NEMSIS
Data Dictionary

NHTSA Version 3.2.2
Build 120328

Medical Device Data Standard

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www.NEMSIS.org

NEMSIS Data Dictionary Version 3.2.2
NEMSIS Overview and Summary

This data dictionary represents 24 months of effort collaborating with the EMS industry through web-based reviews, public comment periods, focus groups, industry dialogue, topic focused projects, and consensus. The National EMS Information System Version 3 represents a revision from the existing version 2.1.1 released in 2005. Adopting a broad perspective, the initiative to move to a 3rd version of the NEMSIS data dictionary was fueled by the need to improve data quality, enhance our ability to assess EMS performance, augment the flexibility of the standard for state adoption and, prepare for our initial movement of this standard into Health Level 7 (HL7) for approval as an American National Standards Institute (ANSI) standard. At the time of this initial publication, NEMSIS Version 3 has passed several ballots within HL7 in an effort to be recognized as a federal and international healthcare information standard. Final HL7 adoption of NEMSIS Version 3 is expected in 2012. HL7 will be the permanent home for the NEMSIS standard once fully adopted and future revisions will occur through the HL7 process.

NEMSIS Version 3.2.2 Data Dictionary Content

**Note: The numbers to the right of the content listed below represent the location for each element on the Sample Page of the Data Dictionary (page vi).

Data Element Number (#1)
- The NEMSIS Version 3 element numbering system has been revised to improve the information that can be derived from just the data element number. An example of a data element number is dAgency.01.
  - The data element number begins with either a "d" representing the demographic (agency) section or an "e" representing the EMS PCR section.
  - A one word descriptor for each section is now included in the data element number.
  - A period separates the section (e.g. dAgency) from the data element number (e.g. 01).

Data Element Name (#3)
- The name for the data element.

National and State Element Indicator (#2, #5, #6)
- National = Yes, is an indication that the data element is required to be collected:
  - at the local EMS agency level and submitted to the state
- State = Yes, is an indication that the data element is recommended to be collected at the "State" level.

Data Element Definition (#4)
- The definition for the data element.

Version 2 Number (#7)
- The NEMSIS Version 2.2.1 Data Element Number.
- If the Data Element is new to Version 3.2.2, the Version 2 Number will be blank.

Data Structure Information
- Recurrence (#12)
  - Indication that the data element can have more than one value.
    - Represented by two characters separated by a colon. The configuration

includes:
- 0:1 = element is not required and can occur only once
- 0:M = element is not required and can repeat multiple times
- 1:1 = element is required and can occur only once
- 1:M = element is required and can repeat multiple times

- Usage **(#8)**
  - Indication of when the data element is expected to be collected.
    - Mandatory = Must be completed and does not allow for NOT values
    - Required = Must be completed and allows NOT values
    - Recommended = Does not need to be completed and allows NOT values
    - Optional = Does not need to be completed and does not allow for NOT values
- NOT Value Characteristics **(#10)**
  - Indication that the data element can have NOT values.
  - NOT Values are used (where permitted) to document that a data element was not applicable to the EMS response / request for service, was not or could not be completed.
  - NOT Values are documented as "an attribute" of an element. It allows the documentation of NOT value when a "real" value is not documented. *(Please reference the NEMSIS White Paper describing the use of NOT Values, Pertinent Negatives, and Nill.)*
- NOT Values Accepted **(#14)**
  - Indication of which of the following three NOT values is acceptable.
  - Not all data elements accept NOT values.
  - NOT Values have been condensed in Version 3.
    - Not Applicable = *The data element is not applicable or pertinent to the EMS event.*
    - Not Recorded = *If a data element was unintentionally left blank the EMS software should auto-populate it with "Not Recorded".*
    - Not Reporting = *The data element is not collected by the EMS agency or state. This NOT value does not apply to National elements where "Usage = Required".*
- Pertinent Negative Values (PN) **(#9, #14)**
  - A list of Pertinent Negative Values which can be associated with a data element.
  - Not all data elements accept Pertinent Negative Values.
  - Pertinent Negative Values are documented as "an attribute" of an element. It allows the documentation of pertinent negative value in addition to the documentation of a "real" value. *(Please reference the NEMSIS White Paper describing the use of NOT Values, Pertinent Negatives, and Nill.)*
  - Example of use:
    - Example #1 - Aspirin Administration:
      - If the medication Aspirin is part of the agency protocol for Chest Pain but was not administered by the responding crew, the reason why should be documented. This is done through the use of Pertinent Negative Values. If the patient took the Aspirin prior to the EMS arrival on scene, the value "Medication Already Taken" should be documented in addition to "Aspirin".
    - Example #2 - Gunshot Wound Entry & Exit Assessment
      - If the patient was injured by a gunshot the assessment should document not only the entry but the exit of the bullet. In the abdominal assessment if "Gunshot Wound-Entry" was documented in the Right Upper Quadrant the EMS professional should be looking for an exit

wound. If upon assessment of the back/spine no "Gunshot Wound-Exit" was identified then both "Gunshot Wound-Exit" and the pertinent negative value of "Exam Finding Not Present" should be documented.

- Is Nillable **(#11)**
  - Indication that the element can accept a "blank" value.
  - If the element is left "blank" the software must submit an appropriate value of one of the two attributes: Pertinent Negative or NOT Values.

