



California EMS System Core Quality Measures Instruction Manual **2023 Update for NEMSIS v3.5.0**

Emergency Medical Services Authority
California Health and Human Services Agency
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UPDATE FOR NEMSIS V3.5.0:

This document is an addendum to the [EMS Core Quality Measures Instruction Manual \(EMSA Publication SYS 100-11\) – 2022-2023 Data \(Updated November 2023\)](#). Please refer to the manual for additional information and detailed instructions on core quality measure reporting. The manual is accessible via the California Emergency Medical Services Authority website at <https://emsa.ca.gov/ems-core-quality-measures-project/>.

This addendum contains the California EMS Core Quality Measure specifications consistent with the National Emergency Medical Services Information System (NEMSIS) v3.5.0 data standard. The Emergency Medical Services Agency (EMSA), in coordination with the 34 local EMS agencies (LEMSAs), adopted the NEMSIS v3.5.0 data standard in the calendar year 2023 for utilization in the California Emergency Medical Services Information System (CEMSIS). Transition to NEMSIS v3.5.0 supports California EMS data initiatives via the collection, storage, and sharing of standardized EMS data.

INSTRUCTIONS FOR LEMSAS

EMSA requests that each LEMSA report data for all core quality measures for the calendar year 2023 using the NEMSIS data standard. The measure specifications, consistent with NEMSIS v3.5.0, are provided below and a reporting spreadsheet will be sent to each LEMSA for reporting qualifying data. LEMSAs transitioning from NEMSIS v3.4.0 to v3.5.0 at the time of reporting may opt to use NEMSIS v3.4.0 when reporting qualifying data for the 2023 calendar year. To report data using NEMSIS v3.4.0, refer to the measure specifications in the [EMS Core Quality Measures Instruction Manual \(EMSA Publication SYS 100-11\) – 2022-2023 Data \(Updated November 2023\)](#). The manual is accessible via the EMSA website at <https://emsa.ca.gov/ems-core-quality-measures-project/>.

The table below lists all NEMSIS v3.5.0 essential data elements used to execute core quality measure reports. Each data element plays a vital role in EMSA's ability to collect and report on the Core Quality Measures Project. EMS providers and LEMSAs should ensure that these data elements are appropriately captured and populated in every patient care record.

Data Element Name	Data Element Number
Destination/Transferred To, Code	eDisposition.02
Additional Transport Mode Descriptors	eDisposition.18
Hospital Capability	eDisposition.23
Transport Disposition	eDisposition.30
Trauma Triage Criteria (High Risk for Serious Injury)	eInjury.03
Trauma Triage Criteria (Moderate Risk for Serious Injury)	eInjury.04
Medication Administered	eMedications.03
Age	ePatient.15
Age Units	ePatient.16
Procedure	eProcedures.03
Type of Service Requested	eResponse.05
Unit Transport and Equipment Capability	eResponse.07
Additional Response Mode Descriptors	eResponse.24
Provider's Primary Impression	eSituation.11
Provider's Secondary Impressions	eSituation.12
Pulse Oximetry	eVitals.12
Respiratory Rate	eVitals.14
End Tidal Carbon Dioxide (ETCO ₂)	eVitals.16
Blood Glucose Level	eVitals.18
Stroke Scale Score	eVitals.29

CORE QUALITY MEASURES NEMSIS V3.5.0:

TRANSPORT OF TRAUMA PATIENTS TO A TRAUMA CENTER

Measure Set	Trauma
Measure ID #	TRA-2
Measure Name	Transport of Trauma Patients to a Trauma Center
Measure Description	Percentage of trauma patients meeting CDC Field Trauma Triage Criteria Step 1 or 2 or 3 that were transported to a trauma center originating from a 911 response.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of trauma patients meeting CDC Field Trauma Triage Criteria Step 1 or 2 or 3 originating from a 911 response.
Denominator Inclusion Criteria	<p>All events where:</p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eDisposition.30 Transport Disposition = 4230001 "Transport by This EMS Unit (This Crew Only)" 4230003 "Transport by this EMS Unit, with a Member of a Another Crew" <p>AND</p> <ul style="list-style-type: none"> • (eInjury.03 Trauma Triage Criteria (High Risk for Serious Injury)) = 2903001 "Amputation proximal to wrist or ankle" 2903003 "Crushed, degloved, mangled, or pulseless extremity" 2903005 "Chest wall instability, deformity, or suspected flail chest" 2903007 "Glasgow Coma Score ≤13" 2903009 "Skull deformity, suspected skull fracture" 2903011 "Paralysis" 2903013 "Suspected pelvic fractures" 2903015 "Penetrating injuries to head, neck, torso, and proximal extremities" 2903017 "Respiratory Rate <10 or >29 breaths per minute (<20 in infants aged <1 year) or need for ventilatory support" 2903019 "Systolic Blood Pressure <90 mmHg" 2903021 "Suspected fracture of two or more proximal long bones" <p>OR</p>

	<ul style="list-style-type: none"> • eInjury.04 Trauma Triage Criteria (Moderate Risk for Serious Injury)= 2904001 "Pedestrian/bicycle rider thrown, run over, or with significant impact" 2904003 "Fall Adults: > 20 ft. (one story is equal to 10 ft.)" 2904005 "Fall Children: > 10 ft. or 2-3 times the height of the child" 2904007 "Auto Crash: Death in passenger compartment" 2904009 "Auto Crash: Partial or complete ejection" 2904011 "Auto Crash: Significant intrusion (including roof): >12 inches occupant site; >18 inches any site; need for extrication" 2904013 "Auto Crash: Vehicle telemetry data consistent with severe injury" 2904015 "Motorcycle Crash > 20 MPH") <p><i>Count by patients treated rather than by number of responses.</i></p>
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of trauma patients meeting CDC Field Trauma Triage Criteria Step 1 or 2 or 3 transported to a trauma center originating from a 911 response.
Numerator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eDisposition.30 Transport Disposition = 4230001 "Transport by This EMS Unit (This Crew Only)" 4230003 "Transport by this EMS Unit, with a Member of a Another Crew" <p>AND</p> <ul style="list-style-type: none"> • (eInjury.03 Trauma Triage Criteria (High Risk for Serious Injury) = 2903001 "Amputation proximal to wrist or ankle" 2903003 "Crushed, degloved, mangled, or pulseless extremity" 2903005 "Chest wall instability, deformity, or suspected flail chest" 2903007 "Glasgow Coma Score ≤13" 2903009 "Skull deformity, suspected skull fracture" 2903011 "Paralysis" 2903013 "Suspected pelvic fractures" 2903015 "Penetrating injuries to head, neck, torso, and proximal extremities" 2903017 "Respiratory Rate <10 or >29 breaths per minute (<20 in infants aged <1 year) or need for ventilatory support" 2903019 "Systolic Blood Pressure <90 mmHg" 2903021 "Suspected fracture of two or more proximal long bones"

	<p>OR</p> <ul style="list-style-type: none"> • eInjury.04 Trauma Triage Criteria (Moderate Risk for Serious Injury)= 2904001 "Pedestrian/bicycle rider thrown, run over, or with significant impact" 2904003 "Fall Adults: > 20 ft. (one story is equal to 10 ft.)" 2904005 "Fall Children: > 10 ft. or 2-3 times the height of the child" 2904007 "Auto Crash: Death in passenger compartment" 2904009 "Auto Crash: Partial or complete ejection" 2904011 "Auto Crash: Significant intrusion (including roof): >12 inches occupant site; >18 inches any site; need for extrication" 2904013 "Auto Crash: Vehicle telemetry data consistent with severe injury" 2904015 "Motorcycle Crash > 20 MPH") <p>AND</p> <ul style="list-style-type: none"> • (eDisposition.23 Hospital Capability = 9908021 "Trauma Center Level 1" 9908023 "Trauma Center Level 2" 9908025 "Trauma Center Level 3" 9908027 "Trauma Center Level 4" <p>OR</p> <ul style="list-style-type: none"> • eDisposition.02 Destination/Transferred To, Code = [Insert all destination/transferred to codes from the Trauma Center List that apply to your LEMSA. The Trauma Center List is provided in Appendix A on page #20-22.] <p><i>Count by patients treated rather than by number of responses.</i></p>
Numerator Exclusion Criteria	None
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 & Unit)	95%
Measure Value Interpretation	For this measure, a higher value typically indicates better quality.
Sampling	No
Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none"> • Retrospective data sources for required data elements include administrative data and prehospital care records. • Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.

