

Hawaii Emergency Medical Services Information System

Data Dictionary

Prepared by:



Hawaii EMS Information System

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Hawaii Electronic EMS Reporting

History of HEMSIS:

The Hawaii Department of Health, Division of EMS (HDOHEMS) data committee consisting of representatives from the HDOHEMS, the trauma registry, and field providers created the HEMSIS dataset in 2005. Originally consisting of 109-elements the HEMSIS dataset provided data collection to the HDOHEMS for 2 years. The HDOHEMS early on was committed to participation in NEMSIS and developed their system prior to the final release of NEMSIS. There was no way the HDOHEMS could fully anticipate the final NEMSIS process as it matured over the past years. This version 2 of the HEMSIS data dictionary incorporates the NEMSIS national data elements along with some of the original data elements that the HDOHEMS requires to provide adequate monitoring and reporting of Emergency Medical Services (EMS) activity in the State of Hawaii.

NEMSIS Explanation:

In 2001 the National Association of EMS Directors in conjunction with the National Highway Traffic Safety Administration (NHTSA) and the Trauma/EMS systems program of Health Resources and Services Administration (HRSA) agreed to develop a national EMS database. From this agreement the NEMSIS project was grown. In 2003 the member states initiated a memorandum of understanding stating that they “recognized the need for EMS data collection at the national level” and agreed to abide by the assignment of “specific definitions to a set of data elements identified as desirable to be collected on a national level”. Between 2003 and 2005 the NEMSIS project developed an EMS and demographic dataset compiling them into a databook with a defined Extended Markup Language (XML) schema to facilitate transport of the data between systems. The databook consists of two datasets; the first is referred to as the demographic dataset. This dataset collects information on the submitting agency, their vehicles, personnel, stations, medical equipment, protocols and medical direction. The second is referred to as the EMS dataset and collects information on the event or patient encounter. The elements can be used to build an extensive patient care report for medical reporting purposes as well as data collection. The current databook includes over 400 data elements that are recommended to be included in an EMS data collection system and are also referred to as the Gold set. Knowing the difficulty in collecting this many elements from end users, NEMSIS has created a subset of the data elements known as “National Data Elements” also referred as the Silver set. The Silver subset consists of a total of 83 elements, 67 elements (13 mandatory) in the EMS dataset and 16 elements (8 mandatory) in the demographic dataset. NEMSIS and NHTSA require that states at minimum must collect the “National Data Elements” for submission to the national EMS database. In April of 2006 the final release of the NEMSIS databook was published and software vendor compliance testing initiated. NEMSIS and NHTSA are now requesting states to submit their data to the national EMS database.

NEMSIS is attempting to remove the difficulty for EMS software vendors in conducting business in multiple regions or states. The movement to an accepted standardized data dictionary and XML with a standardized format removes the complaints of software vendors in modifying their software between customers in different regions or states. NEMSIS offers free compliance tools and certification process for vendors to become NEMSIS compliant. These

benefits assist to eliminate the noncompliance of EMS agencies in submitting data to the HEMSIS system.

Data Dictionary Format:

Each data element is presented using the following template. The Consensus Panel considered it important to provide sufficient detail about each data element to justify its inclusion in the uniform data set, as well as to assist agencies, which seek to implement a data collection system. When a data element requires specific categories, these are listed in the data item specification ("Field Values"). The Panel recognizes that the lists, which are included in this dictionary are imperfect, but definitions of these lists have been debated for many years without resolution.

This data dictionary is not designed to provide all information and explanation of the NHTSA 2 (NEMSIS 2.2.1) datasets, XML and XSD structure. Persons interested in learning more about NEMSIS or development for NEMSIS compliance should contact NEMSIS at www.nemesis.org

This document is to be used by software developers and EMS agencies to understand the request for a data element, reference acceptable values for data elements, reference the corresponding NEMSIS data dictionary identifier number, identify the business rules associated with an element's submission, denote any variations from the original NEMSIS structure deemed necessary by the HDOHEMS. Submitting agencies are required to be using NEMSIS Gold or Silver compliance certified software with the XSD modifications noted in this document.

Submitted XML record sets will be processed against the HEMSIS XSD for submission compliance. Submitted records with elements that fail the submission screening and are noted as 'record will be rejected' will fail that complete record's entry into the HEMSIS database. Submitted records with elements that fail the submission screening and are noted as 'will be marked as non-compliant' will allow that record's entry into the HEMSIS database. Non-compliance marking is to alert the EMS agency, the software vendor, and the HDOHEMS of a submission that does not conform to the HDOHEMS expected completeness or standard of an EMS record. The label of "non-compliant" is not a negative term in isolated occurrences. It is a concern when this occurs on the same element frequently or an agency has a high number of non-compliance markings. It is really meant to provide a quality assurance means to improve data collection by the end user and vendors. There is no way a system can be built that will be 100% fool proof to ensure the best data and still allow edge cases to be entered. Drawing attention to the occurrence allows all parties to evaluate the cause of the non-compliance. This will allow either the agency or software vendor to correct misconceptions on the collection of the data or the HDOHEMS to identify that the element business rules is not valid. The HDOHEMS will provide an XSD file for testing using the free testing software available from NEMSIS.