Associated Performance Measure Initiatives (#13)

- Indication that the data element has value in describing, defining, or measuring EMS from a performance perspective. Performance Measures can be associated with EMS service delivery, patient care, or both. The following service delivery or time dependent illness/injury performance measure topics have been included in NEMSIS Version 3:
  - Airway - Airway Management
  - Cardiac Arrest - Out of Hospital Cardiac Arrest
  - Pediatric - Acute Pediatric Care
  - Response - EMS Response Time
  - STEMI - ST Elevation Myocardial Infarction (STEMI)
  - Stroke - Acute Stroke Care
  - Trauma - Acute Injury/Trauma Care

Attributes (#14)

- An attribute provides extra information within an element. For information related to the first three attributes please see the NEMSIS document 'How to Utilize NEMSIS V3 "NOT values/pertinent negatives/nillable"'. The following are possible attributes:

  - PN (Pertinent Negative)
    - 8801001 - Contraindication Noted
    - 8801003 - Denied By Order
    - 8801005 - Exam Finding Not Present
    - 8801007 - Medication Allergy
    - 8801009 - Medication Already Taken
    - 8801013 - No Known Drug Allergies
    - 8801015 - None Reported
    - 8801017 - Not Performed by EMS
    - 8801019 - Refused
    - 8801021 - Unresponsive
    - 8801023 - Unable to Complete

  - NV (Not Value)
    - 7701001 - Not Applicable
    - 7701003 - Not Recorded
    - 7701005 - Not Reporting

  - Nillable xsi:nil="true"

  - Code Type
    - 9924001 - ICD10
    - 9924003 - RxNorm

  - CorrelationID

- Date Type = String
- minLength = 0
- maxLength = 255

- DistanceUnit
  - 9921001 - Kilometers
  - 9921003 - Miles

- EmailAddressType
  - 9904001 - Personal
  - 9904003 - Work

- nemsisCode
  - Date Type = String

- nemsisElement
  - Date Type = String

- nemsisValueDescription
  - Date Type = String

- PhoneNumberType
  - 9913001 - Fax
  - 9913003 - Home
  - 9913005 - Mobile
  - 9913007 - Pager
  - 9913009 - Work

- ProcedureGroupCorrelationID
  - Date Type = CorrelationID

- StreetAddress2
  - Date Type = String
  - minLength = 1
  - maxLength = 55

- TIMESTAMP
  - Date Type = DateTime
  - minValue = 1950-01-01T00:00:00-00:00
  - maxValue = 2050-01-01T00:00:00-00:00

- VelocityUnit
  - 9921001 - Kilometers
  - 9921003 - Miles

Code List (#16)

- A list of values associated with the data element. Not all data elements have predefined value sets.
- Codes for each value:
  - The codes are based on a 7-digit number, in a 2-2-3 pattern (without dashes).
    - The first set of two numbers represent the data section
    - The second set of two numbers represent the element number

- The last set is a 3-digit number for each value beginning at 001; The codes increase in increments of two (2).
  - Codes are typically sequential (by two) and alphabetical. Some ordering is provided in an effort to present information based on workflow.
  - Several values and codes reference external standards such as ICD-10, RxNorm, SNOMED, etc. NEMSIS will assist in providing a recommended list of EMS specific values and codes from these larger standards for most elements using these external standards.

Data Element Editorial Comments (#17)

- Comments are provided to describe additions, changes, clarifications, or provide additional insight into the data element.

Version 3 Changes Implemented (#18)

- Comments providing insight into specific Version 3 changes such as new or revised data elements.

NEMSIS Version 3.2.2 Change Summary

NEMSIS Version 3 includes several new types of information to better describe EMS from an industry, workforce, EMS service delivery, and patient care perspective. Examples of new Version 3 content include:

Demographic (Agency) Content

- EMS Agencies can list more than one state in which they offer EMS service delivery.
- EMS Agencies can indicate multiple Agency numbers.
- Multiple EMS Agency contacts can now be managed within the Demographic Section.
- EMS Agency Location and GIS information has been enhanced.
- EMS Professional and Workforce information has been enhanced.

EMS (PCR) Content

- EMS Crew level information has been enhanced
- Scene location information has been enhanced to improve geo-coding and location analysis.
- Provider Impression (diagnosis), Symptoms, Cause of Injury, Medical/Surgical History, and Incident Location are now based on ICD-10.
- Procedures are now based on SNOMED.
- Medications are now stored using the RxNorm standard
- Cardiac Arrest information has been enhanced to add focus on CPR and post arrest cooling.
- Automated Collision Notification information has been included.
- The data elements required to document and evaluate the CDC Field Triage Algorithm for trauma have been included.
- Vital Sign and patient monitoring information have been enhanced
- A new section for Laboratory and Diagnostic Imaging results has been added.
- The Exam section has been reconfigured to improve documentation and ease of use.
- Much of the medical device information has been mapped into the vital sign section for direct import via the XML standard.
- Inclusion of electronic signatures and external electronic documents.
- An Airway section has been added to better document and evaluate airway management.
- Improved Work Related Illness and Injury documentation capability.

- Disposition information has been enhanced especially associated with Specialty Centers and time dependent illness/injury Systems of Care.
- EMS Response and Transport Modes have been enhanced to better define emergent, non-emergent, scheduled, and non-scheduled variation.
- EMS Response and Transport Mode Descriptors have been added to allow for documentation of Lights and Sirens Use and Intersection Navigation tools.
- The Payment/Billing section has been greatly expanded to meet current electronic billing requirements.
- Outcome information has been expanded to include additional Emergency Department and Hospital Outcome information (often obtained through linkage).

General Improvements

- Version 3 content has focused on objective performance measures to better describe and evaluate EMS service delivery and patient care.
- State level configuration and customized data elements have been enhanced without changing the NEMSIS Version 3 Standard.

(1) eMedications.01
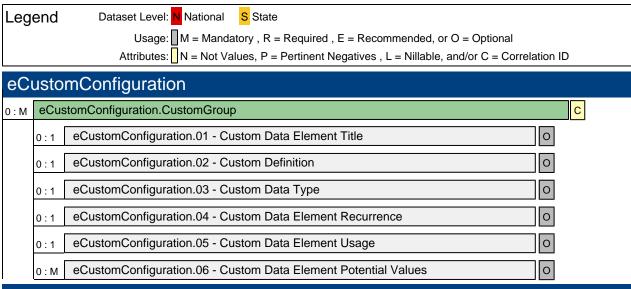
(2) State | National

(3) eMedications.01 - Date/Time Medication Administered

(4) Definition

The date/time medication administered to the patient

(5) National Element	Yes	Pertinent Negatives (PN)	Yes	(9)
(6) State Element	Yes	NOT Values	Yes	(10)
(7) Version 2 Element	E18_01	Is Nillable	Yes	(11)
(8) Usage	Required	Recurrence	1 : M	(12)

