Change Log: AZ-PIERS V3 → AZ-PIERS V3.1

This log only details NEMSIS & Arizona Changes that represent data elements collected by AZ-PIERS version3 with the current NEMSIS 3.3.4 standard

Part I Change Log: Changes by Category/Group

icd10MedSurge
Pattern Change: The ICD-10-CM “T” Codes were added to the allowed pattern.
Old Pattern: ([A-QSZ][0-9]{2})((\.[0-9A-Z]{1,3})?)
New Pattern: ([A-QSTZ][0-9]{2})((\.[0-9A-Z]{1,3})?)
AZ-PIERS Elements Affected: eHistory.08 – Medical/Surgical History

StateCertificationLicensureLevels
Codes Added
Code: 9917025 Description: Nurse Practitioner
Code: 9917027 Description: Physician Assistant
Code: 9917029 Description: Licensed Practical Nurse (LPN)
Code: 9917031 Description: Registered Nurse
Codes Definition Modified:
Code: 9917005 Old Description: 2009 Emergency Medical Technician
New Description: 2009 Emergency Medical Technician (EMT)
AZ-PIERS Elements Affected:
dAgency.11 - Level of Service
dConfiguration.06 - EMS Certification Levels Permitted to Perform Each Procedure
dConfiguration.08 - EMS Certification Level Permitted to Administer Each Medication

LicensureLevels
Codes Added
Code: 9911027 Description: Nurse Practitioner
Code: 9911029 Description: Physician Assistant
Code: 9911031 Description: Licensed Practical Nurse (LPN)
Code: 9911033 Description: Registered Nurse
Codes Definition Modified:
Code: 9911005 Old Description: 2009 Emergency Medical Technician
New Description: 2009 Emergency Medical Technician (EMT)
AZ-PIERS Elements Affected:
dConfiguration.02 - State Certification Licensure Levels

MemberLevel
Codes Added
Code: 9925037 Description: Nurse Practitioner
Code: 9925039 Description: Physician Assistant
Code: 9925041 Description: LPN (licensed practical nurse)
Code: 9925043 Description: Registered Nurse
AZ-PIERS Elements Affected:
eCrew.02 - Crew Member Level
**CommonDataType**

*Code Added*

*Code: 9902011*  
*Description: Boolean*

**AZ-PIERS Elements Affected:**
eCustomConfiguration.03 (dCustomConfiguration.03)

**ProtocolsUsed**

*Codes Added*

*Code: 9914167*  
*Description: Exposure-Carbon Monoxide*

*Code: 9914169*  
*Description: Cardiac Arrest-Do Not Resuscitate*

*Code: 9914171*  
*Description: Cardiac Arrest-Special Resuscitation Orders*

*Code: 9914173*  
*Description: Exposure-Smoke Inhalation*

*Code: 9914175*  
*Description: General-Community Paramedicine / Mobile Integrated Healthcare*

*Code: 9914177*  
*Description: General-Exception Protocol*

*Code: 9914179*  
*Description: General-Extended Care Guidelines*

*Code: 9914181*  
*Description: General-Interfacility Transfers*

*Code: 9914183*  
*Description: General-Law Enforcement - Blood for Legal Purposes*

*Code: 9914185*  
*Description: General-Law Enforcement - Assist with Law Enforcement Activity*

*Code: 9914187*  
*Description: General-Neglect or Abuse Suspected*

*Code: 9914189*  
*Description: General-Refusal of Care*

*Code: 9914191*  
*Description: Injury-Mass/Multiple Casualties*

*Code: 9914193*  
*Description: Injury-Thoracic*

*Code: 9914195*  
*Description: Medical-Adrenal Insufficiency*

*Code: 9914197*  
*Description: Medical-Apparent Life Threatening Event (ALTE)*

*Code: 9914199*  
*Description: Medical-Tachycardia*

**AZ-PIERS Elements Affected:**
dConfiguration.05 - Protocols Permitted by the State  
dConfiguration.10 - EMS Agency Protocols

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**Part II Change Log: Changes by Element Name (alpha order)**