TREATMENT ADMINISTERED FOR HYPOGLYCEMIA

Measure Set	Hypoglycemia
Measure ID #	HYP-1
Measure Name	Treatment Administered for Hypoglycemia
Measure Description	Percentage of patients that received treatment to correct their hypoglycemia originating from a 911 response.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of patients who had a blood glucose level indicating hypoglycemia originating from a 911 response.
Denominator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eVitals.18 Blood Glucose Level < 60 <p><i>Count by patients treated rather than by number of responses</i></p>
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of patients who received treatment to correct their hypoglycemia originating from a 911 response.
Numerator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eVitals.18 Blood Glucose Level < 60 <p>AND</p> <ul style="list-style-type: none"> • (eMedications.03 Medication Administered = <ul style="list-style-type: none"> 4832 "Glucagon" 4850 "Glucose" 92972 "Insta-Glucose" 237648 "Dextrose (D10)" 237653 "Glucose 500 MG/ML Injectable Solution" 260258 "Glucose 250 MG/ML Injectable Solution" 309778 "Glucose 500 MG/ML Injectable Solution" 317630 "Glucose 100 MG/ML" 372326 "Glucose Chewable Tablet" 376937 "Glucose Injectable Solution" 377980 "Glucose Oral Gel" 1165819 "Glucose Injectable Product" 1165822 "Glucose Oral Liquid Product"

	<p>1165823 "Glucose Oral Product" 1794567 "Glucose Injection" 1795477 "500 ML glucose 100 MG/ML Injection" 1795480 "250 ML glucose 100 MG/ML Injection" 1795610 "250 ML Glucose 50 MG/ML Injection" "Contains any dextrose"</p> <p>OR</p> <ul style="list-style-type: none"> • eProcedures.03 Procedure = 225285007 "Giving oral fluid" 710925007 "Provision of food" <p>OR</p> <ul style="list-style-type: none"> • eMedications.03 Medication Administered = 8801001 "Contraindication Noted" 8801003 "Denied By Order" 8801007 "Medication Allergy" 8801009 "Medication Already Taken" 8801019 "Refused" 8801023 "Unable to Complete" 8801027 "Order Criteria Not Met" <p>OR</p> <ul style="list-style-type: none"> • eProcedures.03 Procedure = 8801001 "Contraindication Noted" 8801003 "Denied By Order" 8801019 "Refused" 8801023 "Unable to Complete" 8801027 "Order Criteria Not Met") <p><i>Count by patients treated rather than by number of responses.</i></p>
Numerator Exclusion Criteria	None
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 & Unit)	95%
Measure Value Interpretation	For this measure, a higher value indicates better quality.
Sampling	No
Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none"> • Retrospective data sources for required data elements include administrative data and prehospital care records.