(13) Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

(14) Attributes

NOT Values
7701001 - Not Applicable   7701003 - Not Recorded   7701005 - Not Reporting

Pertinent Negatives
8801001 - Contraindication Noted   8801003 - Denied By Order   8801007 - Medication Allergy
8801009 - Medication Already Taken 8801019 - Refused   8801023 - Unable to Complete

Email Address
9904001 - Personal   9904003 - Work

Phone Number
9913001 - Fax   9913003 - Home   9913005 - Mobile   9913007 - Pager   9913009 - Work

Current Status
A - Active   I - Inactive

Current Status Date
Data Type: DateTime   **minInclusive:** 1950-01-01T00:00:00   **maxInclusive:** 2050-01-01T00:00:00
Pattern: [0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(\.\d+)?(\+|-)[0-9]{2}:[0-9]{2}

Correlation ID
Data Type: String   **minLength:** 0   **maxLength:** 255

(15) Constraints

| Data Type | minValue | maxValue |
| dateTime | 1950-01-01T00:00:00 | 2050-01-01T00:00:00 |

Pattern
[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(\.\d+)?(\+|-)[0-9]{2}:[0-9]{2}

(16) Code List

Code	Description
SSEE001	Value A
SSEE003	Value B
SSEE005	Value C

(17) Data Element Comment

Comments for this element

(18) Version 3 Changes Implemented

Version 3 Changes implemented for this element

Table of Contents

MedDeviceDataSet

MedDeviceDataSet

0 : 1	eCustomConfiguration
1 : 1	eMedDevice
0 : 1	eCustomResults

MedDeviceDataSet

eCustomConfiguration

eCustomConfiguration

0 : M	eCustomConfiguration.CustomGroup	C
0 : 1	eCustomConfiguration.01 - Custom Data Element Title	O
0 : 1	eCustomConfiguration.02 - Custom Definition	O
0 : 1	eCustomConfiguration.03 - Custom Data Type	O
0 : 1	eCustomConfiguration.04 - Custom Data Element Recurrence	O
0 : 1	eCustomConfiguration.05 - Custom Data Element Usage	O
0 : M	eCustomConfiguration.06 - Custom Data Element Potential Values	O

eCustomConfiguration

eCustomConfiguration.01 - Custom Data Element Title

Definition

This is the title of the custom data element created to collect information that is not defined formally in NEMSIS Version 3.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Attributes

nemsisElement
Data Type: anySimpleType **whiteSpace:** preserve

Constraints

Data Type	minLength	maxLength
string	2	100

Data Element Comment

This is grouped with all data elements in this section and can have multiple instances.

Version 3 Changes Implemented

Added to allow customized data elements to be inserted and collected from within the NEMSIS Version 3 standard.

eCustomConfiguration.02 - Custom Definition

Definition

The definition of the custom element and how it should be used.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	0	255

Data Element Comment

eCustomConfiguration.03 - Custom Data Type

Definition

The data type of the custom element.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
9902001	Binary
9902003	Date/Time
9902005	Integer/Number
9902007	Other (Not Listed)
9902009	Text/String

Data Element Comment

eCustomConfiguration.04 - Custom Data Element Recurrence

Definition

Indication if the data element will accept multiple values.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
9923001	No
9923003	Yes

Data Element Comment

Version 3 Changes Implemented

Added to allow customized data elements to be inserted and collected from within the NEMSIS Version 3 standard.

eCustomConfiguration.05 - Custom Data Element Usage

Definition

The Usage (Mandatory, Required, Recommended or Optional) for the Custom Data Element.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
9903001	Mandatory
9903003	Required
9903005	Recommended
9903007	Optional

Data Element Comment

Mandatory = Must be completed and will not accept null values
Required = Must be completed but will accept null values
Recommended = Not required but if collected will accept null values
Optional = Not required but if collected, it cannot be a null value.

Version 3 Changes Implemented

Added to allow customized data elements to be inserted and collected from within the NEMSIS Version 3 standard.

eCustomConfiguration.06 - Custom Data Element Potential Values

Definition

The values which are associated with the Custom Data Element. Values would be the choices provided to the user when they document the Custom Data Element

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : M

Attributes

nemsisCode
Data Type: anySimpleType **whiteSpace:** preserve

customValueDescription
Data Type: anySimpleType **whiteSpace:** preserve

Constraints

Data Type	minLength	maxLength
string	1	100

Data Element Comment

Version 3 Changes Implemented

Added to allow customized data elements to be inserted and collected from within the NEMSIS Version 3 standard.

eMedDevice

eMedDevice

1 : 1	eMedDevice.01 - (dAgency.01) EMS Agency Unique State ID	N S M
0 : 1	eMedDevice.02 - (dAgency.02) EMS Agency Number	O
0 : 1	eMedDevice.03 - (dAgency.03) EMS Agency Name	O
0 : 1	eMedDevice.04 - (dAgency.04) EMS Agency State	O
0 : 1	eMedDevice.05 - (dDevice.01) Medical Device Serial Number	O
0 : 1	eMedDevice.06 - (dDevice.02) Medical Device Name or ID	O
0 : M	eMedDevice.07 - (dDevice.03) Medical Device Type	O C
0 : 1	eMedDevice.08 - (dDevice.04) Medical Device Manufacturer	O
0 : 1	eMedDevice.09 - (dDevice.05) Medical Device Model Number	O
1 : 1	eMedDevice.10 - (eRecord.01) Patient Care Report Number	N S M

eMedDevice.PatientNameGroup (0 : 1)

0 : 1	eMedDevice.11 - (ePatient.02) Last Name	O
0 : 1	eMedDevice.12 - (ePatient.03) First Name	O
0 : 1	eMedDevice.13 - (ePatient.04) Middle Initial/Name	O
0 : 1	eMedDevice.14 - (ePatient.13) Gender	O
0 : M	eMedDevice.15 - (ePatient.14) Race	O C

eMedDevice.PatientAgeGroup (0 : 1)

0 : 1	eMedDevice.16 - (ePatient.15) Age	O
0 : 1	eMedDevice.17 - (ePatient.16) Age Units	O

