CEMSIS Data Elements
Air Transport Use Modifications
TYPE OF DISPATCH DELAY       E02_06
Level III (Providers utilizing a totally electronic system)

Data Format [combo] multiple-choice

Definition
The dispatch delays, if any, associated with the dispatch of the EMS unit to the patient encounter

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSD Domain (Simple Type)</td>
<td>TypeOfDispatchDelay</td>
</tr>
<tr>
<td>Multiple Entry Configuration</td>
<td>Yes</td>
</tr>
<tr>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
<tr>
<td>Required in XSD</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
  - Caller (Uncooperative)
  - High Call Volume
  - Language Barrier
  - Location (Inability to Obtain)
  - No Units Available
  - Scene Safety (Not Secure for EMS)
  - Technical Failure (Computer, Phone etc.)

Add Air Transport Specific Field Values

  - None
  - Other

Data Collector
9-1-1 or Dispatch Center and electronically or verbally transmitted to the EMS provider agency

Content
No historical content for this element.

Discussion
There are no discussion points related to this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
TYPE OF RESPONSE DELAY

Level III (Providers utilizing a totally electronic system)

Data Format [combo] multiple-choice

Definition
The response delays, if any, of the unit associated with the patient encounter

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
<th>XSD Domain (Simple Type)</th>
<th>TypeOfResponseDelay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>Yes</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
<tr>
<td>Required in XSD</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
  - Crowd
  - Directions
  - Diversion
  - Distance
  - HazMat
  - Safety
  - Staff Delay
  - Traffic
  - Vehicle Crash
  - Vehicle Failure
  - Weather

Add Air Transport Specific Field Values
  • Declined due to weather restrictions

Data Collector
EMS personnel

Content
No historical content for this element.

Discussion
There are no discussion points related to this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
TYPE OF SCENE DELAY

Data Format [combo] multiple-choice

Definition
The scene delays, if any, of the unit associated with the patient encounter

Technical Information

<table>
<thead>
<tr>
<th><strong>XSD Data Type</strong></th>
<th>xs:integer</th>
<th><strong>XSD Domain (Simple Type)</strong></th>
<th>TypeOfSceneDelay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple Entry Configuration</strong></td>
<td>Yes</td>
<td><strong>Accepts Null</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Required in XSD</strong></td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- Crowd
- Directions
- Distance
- Diversion
- Extrication >20 min.
- HazMat
- Language Barrier
- Safety
- Staff Delay
- Traffic
- Vehicle Crash
- Vehicle Failure
- Weather

Add Air Transport Specific Field Values

- None
- Other

Data Collector
EMS personnel

Content
No historical content for this element.

Discussion
There are no discussion points related to this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
**TYPE OF TRANSPORT DELAY**  
E02_09

**Level II (Providers converting to an electronic system)**

**Data Format** [combo] multiple-choice

**Definition**  
The transport delays, if any, of the unit associated with the patient encounter

**Technical Information**

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
<th>XSD Domain (Simple Type)</th>
<th>TypeOfTransportDelay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>Yes</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Required in XSD**  
Yes

**Field Values**

- 25 Not Applicable
- 20 Not Recorded
- 15 Not Reporting
- 10 Not Known
- 5 Not Available
  - Crowd
  - Directions
  - Distance
  - Diversion
  - HazMat
  - Safety
  - Staff Delay
  - Traffic
  - Vehicle Crash
  - Vehicle Failure
  - Weather

**Add Air Transport Specific Field Values**

- None
- Other

**Data Collector**  
EMS personnel

**Content**  
No historical content for this element.

**Discussion**  
There are no discussion points related to this element.

**CEMSIS to NEMSIS Comparison**

This element has been determined to be equivalent to the NHTSA v2.2.1 element
UNIT BACK IN SERVICE DATE/TIME  E05_11

Level II (Providers converting to an electronic system)

Data Format [date/time]

Definition
The date/time the unit was back in service and available for response (finished with call, but not necessarily back in home location)

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:dateTime</th>
<th>XSD Domain (Simple Type)</th>
<th>DateTime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>No</td>
<td>Accepts Null</td>
<td>No</td>
</tr>
</tbody>
</table>