Definition of the Priority items:

Mandatory: These are elements that are required on all incidents. Failure to provide the mandatory element will flag the record of the incident to NOT be accepted into the HEMSIS database. Correction of the deficiency is required to properly submit the incident.

Essential: These are elements that are to be completed on incidents where they pertain as identified in the Business Rules section for the particular element. If they are missing or are

invalid the, the record will NOT be accepted by the HEMSIS database. When they do not pertain the vendor should follow XSD structure rules.

Desirable: These are elements that are strongly requested but may not be possible to collect on all incidents. If the item could have been collected based on the incident then the field would be marked 'Non-Complaint'.

#Element Number

Name of Data Element:	Name
Priority:	Mandatory or Essential or Desirable
Definition:	Short definition of data element
National Element:	Identifies if this element is part of the NEMSIS National Element (Silver) list. If noted 'modified' then Hawaii has made changes to the element to provide better data collection.
NHTSA 2:	Length of data element
XML:	Specifies the NEMSIS XML format and the XSD definitions.
Field Values:	Defined data elements - alternative descriptions of the data element values or attributes.

Content: Detailed discussion of definition and content.

Discussion and Justification: Provide further details and justify the data element.

Business Rules: Provide information on the requirements for and to a data element to enforce data integrity and submission compliance.

Technical Comments: Additional information which may be of use to individuals setting up a data collection system.

NEMESIS Common Null Values:

These values are to be used in each of the Demographic and EMS Data Elements described in this document, which have been defined to accept the E00 Null Values. For any collection of data to be of value and reliably represent what was intended, a strong commitment must be made to ensure the correct documentation of incomplete data. The described data integrity method must be followed with the HEMESIS dataset. For data elements being electronically stored in a database or moved from one database to another using XML, the indicated values should be applied when a data element is empty or contains a null value.

Not Applicable: (Code -25) = At the time of an EMS patient care report documentation, information requested was “Not Applicable” to the EMS or patient event. This indicates that it is unnecessary to document mechanism or injury related information on a patient who was not traumatized

Not Available: (Code -5) = At the time of an EMS patient care report documentation, information was “Not Available” to EMS personnel. This documents that needed information did exist but the EMS personnel was unsuccessful in their attempt to obtain it.

Not Known: (Code -10) = At the time of an EMS patient care report documentation, information was “Not Known” to patient, family, and EMS personnel. This documents that there was an attempt to obtain information but it was unknown by all parties involved

Not Recorded: (Code -20) = If an EMS documentation or information system has an empty field or nothing is recorded in any data element of the NHTSA dataset, code “-20” should be inserted into the database and/or XML for that data element indicating that the EMS Patient Care Report did not have a value for that specific data element when the EMS event or patient encounter was documented.

Not Reporting: (Code -15) = If an EMS documentation or information system is not using any of the "National" data elements of the NHTSA dataset, code “-15” should be inserted into the database and/or XML for that data element.

EMS Dataset

HEMSIS Element Dictionary

1. Lithocode (Patient Care Report Number)

Name of Data Element:	Lithocode (Patient Care Report Number)
Priority:	Mandatory
Definition:	The unique number automatically assigned by the EMS agency for each patient care report (PCR). This is a unique number to the EMS agency for all of time.
National Element:	YES
NHTSA 2:	E01_01
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>PatientCareReportNumber</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 8 Maximum Constraint: 32

Content: Unique 8 digit number from series assigned to a Hawaii Department of Health, Division of EMS approved software product from commercial vendor or in-house from EMS agency. The HDOHEMS may approve the use of a 32 character globally unique identifier (GUID).

Discussion and Justification: The unique number automatically assigned by the EMS agency via software for each patient care report (PCR). **This is a unique number to the EMS agency for all of time.** This number must be unique within the state. Provides a specific key to a specific record. This record number will fulfill all the requirements for linkage, which have been described under incident number.

Business Rules: All records submitted must have a unique lithocode in the series assigned to the software vendor. Vendors may be granted an exception to submit a GUID in place of a lithocode series. Not Nullable. A unique value must be provided to create a unique record ID within a database. The same unique record ID must be used if the record is amended or updated and resubmitted. Records with duplicate or missing lithocodes will be rejected by the system

Technical Comments: This is the central and most important number in the prehospital portion of the EMS information system. Every incident must have a Lithocode number even if there is no patient. An incident will have multiple Lithocodes if there are multiple patients or multiple responders to single patients.

