

NEMESIS v3.5

The Important Changes: Describing the Whole EMS Event

It isn't only about eDisposition.12...

Is Anything Besides eDisposition.12 Changing in NEMESIS v3.5?

Yes, numerous things...

- NEMESIS v3.5 has some big changes and the stakeholder talk at pretty much any level tended to focus on eDisposition.12, Incident/Patient disposition. (and use of UUID, which won't be fully discussed here)
- However, *the scope and vision of the changes was much broader than just the eDisposition updates.*

But First,

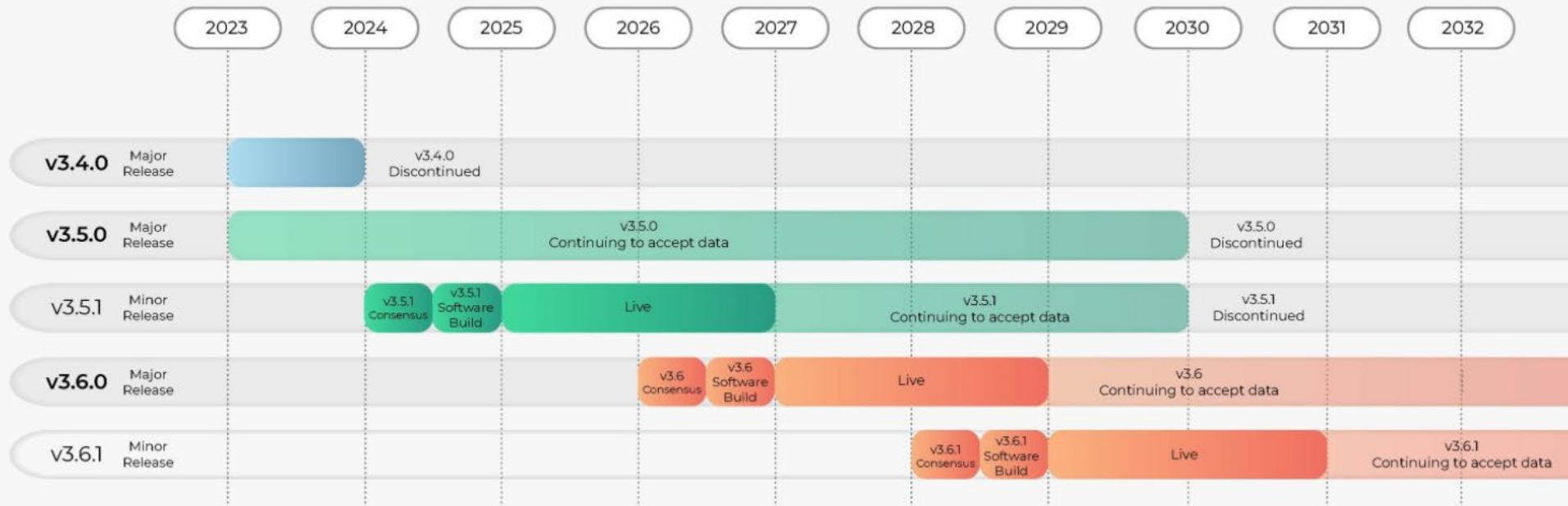


There is no need for panic or revolt. ;-)

The v3.5 revision is simply the latest version of the ever-evolving NEMESIS DataSet. The NEMESIS TAC began accepting Revision Requests for the v3.5 DataSet in April of 2017, below is the current timeline looking forward.



EMS Data Standard Version Timeline



What Were the Goals of the v3.5 Change?

- The primary goal of the v3.5 change was to improve the ability and flexibility to fully describe an EMS event in a way that couldn't be done in previous NEMESIS DataSet versions.
 - States and services needed more cohesive and flexible data to track, analyze and sometimes justify changes in the delivery of EMS care, environment and integration into the broader healthcare system.
 - Previous versions had limited ability to look at things like interfacility transfer levels, types and patterns, MIH-CP programs, level and type of equipment available compared to the level of care actually provided. This led to many custom elements and values being created to address these needs.
 - v3.5 was the opportunity to address these challenges and limitations.
- Secondary goals included addressing the normal technical updates, addition of values needed, clarification of element names, definitions and updates to requirements generally seen in any version update.

Describing the Whole EMS Event

What do we need to know?

- ✓ What kind of call was it? (Type of Service Requested)
- ✓ What type and level of resources responded?
- ✓ Did the unit get on scene and was there patient contact?
- ✓ If there was a patient, were they evaluated and treated?
- ✓ What did the crew do (e.g. provide care, support services)?
- ✓ What level of care was actually provided?
- ✓ How sick was the patient before and after EMS care?
- ✓ Was the patient transported, by who, and what type of destination did they go to?
- ✓ If a transfer, what was the sending order reason and general type? (EMS Provider Impressions do not apply for transfers – diagnosis is by the sending medical provider)

Describing the Whole EMS Event

What needed improvement from v3.4 (v3.3.4, v2.0)?