Required in XSD Yes  Minimum Constraint 1,990 Maximum Constraint 2,030

Field Values
Relevant Value for Data Element & Patient Care

Data Collector
9-1-1 or Dispatch Center and electronically or verbally transmitted to the EMS provider agency

Content
The hour, minute, and second that the EMS response unit is ready for the next call

Discussion
This time represents the time when a unit is ready and available to respond to the next request for service.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
**UNIT BACK AT HOME LOCATION DATE/TIME**  
**E05_13**

**Level III (Providers utilizing a totally electronic system)**

**Data Format**  
[date/time]

**Definition**  
The date/time the responding unit was back in their service area. In agencies who utilize Agency Status Management, home location means the service area as assigned through the agency status management protocol.

**Technical Information**

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:dateTime</th>
<th>XSD Domain (Simple Type)</th>
<th>DateTime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>No</td>
<td>Accepts Null</td>
<td>Yes, but null value is blank or empty</td>
</tr>
</tbody>
</table>

| Required in XSD | Yes | Minimum Constraint | 1,990 | Maximum Constraint | 2,030 |

**Field Values**

Relevant Value for Data Element & Patient Care

**Data Collector**

9-1-1 or Dispatch Center and electronically or verbally transmitted to the EMS agency

**Content**

No historical content for this element.

**Discussion**

There are no discussion points related to this element.

**CEMSIS to NEMSIS Comparison**

This element has been determined to be equivalent to the NHTSA v2.2.1 element
INCIDENT FACILITY CODE

E08_08

Level III (Providers utilizing a totally electronic system)

Data Format [text]

Definition
The state or regulatory number (code) associated with the facility if the Incident is a Healthcare Facility.

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:string</th>
<th>XSD Domain (Simple Type)</th>
<th>IncidentFacilityCode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>No</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
</tbody>
</table>

| Required in XSD | No | Minimum Constraint | 2 | Maximum Constraint | 30 |

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available

- Relevant Value for Data Element & Patient Care

Additional Information
Could be an editable list box Created from Hospitals Facility Number (D04_12) and Other Destination Facility Number (D04_14) (Elective NEMSIS elements)

Data Collector
EMS personnel

Note: Collection of this data element is not applicable for Air Transport unless the local EMS Agency requests “interfacility” transport information as part of their EMS data collection system.

Content
This identifier must be unique within California, and should be the HIPAA NPI (National Provider Identifier).

Discussion
EMSA will electronically provide the HIPAA codes to the end user for this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
PRIOR AID

**Level III (Providers utilizing a totally electronic system)**

**Data Format** [combo] multiple-choice

**Definition**
Any care which was provided to the patient prior to the arrival of this unit.

**Technical Information**

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:string</th>
<th>XSD Domain (Simple Type)</th>
<th>PriorAid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>Yes</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Field Values**
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available

- **First Responder on Scene**
- Bleeding Control
- Blood Sampling
- Obstetrical delivery
- Pacing
- Wound care
- NG/OG tube
- Precordial thump
- Rapid Sequence Induction
- Restraints
- 12 lead
- CPR
- Defibrillation (auto)
- Synchronized cardioversion
- Defibrillation (manual)
- Defibrillation (semi-automatic)
- EKG monitor
- Pre-existing devices
- Removal of foreign body
- Vagal maneuvers
- Oxygen by mask
- Oxygen by cannula
- Bag/Valve/Mask
- Oropharyngeal airway
- Nasopharyngeal airway
- Esophageal airway
- Esophageal/tracheal airway
- Endotracheal intubation
• Intubation, other (stoma, nasal)
• Needle cricothyrotomy
• Needle thoracostomy
• Monitor thoracostomy tube(s)
• Assisted ventilation (positive pressure)
• Suction tube(s)
• Pulse Oximetry
• End Tidal CO2
• Saline lock
• Intravenous catheter
• Intraosseous catheter
• Monitor pre-existing vascular access
• Monitor and adjust IV solutions containing potassium
• Monitor and adjust IV solutions containing heparin
• Monitor and adjust IV solutions containing nitroglycerine
• Splint of extremity (non-traction)
• Traction splint
• Spinal precautions
• Normal Saline
• 25% Dextrose
• 50% Dextrose
• Oral Glucose/Sugar Solutions
• Activated Charcoal
• Adenosine
• Aerosolized or nebulized beta-2 specific bronchodilator
• Amiodarone
• Aspirin
• Atropine Sulfate
• Beta Agonist (any drug)
• Blood & Blood Products
• Calcium Chloride
• Diazepam (Valium®)
• Diazepam (rectal Valium®)
• Diphenhydramine Hydrochloride (Benadryl®)
• Dopamine Hydrochloride
• Epinephrine
• Furosemide (Lasix®)
• Glucagon
• Heparin (intravenous)
• Ipratropium Bromide (Atrovent®)
• Lidocaine Hydrochloride
• Lorazepam
• Mannitol
• Midazolam
• Magnesium Sulfate
• Morphine Sulfate
• Naloxone Hydrochloride
• Nitroglycerin Preparations (except IV)
- Nitroglycerin (intravenous)
- Nitrous Oxide
- Oxygen
- Oxytocin (Pitocin®)
- Procainamide
- Potassium Chloride
- Pralixome Chloride 2 (2 PAM)
- Rocuronium Bromide (Zemuron®)
- Sodium Bicarbonate
- Sodium Thiosulfate
- Succinylcholine Chloride (Anectine)
- Syrup of Ipecac
- Tissue Plasminogen Activator
- Verapamil