2. Incident Number

Name of Data Element:	Incident Number
Priority:	Mandatory
Definition:	The incident number assigned by the 911 Dispatch Center or local EMS agency.
National Element:	No
NHTSA 2:	E02_02
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>IncidentNumber</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 7 Maximum Constraint: 15

Content: This element consists of a 7-15 position alphanumeric string assigned by a local jurisdiction to each EMS related incident. Zero fill, left justified if number is small (e.g. 0000123). May use the same incident number for different patients involved in the same incident, recommend that the patients be separated by a letter or numeric identifier (i.e. 0000123A, 00001234B).

Discussion and Justification: It should be unique within an agency for a particular agency, and then by combining it with a unique agency number, it will be possible to construct another unique identifying number for the incident.

This number is valuable for linking EMS data files with other files related to the incident, such as emergency department and inpatient hospital files, if those medical files also contain this number. Accurate numbering within all available files may be facilitated by technologies such as bar codes.

Probabilistic linkage methodology is of great value when linking files that do not have numeric fields such as incident number in common. However, linkage is greatly facilitated by the presence of such a number in each of the files to be linked.

Business Rules: All records submitted must have an agency defined Incident Number for local cross-reference. Records with a missing or an invalid entry will be rejected by the system. Duplicates of this field are ignored.

Technical Comments: In some cases incident number, Lithocode number, or PSAP number may be the same.

3. EMS Agency Number

Name of Data Element:	EMS Agency Number
Priority:	Mandatory
Definition:	The state-assigned provider number of the responding agency.
National Element:	Yes
NHTSA 2:	E02_01
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>EMSAgencyNumber</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 7 Maximum Constraint: 7
Field Values:	Refer to Appendix A (EMS Agency List) for Agency Number

Content: This element consists of a State assigned Island number followed by the State assigned responding agency number.

Discussion and Justification: The state-assigned provider number of the responding agency. A component of the EMS Medical Record. May be combined with other elements to build a unique identifier. Allows data to be sorted by the EMS Agency. Important for grouping and comparing EMS Agencies in Benchmarking and Quality Management . When linked to D01_02 provides the Agency name on the EMS Medical Record: Patient Care Report

Business Rules: All records submitted must have an EMS Agency Number entered. The Agency number must be from the approved agency list as published by the Hawaii Department of Health, Division of EMS. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: The first 2 numbers are the island number as assigned by the Hawaii Department of Health, Division of EMS with a left justified zero to increase the size to 2 (Oahu = 01). The last three digit is the unique agency number for that island (Honolulu City & County = 001).

4. EMS Unit Call Sign (EMS Unit Number)

Name of Data Element:	EMS Unit Call Sign
Priority:	Mandatory
Definition:	The EMS unit number used to dispatch and communicate with the unit.
National Element:	Yes
NHTSA 2:	E02_12
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>EMSUnitCallSign</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 15

Content: This element consists of the unique number assigned by a local jurisdiction to each vehicle/unit in their fleet.

Discussion and Justification: It should be unique within an agency, and then unique within the State by combining it with the unique EMS Agency Number. Particularly valuable for local reporting, allows the generation of reports for a specific vehicle in a fleet. The unique unit number allows for future software product expansion for vehicle GPS, maintenance and maintenance systems.

Probabilistic linkage methodology is of great value when linking files that do not have numeric fields such as incident number in common. However, linkage is greatly facilitated by the presence of such a number in each of the files to be linked.

Business Rules: All records submitted must have a EMS Unit Call Sign entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: Not Nullable. A unique value must be provided to create a unique record ID within a database.

Submitted data will be verified for accuracy against the Hawaii Department of Health, Division of EMS Registry. The registry is established and maintained by the HDOHEMS. Individual EMS agencies' unit information is regulated by NEMSIS section D04_02 and is stored in the registry. EMS agencies will be responsible to revise and update their individual agency's NEMSIS demographic section D within the HDOHEMS Registry.

5. Type of Service Requested (Dispatch Type)

Name of Data Element:	Type of Service Requested			
Priority:	Mandatory			
Definition:	The type of service or category of service requested of the EMS service responding for this specific EMS incident.			
National Element:	Yes			
NHTSA 2:	E02_04			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfServiceRequested</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes			
Field Values:				
	30	911 Response (Scene)	35	Intercept
	40	Interfacility Transfer	45	Medical Transport
	50	Mutual Aid	55	Standby

Content: This is the type of service or category of service requested of the EMS agency responding for this specific EMS incident.

Discussion and Justification: Used to categorize the types of service, which are required, and allows planning of EMS resource allocation. Dispatch type is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources. Provides descriptive data on EMS call volume and service provided.

Business Rules: All records submitted must have a Dispatch Type entered. Records with missing or an invalid Dispatch Type will be rejected a by the system.