**D Elements**

**dAgency.05 – Agency Service Area States**

*Comment Change*

*Old:* Element added to document all of the states in which the EMS agency provides services. Each state listed is associated with the counties, census tracts, and ZIP codes within the EMS Agency Service Area for each state. GNIS Codes Website: [http://geonames.usgs.gov/domestic/download_data.htm](http://geonames.usgs.gov/domestic/download_data.htm)

*New:* Each state is captured as a group where the EMS agency provides service. The group includes dAgency.05, dAgency.06, dAgency.07, and Agency.08. Element added to document all of the states in which the EMS agency provides services. Each state listed is associated with the counties, census tracts, and ZIP codes within the EMS Agency Service Area for each state. GNIS Codes Website: [http://geonames.usgs.gov/domestic/download_data.htm](http://geonames.usgs.gov/domestic/download_data.htm)
dAgency.25 – National Provider Identifier
Definition Change
Old: The state assigned Fire Department ID Number for EMS Agency(ies) operating within a Fire Department.
New: The National Provider Identifier issued by CMS.
New Comment
New: Only EMS Agencies billing for service will have an NPI number.
CMS (Centers for Medicare and Medicaid Services) NPI Registry lookup:
https://npiregistry.cms.hhs.gov/NPPESRegistry/NPIRegistryHome.do

dConfiguration.02 – State Certification Licensure Levels
Name change
Old: State Certification Licensure
New: State Certification/Licensure Levels

dConfiguration.07 – EMS Agency Procedures
Comment Change
Old: This is associated with the EMS Agency Number (dAgency.02) since each EMS Agency Number may have different capabilities. Each procedure is associated with the EMS professional certification levels permitted to perform the procedure. EMS Agencies may identify additional SNOMEDCT procedure codes based on medical direction and their own need. If an agency resides in a state with statewide approved procedures, they should be listed/implemented here. Code list is represented in SNOMEDCT: Reference the NEMSIS Suggested Lists at:
http://nemsis.org/v3/resources.html  SNOMEDCT Website:
http://www.nlm.nih.gov/research/umls/Snomed/snomed_main.html  Product: Product - UMLS Metathesaurus. The EMS agency should submit "Not Applicable" and "Nil" to the state system for the demographic export. The state EMS system does not need to import this information into their database. It is the responsibility of the state to submit this element to the national EMS database (NEMSIS). Reference the Demographic Dataset Submission Guide for further details.
New: This is associated with the EMS Agency Number (dAgency.02) since each EMS Agency Number may have different capabilities. Each procedure is associated with the EMS professional certification levels permitted to perform the procedure. EMS Agencies may identify additional SNOMEDCT procedure codes based on medical direction and their own need. If an agency resides in a state with statewide approved procedures, they should be listed/implemented here. Code list is represented in SNOMEDCT: Reference the NEMSIS Suggested Lists at:
http://nemsis.org/v3/resources.html  SNOMEDCT Website:

dConfiguration.09 – EMS Agency Medications
Comment Change
Old: The medication list is stored as the RxNorm (RXCUI) Code. This is associated with the EMS Agency Number (dAgency.02) since each EMS Agency Number may have different capabilities. The EMS agency should submit "Not Applicable" and "Nil" to the state system for the demographic export. The state EMS system does not need to import this information into their database. It is the responsibility of the state to submit this element to the national EMS database (NEMSIS). Reference the Demographic Dataset Submission Guide for further details.
List of medications based on RxNorm (RXCUI) code. Reference the NEMSIS Suggested Lists at:
**dState.01 – State Required Element**

**Comment Added**

Added: This element was created to document elements required by the state. The TIMESTAMP attribute describes the active date of the element.

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**E Elements**

**eArrest.01 – Cardiac Arrest**

**Definition Change**

**Old:** Indication of the presence of a cardiac arrest at any time.

**New:** Indication of the presence of a cardiac arrest at any time during this EMS event.

**Comment Change**

**Old:** This element is a component of the Utstein Cardiac Arrest Criteria.

**New:** This element is a component of the Utstein Cardiac Arrest Criteria. If the patient has a history of cardiac arrest do not document Cardiac Arrest (eArrest.01) with "Yes, Prior to EMS Arrival" or "Yes, After EMS Arrival" during this encounter.

