

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

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

## 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 NEMESIS Suggested Lists at:

<http://nemsis.org/v3/resources.html> SNOMEDCT Website:

[http://www.nlm.nih.gov/research/umls/Snomed/snomed\\_main.html](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 (NEMESIS). 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 NEMESIS Suggested Lists at:

<http://nemsis.org/v3/resources.html> SNOMEDCT Website:

[http://www.nlm.nih.gov/research/umls/Snomed/snomed\\_main.html](http://www.nlm.nih.gov/research/umls/Snomed/snomed_main.html) Product: Product - UMLS

Metathesaurus

## dConfiguration.09 – EMS Agency Medications

### Comment Change

**Old:** The medication list is stored as the RxNorm (RXCU) 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 (NEMESIS). Reference the Demographic Dataset Submission Guide for further details.

List of medications based on RxNorm (RXCU) code. Reference the NEMESIS Suggested Lists at:

<http://nemsis.org/v3/resources.html> RxNorm Website - <http://uts.nlm.nih.gov>

Product - UMLS Metathesaurus Website

<http://www.nlm.nih.gov/research/umls/rxnorm/docs/rxnormfiles.html> Product - RxNorm Full Monthly Release

**New:** The medication list is stored as the RxNorm (RXCU) Code. This is associated with the EMS Agency Number (dAgency.02) since each EMS Agency Number may have different capabilities.

List of medications based on RxNorm (RXCU) code. Reference the NEMESIS Suggested Lists at:

[http://nemesis.org/v3/resources.html](http://nemis.org/v3/resources.html) RxNorm Website - <http://uts.nlm.nih.gov>

Product - UMLS Metathesaurus Website -

<http://www.nlm.nih.gov/research/umls/rxnorm/docs/rxnormfiles.html> Product - RxNorm Full Monthly Release

## 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.

## 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>

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>

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>

**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>

### 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 1,2

**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](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](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](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](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)