%
North Coast	143	183	78%
Riverside County	1559	3205	49%
Sacramento County	1544	2239	69%
San Benito County	41	47	87%
San Diego County	228	291	78%
San Francisco	651	890	73%
San Joaquin County	252	863	29%
San Mateo County	250	293	85%
Santa Barbara County	268	404	66%
Santa Clara County	1171	1670	70%
Santa Cruz County	78	230	34%
Sierra-Sacramento Valley	1504	1598	94%
Tuolumne County	77	89	87%
Ventura County	165	1152	14%
Yolo County	155	184	84%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County

Response Count	25
Response Rate (n=33)	76%
Numerator Total	23340
Denominator Total	34343
Mean	69%
Median	76%

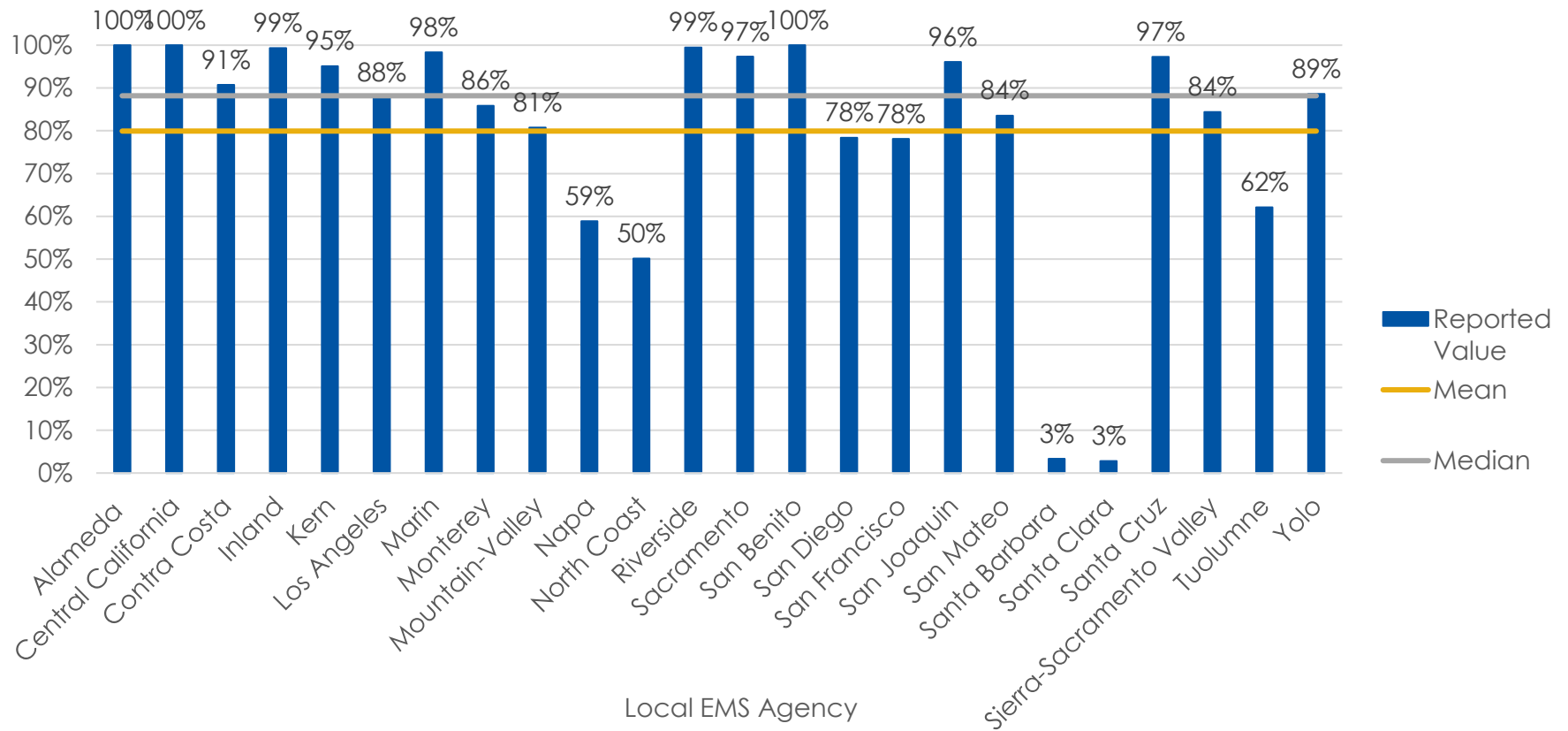
Of the 25 LEMSAs reporting HYP-1 data for 2020, the mean (average) value of the data set was 69% and the median value was 76%.