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| | <ul style="list-style-type: none">• Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency. |
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PREHOSPITAL SCREENING FOR SUSPECTED STROKE PATIENTS

Measure Set	Stroke
Measure ID #	STR-1
Measure Name	Prehospital Screening for Suspected Stroke Patients
Measure Description	Percentage of suspected stroke patients that received a prehospital stroke screening originating from a 911 response.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of patients who had a primary or secondary impression of stroke originating from a 911 response.
Denominator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • (eSituation.11 Provider's Primary Impression = I63.9 "Stroke/CVA/TIA" <p>OR</p> <ul style="list-style-type: none"> • eSituation.12 Provider's Secondary Impressions = I63.9 "Stroke/CVA/TIA") <p><i>Count by patients treated rather than by number of responses.</i></p>
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of patients who had a primary or secondary impression of stroke originating from a 911 response and yielded a documented stroke assessment.
Numerator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • (eSituation.11 Provider's Primary Impression = I63.9 "Stroke/CVA/TIA" <p>OR</p> <ul style="list-style-type: none"> • eSituation.12 Provider's Secondary Impressions = I63.9 "Stroke/CVA/TIA") <p>AND</p> <ul style="list-style-type: none"> • (eVitals.29 Stroke Scale Score = 3329001 "Negative" 3329003 "Non-Conclusive" 3329005 "Positive" <p>OR</p>

	<ul style="list-style-type: none"> eVitals.29 Stroke Scale Score = 8801019 "Refused" 8801023 "Unable to Complete") <p><i>Count by patients treated rather than by number of responses.</i></p>
Numerator Exclusion Criteria	None
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 & Unit)	95%
Sampling	No
Measure Value Interpretation	For this measure, a higher value indicates better quality.
Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none"> Retrospective data sources for required data elements include administrative data and prehospital care records. Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.

RESPIRATORY ASSESSMENT FOR PEDIATRIC PATIENTS

Measure Set	Pediatric
Measure ID #	PED-3
Measure Name	Respiratory Assessment for Pediatric Patients
Measure 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.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of pediatric patients who had a primary or secondary impression of respiratory distress originating from a 911 response.
Denominator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • ((ePatient.15 Age ≤ 14 <p>AND</p> <ul style="list-style-type: none"> • ePatient.16 Age Units = 2516009 "Years") <p>OR</p> <ul style="list-style-type: none"> • (ePatient.15 Age = Not Null <p>AND</p> <ul style="list-style-type: none"> • ePatient.16 Age Units = 2516001 "Days" 2516003 "Hours" 2516005 "Minutes" 2516007 "Months")) <p>AND</p> <ul style="list-style-type: none"> • (eSituation.11 Provider's Primary Impression = J80 "Respiratory Distress/Other" J98.01 "Respiratory Distress/Bronchospasm" <p>OR</p> <ul style="list-style-type: none"> • eSituation.12 Provider's Secondary Impressions = J80 "Respiratory Distress/Other" J98.01 "Respiratory Distress/Bronchospasm") <p><i>Count by patients treated rather than by number of responses.</i></p>
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of pediatric patients who had a primary or secondary impression of respiratory distress originating from a 911 response and yielded a documented respiratory assessment.

**Numerator Inclusion
Criteria**

All events where:

- [eResponse.05 Type of Service Requested](#) =
2205001 "Emergency Response (Primary Response Area)"

AND

- [\(ePatient.15 Age](#) ≤ 14

AND

- [ePatient.16 Age Units](#) = 2516009 "Years")

OR

- [\(ePatient.15 Age](#) = Not Null

AND

- [ePatient.16 Age Units](#) =
2516001 "Days"
2516003 "Hours"
2516005 "Minutes"
2516007 "Months"))

AND

- [\(eSituation.11 Provider's Primary Impression](#) =
J80 "Respiratory Distress/Other"
J98.01 "Respiratory Distress/Bronchospasm"

OR

- [eSituation.12 Provider's Secondary Impressions](#) =
J80 "Respiratory Distress/Other"
J98.01 "Respiratory Distress/Bronchospasm")

AND

- [\(eVitals.14 Respiratory Rate](#) =
Logical and Present [min 0 - max 300]

OR

- [eVitals.14 Respiratory Rate](#) =
8801005 "Exam Finding Not Present"
8801019 "Refused"
8801023 "Unable to Complete")