Technical Comments:

30 911 Response

The incident request either originated from a Public Safety Answering Point (PSAP) or a “silent alarm” but would be considered a 911 response (public notifies in station crew of MVA in front of station).

35 Intercept / EMS Rendezvous

The incident request at time of dispatch was to provide a support service to another agency and if the patient condition warranted to assist in the transport of the patient. This would be utilized for

911 Responses as well as non-911 request for a similar service. Examples of this would be an ALS chase vehicle that is simultaneously dispatched or requested later to meet up either at the scene or enroute with a BLS unit.

40 *Interfacility Transfer*

The incident request is a transfer of a patient from one facility to another facility. . Examples include; a scheduled transfer of a patient from one hospital to another or emergent transfer of patient from one facility to another. This code should not be used for transports of the patient from their residence or extended care facility, which are coded separately.

45 *Medical Transport*

The incident request is a transfer of a patient from their residence or extended care facility to a physician, clinic, rehabilitation or other medical center.

50 *Mutual Aid*

The incident request is to lend assistance across jurisdictional boundaries when required; either by an emergency that exceeds local resources or a disaster. Awaiting further definition from NEMSIS.

55 *Standby*

The incident request is for a non-emergent response or for a response not covered in other descriptions. The origin of the dispatch does not dictate type, so PSAP dispatch for a non-emergent sporting standby would be a Support Services type. Other examples would be for a standby at a sporting event, community service for disabled individuals, and so on.

6. Primary Role of Unit

Name of Data Element:	Primary Role of the Unit			
Priority:	Mandatory			
Definition:	The primary role of the EMS service, which was requested for this specific EMS incident.			
National Element:	Yes			
NHTSA 2:	E02_05			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PrimaryRoleOfTheUnit</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes			
Field Values:				
	60	Non-Transport	65	Rescue
	70	Supervisor	75	Transport

Content: This is a list of the general categories that should match the primary role of this vehicle during this incident.

Discussion and Justification: The primary role of the EMS service, which was requested for this specific EMS incident. Assists in differentiating the roles of several vehicles that respond to the same incident. A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted by the role of the responder. Provides descriptive data on EMS call volume and service provided

Business Rules: All records submitted must have a Primary Role entered. Records with Records with missing or an invalid Primary Role of the Unit will be rejected a by the system.

Technical Comments:

Transport

Refers to direct response to the scene and the role of the unit was for transporting the patient. Does not matter if the incident disposition or outcome did not involve a transport, just that the unit's role was to transport a patient.

Non-Transport

Refers to direct response to the scene or rendezvous where primary care is taken over, but transport is by another EMS entity. Does not matter what the incident disposition or outcome

was.

Supervisor/Assist unit

Refers to direct response to the scene by the unit as a supervisor or provide other assistance, but did not assume primary care.

Rescue

Refers to direct response to the scene by the unit to provide rescue services, but did not assume primary care.

7. Incident / Patient Disposition

Name of Data Element:	Incident / Patient Disposition		
Priority:	Mandatory		
Definition:	Type of disposition treatment and/or transport of the patient.		
National Element:	Yes		
NHTSA 2:	E20_10		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>IncidentPatientDisposition</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes		
Field Values:			
4815	Cancelled	4820	Dead at Scene
4825	No Patient Found	4830	No Treatment Required
4835	Patient Refused Care	4840	Treated and Released
4845	Treated, Transferred Care	4850	Treated, Transported by EMS
4855	Treated, Transported by Law Enforcement	4860	Treated, Transported by Private Vehicle

Content: The final disposition of the EMS responses. Type of disposition of treatment and/or transport of the patient

Discussion and Justification: Allows reports to be generated according to the final disposition of EMS responses. This will provide information about the reasons for which EMS is notified, correlated with the ultimate incident disposition. For instance, it will be of value to know that in certain regions, EMS is frequently activated to see patients who require no treatment or transport. Reports generated from this data element may be of use in coordinating the dispatch and responder functions as well.

Business Rules: All records submitted must have an Incident/Patient Disposition entered. Records with missing or an invalid entry will be rejected by the system. This field is important in that it dictates further required fields based on the selections.

Technical Comments:

Treated and transported by EMS

This code means that the EMS responder providing the data record treated and transported the

patient. Transport may be to any valid destination, as defined for the destination data element. If the EMS responder transports a patient to a rendezvous point with another EMS responder (for instance, a ground crew rendezvous with a helicopter based agency), this is the correct code for this data element.

Treated, transferred care

This code means that the EMS responder provided treatment at the scene but the patient was transferred into the care of another service. The EMS responder did not provide transport in this instance. For example, if a BLS provider is at a scene and treats a patient, but a separate ALS responder arrives and takes over, the BLS record would indicate this code. If an EMS responder treats a patient who is then transported by a separate police or fire vehicle, this is the correct code for the EMS responder record.