At least three LEMSAs noted documentation issues, primarily with the collection or mapping of NEMSIS data elements eProcedures.03 (Procedure) and eMedications.03 (Medication Given). Two LEMSAs stated that corrections and additional training are being applied to address these issues.

The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for HYP-1](#)

STR-1: PREHOSPITAL SCREENING FOR SUSPECTED STROKE PATIENTS



STR-1 Description: Percentage of suspected stroke patients that received a prehospital stroke screening originating from a 911 response.

LEMSA	Numerator (Subpopulation)	Denominator (Population)	Reported Value
Alameda County	1976	1976	100%
Central California	2138	2138	100%
Contra Costa County	1826	2013	91%
Inland Counties	5039	5072	99%
Kern County	1686	1773	95%
Los Angeles County	8539	9732	88%
Marin County	294	299	98%
Monterey County	988	1151	86%
Mountain-Valley	893	1106	81%
Napa County	272	462	59%
North Coast	200	399	50%
Riverside County	5251	5280	99%
Sacramento County	3339	3431	97%
San Benito County	190	190	100%
San Diego County	700	893	78%
San Francisco	1036	1327	78%
San Joaquin County	1313	1367	96%
San Mateo County	833	997	84%
Santa Barbara County	27	819	3%
Santa Clara County	103	3640	3%
Santa Cruz County	539	554	97%
Sierra-Sacramento Valley	2810	3330	84%
Tuolumne County	72	116	62%
Yolo County	389	439	89%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County, Ventura County

Response Count	24
Response Rate (n=33)	73%
Numerator Total	40453
Denominator Total	48504
Mean	80%
Median	88%

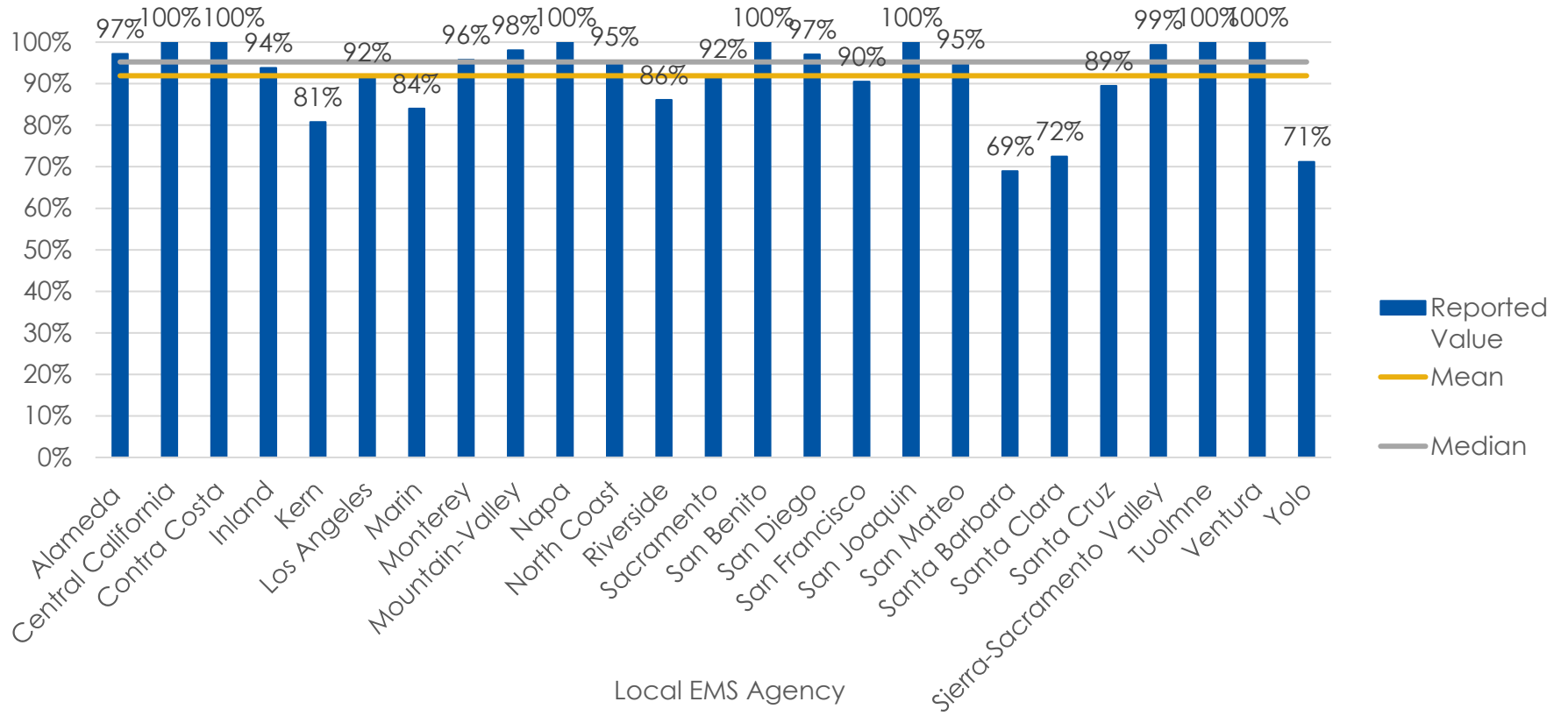
Of the 24 LEMSAs reporting STR-1 data for 2020, the mean (average) value of the data set was 80% and the median value was 88%.