AND

- [\(eVitals.12 Pulse Oximetry](#) =
Logical and Present [min 0 - max 100]

OR

- [eVitals.12 Pulse Oximetry](#) =
8801005 "Exam Finding Not Present"
8801019 "Refused"
8801023 "Unable to Complete"

OR

- [eVitals.16 End Tidal Carbon Dioxide \(ETCO2\)](#) =
Logical and Present [min 0 - max 760]

OR

- [eVitals.16 End Tidal Carbon Dioxide \(ETCO2\)](#) =

	<p>8801019 "Refused" 8801023 "Unable to Complete")</p> <p><i>Count by patients treated rather than by number of responses.</i></p>
Numerator Exclusion Criteria	None
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 & Unit)	95%
Measure Value Interpretation	For this measure, a higher value indicates better quality.
Sampling	No
Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none"> Retrospective data sources for required data elements include administrative data and prehospital care records. Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.

911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS RESPONSE

Measure Set	Response and Transport
Measure ID #	RST-4
Measure Name	911 Requests for Services That Included a Lights and/or Sirens Response
Measure Description	Percentage of EMS responses originating from a 911 request that included the use of lights and/or sirens during a response.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of EMS responses originating from a 911 request.
Denominator Inclusion Criteria	All events where: <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)"
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of EMS responses originating from a 911 request that included a lights and/or sirens response.
Numerator Inclusion Criteria	All events where: <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" AND <ul style="list-style-type: none"> • eResponse.24 Additional Response Mode Descriptors = 2224015 "Lights and Sirens" 2224017 "Lights and No Sirens" 2224021 "Initial No Lights or Sirens, Upgraded to Lights and Sirens" 2224023 "Initial Lights and Sirens, Downgraded to No Lights or Sirens"
Numerator Exclusion Criteria	None
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 & Unit)	15%
Measure Value Interpretation	For this measure, a lower value generally indicates better quality.
Sampling	No

Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none">• Retrospective data sources for required data elements include administrative data and prehospital care records.• Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.

911 REQUESTS FOR SERVICES THAT INCLUDED A LIGHTS AND/OR SIRENS TRANSPORT

Measure Set	Response and Transport
Measure ID #	RST-5
Measure Name	911 Requests for Services That Included a Lights and/or Sirens Transport
Measure Description	Percentage of EMS transports originating from a 911 request that included the use of lights and/or sirens during patient transport.
Type of Measure	Process
Reporting Value & Unit	Percentage (%)
Denominator Statement (Population)	Number of EMS transports originating from a 911 request.
Denominator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eResponse.07 Primary Role of the Unit = 2207015 "Ground Transport (ALS Equipped)" 2207017 "Ground Transport (BLS Equipped)" 2207019 "Ground Transport (Critical Care Equipped)" <p>AND</p> <ul style="list-style-type: none"> • eDisposition.30 Transport Disposition = 4230001 "Transport by This EMS Unit (This Crew Only)" 4230003 "Transport by this EMS Unit, with a Member of a Another Crew" <p><i>Count by patients treated rather than by number of responses.</i></p>
Denominator Exclusion Criteria	None
Numerator Statement (Subpopulation)	Number of EMS transports originating from a 911 request that included a lights and/or sirens patient transport.
Numerator Inclusion Criteria	<p><i>All events where:</i></p> <ul style="list-style-type: none"> • eResponse.05 Type of Service Requested = 2205001 "Emergency Response (Primary Response Area)" <p>AND</p> <ul style="list-style-type: none"> • eResponse.07 Unit Transport and Equipment Capability = 2207015 "Ground Transport (ALS Equipped)" 2207017 "Ground Transport (BLS Equipped)" 2207019 "Ground Transport (Critical Care Equipped)" <p>AND</p> <ul style="list-style-type: none"> • eDisposition.30 Transport Disposition = 4230001 "Transport by This EMS Unit (This Crew Only)"