0 : 1	eMedDevice.18 - (ePatient.17) Date of Birth	O

eMedDevice.VitalsGroup (0 : M) — C

0 : 1	eMedDevice.19 - (eVitals.01) Date/Time Vital Signs Taken	O

eMedDevice.CardiacRhythmGroup (0 : 1)

0 : M	eMedDevice.20 - (eVitals.03) Cardiac Rhythm / Electrocardiography (ECG)	O C
0 : 1	eMedDevice.21 - (eVitals.04) ECG Type	O
0 : M	eMedDevice.22 - (eVitals.05) Method of ECG Interpretation	O C

eMedDevice.BloodPressureGroup (0 : 1)

0 : 1	eMedDevice.23 - (eVitals.06) SBP (Systolic Blood Pressure)	O
0 : 1	eMedDevice.24 - (eVitals.07) DBP (Diastolic Blood Pressure)	O
0 : 1	eMedDevice.25 - (eVitals.08) Method of Blood Pressure Measurement	O
0 : 1	eMedDevice.26 - (eVitals.09) Mean Arterial Pressure	O

eMedDevice.HeartRateGroup (0 : 1)

0 : 1	eMedDevice.27 - (eVitals.10) Heart Rate	O
0 : 1	eMedDevice.28 - (eVitals.11) Method of Heart Rate Measurement	O

0 : 1	eMedDevice.29 - (eVitals.12) Pulse Oximetry	O
0 : 1	eMedDevice.30 - (eVitals.14) Respiratory Rate	O
0 : 1	eMedDevice.31 - (eVitals.16) Carbon Dioxide (CO2)	O
0 : 1	eMedDevice.32 - (eVitals.17) Carbon Monoxide (CO)	O
0 : 1	eMedDevice.33 - (eVitals.18) Blood Glucose Level	O

0 : 1 eMedDevice.BodyTempuratureGroup

0 : 1	eMedDevice.34 - (eVitals.24) Temperature	O
0 : 1	eMedDevice.35 - (eVitals.25) Temperature Method	O

0 : M eMedDevice.LabsGroup   C

0 : 1	eMedDevice.36 - (eLabs.01) Date/Time of Laboratory or Imaging Result	O

0 : M eMedDevice.LabResultGroup

0 : 1	eMedDevice.37 - (eLabs.03) Laboratory Result Type	O
0 : 1	eMedDevice.38 - (eLabs.04) Laboratory Result	O

0 : M eMedDevice.LabImageGroup

0 : 1	eMedDevice.39 - (eLabs.05) Imaging Study Type	O
0 : 1	eMedDevice.40 - (eLabs.06) Imaging Study Results	O

0 : M eMedDevice.WaveFormGraphicGroup

0 : 1	eMedDevice.41 - (eLabs.07) Imaging Study File or Waveform Graphic Type	O
0 : 1	eMedDevice.42 - (eLabs.08) Imaging Study File or Waveform Graphic	O

0 : M eMedDevice.DeviceGroup

0 : 1	eMedDevice.43 - (eDevice.01) Medical Device Serial Number	O
0 : 1	eMedDevice.44 - (eDevice.02) Date/Time of Event (per Medical Device)	O
0 : M	eMedDevice.45 - (eDevice.03) Medical Device Event Type	O C

0 : 1 eMedDevice.WaveGroup

0 : 1	eMedDevice.46 - (eDevice.04) Medical Device Waveform Graphic Type	O
0 : 1	eMedDevice.47 - (eDevice.05) Medical Device Waveform Graphic	O
0 : 1	eMedDevice.48 - (eDevice.06) Medical Device Mode (Manual, AED, Pacing, CO2, etc)	O

0 : M	eMedDevice.49 - (eDevice.07) Medical Device ECG Lead	O C
0 : 1	eMedDevice.50 - (eDevice.08) Medical Device ECG Interpretation	O

0 : 1 eMedDevice.ShockGroup

0 : 1	eMedDevice.51 - (eDevice.09) Type of Shock	O
0 : 1	eMedDevice.52 - (eDevice.10) Shock or Pacing Energy	O
0 : 1	eMedDevice.53 - (eDevice.11) Total Number of Shocks Delivered	O
0 : 1	eMedDevice.54 - (eDevice.12) Pacing Rate	O

eMedDevice.01

eMedDevice.01 - EMS Agency Unique State ID

Definition

The unique ID assigned to the EMS Agency which is associated with all state licensure numbers and information.

National Element	Yes	Pertinent Negatives (PN)	No
State Element	Yes	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Mandatory	Recurrence	1 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type	minLength	maxLength
string	1	50

Data Element Comment

This may be the EMS Agency Name or a unique number assigned by the state EMS office. This is required to document multiple license types and numbers associated with the same EMS Agency.

eMedDevice.02 - EMS Agency Number

Definition

The state-assigned provider number of the responding agency

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D01_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type	**minLength**	**maxLength**
string	1	15

Data Element Comment

This is the primary identifier for the entire Demographic Section. Each of the Demographic sections must be associated with an EMS Agency Number. An EMS Agency can have more than one Agency Number within a state. This reflects the ability for an EMS Agency to have a different number for each service type or location (based on state implementation).

eMedDevice.03 - EMS Agency Name

Definition

The formal name of the agency.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D01_02	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type	**minLength**	**maxLength**
string	2	100

Data Element Comment

eMedDevice.04 - EMS Agency State

Definition

The state/territory which assigned the EMS agency number.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D01_03	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type   **length**
string   2

Data Element Comment

This has been clarified to reflect that it is the state in which the EMS Agency resides and the state associated with the EMS Agency number.