- **What kind of call was it?** (Type of Service Requested)
 - Mostly limited to 911 and both transfer options were confusing, causing inconsistencies in data
 - There were dispositions that were better identified in other elements
- **“Primary Role of Unit” was limited.** Needed to be expanded and incorporate the level of equipment with the responding unit
- **Determining level of care *actually provided* was difficult,** required looking at several data elements resulting in states or services using custom elements to capture it (Often modifying already complicated eDisposition.12 values)
- **Incident/patient disposition collected 3-4 pieces of information in each value** (always a limiting idea), did not address all EMS scenarios, provided no flexibility, and made data mining and business rules more difficult than needed
- **Capturing reasons for transfers couldn't be done** which is important for billing purposes and analyzing transfer volume and levels and referral patterns for systems-of-care
- **Type of destination options needed to be expanded** for changes in EMS operations

So, What Changed?

- The following slides provide an overview of the element changes made to better describe an EMS event.
 - They follow the steps outlined previously to describe an EMS event.
 - Note that comparison matches are suggested and may not align with all EMS scenarios.
- More slides, toward the end, also provide an overview of changes to other Elements detailed in the NEMESIS change logs.

What kind of call was it?

eResponse.05 - Type of Service Requested	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Emergency Response (Primary Response Area)	911 Response (Scene)
Emergency Response (Intercept)	Intercept
Emergency Response (Mutual Aid)	Mutual Aid
Hospital-to-Hospital Transfer	Interfacility Transport
Hospital to Non-Hospital Facility Transfer	
Non-Hospital Facility to Hospital Transfer	
Non-Hospital Facility to Non-Hospital Facility Transfer	Medical Transport
Other Routine Medical Transport	
Public Assistance	Public Assistance / Other Not Listed
Standby	Standby
Support Services	
Non-Patient Care Rescue / Extrication	
Crew Transport Only	
Transport of Organs or Body Parts	
Mortuary Services	
Mobile Integrated Health Care Encounter	
Medical Evaluation for Special Referral / Intake Programs	
Administrative Operations	

The type of service or category of service requested of the EMS Agency responding for this specific EMS event.

What type and level of resources responded?

Formerly Labeled “Primary Role of Unit”

eResponse.07 - Unit Transport and Equipment Capability	
v3.5 Value Options	Replaces Previous v3.4 Value Options
Ground Transport (ALS Equipped)	Ground Transport
Ground Transport (BLS Equipped)	
Ground Transport (Critical Care Equipped)	
Non-Transport - Medical Treatment (ALS Equipped)	Non-Transport Rescue
Non-Transport - Medical Treatment (BLS Equipped)	
Non-Transport - No Medical Equipment	Non-Transport Assistance
	Non-Transport Administrative (e.g., Supervisor)
Air Transport - Helicopter	Air Transport - Helicopter
Air Transport - Fixed Wing	Air Transport - Fixed Wing
Wheelchair Van / Ambulette	

The transport and equipment capabilities of the EMS Unit which responded to this specific EMS event.

Did the unit get on scene and was there patient contact?

This is a key filter point looking at data

eDisposition.27 - Unit Disposition	
NEW v3.5 Value Options	Previous v3.4 Value Options
Patient Contact Made	Assist, Agency
	Assist, Public
	Assist, Unit
	Patient Dead at Scene-No Resuscitation Attempted (With Transport)
	Patient Dead at Scene-No Resuscitation Attempted (Without Transport)
	Patient Dead at Scene-Resuscitation Attempted (With Transport)
	Patient Dead at Scene-Resuscitation Attempted (Without Transport)
	Patient Evaluated, No Treatment/Transport Required
	Patient Refused Evaluation/Care (With Transport)
	Patient Refused Evaluation/Care (Without Transport)
	Patient Treated, Released (AMA)
	Patient Treated, Released (per protocol)
	Patient Treated, Transferred Care to Another EMS Unit
	Patient Treated, Transported by this EMS Unit
Patient Treated, Transported by Law Enforcement	
Patient Treated, Transported by Private Vehicle	
Cancelled Prior to Arrival at Scene	Canceled (Prior to Arrival At Scene)
Cancelled on Scene	Canceled on Scene (No Patient Contact) Canceled on Scene (No Patient Found)
No Patient Contact	
No Patient Found	
Non-Patient Incident (Not Otherwise Listed)	Standby-No Services or Support Provided
	Standby-Public Safety, Fire, or EMS Operational Support Provided
	Transport Non-Patient, Organs, etc.