	<p>4230003 "Transport by this EMS Unit, with a Member of a Another Crew"</p> <p>AND</p> <ul style="list-style-type: none"> • eDisposition.18 Additional Transport Mode Descriptors = <p>4218011 "Lights and Sirens"</p> <p>4218013 "Lights and No Sirens"</p> <p>4218017 "Initial No Lights or Sirens, Upgraded to Lights and Sirens"</p> <p>4218019 "Initial Lights and Sirens, Downgraded to No Lights or Sirens"</p> <p><i>Count by patients treated rather than by number of responses.</i></p>
Numerator Exclusion Criteria	None
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 & Unit)	15%
Measure Value Interpretation	For this measure, a lower value generally indicates better quality.
Sampling	No
Aggregation	Yes
Blinded	Yes
Data Collection Approach	<ul style="list-style-type: none"> • Retrospective data sources for required data elements include administrative data and prehospital care records. • Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.

APPENDIX A: TRAUMA CENTER LIST

LEMSA	County	Destination/ Transferred To Code	Hospital Name
Alameda EMS	Alameda	20005	Highland Alameda County Medical Center
Alameda EMS	Alameda	20112	Sutter Health Eden Medical Center
Alameda EMS	Alameda	20059	UCSF Benioff Children's Hospital Oakland
Central California EMS	Fresno	20085	Community Regional Medical Center
Central California EMS	Tulare	20219	Kaweah Delta Medical Center
Central California EMS	Madera	20061	Valley Children's Hospital
Coastal Valley EMS	Mendocino	20506	Ukiah Valley Medical Center
Coastal Valley EMS	Mendocino	20132	Frank Howard Memorial Hospital
Coastal Valley EMS	Sonoma	20402	Santa Rosa Memorial Hospital
Contra Costa EMS	Contra Costa	20180	John Muir Medical Center, Walnut Creek
El Dorado EMS	El Dorado	20033	Barton Healthcare System
El Dorado EMS	El Dorado	20272	Marshall Medical Center
Imperial County EMS	Imperial	20117	El Centro Regional Medical Center
Imperial County EMS	Imperial	20344	Pioneers Memorial Healthcare District
Inland Counties EMS	San Bernardino	20019	Arrowhead Regional Medical Center
Inland Counties EMS	San Bernardino	20252	Loma Linda University Medical Center
Kern EMS	Kern	20224	Kern Medical Center
Kern EMS	Kern	20372	Ridgecrest Regional Hospital
Los Angeles EMS	Los Angeles	20018	Antelope Valley Hospital
Los Angeles EMS	Los Angeles	20054	Cedars-Sinai Medical Center
Los Angeles EMS	Los Angeles	20062	Children's Hospital Los Angeles
Los Angeles EMS	Los Angeles	20045	Dignity Health California Hospital Medical Center
Los Angeles EMS	Los Angeles	20315	Dignity Health Northridge Hospital Medical Center
Los Angeles EMS	Los Angeles	20460	Dignity Health St. Mary Medical Center
Los Angeles EMS	Los Angeles	20240	Harbor-UCLA Medical Center
Los Angeles EMS	Los Angeles	20163	Henry Mayo Newhall Memorial Hospital
Los Angeles EMS	Los Angeles	20173	Huntington Memorial Hospital
Los Angeles EMS	Los Angeles	20242	LAC + USC Medical Center
Los Angeles EMS	Los Angeles	20255	Long Beach Memorial Medical Center