GNIS Codes Website: http://geonames.usgs.gov/domestic/download_data.htm

eMedDevice.05 - Medical Device Serial Number

Definition

The unique manufacturer's serial number associated with a medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D09_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	2	50

Data Element Comment

eMedDevice.06 - Medical Device Name or ID

Definition

The local number or configurable Name/ID of the medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D09_02	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	2	50

Data Element Comment

eMedDevice.07 - Medical Device Type

Definition

The type of medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : M

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
1603001	Capnography-Numeric
1603003	Capnography-Waveform
1603005	Chemistry Measurement-Blood or Serum
1603007	Chemistry Measurement-Glucometer
1603009	Chemistry Measurement-Urine
1603011	CPR-External Device
1603013	Defibrillator-Automated
1603015	Defibrillator-Manual
1603017	ECG-12 Lead or Greater
1603019	ECG-Less than 12 Lead (Cardiac Monitor)
1603021	Medication Infusion Pump
1603023	Other (Not Listed)
1603025	Oximetry-Carbon Monoxide
1603027	Oximetry-Oxygen
1603029	Pressure Monitors-Invasive
1603031	Pressure Monitors-Non-Invasive
1603033	Respirator (BLS)
1603035	Ventilator (ALS)
1603037	Ventilator Assistance-BiPAP
1603039	Ventilator Assistance-CPAP

Data Element Comment

This is multiple choice to allow documentation of various multifunction device configurations.

eMedDevice.08 - Medical Device Manufacturer

Definition

The manufacturer of the medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D09_03	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	2	50

Data Element Comment

eMedDevice.09 - Medical Device Model Number

Definition

The specific manufacturer's model number associated with medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	D09_04	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	2	50

Data Element Comment

eMedDevice.10

State | National

eMedDevice.10 - Patient Care Report Number

Definition

The unique number automatically assigned by the EMS agency for each Patient Care Report (PCR). This should be a unique number for the EMS agency for all of time.

National Element	Yes	Pertinent Negatives (PN)	No
State Element	Yes	NOT Values	No
Version 2 Element	E01_01	Is Nillable	No
Usage	Mandatory	Recurrence	1 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type	minLength	maxLength
string	3	32

Data Element Comment

eMedDevice.11 - Last Name

Definition

The patient's last (family) name

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	1	50

Data Element Comment

Pertinent negatives accepted with option of "Unable to Complete" or "Refused".

eMedDevice.12 - First Name

Definition

The patient's first (given) name

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_02	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	**minLength**	**maxLength**
string	1	50

Data Element Comment

Pertinent negatives accepted with option of "Unable to Complete" or "Refused".

eMedDevice.13 - Middle Initial/Name

Definition

The patient's middle name, if any

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_03	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	**minLength**	**maxLength**
string	1	50

Data Element Comment

eMedDevice.14 - Gender

Definition

The Patient's Gender

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_11	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Code List

Code	**Description**
9906001	Female
9906003	Male
9906005	Unknown (Unable to Determine)

Data Element Comment

eMedDevice.15 - Race

Definition

The patient's race as defined by the OMB (US Office of Management and Budget)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_12	Is Nillable	No
Usage	Optional	Recurrence	0 : M

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
2514001	American Indian or Alaska Native
2514003	Asian
2514005	Black or African American
2514007	Hispanic or Latino
2514009	Native Hawaiian or Other Pacific Islander
2514011	White

Data Element Comment

OMB requirements are provided at: http://www.omhrc.gov/templates/browse.aspx?lvl=2&lvlID=172. Using single multiple choice question methodology to improve the completion of ethnicity information.

Ethnicity (Version 2.2.1: E06_13) has been merged with this data element and retired.

eMedDevice.16 - Age

Definition

The patient's age (either calculated from date of birth or best approximation)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_14	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	1	120

Data Element Comment

eMedDevice.17 - Age Units

Definition

The unit used to define the patient's age

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_15	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   Response   STEMI   Stroke   Trauma

Code List

Code	Description
2516001	Days
2516003	Hours
2516005	Minutes
2516007	Months
2516009	Years

Data Element Comment

eMedDevice.18 - Date of Birth

Definition

The patient's date of birth

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E06_16	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minInclusive	maxInclusive
date	1890-01-01	2050-01-01

Data Element Comment

eMedDevice.19 - Date/Time Vital Signs Taken

Definition

The date/time vital signs were taken on the patient.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type   **minInclusive**   **maxInclusive**
dateTime   1950-01-01T00:00:00-00:00   2050-01-01T00:00:00-00:00

Pattern
[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(\.\d+)?(\+|-)[0-9]{2}:[0-9]{2}

Data Element Comment

DateTime consists of finite-length characters of the form: yyyy '-' mm '-' dd 'T' hh ':' mm ':' ss ('.' s+)? (zzzzzz)

yyyy	a four-digit numeral that represents the year
'-'	separators between parts of the date portion
mm	a two-digit numeral that represents the month
dd	a two-digit numeral that represents the day
T	separator that indicates time-of-day follows
hh	a two-digit numeral that represents the hour
':'	a separator between parts of the time-of-day portion
mm	a two-digit numeral that represents the minute
ss	a two-integer-digit numeral that represents the whole seconds
'.' s+	(not required) represents the fractional seconds
zzzzzz	(required) represents the timezone (as described below)

Timezones, required, are durations with (integer-valued) hour and minute properties in the form: ('+' | '-') hh ':' mm

hh	a two-digit numeral (with leading zeros as required) that represents the hours
mm	a two-digit numeral that represents the minutes
'+'	a nonnegative duration
'-'	a nonpositive duration

eMedDevice.20 - Cardiac Rhythm / Electrocardiography (ECG)

Definition

The cardiac rhythm / ECG and other electrocardiography findings of the patient as interpreted by EMS personnel.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_03	Is Nillable	No
Usage	Optional	Recurrence	0 : M

Associated Performance Measure Initiatives

Cardiac Arrest   STEMI

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
9901001	Agonal/Idioventricular
9901003	Asystole
9901005	Artifact
9901007	Atrial Fibrillation
9901009	Atrial Flutter
9901011	AV Block-1st Degree
9901013	AV Block-2nd Degree-Type 1
9901015	AV Block-2nd Degree-Type 2
9901017	AV Block-3rd Degree
9901019	Junctional
9901021	Left Bundle Branch Block
9901023	Non-STEMI Anterior Ischemia
9901025	Non-STEMI Inferior Ischemia
9901027	Non-STEMI Lateral Ischemia
9901029	Non-STEMI Posterior Ischemia
9901031	Other (Not Listed)
9901033	Paced Rhythm
9901035	PEA
9901037	Premature Atrial Contractions
9901039	Premature Ventricular Contractions
9901041	Right Bundle Branch Block
9901043	Sinus Arrhythmia
9901045	Sinus Bradycardia
9901047	Sinus Rhythm
9901049	Sinus Tachycardia
9901051	STEMI Anterior Ischemia
9901053	STEMI Inferior Ischemia
9901055	STEMI Lateral Ischemia
9901057	STEMI Posterior Ischemia
9901059	Supraventricular Tachycardia
9901061	Torsades De Points
9901063	Unknown AED Non-Shockable Rhythm
9901065	Unknown AED Shockable Rhythm
9901067	Ventricular Fibrillation
9901069	Ventricular Tachycardia (With Pulse)
9901071	Ventricular Tachycardia (Pulseless)