Cancelled

This code means that the EMS response was cancelled enroute or on scene.

Patient refused care, Against Medical Advice (AMA)

Patient was at scene and refused care, whether injured or not. If the EMS responder knows that there is an injury, but the patient refuses care and is transported by friends or acquaintances, this is still the correct code for this data element

Treated, transported by private vehicle

This code means that the EMS responder provided treatment, but the patient was transported to his or her destination by a private vehicle. This includes instances in which the patient transports himself via private automobile, if the EMS responder understands that the patient is going to seek further medical care, such as at a private doctor's office or the local emergency department.

Treated and released

This code means that the EMS responder provided treatment, and the patient required no further emergency care. This is distinct from the instance in which the patient is known to be in need of further care, but is transported by him self or others to the facility providing further care

No treatment required

This code means that the EMS responder evaluated the patient, and no treatment was required. If the patient refused evaluation, or if the EMS responder did not evaluate a specific patient, this is not the correct code for this data element.

Dead at scene

This code means that the patient was pronounced dead at the scene, whether or not treatment was undertaken. If a patient is given CPR at the scene and transported to the hospital while undergoing CPR, then this is not the correct code. If a patient is given CPR and is then pronounced dead at the scene, this is the correct code.

No patient found

This code is used if a unit arrives on scene, but the responder can find no patient or there is no

patient contact.

Treated, Transported by Law Enforcement

This code means that the EMS responder provided treatment, but the patient was transported to his or her destination by a law enforcement vehicle.

8. Patient's First Name

Name of Data Element:	Patient's First Name		
Priority:	Desirable		
Definition:	Patient's First (given) Name.		
National Element:	No		
NHTSA 2:	E06_02		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>FirstName</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: No Minimum Constraint: 1 Maximum Constraint: 20		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Relevant characters

Content: If patient contact is established enter the patient's first name if known. Local policy should dictate how Last Name and First Name should be created if unknown.

Discussion and Justification: Desirable because of its value in probabilistic linkage, both as a linking variable as well as a confirmatory variable to determine appropriate linkage. Allows a patient's information to be stored and retrieved by first name. Key component of an EMS Medical Record. Provides contact information for multiple purposes including follow-up, billing, bioterrorism syndromic surveillance, etc.

It is recognized that this data element requires careful protection from misuse, but it is more appropriate to regulate appropriate use of this field rather than to prevent its collection.

Business Rules: If the patient's first name is unable to be obtained or the call does not involve a patient contact then one of the above field value codes should be entered.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

9. Patient's Last Name

Name of Data Element:	Patient's Last Name			
Priority:	Desirable			
Definition:	Patient's Last (family) Name.			
National Element:	No			
NHTSA 2:	E06_01			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>LastName</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 20			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant characters

Content: If patient contact is established enter the patient's first name if known. Local policy should dictate how Last Name and First Name should be created if unknown.

Discussion and Justification: Essential because of its value in probabilistic linkage, both as a linking variable as well as a confirmatory variable to determine appropriate linkage. Allows a patient's information to be stored and retrieved by last name. Key component of an EMS Medical Record. Provides contact information for multiple purposes including follow-up, billing, bioterrorism syndromic surveillance, etc.

It is recognized that this data element requires careful protection from misuse, but it is more appropriate to regulate appropriate use of this field rather than to prevent its collection.

Business Rules: If the patient's last name is unable to be obtained or the call does not involve a patient contact then one of the above field value codes should be entered.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

10. Date of Birth

Name of Data Element:	Date of Birth
Priority:	Essential
Definition:	Patient's date of birth.
National Element:	Yes
NHTSA 2:	E06_16
XML:	XSD Data Type: <i>xs:date</i> XSD Domain (Simple Type): <i>DateOfBirth</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: 1,890 Maximum Constraint: 2,030

Content: Format permits sorting across multiple years, and is recommended for data export purposes. Century digits are mandatory.

Discussion and Justification: Extremely valuable for probabilistic linkage and calculation of accurate age information. Provides much more discriminatory power in probabilistic linkage than the numeric age. Key component of an EMS Medical Record. Provides important information which will allow EMS data to be sorted, grouped and evaluated by age demographics.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Date of Birth value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

11. Age

Name of Data Element:	Age
Priority:	Essential
Definition:	Patient's age or best approximation
National Element:	Yes
NHTSA 2:	E06_14
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>Age</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: 1 Maximum Constraint: 120

Content: Patient's age either calculated from date of birth or best approximation. Requires additional information of Age Units

Discussion and Justification: Valuable in the absence of a date of birth. Age information permits linkage to other files, and is useful for epidemiologists interested in patterns of emergency medical problems in different age groups.