At least three LEMSAs noted documentation issues with the NEMSIS data element eVitals.29 (Stroke Scale Score). Two LEMSAs do not currently utilize this data element, whereas one LEMSA stated issues with documentation in the patient care reports. One LEMSA stated that ongoing training is being applied to address the documentation issues.

The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for STR-1](#)

PED-3: RESPIRATORY ASSESSMENT FOR PEDIATRIC PATIENTS



PED-3 Description: Percentage of pediatric patients that had a primary or secondary impression of respiratory distress and received a documented respiratory assessment originating from a 911 response.

LEMSA	Numerator (Subpopulation)	Denominator (Population)	Reported Value
Alameda County	239	246	97%
Central California	226	226	100%
Contra Costa County	68	68	100%
Inland Counties	1227	1308	94%
Kern County	403	499	81%
Los Angeles County	953	1041	92%
Marin County	21	25	84%
Monterey County	2504	2614	96%
Mountain-Valley	152	155	98%
Napa County	24	24	100%
North Coast	20	21	95%
Riverside County	575	668	86%
Sacramento County	324	353	92%
San Benito County	8	8	100%
San Diego County	65	67	97%
San Francisco	95	105	90%
San Joaquin County	65	65	100%
San Mateo County	53	56	95%
Santa Barbara County	51	74	69%
Santa Clara County	250	345	72%
Santa Cruz County	34	38	89%
Sierra-Sacramento Valley	316	318	99%
Tuolumne County	3	3	100%
Ventura County	26	26	100%
Yolo County	42	59	71%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County

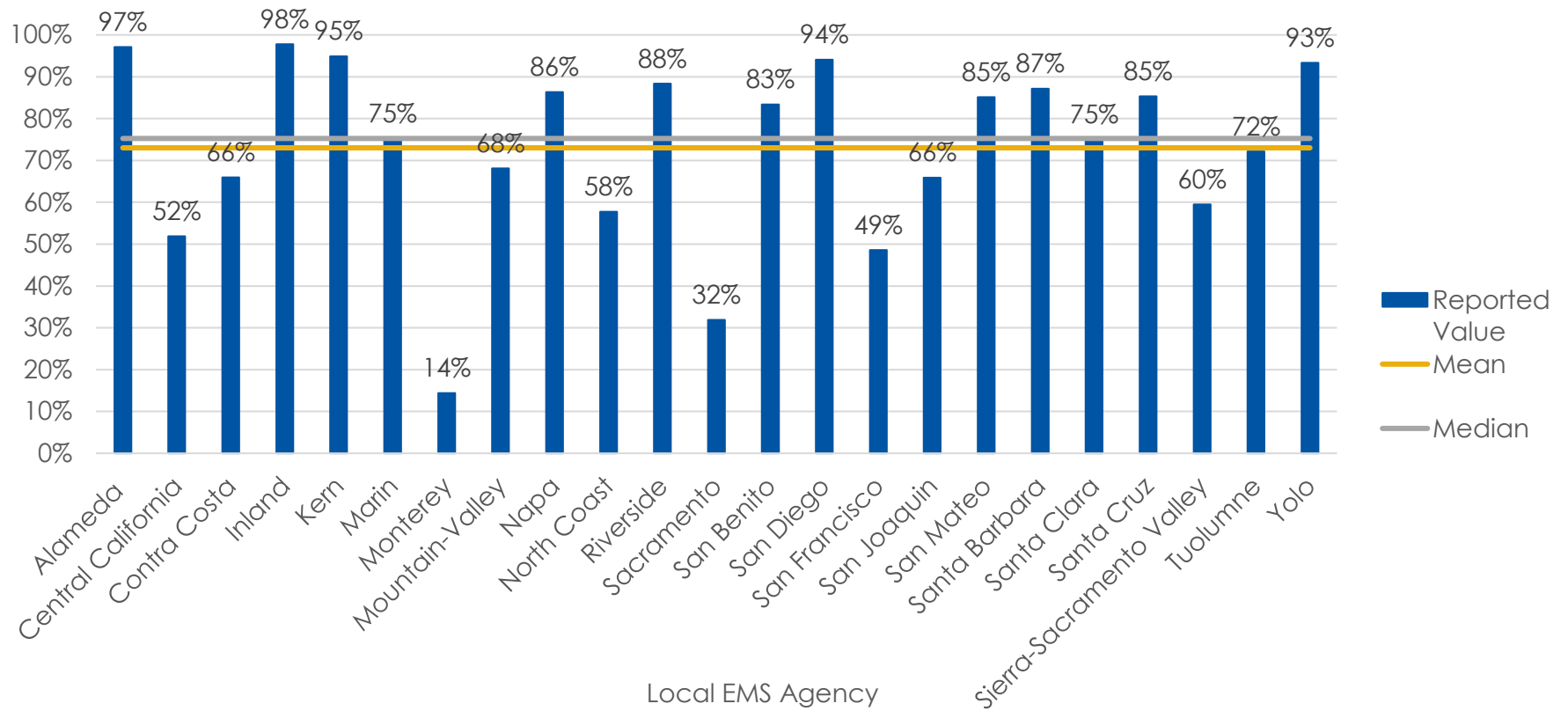
Response Count	25
Response Rate (n=33)	76%
Numerator Total	7744
Denominator Total	8412
Mean	92%
Median	95%