Data Element Comment

eMedDevice.21 - ECG Type

Definition

The type of ECG associated with the cardiac rhythm.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

STEMI

Code List

Code	Description
3304001	3 Lead
3304003	4 Lead
3304005	5 Lead
3304007	12 Lead-Left Sided (Normal)
3304009	12 Lead-Right Sided
3304011	15 Lead
3304013	18 Lead
3304015	Other (Not Listed)

Data Element Comment

Version 3 Changes Implemented

Added to better document ECG results.

eMedDevice.22 - Method of ECG Interpretation

Definition

The method of ECG interpretation.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : M

Associated Performance Measure Initiatives

STEMI

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
3305001	Computer Interpretation
3305003	Manual Interpretation
3305005	Transmission with No Interpretation
3305007	Transmission with Remote Interpretation

Data Element Comment

"Transmission with no interpretation" may be used by EMS Agency Personnel that are not trained to interpret cardiac rhythms.

Version 3 Changes Implemented

Added to better document ECG results.

eMedDevice.23 - SBP (Systolic Blood Pressure)

Definition

The patient's systolic blood pressure.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_04	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	0	500

Data Element Comment

Required for ACS-Field Triage and other patient scoring systems.

eMedDevice.24 - DBP (Diastolic Blood Pressure)

Definition

The patient's diastolic blood pressure.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_05	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Pattern
[5][0][0]|[1-4][0-9][0-9]|[0]|[1-9][0-9]|P|p

Data Element Comment

Diastolic blood pressure pattern allows for the following values:
1) A number 0 through 500
2) P
3) p

eMedDevice.25 - Method of Blood Pressure Measurement

Definition

Indication of method of blood pressure measurement.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_06	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
3308001	Arterial Line
3308003	Doppler
3308005	Cuff-Automated
3308007	Cuff-Manual Auscultated
3308009	Cuff-Manual Palpated Only
3308011	Venous Line

Data Element Comment

eMedDevice.26 - Mean Arterial Pressure

Definition

The patient's mean arterial pressure.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	**minInclusive**	**maxInclusive**
integer	1	500

Data Element Comment

Version 3 Changes Implemented

Added for additional patient monitoring capability.

eMedDevice.27 - Heart Rate

Definition

The patient's heart rate expressed as a number per minute.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_07	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	0	500

Data Element Comment

Pulse Rate and Electronic Monitor Rate have been merged with an additional data element for Method of Heart Rate Measurement.

eMedDevice.28 - Method of Heart Rate Measurement

Definition

The method in which the Heart Rate was measured. Values include auscultated, palpated, electronic monitor).

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
3311001	Auscultated
3311003	Doppler
3311005	Electronic Monitor - Cardiac
3311007	Electronic Monitor - Pulse Oximeter
3311009	Electronic Monitor (Other)
3311011	Palpated

Data Element Comment

This data element was added when Pulse Rate and Electronic Monitor Rate were merged as EVitals.10.

Version 3 Changes Implemented

This data element was added when Pulse Rate and Electronic Monitor Rate were merged as EVitals.10.

eMedDevice.29 - Pulse Oximetry

Definition

The patient's oxygen saturation.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_09	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	0	100

Data Element Comment

eMedDevice.30 - Respiratory Rate

Definition

The patient's respiratory rate expressed as a number per minute.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_11	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	0	300

Data Element Comment

eMedDevice.31 - Carbon Dioxide (CO2)

Definition
The patient's end-tidal or other CO2 level.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_13	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives
Airway   Cardiac Arrest   Pediatric   STEMI   Stroke   Trauma

Constraints

Data Type	minInclusive	maxInclusive
integer	0	100

Data Element Comment

eMedDevice.32 - Carbon Monoxide (CO)

Definition

The patient's carbon monoxide level measured in parts per million (ppm).

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	**minInclusive**	**maxInclusive**
integer	0	100

Data Element Comment

Version 3 Changes Implemented

Added to allow use of a new patient monitoring device

eMedDevice.33 - Blood Glucose Level

Definition

The patient's blood glucose level.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_14	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Pediatric   Stroke

Constraints

Data Type	**minInclusive**	**maxInclusive**
integer	0	2000

Data Element Comment

eMedDevice.34 - Temperature

Definition

The patient's body temperature in degrees Celsius/centigrade.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_20	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Pediatric

Constraints

Data Type	totalDigits	fractionDigits	minInclusive	maxInclusive
decimal	3	1	0	50

Data Element Comment

eMedDevice.35 - Temperature Method

Definition

The method used to obtain the patient's body temperature.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E14_21	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
3325001	Axillary
3325003	Central (Venous or Arterial)
3325005	Esophageal
3325007	Oral
3325009	Rectal
3325011	Temporal Artery
3325013	Tympanic
3325015	Urinary Catheter

Data Element Comment

eMedDevice.36 - Date/Time of Laboratory or Imaging Result

Definition

The data and time for the specific laboratory result

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type   **minInclusive**   **maxInclusive**
dateTime   1950-01-01T00:00:00-00:00   2050-01-01T00:00:00-00:00

Pattern
[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(\.\d+)?(\+|-)[0-9]{2}:[0-9]{2}