If there was a patient, were they evaluated and treated?

eDisposition.28 - Patient Evaluation/Care	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Patient Evaluated and Care Provided	Patient Dead at Scene-Resuscitation Attempted (With Transport)
	Patient Dead at Scene-Resuscitation Attempted (Without Transport)
	Patient Treated, Released (per protocol)
	Patient Treated, Transferred Care to Another EMS Unit
	Patient Treated, Transported by this EMS Unit
Patient Support Services Provided	Assist, Agency
	Assist, Public
	Assist, Unit
Patient Evaluated, No Care Required	Assist, Public
	Patient Dead at Scene-No Resuscitation Attempted (With Transport)
	Patient Dead at Scene-No Resuscitation Attempted (Without Transport)
	Patient Evaluated, No Treatment/Transport Required
Patient Refused Evaluation / Care	Patient Refused Evaluation/Care (With Transport)
Patient Evaluated and Refused Care	Patient Treated, Released (AMA)
	Patient Treated, Transported by Law Enforcement
	Patient Treated, Transported by Private Vehicle
Not Applicable	Canceled (Prior to Arrival At Scene)
	Canceled on Scene (No Patient Contact)
	Canceled on Scene (No Patient Found)
	Standby-No Services or Support Provided
	Standby-Public Safety, Fire, or EMS Operational Support Provided
	Transport Non-Patient, Organs, etc.

The patient disposition for an EMS event identifying whether a patient was evaluated, and care or services were provided.

What did the crew do?

eDisposition.29 - Crew Disposition	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Initiated and Continued Primary Care Or Assumed Primary Care from Another EMS Crew	Patient Dead at Scene-No Resuscitation Attempted (With Transport)
	Patient Dead at Scene-No Resuscitation Attempted (Without Transport)
	Patient Dead at Scene-Resuscitation Attempted (With Transport)
	Patient Dead at Scene-Resuscitation Attempted (Without Transport)
	Patient Refused Evaluation/Care (With Transport)
	Patient Treated, Released (AMA)
	Patient Treated, Released (per protocol)
	Patient Treated, Transported by this EMS Unit
	Patient Treated, Transported by Law Enforcement
	Patient Treated, Transported by Private Vehicle
	Assist, Public
Initiated Primary Care and Transferred to Another EMS Crew	Patient Treated, Transferred Care to Another EMS Unit
Back in Service, Care/Support Services Refused	Patient Refused Evaluation/Care (Without Transport)
Provided Care Supporting Primary EMS Crew	Assist, Agency
	Assist, Unit
	Transport Non-Patient, Organs, etc.
Incident Support Services Provided (Including Standby)	Standby-No Services or Support Provided
	Standby-Public Safety, Fire, or EMS Operational Support Provided
Back in Service, No Care/Support Services Required	Patient Evaluated, No Treatment/Transport Required
	Canceled (Prior to Arrival At Scene)
	Canceled on Scene (No Patient Contact)
	Canceled on Scene (No Patient Found)

The crew disposition for this EMS event identifying which crew provided primary patient care or whether support services were required.

Was the patient transported, and by who?

This is another key filter point looking at data

eDisposition.30 - Transport Disposition	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Transport by This EMS Unit (This Crew Only), OR Transport by This EMS Unit, with a Member of Another Crew, OR Transport by Another EMS Unit, OR Transport by Another EMS Unit, with a Member of This Crew	Patient Dead at Scene-No Resuscitation Attempted (With Transport)
	Patient Dead at Scene-Resuscitation Attempted (With Transport)
	Patient Refused Evaluation/Care (With Transport)
	Patient Treated, Transported by this EMS Unit
	Patient Refused Evaluation/Care (With Transport)
Patient Refused Transport	Patient Treated, Transported by Law Enforcement
	Patient Treated, Transported by Private Vehicle
	Patient Treated, Released (AMA)
No Transport	Patient Dead at Scene-No Resuscitation Attempted (Without Transport)
	Patient Dead at Scene-Resuscitation Attempted (Without Transport)
	Patient Refused Evaluation/Care (Without Transport)
	Patient Treated, Released (per protocol)
	Patient Evaluated, No Treatment/Transport Required
	Assist, Public
Non-Patient Transport (Not Otherwise Listed)	Transport Non-Patient, Organs, etc.
(Any value above may apply)	Assist, Agency
	Assist, Unit
Not Applicable	Canceled (Prior to Arrival At Scene)
	Canceled on Scene (No Patient Contact)
	Canceled on Scene (No Patient Found)
	Standby-No Services or Support Provided
	Standby-Public Safety, Fire, or EMS Operational Support Provided

The transport disposition for an EMS event identifying whether a transport occurred, and by which unit.

If they refused care and/or transport – why?

Makes it easier to track this as data and helps retire certain previous disposition values with a better use model

eDisposition.31 - Reason for Refusal/Release	
NEW v3.5 Value Options	Match to Previous v3.4 Value Options
Against Medical Advice	Patient Treated, Released (AMA)
Patient/Guardian Indicates Ambulance Transport is Not Necessary	Patient Refused Evaluation/Care (Without Transport)
Released Following Protocol Guidelines	Patient Treated, Released (per protocol)
DNR	Patient Treated, Released (per protocol)
Medical/Physician Orders for Life Sustaining Treatment	Patient Treated, Released (per protocol)
Released to Law Enforcement	Patient Treated, Transported by Law Enforcement
Patient/Guardian States Intent to Transport by Other Means	Patient Treated, Transported by Private Vehicle
Other, Not Listed	

Describes reason(s) for the patient's refusal of care/transport OR the EMS clinician's decision to release the patient.