**eArrest.12 – Any Return of Spontaneous Circulation**

**Comment Change**

**Old:** This element is a component of the Utstein Cardiac Arrest Criteria as identified in the American Heart Association journal "Resuscitation" from 2004 entitled "Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports". [http://circ.ahajournals.org/cgi/content/full/110/21/3385](http://circ.ahajournals.org/cgi/content/full/110/21/3385)

This element needs to be documented when the patient has been in cardiac or respiratory arrest and transported to a healthcare facility to show the change in patient condition, if any. The cardiac rhythm list has been updated to be the same for eVitals.03 (Cardiac Rhythm Electrocardiography (ECG)). They are using the common type: CardiacRhythm. ST segment changes consistent (or not consistent) with STEMI criteria should be documented as Ischemia in the appropriate location.

**New:** This element is a component of the Utstein Cardiac Arrest Criteria as identified in the American Heart Association journal "Resuscitation" from 2004 entitled "Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports". [http://circ.ahajournals.org/cgi/content/full/110/21/3385](http://circ.ahajournals.org/cgi/content/full/110/21/3385)

This element needs to be documented when the patient has been in cardiac arrest and transported to a healthcare facility to show the change in patient condition, if any. Any ROSC is defined as any brief (approximately >30 seconds) restoration of spontaneous circulation that provides evidence of more than an occasional gasp, occasional fleeting palpable pulse, or arterial waveform.
**eArrest.18 – End of EMS Cardiac Arrest Event**

**Comment Change**

**Old:** A resuscitation event is deemed to have ended when death is declared or spontaneous circulation is restored and sustained for 20 minutes or longer.

This element is a component of the Utstein Cardiac Arrest Criteria as identified in the American Heart Association journal "Resuscitation" from 2004 entitled "Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports". [http://circ.ahajournals.org/cgi/content/full/110/21/3385](http://circ.ahajournals.org/cgi/content/full/110/21/3385)

**New:** This element is a component of the Utstein Cardiac Arrest Criteria as identified in the American Heart Association journal "Resuscitation" from 2004 entitled "Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports". [http://circ.ahajournals.org/cgi/content/full/110/21/3385](http://circ.ahajournals.org/cgi/content/full/110/21/3385)

**Codes Added**

- **Code:** 3018007 **Description:** ROSC in the Field
- **Code:** 3018009 **Description:** ROSC in the ED
- **Code:** 3018011 **Description:** Ongoing Resuscitation by Other EMS

**eCustomResults.01 - Custom Data Element Result**

**Definition Change**

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

**New:** 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

**eDispatch.01 – Complaint Reported by Dispatch**

**Code Added**

- **Code:** 2301083 **Description:** Airmedical Transport

**Comment Change**

**Old:** Added Pandemic/Epidemic/Outbreak. Added Automated Crash Notification Added Healthcare Professional Admission Added Interfacility/Evaluation/Transfer - Other entries expanded based on current national EMD Dispatch List

**New:** Added Pandemic/Epidemic/Outbreak. Added Automated Crash Notification Added Healthcare Professional Admission Added Transfer/Interfacility/Palliative Care - Other entries expanded based on current national EMD Dispatch List

**eDisposition.12 - Incident/Patient Disposition**

**Code Definition Updates**

- **Code:** 4212009 **Old Description:** No Patient Contact (Canceled on Scene)
  **New Description:** Canceled on Scene (No Patient Contact)
- **Code:** 4212011 **Old Description:** No Patient Found (Canceled on Scene)
  **New Description:** Canceled on Scene (No Patient Found)
- **Code:** 4212031 **Old Description:** Patient Treated, Transferred Care to Another EMS Professional
  **New Description:** Patient Treated, Transferred Care to Another EMS Unit
- **Code:** 4212033 **Old Description:** Patient Treated, Transported by EMS
  **New Description:** Patient Treated, Transported by this EMS Unit
- **Code:** 4212043 **Old Description:** Transport of Body Parts or Organs Only
  **New Description:** Transport Non-Patient, Organs, etc.
**eDisposition.21 – Type of Destination**

**Codes Added**

**Code:** 4221021 Description: Urgent Care  
**Code:** 4221023 Description: Freestanding Emergency Department

**eDisposition.24 – Destination Team Pre-Arrival Activation**

**Element Name Change**

**Old:** Destination Team Pre-Arrival Activation  
**New:** Destination Team Pre-Arrival Alert or Activation

**Definition Change**

**Old:** Activation by EMS of the appropriate destination healthcare facility team. The activation should occur prior to the EMS Unit arrival at the destination with the patient.  
**New:** Indication that an alert (or activation) was called by EMS to the appropriate destination healthcare facility team. The alert (or activation) should occur prior to the EMS Unit arrival at the destination with the patient.