Technical Comments: Age information permits linkage to other files and is useful for epidemiologists interested in patterns of emergency medical problem in different age groups.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Patient's Age submitted. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

12. Age Units

Name of Data Element:	Age Units			
Priority:	Essential			
Definition:	The units which the age is documented in as listed below.			
National Element:	Yes			
NHTSA 2:	E06_15			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>AgeUnits</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	700	Hours
	705	Days	710	Months
	715	Years		

Content: The units which the age is documented in hours, days, months or years. Requires additional information of Age.

Discussion and Justification: Valuable in the absence of a date of birth. Age information permits linkage to other files, and is useful for epidemiologists interested in patterns of emergency medical problems in different age groups. Allows data to be sorted based on age. Allows data to describe the age of the EMS patient population.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Age Unit submitted.

Technical Comments: Days are to be used for 1 to 30 days from birth. Months are to be used for 1 to 12 months from birth. Years are to be used for anyone over 12 months from birth.

13. Gender

Name of Data Element:	Gender		
Priority:	Essential		
Definition:	Gender of patient.		
National Element:	Yes		
NHTSA 2:	E06_11		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>Gender</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	650	Male
655	Female		

Content: The gender or sex of the patient.

Discussion and Justification: Valuable for linkage to other files, and permits reporting of epidemiological information by gender. Allows data to be sorted based on gender. Allows data to describe the gender of the EMS patient population.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Patient's Gender entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments:

-10 *Not Known*

This code should be used only when the sex of the patient cannot be accurately determined after patient contact. If no patient was encountered then the appropriate number of spaces should be submitted.

14. Patient Street Address

Name of Data Element:	Patient Street Address			
Priority:	Desirable			
Definition:	Patient's street address.			
National Element:	No			
NHTSA 2:	E06_04			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>StreetAddress</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 30			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant values

Content: The patient's legal residence's street address should be entered. Local jurisdiction may allow temporary or billing address to be entered.

Discussion and Justification: Essential because of its value in probabilistic linkage, both as a linking variable as well as a confirmatory variable to determine appropriate linkage. It is recognized that this data element requires careful protection from misuse, but it is more appropriate to regulate appropriate use of this field rather than to prevent its collection.

Business Rules: If Patient's Street Address is not reported, this field should be submitted with one of the appropriate field values listed.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

15. Patient's City of Residence

Name of Data Element:	Patient's City of Residence			
Priority:	Desirable			
Definition:	Patient's residence postal city (if applicable)			
National Element:	No			
NHTSA 2:	E06_05			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>City</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 30			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant values

Content: The patient's city of legal residence. Local jurisdiction may allow temporary or other billing city to be entered.

Discussion and Justification: Essential because of its value in probabilistic linkage, both as a linking variable as well as a confirmatory variable to determine appropriate linkage. It is recognized that this data element requires careful protection from misuse, but it is more appropriate to regulate appropriate use of this field rather than to prevent its collection.

Business Rules: If Patient's City of Residence is not reported, this field should be submitted with one of the appropriate field values listed.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

16. Patient's State of Residence

Name of Data Element:	Patient's State of Residence		
Priority:	Desirable		
Definition:	State of patient's residence (if applicable)		
National Element:	No		
NHTSA 2:	E06_07		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>State</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 3		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Relevant values

Content: The patient's state of legal residence. Local jurisdiction may allow temporary or other billing state to be entered.

Discussion and Justification: Useful for determining the political entity responsible for potential public health interventions, payment for services, etc.

Business Rules: If Patient's State of Residence is not reported, this field should be submitted with one of the appropriate field values listed.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

17. Zip Code of Patient's Residence

Name of Data Element:	Zip Code of Patient's Residence			
Priority:	Essential			
Definition:	Zip Code of patient's residence			
National Element:	Yes			
NHTSA 2:	E06_08			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>Zip</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 10			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant values

Content: The patient's zip code of legal residence. Local jurisdiction may allow temporary or other billing zip code to be entered.

Discussion and Justification: Useful for determining the political entity responsible for potential public health interventions, payment for services, etc. From Zip Code, county could be derived in software.

Business Rules: If Patient's Zip Code is not reported, this field should be submitted with one of the appropriate field values listed.

Technical Comments: Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

-10 *Not Known*

This code should only be used if submitting the complete address elements and the patient's zip code is unknown. Do not send this code if no patient encountered or not submitting above listed data elements. In such cases submit the appropriate number of spaces.

18. Social Security Number

Name of Data Element:	Social Security Number		
Priority:	Desirable		
Definition:	Patient Social Security number		
National Element:	No		
NHTSA 2:	E06_10		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>SocialSecurityNumber</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 9		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Relevant values

Content: The patient's 9-digit social security number

Discussion and Justification: Will provide valuable linkage data element. However, this field is very difficult for field responders to obtain.

Business Rules: If the Patient's Social Security Number is not reported this field should be submitted with one of the appropriate field values listed.