What level of care was *actually provided*?

Level of Care of this Unit (removed in v3.5) attempted to collect this combined with equipment level on vehicle but was ineffective and confusing for providers. Level of Care Provided per Protocol was added as it is very specific and direct, and equipment was moved to eResponse.07 - Unit Transport and Equipment Capability

eDisposition.32 - Level of Care Provided per Protocol

NEW v3.5 Value Options
BLS - All Levels
ALS - AEMT/Intermediate
ALS - Paramedic
EMS and Other Healthcare Staff
Critical Care
Integrated Health Care
No Care Provided

Definition:

The level of care should be defined by the situation, medications, and procedures provided to the patient *based on what is allowed in the local EMS protocols. This definition can vary between regions*; what may be allowed for BLS providers in one region may be considered ALS care in another. *This is not a reflection of the provider levels providing care, but the actual care given-for example, BLS care provided by a paramedic would be entered as "BLS – All Levels"*. This element benefits reviews of performance, resource demand and utilization, and reimbursement coding.

How sick was the patient before and after EMS care?

Two values added to better describe common findings

eSituation.13 - Initial Patient Acuity	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Critical (Red)	Critical (Red)
Emergent (Yellow)	Emergent (Yellow)
Lower Acuity (Green)	Lower Acuity (Green)
Dead without Resuscitation Efforts (Black)	Dead without Resuscitation Efforts (Black)
Non-Acute/Routine	

eDisposition.19 - Final Patient Acuity	
NEW v3.5 Value Options	Replaces Previous v3.4 Value Options
Critical (Red)	Critical (Red)
Emergent (Yellow)	Emergent (Yellow)
Lower Acuity (Green)	Lower Acuity (Green)
Dead without Resuscitation Efforts (Black)	Dead without Resuscitation Efforts (Black)
Dead with Resuscitation Efforts (Black)	
Non-Acute/Routine	

Justification for Transfers

New fields were created to allow space to capture the diagnosis of the physician ordering the transfer. A second element was added with fixed values so transfer reasons and patterns can better be analyzed

eSituation.19 - Justification for Transfer or Encounter
<p>This is a text field to enter the sending physician's diagnosis for transfer. EMS Provider Primary Impression is not the reason that a transfer is ordered and should not be used.</p>

eSituation.20 - Reason for Interfacility Transfer/Medical Transport
NEW v3.5 Value Options
Cardiac Specialty
Convenience Transfer (Patient Request)
Diagnostic Testing
Dialysis
Drug and/or Alcohol Rehabilitation Care
Extended Care
Maternal/Neonatal
Medical Specialty Care (Other, Not Listed)
Neurological Specialty Care
Palliative/Hospice Care (Home or Facility)
Pediatric Specialty Care
Psychiatric/Behavioral Care
Physical Rehabilitation Care
Return to Home/Residence
Surgical Specialty Care (Other, Not Listed)
Trauma/Orthopedic Specialty Care

eDisposition.21 - Type of Destination

eDisposition.21 - Type of Destination	
NEW v3.5 Value Options	Previous v3.4 Value Options
Home	Home
Hospital - Emergency Department	Hospital-Emergency Department
Hospital - Non-Emergency Department Bed	Hospital-Non-Emergency Department Bed
Clinic	Medical Office/Clinic
Morgue/Mortuary	Morgue/Mortuary
(Now Separated)	Nursing Home/Assisted Living Facility
Other	Other
Other EMS Responder (air)	Other EMS Responder (air)
Other EMS Responder (ground)	Other EMS Responder (ground)
Police/Jail	Police/Jail
Urgent Care	Urgent Care
Freestanding Emergency Department	Freestanding Emergency Department
Dialysis Center	
Diagnostic Services	
Assisted Living Facility	
Mental Health Facility	
Nursing Home	
Other Recurring Care Center	
Physical Rehabilitation Facility	
Drug and/or Alcohol Rehabilitation Facility	
Skilled Nursing Facility	

Other Significant Changes

- The following five slides show other significant changes including Elements that have:
 - Had values added
 - Had names or definitions changed
 - Been added or removed from National requirements
 - Been added, removed and/or replaced
- This is only a general summary, a complete review of the v3.5 Change Log can be found here:
https://nemsis.org/media/nemsis_v3/release-3.5.0/DataDictionary/ChangeLog.pdf