**Additional Information**
List created from Procedures (D04_04) and Medications (D04_06) (Elective NEMSIS elements) and California prehospital scope of practice.

**Data Collector**
EMS personnel

**Content**
No historical content for this element

**Discussion**
If the EMS unit completing the Patient Care Record is the first responder on scene, the element will be marked as “first responder on scene”

**CEMSIS to NEMSIS Comparison**
Variables obtained from Procedures (D04_04) and Medications (D04_06) and California prehospital scope of practice. The CEMSIS variable list differs slightly from NHTSA v2.2.1 but will allow data transmittal to NEMSIS.
PRIOR AID PERFORMED BY

Data Format [combo] multiple-choice

Definition
The type of individual who performed the care prior to the arrival of this unit.

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSD Domain (Simple Type)</td>
<td>PriorAidPerformedBy</td>
</tr>
<tr>
<td>Multiple Entry Configuration</td>
<td>Yes</td>
</tr>
<tr>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
<tr>
<td>Required in XSD</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- EMS Provider
- Law Enforcement
- Lay Person
- Other Healthcare Provider
- Patient

Data Collector
EMS personnel

Content
No historical content for this element.

Discussion
There are no discussion points related to this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
OUTCOME OF THE PRIOR AID

Level III (Providers utilizing a totally electronic system)

Data Format [combo] single-choice

Definition
What was the outcome or result of the care performed prior to the arrival of the unit?

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
<th>XSD Domain (Simple Type)</th>
<th>OutcomeOfPriorAid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>No</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Field Values
- 25 Not Applicable
- 20 Not Recorded
- 15 Not Reporting
- 10 Not Known
- 5 Not Available
- Improved
- Unchanged
- Worse

Data Collector
EMS personnel

Content
No historical content for this element.

Discussion
There are no discussion points related to this element.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
REASON FOR CHOOSING DESTINATION   E20_16
Level I (Providers currently on a paper based system)

Data    [combo] single-choice

Definition
The reason the unit chose to deliver or transfer the patient to the destination

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:integer</th>
<th>XSD Domain (Simple Type)</th>
<th>Reason For Choosing Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry</td>
<td>No</td>
<td>Accepts Null</td>
<td>Yes</td>
</tr>
<tr>
<td>Required in XSD</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- • Closest Facility
- • Diversion
- • Family Choice
- • Insurance Status
- • Law Enforcement Choice
- • On-Line Medical Direction
- • Other
- • Patient Choice
- • Patient's Physician’s Choice
- • Protocol
- • Specialty Resource Center

Considering adding:
- • Trauma Center
- • Pediatric Trauma Center
- • Pediatric Critical Care Center
- • Burn Center
- • STEMI Center
- • Stroke Center
- • Perinatal Care

Additional Information
If Diversion is selected, please see C01_05 “Diversion”

Data Collector
EMS personnel

Content
The code (from those above) that indicates the primary reason the destination was selected. Closest facility should be chosen if none of the other variables are appropriate.
Discussion
Helps EMS managers determine whether the choice of destination was appropriate.