**Code Added**

**Code:** 4224017 Description: Yes - Trauma (General)

**eDisposition.25 – Date/Time of Destination Prearrival Activation**

**Element Name Change**

**Old:** Date/Time of Destination Prearrival Activation  
**New:** Date/Time of Destination Prearrival Alert or Activation

**Definition Change**

**Old:** Date/Time EMS Notified/Activated the Destination Healthcare Facility Team prior to EMS arrival for acute ill or injured patient.  
**New:** The Date/Time EMS alerted, notified, or activated the Destination Healthcare Facility prior to EMS arrival. The EMS assessment identified the patient as acutely ill or injured based on exam and possibly specified alert criteria.

**eInjury.04 - Vehicular, Pedestrian, or Other Injury Risk Factor**

**Definition Change**

**Old:** The kind of risk factor predictors present at the incident  
**New:** Field Triage Criteria for transport to a trauma center as defined by the Centers for Disease Control and Prevention and the American College of Surgeons-Committee on Trauma.

**Comment Change**

**Old:** Added additional mechanism or risk indicators based on CDC 2011 Guidelines for the Field Triage of Injured Patients Step 3.  
**New:** Assesses mechanism of injury and evidence of high-energy impact (Step 3) AND Assess special patient or system considerations (Step 4) based on CDC 2011 Guidelines for the Field Triage of Injured Patients Step 3 and 4. Website: http://www.cdc.gov/FieldTriage/.

**Codes Added**

**Code:** 2904017 Description: SBP < 110 for age > 65  
**Code:** 2904019 Description: Anticoagulants and Bleeding Disorders  
**Code:** 2904021 Description: Pregnancy > 20 weeks  
**Code:** 2904023 Description: EMS Provider Judgment
Changes exclusive to AZ-PIERS

Code: it2904.101 Burn, with trauma mechanism
Code: it2904.100 Burn, without other trauma

ePatient.05 – Patient's Home Address
Definition Change
Old: The patient's home mailing or street address
New: Patient's address of residence

ePatient.06 – Patient's Home City
Definition Change
Old: The patient's home city or township or residence
New: The patient's primary city or township of residence.
Comment Change
Old: Based on GNIS Civil Code or Populated Place code.
GNIS Codes Website: http://geonames.usgs.gov/domestic/download_data.htm
New: City codes are based on GNIS Feature Class. The primary Feature Class to use is "Civil" with "Populated Place" and "Military" code as additional options.
Definitions for each GNIS City Feature Class can be found on the GNIS Codes website.
GNIS Codes Website: http://geonames.usgs.gov/domestic/download_data.htm

ePatient.07 – Patient's Home County
Definition Change
Old: The patient's home county or parish or residence
New: The patient's home county or parish of residence.

ePatient.08 – Patient's Home State
Definition Change
Old: The patient's home state, territory, or province, or District of Columbia, where the patient resides.
New: The state, territory, or province where the patient resides.

ePatient.09 – Patient's Home ZIP Code
Definition Change
Old: The patient's home ZIP code of residence
New: The patient's ZIP code of residence.

ePatient.10 – Patient's Home Country
Definition Change
Old: The country in which the patient lives.
New: The country of residence of the patient.

ePayment.01 – Primary Method of Payment
New Codes
Code: 2601015 Description: Payment by Facility
Code: 2601017 Description: Contracted Payment
Code: 2601019 Description: Community Network
Code: 2601021 Description: No Insurance Identified
Code: 2601023 Description: Other Payment Option
eResponse.07 – Primary Role of the Unit
New Codes
Code: 2207011 Description: Air Transport-Helicopter
Code: 2207013 Description: Air Transport-Fixed Wing

eResponse.09 – Type of Response Delay
New Code
Code: 2209031 Description: Mechanical Issue-Unit, Equipment, etc
Code: 2209033 Description: Flight Planning