Existing Elements Modified in v3.5



Generally, these elements had values added to remain current with changes in the EMS Environment

dFacility.01 - Type of Facility
eAirway.05- Airway Confirmation Methods
eArrest.01 - Cardiac Arrest (Was there one)
eArrest.02 - Cardiac Arrest Etiology
eArrest.04 - Arrest Witnessed By
eArrest.04 - Arrest Witnessed By
eArrest.09 - Type of CPR Provided
eDispatch.01 - Dispatch Reason
eDisposition.19 - Final Patient Acuity
eDisposition.19 - Type of Destination
eDisposition.21 - Type of Destination
eDisposition.23 - Hospital Designations (and dFacility.04)
eDisposition.24 - Destination PreArrival Activation
eExam.15 - Extremity Assessment Finding Location
eExam.18 - Eye Assessment
eExam.19 - Mental Status Assessment
eExam.20 - Neurological Assessment
eHistory.10 - The Patient's Type of Immunization
eHistory.17 - Alcohol/Drug Use Indicators
eInjury.07 - Use of Occupant Safety Equipment
eLabs.03 - Laboratory Result Type
eMedications.04 - Medication Administered Route
EMS Care Giver and License Level (Meds, Procedures, Crew)
eOther.07 - Natural, Suspected, Intentional, or Unintentional Disaster
eOutcome.06 - Emergency Department Chief Complaint
eOutcome.07 - First ED Systolic Blood Pressure
eOutcome.08 - Emergency Department Recorded Cause of Injury
ePatient.13 - Gender
ePayment.05 - Healthcare Provider Type Signing Physician Certification Statement
ePayment.42 - Specialty Care Transport Care Provider
eProcedures.13 - Vascular Access Location
eResponse.05 - Type of Service Requested
eResponse.08 - Type of Dispatch Delay
eSituation.13 - Initial Patient Acuity
eVitals.03 - Cardiac Rhythm / Electrocardiography (ECG)
eVitals.04 - ECG Type
eVitals.16 - End Tidal Carbon Dioxide (ETCO2)
eVitals.30 - Stroke Scale Type

Elements with Changes to Element Name, Description, or Recurrence

These changes occurred to improve usability or reflect changes in the EMS environment and needs

eDisposition.23 - Hospital Capability
eInjury.03 - Trauma Triage Criteria (High Risk for Serious Injury)
eInjury.04 - Trauma Triage Criteria (Moderate Risk for Serious Injury)
eMedications.03 - Medication Administered
eMedications.05 - Medication Dosage
eMedications.06 - Medication Dosage Units
eResponse.02 - EMS Agency Name
eResponse.07 - Unit Transport and Equipment Capability
eResponse.16 - Vehicle Dispatch Location
eResponse.23 - Response Mode to Scene
eScene.01 - First EMS Unit on Scene
eScene.02 - Other EMS or Public Safety Agencies at Scene
eScene.03 - Other EMS or Public Safety Agency ID Number
eTimes.13 - Unit Back in Service Date/Time
eTimes.09 - Unit Left Scene Date/Time
eTimes.12 - Destination Patient Transfer of Care Date/Time
eVitals.16 - End Tidal Carbon Dioxide (ETCO2)
eVitals.18 - Blood Glucose Level
eVitals.19 - Glasgow Coma Score - Eye
eVitals.20 - Glasgow Coma Score - Verbal
eVitals.21 - Glasgow Coma Score - Motor
eVitals.33 - Revised Trauma Score

New or Removed Elements in v3.5

These are Elements that are Completely New or were Permanently Removed and not replaced in v3.5

Completely New Elements in v3.5
Unique Run Record Identifier "UUID" (Reference the NEMESIS site for detailed explanation)
eHistory.20 - Current Medication Frequency
eOutcome.19 - Date/Time Emergency Department Procedure Performed
eOutcome.20 - Date/Time Hospital Procedure Performed
eOutcome.18 - Date/Time of Emergency Department Admission
ePatient.22 - Alternate Home Residence
ePayment.59 - Insurance Company Phone Number
ePayment.60 - Date of Birth of the Insured
eScene.24 - First Other EMS or Public Safety Agency at Scene to Provide Patient Care
eTimes.17 - Unit Arrived at Staging Area Date/Time
eSituation.19 - Justification for Transfer or Encounter
eSituation.20 - Reason for Interfacility Transfer/Medical Transport
eDisposition.32 - Level of Care Provided per Protocol
sConfiguration.02 - EMS Certification Levels Permitted to Perform Each Procedure
sConfiguration.04 - EMS Certification Levels Permitted to Administer Each Medication

Removed from v3.5 and Not Replaced with New Elements
eOutcome.14 - Total ICU Length of Stay
eOutcome.15 - Total Ventilator Days

Elements Removed and Replaced in v3.5

These are Elements that have been removed and replaced with new elements in v3.5, in order to better address the changing needs of the EMS Environment