CEMSIS to NEMSIS Comparison
This element has been determined to be equivalent to the NHTSA v2.2.1 element
NEMSIS Data Elements
Air Transport Use Modifications
CREW MEMBER ID  

**E04_01**  

*Use may be determined by LEMSA*

**Data**

[text]

**Definition**

The State Certification/Licensure ID number assigned to the crew member

**XSD Data Type**  

*xs:string*  

**XSD Domain (Simple Type)**  

*CrewMemberID*

**Multiple Entry Configuration**  

Yes, via structure  

**Accepts Null Values**  

*Yes*

**Required in XSD**  

*No*

**Minimum Constraint**  

*2*

**Maximum Constraint**  

*15*

**XSD Structure**

E04_01, E04_02, E04_03 are all members of the E04 Unit Personnel Information structure

**Field Values**

-25 Not Applicable  
-15 Not Reporting  
-5 Not Available  
-20 Not Recorded  
-10 Not Known

**Additional Information**

- A multiple entry configuration to allow all crew members to be entered  
- Linked to State/Licensure ID Number (D07_02)  
- List box created from the State/ Licensure ID Number (D07_02) which could display the Personnel’s Names as associated with D08_01, D08_02, and D08_03 for easy data entry

**Uses**

- A component of the EMS Medical Record: Patient Care Report  
- Associates an EMS event with specific EMS personnel  
- Useful for reporting EMS personnel statistics related to EMS events and evaluation of EMS personnel performance

**Data Collector**

- EMS personnel

**Other Associated Elements**

- **E00** Common Null Values  
- **E01_01** Patient Care Report Number  
- **E04_02** Crew Member Role  
- **E04_03** Crew Member Level
FIRST NAME E06_02

Use may be determined by LEMSA; need to keep patient identifiers to a minimum

Data [text]

Definition
The patient's first (given) name

XSD Data Type xs:string  XSD Domain (Simple Type) FirstName
Multiple Entry Configuration No  Accepts Null Values Yes
Required in XSD No  Minimum Constraint 1  Maximum Constraint 20
XSD Structure: E06_01, E06_02, and E06_03 are all members of the E06_01_0 Patient Name Structure

Field Values
-25 Not Applicable  -20 Not Recorded
-15 Not Reporting  -10 Not Known
-5 Not Available

Additional Information
• Local Policy should dictate how Last Name and First Name should be created if Unknown

Uses
• Allows a patient's information to be stored and retrieved by Name
• Key component of an EMS Medical Record
• Provides contact information for multiple purposes including follow-up, billing, bioterrorism syndromic surveillance, etc

Data Collector
• EMS personnel or electronically through linkage with a pre-existing Patient Care Report or hospital database

Other Associated Elements
E00 Common Null Values  E01_01 Patient Care Report Number
E06_01 Last Name  E06_03 Middle Initial/Name
**INCIDENT ADDRESS**

**Definition**
The street address (or best approximation) where the patient was found, or, if no patient, the address to which the unit responded.

**XSD Data Type**  
*xs:string*

**XSD Domain (Simple Type)**  
*StreetAddress*

**Multiple Entry Configuration**  
No

**Accepts Null Values**  
Yes

**Required in XSD**  
No

**Minimum Constraint**  
2

**Maximum Constraint**  
30

XSD Structure: E08_11, E08_12, E08_14, E08_15 are all members of E08_11_0 Incident Address Structure

**Field Values**

-25 Not Applicable

-15 Not Reporting

-5 Not Available

-20 Not Recorded

-10 Not Known

**Uses**

- A component of the EMS Medical Record: Patient Care Report
- Important for grouping or comparing data by Scene location which also allows data to be sorted by geographic response areas in many agencies
- Provides information on overall response patterns and times for agency configuration and evaluation
- For purposes of Air Transport data, this location would be where the air unit landed (helispot/helipad)

**Data Collector**

- EMS agency or may be electronically provided through the 911 or dispatch center