Los Angeles EMS	Los Angeles	20348	Pomona Valley Hospital Medical Center
Los Angeles EMS	Los Angeles	20354	Providence Holy Cross Medical Center
Los Angeles EMS	Los Angeles	20377	Ronald Reagan UCLA Medical Center
Los Angeles EMS	Los Angeles	20446	St. Francis Medical Center
Marin EMS	Marin	20269	Marin General Hospital
Monterey EMS	Monterey	20306	Natividad Medical Center
Mountain Valley EMS	Stanislaus	20101	Doctors Medical Center Modesto
Mountain Valley EMS	Stanislaus	20275	Memorial Medical Center Modesto
Napa EMS	Napa	20362	Queen of the Valley Medical Center
North Coast EMS	Humboldt	20264	Mad River Community Hospital
North Coast EMS	Humboldt	20454	St. Joseph Medical Center
North Coast EMS	Del Norte	20472	Sutter Coast Hospital
North Coast EMS	Lake	20476	Sutter Lakeside Hospital
Northern California EMS	Lassen	20030	Banner Lassen Hospital
Orange EMS	Orange	20063	Children's Hospital Orange County
Orange EMS	Orange	20296	Mission Hospital Regional Medical Center
Orange EMS	Orange	20529	Orange County Global Medical Center
Orange EMS	Orange	20509	UC Irvine Health
Riverside EMS	Riverside	20177	John F. Kennedy Memorial Hospital
Riverside EMS	Riverside	20097	Desert Regional Medical Center
Riverside EMS	Riverside	20442	Inland Valley Medical Center
Riverside EMS	Riverside	20374	Riverside Community Hospital
Riverside EMS	Riverside	20375	Riverside University Health System
Sacramento EMS	Sacramento	20286	Dignity Health Mercy San Juan Medical Center
Sacramento EMS	Sacramento	20205	Kaiser Permanente South Sacramento
Sacramento EMS	Sacramento	20508	University of California, Davis Medical Center
San Benito	San Benito	20156	Hazel Hawkins Memorial Hospital
San Diego EMS	San Diego	20561	Palomar Medical Center
San Diego EMS	San Diego	20364	Rady Children's Hospital-San Diego
San Diego EMS	San Diego	20406	Scripps Memorial Hospital
San Diego EMS	San Diego	20408	Scripps Mercy Hospital
San Diego EMS	San Diego	20419	Sharp Memorial Hospital
San Diego EMS	San Diego	20510	UC San Diego Medical Center
San Francisco EMS	San Francisco	20386	Zuckerberg San Francisco General Hospital and Trauma Center

San Joaquin EMS	San Joaquin	20391	San Joaquin General Hospital
San Luis Obispo EMS	San Luis Obispo	20431	Sierra Vista Regional Medical Center
Santa Barbara EMS	Santa Barbara	20267	Dignity Health Marian Regional Medical Center
Santa Barbara EMS	Santa Barbara	20369	Santa Barbara Cottage Hospital
Santa Clara EMS	Santa Clara	20368	Regional Medical Center of San Jose
Santa Clara EMS	Santa Clara	20400	Santa Clara Valley Medical Center
Santa Clara EMS	Santa Clara	20465	Stanford Health Care/Lucile Packard Children's Hospital
Sierra-Sacramento EMS	Siskiyou	20285	Dignity Health Mercy Medical Center Mt. Shasta
Sierra-Sacramento EMS	Shasta	20284	Dignity Health Mercy Medical Center Redding
Sierra-Sacramento EMS	Tehama	20445	Dignity Health St. Elizabeth Community Hospital
Sierra-Sacramento EMS	Butte	20122	Enloe Medical Center
Sierra-Sacramento EMS	Siskiyou	20124	Fairchild Medical Center
Sierra-Sacramento EMS	Yuba	20371	Rideout Regional Medical Center
Sierra-Sacramento EMS	Placer	20486	Tahoe Forest Hospital
Sierra-Sacramento EMS	Placer	20481	Sutter Roseville Medical Center
Solano EMS	Solano	20193	Kaiser Foundation Hospital - Vacaville
Solano EMS	Solano	20309	NorthBay Medical Center
Ventura EMS	Ventura	20261	Los Robles Hospital & Medical Center
Ventura EMS	Ventura	20516	Ventura County Medical Center

California EMS System Core Quality Measures

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