Removed in v3.5 and Replaced	Replaced with in v3.5
eArrest.05 - CPR Care Provided Prior to EMS Arrival	eArrest.20 - Who First Initiated CPR
eArrest.06 - Who Provided CPR Prior to EMS Arrival	
eArrest.08 - Who Used AED Prior to EMS Arrival	eArrest.21 - Who First Applied the AED
(Reactivated from v3.3.4)	eArrest.22 - Who First Defibrillated the Patient
eExam.08 - Chest/Lungs Assessment	eArrest.10 - Therapeutic Hypothermia by EMS
	eExam.22 - Lung Assessment Finding Location
	eExam.23 - Lung Assessment
	eExam.24 - Chest Assessment Finding Location
eResponse.15 - Level of Care of This Unit	eExam.25 - Chest Assessment
	eResponse.07 - Unit Transport and Equipment Capability
eDisposition.12 - Incident/Patient Disposition	eDisposition.32 - Level of Care Provided per Protocol
	eDisposition.27 - Unit Disposition
	eDisposition.28 - Patient Evaluation/Care
	eDisposition.29 - Crew Disposition
	eDisposition.30 - Transport Disposition
eResponse.15 - Level of Care of This Unit	eDisposition.31 - Reason for Refusal/Release
	eResponse.07 - Unit Transport and Equipment Capability
dConfiguration.02 - State Certification/Licensure Levels	eDisposition.32 - Level of Care Provided per Protocol
dConfiguration.03 - Procedures Permitted by the State	sConfiguration.01 - State Certification/Licensure Levels
dConfiguration.04 - Medications Permitted by the State	sConfiguration.03 - Procedures Permitted by the State
dConfiguration.05 - Protocols Permitted by the State	sConfiguration.05 - Medications Permitted by the State
	sConfiguration.06 - Protocols Permitted by the State

Changes in Submission Requirements to NEMESIS

- These are *Existing Elements* that have been *demoted from* or *promoted to* the requirement to be submitted to NEMESIS as part of the national DataSet.
- The Elements have not been removed from the DataSet and remain useable at the state and local level regardless of their status.
- These changes may impact point-of-entry business and Schematron rules and require updates to those rules.

Demoted from Requirement for National Data Submission	Promoted to Requirement for National Data Submission
dAgency.15 - Statistical Calendar Year	eMedications.04 - Medication Administered Route
dAgency.16 - Total Primary Service Area Size	eOther.06 - The Type of Work-Related Injury, Death or Suspected Exposure
dAgency.17 - Total Service Area Population	eOutcome.09 - Emergency Department Procedures
dAgency.18 - 911 EMS Call Center Volume per Year	eOutcome.10 - Emergency Department Diagnosis
dAgency.19 - EMS Dispatch Volume per Year	eOutcome.11 - Date/Time of Hospital Admission
dAgency.20 - EMS Patient Transport Volume per Year	eOutcome.12 - Hospital Procedures
dAgency.21 - EMS Patient Contact Volume per Year	eOutcome.13 - Hospital Diagnosis
dAgency.22 - EMS Billable Calls per Year	eOutcome.16 - Date/Time of Hospital Discharge
dConfiguration.11	eSituation.18 - Date/Time Last Known Well
dConfiguration.15	
eOther.05 - Suspected EMS Work Related Exposure, Injury, or Death	
eProtocols.02 - Protocol Age Category	
eVitals.08 - Method of Blood Pressure Measurement	

Other Updates, Changes, Clarifications with v3.5, some Kentucky-centric

Now we'll explore some other details, of which some are more specific to Kentucky EMS Patient Care Reporting – some of it new, some a refresher.

Validation Rules

- There are hundreds of Validation Rules written for the v3.5 Kentucky EMS StateDataSet. Validation Rules will never be a replacement for agency-based QA/QI, instead the rules assist in ensuring data completeness and prevention of logic errors, providing real-time scoring and feedback while the EMS provider is entering the PCR data.
- Currently, the point values assigned to each Rule range from 0 – 15 points. KBEMS requires each EMS agency to maintain an aggregate PCR Validation Score of 90% or higher.
- The Validation Rules ruleset will be routinely monitored and refined, and supplemented or pared-down, as analysis dictates is necessary.

Mandatory, Required, Recommended, Optional

- Those are the four **Usage** levels assigned to data elements in the NEMESIS EMS DataSet.
- Any PCR missing a **Mandatory** element will not be allowed to import into KStARS. Any other *good* PCRs in the *same* export/import batch will also be rejected.
- Agencies **must** monitor their PCR Export Logs for *all* export failures, correct the offending PCR(s), and re-export the PCR(s) into KStARS.

Facility List / IDs

KBEMS is the source/creator of Facility IDs utilized in Kentucky EMS PCR. EMS agency staff members are reminded to notify KBEMS when there is the need for a Facility ID revision, addition, or deletion, recognized within their locality or response area.

In the following table is a list of new, generic, Facility IDs which should be used when, *and only when*, an exact Facility ID isn't present in the database. Users will simply type **unlisted** into the Facility Name data element field in the ePCR and the generic IDs will be presented as options. Please make the most accurate choice when utilizing, and please accurately record the street address, and related data elements, of the location.