eResponse.10 – Type of Scene Delay
New Code
Code: 2210039 Description: Mechanical Issue-Unit, Equipment, etc

eResponse.11 – Type of Transport Delay
New Code
Code: 2211031 Description: Patient Condition Change (e.g. Unit Stopped)

eResponse.12 – Type of Turn-Around Delay
New Code
Code: 2212033 Description: EMS Crew Accompanies Patient for Facility Procedure

eScene.17 – Incident City
Comment Change
Old: Based on GNIS Civil Code or Populated Place code.
GNIS Codes Website: http://geonames.usgs.gov/domestic/download_data.htm
New: City codes are based on GNIS Feature Class. The primary Feature Class to use is "Civil" with "Populated Place" and "Military" code as additional options.
Definitions for each GNIS City Feature Class can be found on the GNIS Codes website.
GNIS Codes Website: http://geonames.usgs.gov/domestic/download_data.htm

eState.01 – State Required Element
Comment Added
Added: This element was created to document elements required by the state. The TIMESTAMP attribute describes the active date of the element.

eVitals.04 – ECG Type
Code: 3304015
Old Description: Other (Not Listed)
New Description: Other (AED, Not Listed)

eVitals.16 – Carbon Dioxide (CO2)
Definition Change
Old: The patient's end-tidal or other CO2 level.
New: The numeric value of the patient's end-tidal CO2 level.
New Comment
New: Generally the numeric CO2 level is measured in millimeters of mercury (mmHg). End-tidal is the same as exhaled.
**eVitals.GlasgowScoreGroup**
*Documentation Tag Change*
**Old:** Group Tag to hold the details of patient's glasgow score.
**New:** Group Tag to hold the details of patient's glasgow coma scale.

**eVitals.27 – Pain Scale**
*Name Change*
**Old:** Pain Scale
**New:** Pain Scale Score

**eVitals.29 – Stroke Scale Score**
*Definition Change*
**Old:** The patient's Stroke Scale Results.
**New:** The findings or results of the Stroke Scale Type (eVitals.30) used to assess the patient exhibiting stroke-like symptoms.

**eVitals.30 – Stroke Scale Type**
*Code Added*
**Code:** 3330013  
**Description:** F.A.S.T. Exam

**eVitals.30 – Stroke Scale Type**
*Spelling Fix*
Definition: The type of stroke pain scale used  
**Changed to:** Definition: The type of stroke scale used

### Part III Change Log: Deprecated Codes by Element (alpha order)

**dAgency.11 - Level of Service**
*Code:* 9917017  
*Description:* Nurse

**dConfiguration.02 - State Certification/Licensure Levels**
*Code:* 9911017  
*Description:* Nurse

**dConfiguration.05 - Protocols Permitted by the State**
*Code:* 9914039  
*Description:* Exposure-Carbon Monoxide/Smoke Inhalation

**dConfiguration.06 - EMS Certification Levels Permitted to Perform Each Procedure**
*Code:* 9917017  
*Description:* Nurse

**dConfiguration.08 - EMS Certification Levels Permitted to Administer Each Medication**
*Code:* 9917017  
*Description:* Nurse

**dConfiguration.10 - EMS Agency Protocols**
*Code:* 9914039  
*Description:* Exposure-Carbon Monoxide/Smoke Inhalation

**eResponse.07 - Primary Role of the Unit**
*Code:* 2207001  
*Description:* Air Transport
eCrew.02 - Crew Member Level
Code: 9925021 Description: Nurse

eArrest.11 - First Monitored Arrest Rhythm of the Patient
Code: 3011003 Description: Bradycardia

eProtocols.01 - Protocols Used
Code: 9914039 Description: Exposure-Carbon Monoxide/Smoke Inhalation

eMedications.08 - Medication Complication
Code: 3708027 Description: Itching/Urticaria

eVitals.30 – Stroke Scale Type
Spelling Fix
Code: 3330011 Description: Other Stroke Scale Type

Foot Notes
1 (the NEMSIS code 2904027 will later replace the above code for Burn, with trauma mechanism but is not required nationally until Jan. 1, 2016)
2 (the NEMSIS code 2904025 will later replace the above code for Burn, without other trauma but is not required nationally until Jan. 1, 2016)