Data Element Comment

DateTime consists of finite-length characters of the form: yyyy '-' mm '-' dd 'T' hh ':' mm ':' ss ('.' s+)? (zzzzzz)

yyyy	a four-digit numeral that represents the year
'-'	separators between parts of the date portion
mm	a two-digit numeral that represents the month
dd	a two-digit numeral that represents the day
T	separator that indicates time-of-day follows
hh	a two-digit numeral that represents the hour
':'	a separator between parts of the time-of-day portion
mm	a two-digit numeral that represents the minute
ss	a two-integer-digit numeral that represents the whole seconds
'.' s+	(not required) represents the fractional seconds
zzzzzz	(required) represents the timezone (as described below)

Timezones, required, are durations with (integer-valued) hour and minute properties in the form: ('+' | '-') hh ':' mm

hh	a two-digit numeral (with leading zeros as required) that represents the hours
mm	a two-digit numeral that represents the minutes
'+'	a nonnegative duration
'-'	a nonpositive duration

Version 3 Changes Implemented

Added to better document patient care.

eMedDevice.37 - Laboratory Result Type

Definition

The type of the laboratory value.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
3403001	Alanine Transaminase
3403003	Alcohol-Blood
3403005	Alcohol-Breath
3403007	Alkaline Phosphatase
3403009	Amylase
3403011	Angiography
3403013	Aspartate Transaminase
3403015	B-Type Natriuretic Peptide (BNP)
3403017	Base Excess
3403019	Bilirubin-Direct
3403021	Bilirubin-Total
3403023	BUN
3403025	Calcium-Ionized
3403027	Calcium-Serum
3403029	Carbon Dioxide-Partial Pressure
3403031	CAT Scan
3403033	Chloride
3403035	Creatine Kinase
3403037	Creatine Kinase-MB
3403039	Creatinine
3403041	Gamma Glutamyl Transpeptidase
3403043	Glucose
3403045	Hematocrit
3403047	Hemoglobin
3403049	Human Chorionic Gonadotropin-Serum
3403051	Human Chorionic Gonadotropin-Urine
3403053	International Normalized Ratio (INR)
3403055	Lactate Dehydrogenase
3403057	Lactate-Arterial
3403059	Lactate-Venous
3403061	Lipase
3403063	Magnesium
3403065	Oxygen-Partial Pressure
3403067	Partial Thromboplastin Time
3403069	PET Scan
3403071	pH-ABG
3403073	pH-Venous
3403075	Platelets
3403077	Potassium
3403079	Prothrombin Time
3403081	Red Blood Cells
3403083	Sodium
3403085	Troponin
3403087	White Blood Cells

Data Element Comment

Version 3 Changes Implemented

Added to provide for the documentation of laboratory results obtained prior to or during and EMS patient encounter.

eMedDevice.38 - Laboratory Result

Definition

The value or result of the laboratory test (Units may vary).

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	1	50

Data Element Comment

Version 3 Changes Implemented

Added to better document EMS care.

eMedDevice.39 - Imaging Study Type

Definition

The type of x-ray or imaging study.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
3405001	CAT Scan
3405003	Magnetic Resonance Imaging (MRI)
3405005	Other (Not Listed)
3405007	PET Scan
3405009	Ultrasound
3405011	X-ray

Data Element Comment

Version 3 Changes Implemented

Added to better describe the EMS patient care.

eMedDevice.40 - Imaging Study Results

Definition

The description or interpretation of the results of the imaging study.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	3	5000

Data Element Comment

Version 3 Changes Implemented

Added to better describe the EMS Patient Care

eMedDevice.41 - Imaging Study File or Waveform Graphic Type

Definition

The description of the image study file or waveform graphic stored in Imaging Study File or Waveform Graphic (eMedDevice.42).

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Constraints

Data Type	**minLength**	**maxLength**
string	1	255

Data Element Comment

The description is defined as the extension of the file type. Examples of file name extensions include "doc", "jpeg", "tiff", etc. For a list of additional extensions reference the following website(s):

3D Image formats: http://www.fileinfo.com/filetypes/3d_image

Raster Image formats: http://www.fileinfo.com/filetypes/raster_image

Vector Image formats: http://www.fileinfo.com/filetypes/vector_image

Video formats: http://www.fileinfo.com/filetypes/video

Audio formats: http://www.fileinfo.com/filetypes/audio

Comparison of formats:

Image: http://en.wikipedia.org/wiki/Comparison_of_image_file_formats

Audio: http://en.wikipedia.org/wiki/Audio_file_format

Container: http://en.wikipedia.org/wiki/Comparison_of_container_formats

A general list of image formats: http://en.wikipedia.org/wiki/Image_file_formats

Mime Types: http://en.wikipedia.org/wiki/Internet_media_type

Definition			
The imaging study file.			

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives
Airway   Cardiac Arrest   STEMI

Constraints

Data Type
base64Binary

Data Element Comment
Added to allow the imaging file to be uploaded and better document patient care.

eMedDevice.43 - Medical Device Serial Number

Definition

The unique manufacturer's serial number associated with a medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	2	50

Data Element Comment

Definition

The time of the event recorded by the device's internal clock

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Constraints

Data Type   **minInclusive**   **maxInclusive**
dateTime   1950-01-01T00:00:00-00:00   2050-01-01T00:00:00-00:00

Pattern
[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(\.\d+)?(\+|-)[0-9]{2}:[0-9]{2}

Data Element Comment

DateTime consists of finite-length characters of the form: yyyy '-' mm '-' dd 'T' hh ':' mm ':' ss ('.' s+)? (zzzzzz)

yyyy	a four-digit numeral that represents the year
'-'	separators between parts of the date portion
mm	a two-digit numeral that represents the month
dd	a two-digit numeral that represents the day
T	separator that indicates time-of-day follows
hh	a two-digit numeral that represents the hour
':'	a separator between parts of the time-of-day portion
mm	a two-digit numeral that represents the minute
ss	a two-integer-digit numeral that represents the whole seconds
'.' s+	(not required) represents the fractional seconds
zzzzzz	(required) represents the timezone (as described below)

Timezones, required, are durations with (integer-valued) hour and minute properties in the form: ('+' | '-') hh ':' mm

hh	a two-digit numeral (with leading zeros as required) that represents the hours
mm	a two-digit numeral that represents the minutes
'+'	a nonnegative duration
'-'	a nonpositive duration

eMedDevice.45 - Medical Device Event Type

Definition

The type of event documented by the medical device.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_02	Is Nillable	No
Usage	Optional	Recurrence	0 : M