Facility Name (dFacility.02)	Facility Code (dFacility.03)
Unlisted Hospital	21KYunHospital
Unlisted Dialysis Center	21KYunDialysis
Unlisted Skilled Nursing Facility	21KYunSNF
Unlisted Assisted Living Facility	21KYunALF
Unlisted Urgent Care Center	21KYunUCC
Unlisted Freestanding ED	21KYunFSED
Unlisted Medical Office or Clinic	21KYunClinic
Unlisted Private Residence	21KYunResidence
Unlisted Other	21KYunOther

Custom Data Elements

A number of *custom* data elements are included in Kentucky's EMS StateDataSet. Some benefits from these additional elements include; Useful for triggering Validation Rules or Visibility Rules, useful for clarifying associated NEMESIS elements, as a convenience, or useful for recording data that would otherwise only exist in the Narrative – where it would be difficult or impossible to query, calculate, or research.

Custom Element	Usefulness
itDispatch.003 - Dispatch Reason, Other	Allows for free-text comments when eDispatch.03 falls short
itArrest.009 - ROSC Time	Enables time recording when eArrest.12 equals "Yes..."
itExam.088 - Possible Stroke Overall	Useful for triggering Validation and/or Visibility Rules
itHistory.007 - Current Medication Comments	Allows for free-text comments for Current Medications
itHistory.008 - Environment Allergy Comments	Allows for free-text comments for Environmental / Food Allergies
itHistory.009 - Medication Allergy Comments	Allows for free-text comments for Medication Allergies
itHistory.011 - Other Past Medical History	Allows for free-text comments for PMH
itSituation.001 - Patient Belongings	Multi-Select from common Patient Belonging items
itPayment.010 - Patient Belongings Other	Allows for free-text comments describing Patient Belongings
itPayment.011 - Patient Belongings Left With	Select from common Patient Belonging dispositions
itPayment.012 - Patient Belongings Left With Other	Free-text comments around disposition of Patient Belongings
itVitals.001 - Pulse Oximetry Qualifier	Allows for documentation of FIO2 qualifiers for SpO2 values
itVitals.002 – Airway	Basic airway finding descriptions in an element which can be queried
itVitals.019 - Pulse Quality	Basic pulse finding descriptions in an element which can be queried
itStemi.001 - STEMI 12 Lead ECG Used	STEMI documentation and Validity and/or Visibility Rule triggering
itStemi.002 - STEMI 12 Lead ECG Transmitted for Interpretation	STEMI documentation and Validity and/or Visibility Rule triggering
itStemi.003 - STEMI Probable	STEMI documentation and Validity and/or Visibility Rule triggering
itStemi.004 - STEMI 12 Lead ECG Interpreted By	STEMI documentation and Validity and/or Visibility Rule triggering
itStemi.005 - STEMI Triage Criteria	STEMI documentation and Validity and/or Visibility Rule triggering

Vague, or Confusing Elements

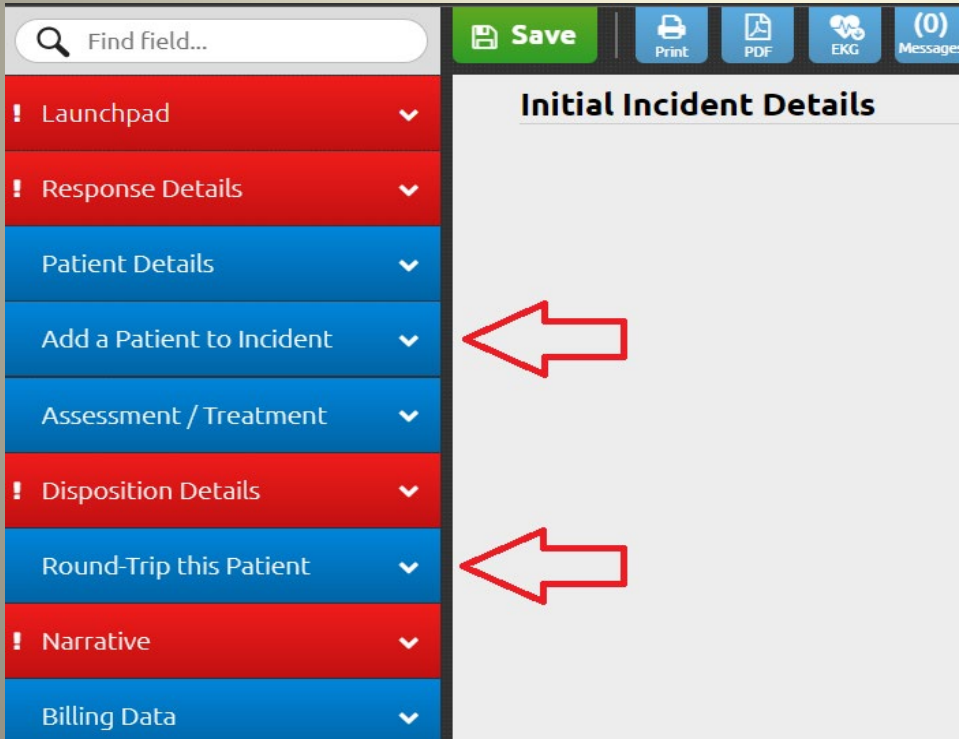
<p>PSAP Call Date/Time (eTimes.01) <i>(Required element)</i></p> <p>The typical “call received” time for EMS calls.</p>	<p>The Date/Time the <i>initial</i> request was received at a Public Safety Answering Point/911 Call Center. Obtain and record these values <i>even when</i> the initial call was relayed/handed-off to another dispatch center prior to reaching your unit.</p>
<p>Dispatch Notified Date/Time (eTimes.02) <i>(Optional element)</i></p> <p>Record these values when a request for response was relayed-through the secondary dispatch center.</p>	<p>The Date/Time that a <i>Non-911 Dispatch Center</i> received the request for response <i>from</i> the 911 Dispatcher/Call Taker. Examples of Non-911 Dispatch might include privately-owned or hospital/aeromedical/industry-based sites, providing specialized or localized responses. Record when applicable.</p>