Technical Comments: May be particularly valuable in jurisdictions where driver licenses or other forms of identification have bar coded Social Security numbers. Submission of this data requires HIPAA compliance awareness on part of the agency and the software.

-10 *Not Known*

This code should only be used if submitting patient demographic information and the patient's social security number is unknown. Do not send this code if no patient encountered or not submitting above listed data elements. In such cases submit the appropriate number of spaces.

19. Race

Name of Data Element:	Race		
Priority:	Essential		
Definition:	Patient's ethnic origin.		
National Element:	Yes		
NHTSA 2:	E06_12,		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>Race</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	660	American Indian or Alaska native
665	Asian	670	Black or African American
675	Native Hawaiian or Other Pacific Islander	680	White
685	Other Race		

Content: The provider's impression of the patient's ethnic origin.

Discussion and Justification: The patient's race as defined by the US Office of Management and Budget. Useful for epidemiological studies, and of importance to data systems in order to access certain types of federal or state funds which are directed to specific ethnic groups.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Race submitted. Records with missing or an invalid entry will be rejected by the system. If the data element is not reported this field should be submitted with one of the appropriate field values listed.

Technical Comments:

685 *Other*

This code should be used when race can be determined but is not one of the races specified in the

list.

-10 *Not Known*

This code should be used when patient's race cannot be accurately determined due to decomposition, burns, etc. It is not to be used if no patient contact was made.

20. Ethnicity

Name of Data Element:	Ethnicity		
Priority:	Essential		
Definition:	The patient's ethnicity.		
National Element:	Yes		
NHTSA 2:	E06_13		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>Ethnicity</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	690	Hispanic or Latino
695	Not Hispanic or Latino		

Content: The provider's impression of the patient's ethnicity.

Discussion and Justification: The patient's ethnicity as defined by the US Office of Management and Budget. Useful for epidemiological studies, and of importance to data systems in order to access certain types of Federal or state funds which are directed to specific ethnic groups.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Ethnicity submitted. Records with missing or an invalid entry will be rejected by the system. If the data element is not reported this field should be submitted with one of the appropriate field values listed.

Technical Comments:

-10 *Not Known*

This code should be used when patient's ethnicity cannot be accurately determined due to

21. Crewmember Certification Type

Name of Data Element:	Crewmember Certification Type		
Priority:	Mandatory		
Definition:	Personnel certification / license level of crew member		
National Element:	No		
NHTSA 2:	E04_03		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CrewMemberLevel</i> Multiple Entry Configuration: Yes Accepts Null Values: No Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	635	Student
640	Other Healthcare Provider	645	Other Non-Healthcare Professional
6090	EMT-Basic	6100	EMT-Intermediate
6110	EMT-Paramedic/MICT	6111	Nurse
6112	Physician	6120	First Responder
6351	EMT-Student	6352	MICT-Student

Content: This crewmember's highest, listed held certification/license level.

Discussion and Justification: This data element permits assessing the highest level of care, which was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service, which was provided. For instance, any level of crewmember certification may be present with any type of vehicle. Reports of value may include descriptions of therapies according to level of provider, adherence to protocols which are written differently for various levels of provider, etc.

Business Rules: All records submitted must have at least one Crewmember Certification Type *position entered*. Records with missing or an invalid Crewmember Certification Type will be rejected by the system. **Only the highest held Crewmember Certification Type** from the above data item list can be submitted. If the selected Crewmember Certification Type is not listed as 'Other', then a Hawaii Department of Health, Division of EMS or other Hawaii State regulatory agency (RN/Physician) certification number is required for the corresponding

Certification Number data element (refer to that data element's business rule section).

Technical Comments: If the selected Crewmember Certification Type is not listed as 'Other', then a Hawaii Department of Health, Division of EMS or other Hawaii State regulatory agency (RN/Physician) certification number is required for the corresponding Certification Number data element (refer to that data element's business rule section). This element captures the highest certification of the responder as recognized by the Hawaii Department of Health, Division of EMS Certifications held but not listed must be marked as 'Other'.

A corresponding Crewmember Certification Type, Number, and Role should be submitted for each crewmember on the reported incident

22. Crewmember Certification Number

Name of Data Element:	Crewmember Certification Number		
Priority:	Essential		
Definition:	Personnel certification / license number for first crewmember.		
National Element:	No		
NHTSA 2:	E04_01		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>CrewMemberID</i> Multiple Entry Configuration: Yes Accepts Null Values: No Required in XSD: Yes Minimum Constraint = 2 Maximum Constraint = 15		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Relevant value

Content: A crewmember's certification/license number, corresponding to the entered certification level.

Discussion and Justification: Necessary to identify specific crewmembers participating in an EMS response. Useful for constructing experience reports, monitoring care rendered by specific providers, planning educational programs.