**Other Associated Elements**

<table>
<thead>
<tr>
<th>E00</th>
<th>Common Null Values</th>
<th>E01_01</th>
<th>Patient Care Report Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>E08_07</td>
<td>Incident Location Type</td>
<td>E08_12</td>
<td>Incident City</td>
</tr>
<tr>
<td>E08_14</td>
<td>Incident State</td>
<td>E08_15</td>
<td>Incident ZIP Code</td>
</tr>
</tbody>
</table>
DATE/TIME VITAL SIGNS TAKEN

Data [date/time]

Definition
Date/Time Vital Signs Taken

Plan: Bring to EMS Data Committee for possible inclusion to next CEMSIS version

XSD Data Type xs:dateTime  XSD Domain (Simple Type) DateTime
Multiple Entry Configuration Yes, via structure  Accepts Null Values Yes, but null value is blank or empty

Required in XSD No  Minimum Constraint 1,990  Maximum Constraint 2,030
XSD Structure: Each element is section E14 is associated with a E14_01 Date/Time

Field Values

Additional Information
• If the date/time is electronically stored within a database or transmitted via XML as a “tick”, the referenced variables may also be used
• Multiple Entry Configuration to allow multiple sets of Vital Signs

Uses
• Part of an EMS Medical Record
• Provides documentation of Assessment and Care
• Used in Quality Management for the evaluation of Care and EMS Agency Performance

Data Collector
• EMS personnel or may be provided electronically through a medical device

Other Associated Elements
E01_01 Patient Care Report Number
**DATE/TIME MEDICATION ADMINISTERED**  E18_01

**Data**  [date/time]

**Plan:** Bring to EMS Data Committee for possible inclusion to next CEMSIS version

**Definition**
The date/time medication administered to the patient

**XSD Data Type**  xs:dateTime  **XSD Domain (Simple Type)**  DateTime

**Multiple Entry Configuration**  Yes, via structure  **Accepts Null Values**  Yes, but null value is blank or empty

**Required in XSD**  No  **Minimum Constraint**  1,990  **Maximum Constraint**  2,030

**XSD Structure:** All data elements section E18 are members of the E18 Medication Structure

**Field Values**

**Additional Information**
- If the date/time is electronically stored within a database or transmitted via XML as a “tick”, the referenced variables may also be used
- This is a multiple entry configuration which will allow multiple medication administrations to be documented

**Uses**
- Part of an EMS Medical Record
- Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools
- Used in Quality Management for the evaluation of Care and EMS Agency Performance

**Data Collector**
- EMS personnel

**Other Associated Elements**

<table>
<thead>
<tr>
<th>E01_01</th>
<th>E18_02</th>
<th>E18_03</th>
<th>E18_04</th>
<th>E18_05</th>
<th>E18_06</th>
<th>E18_07</th>
<th>E18_08</th>
<th>E18_09</th>
<th>E18_10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care Report Number</td>
<td>Medication Administered Prior to this Units EMS Care</td>
<td>Medication Given</td>
<td>Medication Administered Route</td>
<td>Medication Dosage</td>
<td>Medication Dosage Units</td>
<td>Response to Medication</td>
<td>Medication Complication</td>
<td>Medication Crew Member ID</td>
<td>Medication Authorization</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E18_11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Authorizing Physician</td>
</tr>
</tbody>
</table>
DATE/TIME PROCEDURE
PERFORMED SUCCESSFULLY E19_01

Data [date/time]
Plan: Bring to EMS Data Committee for possible inclusion to next CEMSIS version

Definition
The date and time the procedure was performed on the patient

XSD Data Type xs:dateTime XSD Domain (Simple Type) DateTime
Multiple Entry Configuration Yes, via structure Accepts Null Values Yes, but null value is blank or empty
Required in XSD No Minimum Constraint 1,990 Maximum Constraint 2,030
XSD Structure: Data Elements E19_01 through E19_11 are all members of E19_01_0
Procedure Structure

Field Values

Additional Information
• If the date/time is electronically stored within a database or transmitted via XML as a “tick”, the referenced variables may also be used
• This is a multiple entry configuration which will allow for multiple procedures to be documented

Uses
• Part of an EMS Medical Record
• Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools
• Used in Quality Management for the evaluation of Care and EMS Agency Performance