Of the 25 LEMSAs reporting PED-3 data for 2020, the mean (average) value of the data set was 92% and the median value was 95%.

One LEMSA reported documentation issues with the data elements eVitals.12 (Pulse Oximetry) and eVitals.14 (Respiratory Rate) by prehospital personnel. The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for PED-3](#)

RST-4: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS RESPONSE



RST-4 Description: Percentage of EMS responses originating from a 911 request that included the use of lights and/or sirens during a response.

LEMSA			
Alameda County	149684	154158	97%
Central California	116210	224016	52%
Contra Costa County	71431	108276	66%
Inland Counties	445336	455349	98%
Kern County	195564	206074	95%
Marin County	16329	21698	75%
Monterey County	7892	54843	14%
Mountain-Valley	49947	73324	68%
Napa County	16122	18666	86%
North Coast	11972	20730	58%
Riverside County	348090	394001	88%
Sacramento County	61733	193653	32%
San Benito County	3127	3751	83%
San Diego County	33421	35517	94%
San Francisco	48757	100334	49%
San Joaquin County	54619	82893	66%
San Mateo County	43243	50780	85%
Santa Barbara County	58097	66664	87%
Santa Clara County	176716	235678	75%
Santa Cruz County	18720	21942	85%
Sierra-Sacramento Valley	88389	148528	60%
Tuolumne County	4364	6047	72%
Yolo County	20129	21558	93%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Los Angeles County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County, Ventura County

