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# **NEMSIS**

## **Data Dictionary**

**NHTSA v3.4.0**  
**Build 160713 Critical Patch 2**

# **Med Device Data Standard**

**Version Date: July 13, 2016**

Funded by  
**National Highway Traffic Safety Administration (NHTSA)**  
**Office of Emergency Medical Services**

**[www.NEMSIS.org](http://www.NEMSIS.org)**

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# NEMSIS Data Dictionary Version 3.4.0

## 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 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 Element Configuration from v2.2.1

NEMSIS NHTSA Uniform PreHospital Dataset	Version 2.2.1	Version 3.3.4	Version 3.4.0
<b>Demographic (Agency) NEMSIS Version 3 Data Elements</b>	<b>110 (26%)</b>	<b>155 (27%)</b>	<b>157</b>
Existing (version 2.2.1)	88 (80%)	87 (56%)	87 (55.5%)
New		68 (44%)	70 (44.5%)
Retired	22 (20%)		
<b>EMS (ePCR) NEMSIS Version 3 Data Elements</b>	<b>315 (74%)</b>	<b>423 (73%)</b>	<b>428</b>
Existing (version 2.2.1)	258 (82%)	260 (61%)	258 (60%)
New		165 (39%)	170 (40%)
Retired	57 (18%)		2
<b>Overall Total NEMSIS Version 3 Data Elements</b>	<b>425</b>	<b>578</b>	<b>585</b>
Existing (version 2.2.1)	346 (81%)	347 (60%)	345 (59%)
New		232 (40%)	240 (41%)
Retired	79 (19%)		2

### NEMSIS Version 3 Element Configuration

Total Elements including the Custom Elements: 574

Excluding the Demographic and EMS (ePCR) Custom Elements: 556

<b>Total National Elements</b>	<b>165</b>	<b>Total State Elements</b>	<b>104</b>	<b>Total "Other" Element</b>	<b>316</b>
Mandatory	37	Recommended	83	Excluding the custom elements	292
Required	128	Optional	21	<b>Demographic (Agency) Elements</b>	<b>90</b>
<b>Demographic (Agency) Elements</b>	<b>35</b>	<b>Demographic (Agency) Elements</b>	<b>32</b>	Excluding the custom elements	78
Mandatory	22	Recommended	32	<b>EMS (ePCR) Elements</b>	<b>226</b>
Required	13	Optional	0	Excluding the custom elements	214
<b>EMS (ePCR) Elements</b>	<b>130</b>	<b>EMS (ePCR) Elements</b>	<b>72</b>		
Mandatory	15	Recommended	51		
Required	115	Optional	21		

### NEMSIS Version 3.4.0 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 3.4.0, 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 Null.*)

#### **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 Null.*)

- 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 3.4.0 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.



## 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



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# MedDeviceDataSet

Legend	Dataset Level:	N National	S State
	Usage:	M = Mandatory , R = Required , E = Recommended, or O = Optional	
	Attributes:	N = Not Values, P = Pertinent Negatives , L = Nillable, and/or C = Correlation ID	

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

# eCustomConfiguration

## Legend

Dataset Level: N National S State D Deprecated

Usage: M = Mandatory , R = Required , E = Recommended, or O = Optional

Attributes: N = Not Values, P = Pertinent Negatives , L = Nillable, and/or C = Correlation ID

## eCustomConfiguration

0 : M	eCustomConfiguration.CustomGroup	
1 : 1	eCustomConfiguration.01 - Custom Data Element Title	<span style="border: 1px solid black; padding: 0 2px;">M</span>
1 : 1	eCustomConfiguration.02 - Custom Definition	<span style="border: 1px solid black; padding: 0 2px;">M</span>
1 : 1	eCustomConfiguration.03 - Custom Data Type	<span style="border: 1px solid black; padding: 0 2px;">M</span>
1 : 1	eCustomConfiguration.04 - Custom Data Element Recurrence	<span style="border: 1px solid black; padding: 0 2px;">M</span>
1 : 1	eCustomConfiguration.05 - Custom Data Element Usage	<span style="border: 1px solid black; padding: 0 2px;">M</span>
0 : M	eCustomConfiguration.06 - Custom Data Element Potential Values	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eCustomConfiguration.07 - Custom Data Element Potential NOT Values (NV)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eCustomConfiguration.08 - Custom Data Element Potential Pertinent Negative Values (PN)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eCustomConfiguration.09 - Custom Data Element Grouping ID	<span style="border: 1px solid black; padding: 0 2px;">O</span>

## 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	Mandatory	Recurrence	1 : 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	Mandatory	Recurrence	1 : 1

## Constraints

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
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	Mandatory	Recurrence	1 : 1

## Code List

Code	Description
9902001	Binary
9902003	Date/Time
9902005	Integer/Number
9902007	Other
9902009	Text/String
9902011	Boolean

## 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	Mandatory	Recurrence	1 : 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	Mandatory	Recurrence	1 : 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.