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
4103001	12-Lead ECG
4103003	Analysis (Button Pressed)
4103005	CO2
4103007	Date Transmitted
4103009	Defibrillation
4103011	ECG-Monitor
4103013	Heart Rate
4103015	Invasive Pressure 1
4103017	Invasive Pressure 2
4103019	No Shock Advised
4103021	Non-Invasive BP
4103023	Other
4103025	Pacing Electrical Capture
4103027	Pacing Started
4103029	Pacing Stopped
4103031	Patient Connected
4103033	Power On
4103035	Pulse Oximetry
4103037	Pulse Rate
4103039	Respiratory Rate
4103041	Shock Advised
4103043	Sync Off
4103045	Sync On
4103047	Temperature 1
4103049	Temperature 2

Data Element Comment

Can be displayed in the Vital Signs or Procedure Sections.

eMedDevice.46 - Medical Device Waveform Graphic Type

Definition

The description of the waveform file stored in Medical Device Waveform Graphic (eMedDevice.47).

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_03	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Constraints

Data Type	minLength	maxLength
string	1	255

Data Element Comment

The description is defined as the extension of the file type. Examples of file name extensions include "doc", "jpeg", "tiff", etc.
For a list of additional extensions reference the following website(s):

3D Image formats: http://www.fileinfo.com/filetypes/3d_image

Raster Image formats: http://www.fileinfo.com/filetypes/raster_image

Vector Image formats: http://www.fileinfo.com/filetypes/vector_image

Video formats: http://www.fileinfo.com/filetypes/video

Audio formats: http://www.fileinfo.com/filetypes/audio

Comparison of formats:

Image: http://en.wikipedia.org/wiki/Comparison_of_image_file_formats

Audio: http://en.wikipedia.org/wiki/Audio_file_format

Container: http://en.wikipedia.org/wiki/Comparison_of_container_formats

A general list of image formats: http://en.wikipedia.org/wiki/Image_file_formats

Mime Types: http://en.wikipedia.org/wiki/Internet_media_type

eMedDevice.47 - Medical Device Waveform Graphic

Definition			

The graphic waveform file.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_04	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Constraints

Data Type
base64Binary

Data Element Comment

eMedDevice.48 - Medical Device Mode (Manual, AED, Pacing, CO2, O2, etc)

Definition

The mode of operation the device is operating in during the defibrillation, pacing, or rhythm analysis by the device (if appropriate for the event)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_05	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Code List

Code	Description
4106001	Advisory
4106003	Automated
4106005	Demand
4106007	Manual
4106009	Mid-Stream
4106011	Sensing
4106013	Side-Stream

Data Element Comment

eMedDevice.49 - Medical Device ECG Lead

Definition

The lead or source which the medical device used to obtain the rhythm (if appropriate for the event)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_06	Is Nillable	No
Usage	Optional	Recurrence	0 : M

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Attributes

CorrelationID
Data Type: string   **minLength:** 0   **maxLength:** 255

Code List

Code	Description
4107001	I
4107003	II
4107005	III
4107007	AVR
4107009	AVL
4107011	AVF
4107013	Paddle
4107013	Pads
4107015	V1
4107017	V2
4107019	V3
4107019	V3r
4107021	V4
4107021	V4r
4107023	V5
4107023	V5r
4107025	V6
4107025	V6r
4107025	V7
4107025	V8
4107025	V9

Data Element Comment

Can be displayed in the Vital Signs or Procedure Sections.

eMedDevice.50 - Medical Device ECG Interpretation

Definition

The interpretation of the rhythm by the device (if appropriate for the event)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_07	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Airway   Cardiac Arrest   STEMI

Constraints

Data Type	minLength	maxLength
string	1	2000

Data Element Comment

The rhythm interpretation text imported from the device.

eMedDevice.51 - Type of Shock

Definition

The type of shock used by the device for the defibrillation (if appropriate for the event)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_08	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Cardiac Arrest

Code List

Code	Description
4109001	Biphasic
4109003	Monophasic

Data Element Comment

eMedDevice.52 - Shock or Pacing Energy

Definition

The energy (in joules) used for the shock or pacing (if appropriate for the event)

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_09	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Cardiac Arrest

Constraints

Data Type	totalDigits	fractionDigits	minInclusive	maxInclusive
decimal	5	1	1	9000

Data Element Comment

eMedDevice.53 - Total Number of Shocks Delivered

Definition

The number of times the patient was defibrillated, if the patient was defibrillated during the patient encounter.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_10	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Associated Performance Measure Initiatives

Cardiac Arrest

Constraints

Data Type	minInclusive	maxInclusive
integer	1	100

Data Element Comment

eMedDevice.54 - Pacing Rate

Definition

The rate the device was calibrated to pace during the event, if appropriate.

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E21_11	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minInclusive	maxInclusive
integer	1	1000

Data Element Comment

eCustomResults

eCustomResults

0 : M	eCustomResults.ResultsGroup	C
0 : 1	eCustomResults.01 - Custom Data Element Result	O
0 : 1	eCustomResults.02 - Custom Data Element Reference	O
0 : 1	eCustomResults.03 - Custom Correlation ID	O

eCustomResults

eCustomResults.01 - Custom Data Element Result

Definition

The actual value or values chosen (if values listed in custom.05) or result (free text, Date/Time, or number) documented for the Custom Data Element

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	1	100000

Data Element Comment

Version 3 Changes Implemented

Added to allow customized data elements to be inserted and collected from within the NEMSIS Version 3 standard.

eCustomResults.02 - Custom Data Element Reference

Definition

Refers to the data element being extended by referencing the correlationID attribute in the element eCustomConfiguration.CustomGroup

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	1	100000

Data Element Comment

eCustomResults.03 - Custom Correlation ID

Definition	
Correlation id used to map back to set of other elements in other sections.	

National Element	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element		Is Nillable	No
Usage	Optional	Recurrence	0 : 1

Constraints

Data Type	minLength	maxLength
string	1	100000

Data Element Comment

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