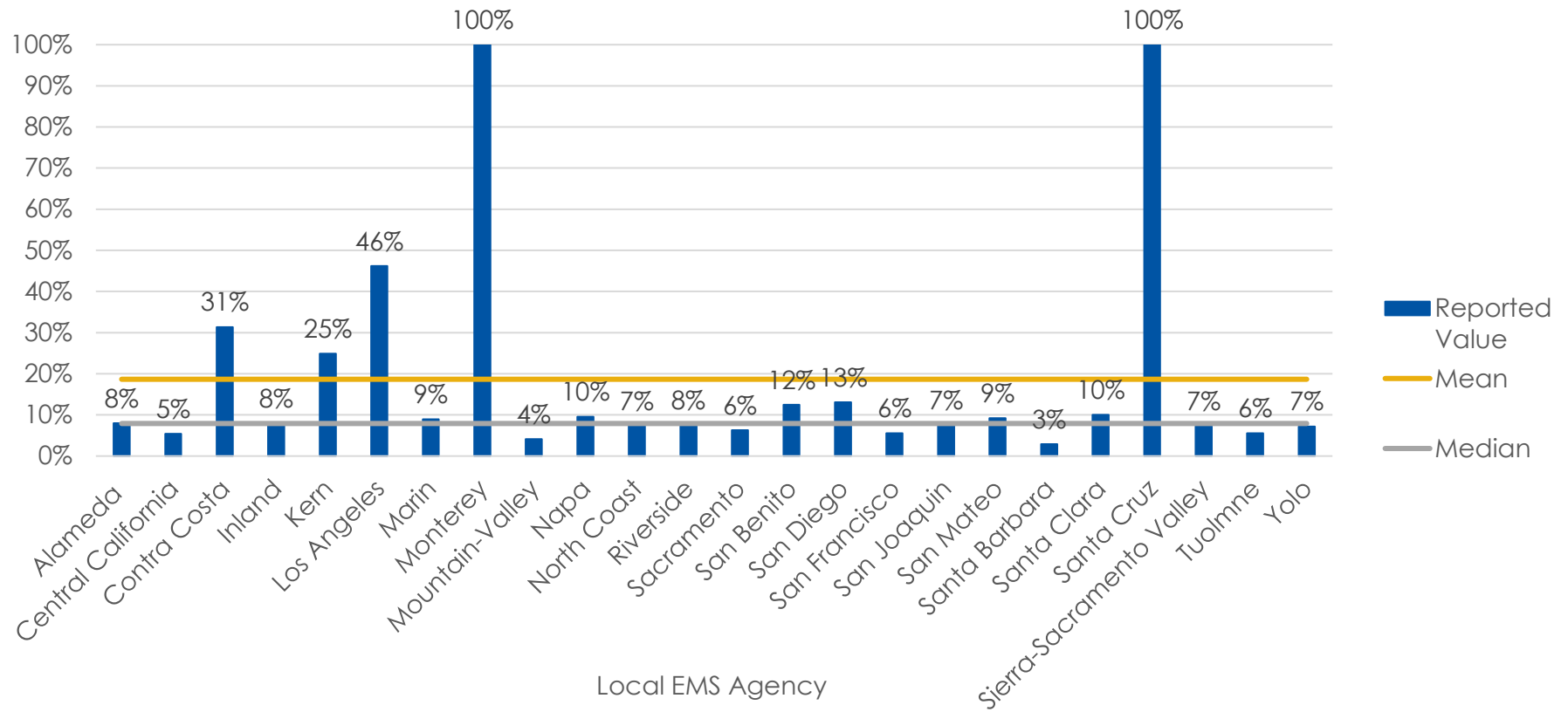
Response Count	23
Response Rate (n=33)	70%
Numerator Total	2039892
Denominator Total	2698480
Mean	73%
Median	75%

Of the 23 LEMSAs reporting RST-4 data for 2020, the mean (average) value of the data set was 73% and the median value was 75%. For this measure, a lower value indicates better quality.

At least five LEMSAs noted documentation issues, including challenges with collecting, mapping, or reporting the NEMSIS data element eResponse.24 (Additional Response Mode Descriptors). The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for RST-4](#)

RST-5: 911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS TRANSPORT



RST-5 Description: Percentage of EMS transports originating from a 911 request that included the use of lights and/or sirens during patient transport.

LEMSA	Numerator (Subpopulation)	Denominator (Population)	Reported Value
Alameda County	7716	96324	8%
Central California	8411	155150	5%
Contra Costa County	29539	94238	31%
Inland Counties	11876	151939	8%
Kern County	25746	103464	25%
Los Angeles County	228360	494623	46%
Marin County	1094	12257	9%
Monterey County	14763	14763	100%
Mountain-Valley	2179	53171	4%
Napa County	849	8863	10%
North Coast	294	3998	7%
Riverside County	11525	152881	8%
Sacramento County	7442	118254	6%
San Benito County	282	2267	12%
San Diego County	3441	26264	13%
San Francisco	4137	74333	6%
San Joaquin County	4711	63046	7%
San Mateo County	2898	31349	9%
Santa Barbara County	667	23230	3%
Santa Clara County	8163	81271	10%
Santa Cruz County	11	11	100%
Sierra-Sacramento Valley	7254	100228	7%
Tuolumne County	255	4623	6%
Yolo County	943	13098	7%

Not Reporting: Coastal Valleys, El Dorado County, Imperial County, Merced County, Northern California, Orange County, San Luis Obispo County, Solano County, Ventura County

Response Count	24
Response Rate (n=33)	73%
Numerator Total	382556
Denominator Total	1879645
Mean	19%
Median	8%

Of the 24 LEMSAs reporting RST-5 data for 2020, the mean (average) value of the data set was 19% and the median value was 8%. For this measure, a lower value indicates better quality.

At least three LEMSAs noted documentation issues, one of which reported gaps in the collection of NEMSIS data element eDisposition.18 (Additional Transport Mode Descriptors) by a single provider. The specifications for this measure will be further evaluated for the 2021 reporting calendar year.