## eCustomConfiguration.07 - Custom Data Element Potential NOT Values (NV)

## Definition

NOT Values (NV) associated with 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 : M

## Code List

Code	Description
7701001	Not Applicable
7701003	Not Recorded
7701005	Not Reporting

## Data Element Comment

## eCustomConfiguration.08 - Custom Data Element Potential Pertinent Negative Values (PN)

## Definition

Pertinent Negative Values (PN) associated with 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 : M

## Code List

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

## Data Element Comment



## eCustomConfiguration.09 - Custom Data Element Grouping ID

## Definition

ID for custom element grouping.

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

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
string	0	255

## Data Element Comment

# eMedDevice

## Legend

Dataset Level: N National S State D Deprecated

Usage: M = Mandatory , R = Required , E = Recommended, or O = Optional

Attributes: N = Not Values, P = Pertinent Negatives , L = Nillable, and/or C = Correlation ID

## eMedDevice

0 : 1	eMedDevice.10 - (eRecord.01) Patient Care Report Number	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.PatientNameGroup	
0 : 1	eMedDevice.11 - (ePatient.02) Last Name	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.12 - (ePatient.03) First Name	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.13 - (ePatient.04) Middle Initial/Name	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.14 - (ePatient.13) Gender	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eMedDevice.15 - (ePatient.14) Race	<span style="border: 1px solid black; padding: 0 2px;">O</span> <span style="border: 1px solid black; padding: 0 2px;">C</span>
0 : 1	eMedDevice.PatientAgeGroup	
0 : 1	eMedDevice.16 - (ePatient.15) Age	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.17 - (ePatient.16) Age Units	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eMedDevice.VitalsGroup	<span style="border: 1px solid black; padding: 0 2px;">C</span>
0 : 1	eMedDevice.19 - (eVitals.01) Date/Time Vital Signs Taken	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.BloodPressureGroup	
0 : 1	eMedDevice.23 - (eVitals.06) SBP (Systolic Blood Pressure)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.24 - (eVitals.07) DBP (Diastolic Blood Pressure)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.25 - (eVitals.08) Method of Blood Pressure Measurement	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.26 - (eVitals.09) Mean Arterial Pressure	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.HeartRateGroup	
0 : 1	eMedDevice.27 - (eVitals.10) Heart Rate	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.28 - (eVitals.11) Method of Heart Rate Measurement	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.29 - (eVitals.12) Pulse Oximetry	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.30 - (eVitals.14) Respiratory Rate	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.31 - (eVitals.16) End Tidal Carbon Dioxide (ETCO2)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.32 - (eVitals.17) Carbon Monoxide (CO)	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.33 - (eVitals.18) Blood Glucose Level	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.BodyTemperatureGroup	
0 : 1	eMedDevice.34 - (eVitals.24) Temperature	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : 1	eMedDevice.35 - (eVitals.25) Temperature Method	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eMedDevice.LabsGroup	<span style="border: 1px solid black; padding: 0 2px;">C</span>
0 : 1	eMedDevice.36 - (eLabs.01) Date/Time of Laboratory or Imaging Result	<span style="border: 1px solid black; padding: 0 2px;">O</span>
0 : M	eMedDevice.LabResultGroup	
0 : 1	eMedDevice.37 - (eLabs.03) Laboratory Result Type	<span style="border: 1px solid black; padding: 0 2px;">O</span>

	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, O2, 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

## 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	No	Pertinent Negatives (PN)	No
State Element	No	NOT Values	No
Version 2 Element	E01_01	Is Nillable	No
Usage	Optional	Recurrence	0 : 1

## Associated Performance Measure Initiatives

Airway    Cardiac Arrest    Pediatric    Response    STEMI    Stroke    Trauma

## Constraints

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
string	3	50

## 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	60

## Data Element Comment

## 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



## 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

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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.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.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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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**

[0-9][1-9][0-9][1-4][0-9][0-9]P|D|d|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**

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
integer	0	300

## Data Element Comment

## eMedDevice.31 - End Tidal Carbon Dioxide (ETCO2)

## Definition

The numeric value of the patient's exhaled end tidal carbon dioxide (ETCO2) level measured as a unit of pressure in millimeters of mercury (mmHg).

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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
integer	0	200

## Data Element Comment



## eMedDevice.32 - Carbon Monoxide (CO)

## Definition

The numeric value of the patient's carbon monoxide level measured as a percentage (%) of carboxyhemoglobin (COHb).

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	totalDigits	fractionDigits
decimal	0	100	3	1

## Data Element Comment

## Version 3 Changes Implemented

Added to allow use of a new patient monitoring devices.