Vague, or Confusing Elements, continued

Initial Patient Acuity (eSituation.13)	The acuity of the patient's condition upon EMS arrival at the patient.
Final Patient Acuity (eDisposition.19)	The acuity of the patient's condition when your contact (or your unit's contact) with the patient ended.
Work-Related Illness/Injury (eSituation.14)	Work as in <i>on-the-job</i> , not like yard work at home.
Type of CPR Provided (eArrest.09)	Type of CPR provided by EMS, not bystanders.
Justification for Transfer or Encounter (eSituation.19)	The ordering physician or medical provider diagnosis or stated reason for a hospital-to-hospital transfer, other medical transport, or Mobile Integrated Healthcare encounter.
Stretcher Purpose Description (ePayment.46)	Free-text field providing the reason for use of a stretcher in the EMS patient transport, primarily necessary for non-emergency billing purposes.

v3.5 Forms

KBEMS has created new v3.5 forms which ImageTrend users in Kentucky may use as-is or copy and modify for agency-specific needs, over and above the minimum Kentucky StateDataSet requirements. The **Kentucky 3.5 Run Form**, **Kentucky 3.5 EMS Patient Care Report**, and **Kentucky 3.5 EMS Agency QA/QI Document** (for when performing QA/QI on paper is preferred or necessary) will be made available when your agency transitions to v3.5 or are available now in the ImageTrend Library for download. Users/vendors of other software products are responsible for their own form updates.



The new Kentucky 3.5 Run Form has two shortcuts, both are for recycling certain data elements, to speed up PCR completion, when you;

- Are transporting multiple patients in a single incident
- Are round-tripping a patient or adding another segment on a multi-leg trip.

PCR Quality

Your patients will often judge you as a caretaker based upon your bedside manner.

Supervisors, medical directors, receiving-hospital staff, billers, lawyers, QA/QI staff, et cetera – anyone who needs information from your EMS call, will judge your provision of care as a healthcare professional based upon your PCR documentation. What else can they (or you) go by, once the event is in the past???

You might be the best EMT on this side of the Mississippi, but does your PCR stack up? Does it provide for continuity of care, after the transfer of care? Does it help your medical director sleep at night? Does it help ensure your agency can successfully bill for services rendered – and give you the pay raise which you deserve? Will it keep you from being embarrassed on the witness stand? Does it accurately, completely, memorialize the event?

Data Value

Your PCR data has great value, for all the reasons previously mentioned, and many others – and that value lasts ***for years*** after each event is over.

- Reimbursement/Sustainability of EMS Services
- Safety/Effectiveness/Revision of Treatment Protocols
- Distribution/Workload/Availability of EMS Services
- Loss Prevention/Risk Management
- Workforce Development in EMS
- Occupational Hazards/Injuries
- Many Illness & Injury Research Studies

The list goes on and on...

Questions?

KBEMS welcomes your questions. For more manageable span of control ratios, it is greatly appreciated when agency-wide operations questions are triaged *in-agency*, then routed to KBEMS if necessary, through agency staff. For help with KEMESIS/KStARS: douglas.taylor@ky.gov

The NEMESIS website is the definitive resource for information on the National EMS DataSet. www.nemesis.org

This document is intended to be an informative overview of the changes in NEMESIS v3.5.0. The information contained herein may be less specific, or a combination of facts, in the interest of summarizing the data for ease of presentation. Errors and omissions may be present. Much gratitude is extended to Chip Cooper, NH Emergency Services Data Manager, for graciously sharing the foundation of this PowerPoint document for revision and reuse in Kentucky.

2023/11/17 DST