[Select this link to view the measure specifications for RST-5](#)

APPENDIX: RESPONSES FROM LEMSAs FOR THE 2020 CORE QUALITY MEASURES REPORT

The following tables include information, as described on page 7, which was provided by each LEMSA for the 2020 Core Quality Measures Report. All notes and feedback provided by the LEMSAs will be considered by EMSA for the 2021 reporting calendar year.

ALAMEDA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1497	1639	91%	ESO 54%, Tableau 91%
HYP-1	1190	1511	79%	ESO 79%, Tableau 57% ???
STR-1	1976	1976	100%	ESO 100%, Tableau 100% (Accurate, Validation rule in place)
PED-3	239	246	97%	ESO Total 97%, Tableau 97%
RST-4	149684	154158	97%	ESO 97%, Tableau 96%, This reported measure is wildly inaccurate. It depends on inaccurate EMT/Medic data entry. Our actual lights/response per CAD is much lower. [FALCK accounts for 90% of responses and their actual lights/siren rate per MPDS data is somewhere closer to ~ 52%??? (requires validation)]*
RST-5	7716	96324	8%	ESO 8%, Tableau 8% (This measure is pretty much spot on)

Additional Comments: Like last year's data, our RST-4 L/S response to scene as measured per the spec. sheet isn't even close. The nomenclature used by ESO doesn't have these NEMSIS values. ESO looks like this (pic included below) and EMT/Medics are selecting Emergent most of the time.

Response Mode to Scene

OK

Search

Clear Selection

Emergent

Non-Emergent

Emergent Downgraded to Non-Emergent

Non-Emergent Upgraded to Emergent

CENTRAL CALIFORNIA EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1590	1966	81%	
HYP-1	1810	1984	91%	
STR-1	2138	2138	100%	
PED-3	226	226	100%	
RST-4	116210	224016	52%	
RST-5	8411	155150	5%	

CONTRA COSTA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1657	2861	58%	
HYP-1	994	1133	88%	
STR-1	1826	2013	91%	
PED-3	68	68	100%	
RST-4	71431	108276	66%	
RST-5	29539	94238	31%	

INLAND COUNTIES EMERGENCY MEDICAL AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2505	5230	48%	Percentage artificially low due to a documentation error that has been corrected.
HYP-1	2161	3192	68%	
STR-1	5039	5072	99%	
PED-3	1227	1308	94%	
RST-4	445336	455349	98%	
RST-5	11876	151939	8%	eResponse.07 = ALS Ground Transport, BLS Ground Transport, Critical Care Transport, Ground Transport. eDisposition.12= Patient Treated, Transported

KERN COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1050	2955	36%	
HYP-1	1271	2523	50%	
STR-1	1686	1773	95%	
PED-3	403	499	81%	
RST-4	195564	206074	95%	
RST-5	25746	103464	25%	

LOS ANGELES COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	7811	8994	87%	
HYP-1	6856	9036	76%	
STR-1	8539	9732	88%	
PED-3	953	1041	92%	
RST-4				Level of Response to scene is not collected.
RST-5	228360	494623	46%	

MARIN COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	20	20	100%	
HYP-1	154	185	83%	
STR-1	294	299	98%	
PED-3	21	25	84%	
RST-4	16329	21698	75%	
RST-5	1094	12257	9%	

MONTEREY COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	344	403	85%	
HYP-1	366	468	78%	
STR-1	988	1151	86%	
PED-3	2504	2614	96%	
RST-4	7892	54843	14%	
RST-5	14763	14763	100%	

MOUNTAIN-VALLEY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	75	120	63%	
HYP-1	344	822	42%	
STR-1	893	1106	81%	
PED-3	152	155	98%	
RST-4	49947	73324	68%	
RST-5	2179	53171	4%	

NAPA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	250	340	74%	After pulling the data this measure might reflect a more accurate percentage with the following: Denominator inclusionary criteria: eResponse.07 = 2207003 "Ground Transport," Denominator exclusionary criteria: eDisposition.12 = 4212015 "Patient Dead at Scene-No Resuscitation Attempted (Without Transport)," and 4212019 "Patient Dead at Scene-Resuscitation Attempted (Without Transport)"
HYP-1	108	151	72%	
STR-1	272	462	59%	
PED-3	24	24	100%	
RST-4	16122	18666	86%	
RST-5	849	8863	10%	

NORTH COAST EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	54	173	31%	
HYP-1	143	183	78%	
STR-1	200	399	50%	
PED-3	20	21	95%	
RST-4	11972	20730	58%	
RST-5	294	3998	7%	