Data Collector
• EMS personnel

Other Associated Elements
E01_01 Patient Care Report Number
E19_02 Procedure Performed Prior to this Units EMS Care
E19_03 Procedure
E19_04 Size of Procedure Equipment
E19_05 Number of Procedure Attempts
E19_06 Procedure Successful
E19_07 Procedure Complication
E19_08 Response to Procedure
E19_09 Procedure Crew Members ID
E19_10 Procedure Authorization
E19_11 Procedure Authorizing Physician
E19_12 Successful IV Site
E19_13 Tube Confirmation
E19_14 Destination Confirmation of Tube Placement
TUBE CONFIRMATION  E19_13

Data  [combo] multiple-choice
Plan: Bring to EMS Data Committee for possible inclusion to next CEMSIS version

Definition
Endotracheal Tube placement verification at the time the airway procedure was done

XSD Data Type  xs:integer  XSD Domain (Simple Type)  TubeConfirmation
Multiple Entry Configuration  Yes  Accepts Null Values  Yes
Required in XSD  No

Field Values
-25 Not Applicable  -20 Not Recorded
-15 Not Reporting  -10 Not Known
-5 Not Available

4740 Colormetric CO2 Detector Confirmation
4750 Esophageal Bulb Aspiration confirmation
4760 Visualization of the Chest Rising with ventilation
4770 Waveform CO2 Confirmation

4745 Digital CO2 Confirmation
4755 Negative Auscultation of the Epigastrium
4765 Visualization of Tube Passing Through the Cords

Additional Information
• Associated with Procedure (E19_03) if Airway Procedure leads to Intubation

Uses
• Part of an EMS Medical Record
• Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools
• Used in Quality Management for the evaluation of Care and EMS Agency Performance

Data Collector
• EMS personnel

Other Associated Elements
E00 Common Null Values  E01_01 Patient Care Report Number
E19_03 Procedure
DESTINATION CONFIRMATION OF TUBE PLACEMENT

Plan: Bring to EMS Data Committee for possible inclusion to next CEMSIS version

Definition
Endotracheal Tube location verification on the arrival at the Destination (if applicable)

XSD Data Type xs:integer  XSD Domain (Simple Type) DestinationConfirmationOfTubePlacement
Multiple Entry Configuration Yes  Accepts Null Values Yes
Required in XSD No

Field Values
-25 Not Applicable
-15 Not Reporting
-5 Not Available
-20 Not Recorded
-10 Not Known
4775 Auscultation of Bilateral Breath Sounds
4780 Colormetric CO2 Detector Confirmation
4785 Digital CO2 Confirmation
4790 Esophageal Bulb Aspiration confirmation
4795 Negative Auscultation of the Epigastrium
4800 Visualization of the Chest Rising with ventilation
4805 Visualization of Tube Passing Through the Cords
4810 Waveform CO2 Confirmation

Additional Information
• Associated with Procedure (E19_03) if Airway Procedure leads to Intubation

Uses
• Part of an EMS Medical Record
• Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools
• Used in Quality Management for the evaluation of Care and EMS Agency Performance

Data Collector
• EMS personnel

Other Associated Elements
E00 Common Null Values
E19_03 Procedure
E01_01 Patient Care Report Number
Additional Data Elements
Air Transport Use
(Not found in NEMSIS or CEMSIS)
**Time Ready for Departure**

**Level III (Providers utilizing a totally electronic system)**

**Data Format**  
[date/time]

**Definition**  
The date/time the EMS provider unit is ready to depart from the scene towards its destination.

**Technical Information**

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:dateTime</th>
<th>XSD Domain (Simple Type)</th>
<th>DateTime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>No</td>
<td>Accepts Null</td>
<td>Yes, but null value is blank or empty</td>
</tr>
<tr>
<td>Required in XSD</td>
<td>Yes</td>
<td>Minimum Constraint</td>
<td>1,990</td>
</tr>
</tbody>
</table>

**Field Values**
-25  Not Applicable  
-20  Not Recorded  
-15  Not Reporting  
-10  Not Known  
-5  Not Available  

**Relevant Value for Data Element & Patient Care**

**Data Collector**
Dispatch Center and electronically or verbally transmitted to the EMS provider agency

**Content**
The hour, minute, and second that the EMS provider unit is ready to depart from the scene towards its destination. Midnight is ‘000000’ and begins the day.