**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**

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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

<b>Data Type</b>	<b>totalDigits</b>	<b>fractionDigits</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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
3325017	Skin Probe

## 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

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
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
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
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
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
3403089	Ammonia
3403091	Bicarbonate (HCO <sub>3</sub> )
3403093	Carboxyhemoglobin
3403095	CO <sub>2</sub> , Total (Bicarbonate)
3403097	CRP (C-Reactive Protein)
3403099	Dilantin
3403101	Leukocytes
3403103	Nitrates
3403105	Phenobarbital
3403107	Protein

3403109 Salicylate  
3403111 Specific Gravity  
3403113 Tylenol

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**

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
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
3405007	PET Scan
3405009	Ultrasound
3405011	X-ray
3405013	Angiography

## 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**

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
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](http://www.fileinfo.com/filetypes/3d_image)

Raster Image formats: [http://www.fileinfo.com/filetypes/raster\\_image](http://www.fileinfo.com/filetypes/raster_image)

Vector Image formats: [http://www.fileinfo.com/filetypes/vector\\_image](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](http://en.wikipedia.org/wiki/Comparison_of_image_file_formats)

Audio: [http://en.wikipedia.org/wiki/Audio\\_file\\_format](http://en.wikipedia.org/wiki/Audio_file_format)

Container: [http://en.wikipedia.org/wiki/Comparison\\_of\\_container\\_formats](http://en.wikipedia.org/wiki/Comparison_of_container_formats)

A general list of image formats: [http://en.wikipedia.org/wiki/Image\\_file\\_formats](http://en.wikipedia.org/wiki/Image_file_formats)

Mime Types: [http://en.wikipedia.org/wiki/Internet\\_media\\_type](http://en.wikipedia.org/wiki/Internet_media_type)

## eMedDevice.42 - Imaging Study File or Waveform Graphic

## 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

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
string	2	50

## Data Element Comment

## eMedDevice.44 - Date/Time of Event (per Medical Device)

## 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](http://www.fileinfo.com/filetypes/3d_image)

Raster Image formats: [http://www.fileinfo.com/filetypes/raster\\_image](http://www.fileinfo.com/filetypes/raster_image)

Vector Image formats: [http://www.fileinfo.com/filetypes/vector\\_image](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](http://en.wikipedia.org/wiki/Comparison_of_image_file_formats)

Audio: [http://en.wikipedia.org/wiki/Audio\\_file\\_format](http://en.wikipedia.org/wiki/Audio_file_format)

Container: [http://en.wikipedia.org/wiki/Comparison\\_of\\_container\\_formats](http://en.wikipedia.org/wiki/Comparison_of_container_formats)

A general list of image formats: [http://en.wikipedia.org/wiki/Image\\_file\\_formats](http://en.wikipedia.org/wiki/Image_file_formats)

Mime Types: [http://en.wikipedia.org/wiki/Internet\\_media\\_type](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
4107015	Pads
4107017	V1
4107019	V2
4107021	V3
4107023	V3r
4107025	V4
4107027	V4r
4107029	V5
4107031	V5r
4107033	V6
4107035	V6r
4107037	V7
4107039	V8
4107041	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

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
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**

<b>Data Type</b>	<b>minInclusive</b>	<b>maxInclusive</b>
integer	1	1000

**Data Element Comment**



# eCustomResults

Legend	Dataset Level: <span>N</span> National	<span>S</span> State	<span>D</span> Deprecated
	Usage: <span>M</span> = Mandatory , <span>R</span> = Required , <span>E</span> = Recommended, or <span>O</span> = Optional		
	Attributes: <span>N</span> = Not Values, <span>P</span> = Pertinent Negatives , <span>L</span> = Nillable, and/or <span>C</span> = Correlation ID		

eCustomResults			
0 : M	eCustomResults.ResultsGroup		C
1 : M	eCustomResults.01 - Custom Data Element Result	M	N, L, P
1 : 1	eCustomResults.02 - Custom Element ID Referenced	M	
0 : 1	eCustomResults.03 - CorrelationID of PatientCareReport Element or Group	O	
eCustomResults			

## eCustomResults.01 - Custom Data Element Result

## Definition

The actual value or values chosen (if values listed in eCustomConfiguration.06) or result (free text, Date/Time, or number) documented for the Custom Data Element

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

## Attributes

**NOT Values (NV)****Pertinent Negatives (PN)****NV**

7701001 - Not Applicable

7701003 - Not Recorded

7701005 - Not Reporting

**PN**

8801001 - Contraindication Noted

8801003 - Denied By Order

8801005 - Exam Finding Not Present

8801007 - Medication Allergy

8801009 - Medication Already Taken

8801013 - No Known Drug Allergy

8801015 - None Reported

8801017 - Not Performed by EMS

8801019 - Refused

8801021 - Unresponsive

8801023 - Unable to Complete

## 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 Element ID Referenced

## Definition

References the CustomElementID attribute for eCustomConfiguration.CustomGroup

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

## Constraints

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
string	0	255

## Data Element Comment

## eCustomResults.03 - CorrelationID of PatientCareReport Element or Group

## Definition

References the CorrelationID attribute of an element or group in the PatientCareReport section

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

<b>Data Type</b>	<b>minLength</b>	<b>maxLength</b>
string	0	255

## Data Element Comment

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