RIVERSIDE COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	3095	5364	58%	Data is based on Patient level using incident date/hour, name, age, gender. Strong recommendation that criteria account for transporting responses only (eDisposition.12 = Treated, Transported by this Unit). Patients not transported (i.e., AMA, dead on scene) substantially inflate denominator with the current criteria. When eDispo.12 accounted for transported only, REMSA's % increased to 66% consistent with 2019. However, REMSA also detected an internal documentation issue with eDisposition.23 not correctly identifying trauma centers. When accounting for both of these, REMSA's actual % on this metric was < 91%. Therefore, REMSA is also in the process of working with education and ePCR system to fix the eDispo.23 issue.
HYP-1	1559	3205	49%	Data is based on Patient level using incident date/hour name, age, gender. If based on all responses, Numerator = 1767, Denominator=3982 and reporting value would be 44.4%. In 2019 REMSA was at 82%. REMSA does not currently have eProcedure.03 as an option which is being corrected and should substantially improve metric.
STR-1	5251	5280	99%	Data is based on Patient level using incident date/hour name, age, gender. If based on all responses, Numerator= 6197, Denominator=6113 and the reporting value would still be 99%. (Current value is an improvement from 2019 @ 87% likely due to stroke education efforts)
PED-3	575	668	86%	Data is based on Patient level using incident date/hour, name, age, gender. If patient level was not assessed and data was provided at the response level, then denominator = 1217; numerator = 841, and metric would be @ 69%. Current outcome is consistent with 2019 @ 85%.
RST-4	348090	394001	88%	Response level only. No patient level modifications made so all responses could be accounted for (Fire and Ambulance). In 2019 calendar year, REMSA used vehicle ID (unit number) to filter only 9-1-1 response units for a more valid count, but based on consistent % calculations (2019 = 89%), current EMSA criteria is sufficient.
RST-5	11525	152881	8%	No modifications or patient level needed as criteria already includes eResponse.07="Ground Transport"; and eDisposition12= "Treated, Transported by this EMS Unit" which accounts predominantly for patient level.

SACRAMENTO COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	541	2643	20%	SCEMSA providers do not capture eDisposition.23. We measure trauma patients to trauma hospitals by searching the destination hospital name. If adjusted to include names of trauma hospitals, percent increases to 70.22%
HYP-1	1544	2239	69%	Upon research it was found that not all medication or food administration was documented in the proper section. Duplicates were also found in this core measure. When duplicates are removed, and treatment documented in the narrative is added the percentage increases to 91%. SCEMSA will work closely with providers to ensure treatment is properly captured.
STR-1	3339	3431	97%	
PED-3	324	353	92%	
RST-4	61733	193653	32%	Please note that in 2020 a single SCEMSA provider was not capturing eResponse.24. This provider accounts for 83,161 incidents documenting eResponse.05 as "911 Response (SCENE)". This resulted in a lower than actual reporting percent value.
RST-5	7442	118254	6%	Please note that in 2020 a single SCEMSA provider was not capturing eDisposition.18. This provider accounts for 44,271 incidents documenting eResponse.05 as "911 Response (SCENE)", eResponse.07 as "Ground transport", and eDisposition.12 as "Patient treated, transported". This resulted in a lower than actual reporting percent value.

SAN BENITO COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	84	117	72%	
HYP-1	41	47	87%	
STR-1	190	190	100%	
PED-3	8	8	100%	
RST-4	3127	3751	83%	
RST-5	282	2267	12%	

SAN DIEGO COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	921	997	92%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.
HYP-1	228	291	78%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.
STR-1	700	893	78%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.
PED-3	65	67	97%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.
RST-4	33421	35517	94%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.
RST-5	3441	26264	13%	Only data from agencies that use the County-provided ePCR is used for this data year. Third party PCR vendor data is not yet integrated into the County system.

SAN FRANCISCO EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	17	1070	2%	91% (975) of events were unknown.
HYP-1	651	890	73%	
STR-1	1036	1327	78%	
PED-3	95	105	90%	
RST-4	48757	100334	49%	17% (17,042) of events were unknown.
RST-5	4137	74333	6%	17% (12,715) of events were unknown.

SAN JOAQUIN COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	109	111	98%	The denominator is too low and does not reflect the volume of Major Trauma patients because the inclusion criteria was limited to either elnjury.03 or elnjury.04 and does not capture major trauma patients consistent with SJCEMSA policies. There were 1998 patients transported to trauma centers based on SJCEMSA policies. The denominator shown is calculated by using the criteria exactly as written.
HYP-1	252	863	29%	
STR-1	1313	1367	96%	
PED-3	65	65	100%	
RST-4	54619	82893	66%	
RST-5	4711	63046	7%	

SAN MATEO COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1121	1395	80%	
HYP-1	250	293	85%	
STR-1	833	997	84%	
PED-3	53	56	95%	
RST-4	43243	50780	85%	
RST-5	2898	31349	9%	