**Discussion**
This time should be obtained from Computer Aided Dispatch (CAD) data, if possible. Although an observed time from the PCR data is acceptable for this field, if any 'upstream times' in the EMS response were determined using GPS universal time, it may result in inaccurate data.

**CEMSIS to NEMSIS Comparison**
No match
**Time of Transfer of Care at Destination Facility**
Level III (Providers utilizing a totally electronic system)

**Data Format** \([date/time]\)

**Definition**
The date/time the EMS provider unit transfers care to a health professional at the destination facility.

**Technical Information**

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>xs:dateTime</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSD Domain (Simple Type)</td>
<td>DateTime</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple Entry Configuration</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepts Null</td>
<td>Yes, but null value is blank or empty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required in XSD</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Constraint</td>
<td>1,990</td>
</tr>
<tr>
<td>Maximum Constraint</td>
<td>2,030</td>
</tr>
</tbody>
</table>

**Field Values**
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available

Relevant Value for Data Element & Patient Care

**Data Collector**
Dispatch Center and electronically or verbally transmitted to the EMS provider agency

**Content**
The hour, minute, and second that the EMS provider unit transfers care to a health professional at the destination facility. Midnight is ‘000000’ and begins the day.

**Discussion**
This time should be obtained from Computer Aided Dispatch (CAD) data, if possible. Although an observed time from the PCR data is acceptable for this field, if any ‘upstream times’ in the EMS response were determined using GPS universal time, it may result in inaccurate data.

**CEMSIS to NEMSIS Comparison**
No match
Indication for Advanced Airway

Level III (Providers utilizing a totally electronic system)

Data Format

Definition

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>XSD Domain (Simple Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Entry Configuration</td>
<td>Accepts Null</td>
</tr>
</tbody>
</table>

Required in XSD

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- Actual or potential airway compromise
- Actual or potential ventilatory compromise
- Clinical course in which early airway intervention indicated

Check NAEMSP standards...

Data Collector

Content

Discussion

Need to define “advanced airway”

CEMSIS to NEMSIS Comparison
No match
12 Lead EKG Result

Level III (Providers utilizing a totally electronic system)

Data Format
Definition
Technical Information

<table>
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<tr>
<th>XSD Data Type</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

Required in XSD

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- None
- Other

Data Collector
Content
Discussion

CEMSIS to NEMSIS Comparison
No match
Type of Specialty Resource – Receiving Facility

Level III (Providers utilizing a totally electronic system)

Data Format
Definition
Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>XSD Domain (Simple Type)</th>
<th>Accepts Null</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
  • None
  • Other

Data Collector
Content
Discussion

CEMSIS to NEMSIS Comparison
No match
Reason for Air Transport Utilization

Level III (Providers utilizing a totally electronic system)

Data Format

Definition

Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>XSD Domain (Simple Type)</th>
<th>Multiple Entry Configuration</th>
<th>Accepts Null</th>
<th>Required in XSD</th>
</tr>
</thead>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- Logistical – Accessibility
- Logistical – Time/Distance
- Clinical – Critical Trauma Findings
- Clinical – Trauma Mechanism/General Considerations
- Clinical – Other (e.g. Cardiac/Stroke/Burn)
- Local Policy
- Interfacility Request
- Other

Data Collector

Content

Discussion

CEMSIS to NEMSIS Comparison
No match
Time at Care Unit
Level III (Providers utilizing a totally electronic system)

Data Format
Definition
Technical Information

<table>
<thead>
<tr>
<th>XSD Data Type</th>
<th>XSD Domain (Simple Type)</th>
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<td></td>
</tr>
</tbody>
</table>

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- None
- Other

Data Collector
Content
Discussion

CEMSIS to NEMSIS Comparison
Title
Level III (Providers utilizing a totally electronic system)

Data Format

Definition

Technical Information

<table>
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</table>

Required in XSD

Field Values
-25 Not Applicable
-20 Not Recorded
-15 Not Reporting
-10 Not Known
-5 Not Available
- None
- Other

Data Collector

Content

Discussion

CEMSIS to NEMSIS Comparison