SANTA BARBARA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	341	3482	10%	Number of patients transported to a Hospital Trauma Center 1, 2, 3, 4 / Total number of patients with trauma score.
HYP-1	268	404	66%	Number of patients treated for hypoglycemia / Total number of patients with blood glucose < 60.
STR-1	27	819	3%	Number of patients assessed for stroke / Total number of patients with provider assessment indicating stroke/CVA/TIA.
PED-3	51	74	69%	Number of patients assessed / Total number of patients with age < 15 and Provider impression is either "Respiratory distress/other or Respiratory/bronchospasm".
RST-4	58097	66664	87%	Number of responses with lights and/or sirens / Total number of responses.
RST-5	667	23230	3%	Number of responses with lights and/or sirens / Total number of responses.

SANTA CLARA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	1694	4053	42%	eDisposition.23 is often left blank by prehospital personnel.
HYP-1	1171	1670	70%	eMedications.03 is often left blank when multiple agencies are on the same incident.
STR-1	103	3640	3%	Santa Clara County uses GFAST, so eVitals.29 is usually blank.
PED-3	250	345	72%	eVitals.12 and eVitals.14 are often left blank by prehospital personnel.
RST-4	176716	235678	75%	N/A
RST-5	8163	81271	10%	N/A

SANTA CRUZ COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	115	393	29%	
HYP-1	78	230	34%	
STR-1	539	554	97%	
PED-3	34	38	89%	
RST-4	18720	21942	85%	
RST-5	11	11	100%	

SIERRA-SACRAMENTO VALLEY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	2704	2822	96%	EMS personnel continue to document eDisposition.23 inconsistently, which provides an inaccurate representation of our EMS system data for this core measure. We substituted eDisposition.23 with eDisposition.01 = names of individual designated trauma receiving centers + eDisposition.20 = "Regional Specialty Center" to determine an accurate Numerator Value for this measure. No changes were made to the Denominator data elements. The un-modified Numerator Value (using only eDisposition.23) was 1035.
HYP-1	1504	1598	94%	No changes made to data specifications sheet.
STR-1	2810	3330	84%	No changes made to data specifications sheet. Additional review of several PCRs indicated that our actual compliance is higher, but crews are not always documenting the stroke scale results in the appropriate section of the PCR. We continue to educate EMS personnel on the importance of accurately documenting stroke scales in the appropriate PCR fields (not just the narrative).
PED-3	316	318	99%	No changes made to data specifications sheet.
RST-4	88389	148528	60%	No changes made to data specifications sheet.
RST-5	7254	100228	7%	No changes made to data specifications sheet.

TUOLUMNE COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	19	31	61%	
HYP-1	77	89	87%	
STR-1	72	116	62%	
PED-3	3	3	100%	
RST-4	4364	6047	72%	
RST-5	255	4623	6%	

VENTURA COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2				We do not yet utilize elnjury.03 or elnjury.04. We have combined those two fields into a local custom field that includes all steps 1-4.
HYP-1	165	1152	14%	
STR-1				We do not utilize eVitals.29. As we have an ELVO system in place, we utilize custom stroke fields related to assessment of stroke patients.
PED-3	26	26	100%	
RST-4				We do not utilize erespone.24. If using eResponse.23, the reporting value for this measure would be 93%
RST-5				We do not utilize erespone.18. If using eResponse.17, the reporting value for this measure would be 10%

YOLO COUNTY EMS AGENCY

Measure ID	Numerator (Subpopulation)	Denominator (Population)	Reported Value	Notes
TRA-2	357	657	54%	The metric requires us to document Trauma Center Level 1 or 2 as reason for destination. We're still educating crews to not mark "Closest / most appropriate" or "Patient request". Our actual transport to trauma centers for all trauma triage patients is 70%, with 100% of Level 1 or 2 patients arriving at trauma centers. The remainder were either transported by air, refused, pronounced, or accepted under mechanism only at local facilities.
HYP-1	155	184	84%	
STR-1	389	439	89%	
PED-3	42	59	71%	
RST-4	20129	21558	93%	
RST-5	943	13098	7%	

QUESTIONS OR COMMENTS?



Additional information about the California Core Quality Measures Project, including reports for previous years, is accessible via the California Emergency Medical Services Authority Quality Improvement webpage at <https://emsa.ca.gov/quality-improvement/>.

For questions or comments about the California Core Quality Measures Report – CY 2020, please contact Michelle McEuen at (916) 384-1925 or Michelle.McEuen@emsa.ca.gov.

California EMS System Core Quality Measures Report

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