Business Rules: All records submitted must have at least one Crewmember Certification Number or field value entered. Records with missing or an invalid Crewmember Certification Type will be rejected by the system. This element is the unique, properly formatted certification/license number associated with the corresponding certification level.

Technical Comments: Submission of a Hawaii Department of Health, Division of EMS or other Hawaii State regulatory agency (RN/Physician) certification number is required for the corresponding Certification Number data element. If the corresponding Crewmember Certification Type is listed as 'Other' then no certification number should be supplied. Failure to supply a certification number when required will flag the record as non-compliant. If the crewmember position and associated crewmember certification type is not entered then the field must be left blank and filled with the appropriate number of spaces. This element is the unique certification number associated with the highest certification of the responder as assigned by the

Hawaii Department of Health, Division of EMS or Hawaii State regulatory agency.

Submitted data will be verified for accuracy against the Hawaii Department of Health, Division of EMS Registry. The registry is established and maintained by the HDOHEMS. Individual EMS agencies' personnel information is regulated by NEMSIS section D07 and is stored in the registry. EMS agencies will be responsible to revise and update their individual agency's NEMSIS demographic section D within the HDOHEMS Registry.

A corresponding Crewmember Certification Type, Number, and Role should be submitted for each crewmember on the reported incident

23. Crewmember Role

Name of Data Element:	Crewmember Role		
Priority:	Mandatory		
Definition:	Crewmember role		
National Element:	No		
NHTSA 2:	E04_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CrewMemberRole</i> Multiple Entry Configuration: Yes Accepts Null Values: No Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	580	Driver
585	Primary Patient Caregiver	590	Secondary Patient Caregiver
595	Third Patient Caregiver	600	Other

Content: A crewmember's role on the reported incident.

Discussion and Justification: Identifies the primary care provider and owner of the PCR in the WebCUR™ system.

Business Rules: All records submitted must have at minimum a Crewmember Role of Primary Patient Care Giver value entered. Additional crewmember added should be assigned their respective role for the reported incident. Records with missing or an invalid Crewmember Role will be rejected by the system.

Technical Comments: The WebCUR™ and EMStat™ systems use this element to define security and ownership of the PCR entered. The person responsible for completion of the patient care report is the person who should be marked as the Crew Chief.

A corresponding Crewmember Certification Type, Number, and Role should be submitted for each crewmember on the reported incident

Driver

Is defined as the driver during the time of patient transport or during the response if there was not

transport required.

Primary Patient Care Giver

Is defined as the individual responsible for the patient care during the transport of the patient, or if no transport, the individual responsible for the assessment and treatment of the patient on scene.

Secondary Patient Care Giver

Is defined as the individual assisting the Primary Patient Care Giver.

Third Patient Care Giver

Is defined as the individual assisting in the Primary and Secondary Patient Care Givers.

24. PSAP Call Date/Time

Name of Data Element:	PSAP Call Date/Time (Time Incident Reported)
Priority:	Mandatory
Definition:	The date/time dispatch was notified by the 911 call taker (if a separate entity).
National Element:	Yes
NHTSA 2:	E05_02
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: Time and date call is first received by Public Safety Answering Point (PSAP) or other designated entity

Discussion and Justification: Provides the start point of the EMS response, and allows managers to assess the adequacy of EMS response, identify delays, and plan resources in a manner to provide expeditious EMS response.

Business Rules: All records submitted must have a PSAP Call Date/Time of Call entered. Records with missing or an invalid entry will be rejected by the system. .

Technical Comments: If PSAP Call Date/Time is not collected by the EMS agency, this field may be filled with the same time/date as Dispatched. Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

25. Unit Notified by Dispatch Date/Time

Name of Data Element:	Unit Notified by Dispatch Date/Time (Dispatched)
Priority:	Mandatory
Definition:	The date the responding unit was notified by dispatch.
National Element:	Yes
NHTSA 2:	E05_04
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes

Content: The date and time the unit was notified by dispatch to respond.

Discussion and Justification: Permits measurement of the actual responder response or delays. Assists planning of communication resources for individual responders, and allows identification of system delays following the dispatch component of the EMS system.

Business Rules: All records submitted must have a Dispatched date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.OZ.

26. Unit Enroute Date/Time

Name of Data Element:	Unit Enroute Date/Time (Enroute/Responding)
Priority:	Essential
Definition:	The date/time the unit responded; that is, the time the vehicle started moving
National Element:	Yes
NHTSA 2:	E05_05
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>Date Time</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The date/time that the response unit begins physical motion.

Discussion and Justification: Permits measurement of delay between notification of EMS responder and the actual mobilization of the response unit. This data element refers to physical motion of the responding EMS vehicle, and does not refer to individual EMTs who may respond directly to the scene when notified by individual radio or telephone. For example, if an EMS incident is reported, one EMT may be at home or at work and be responsible to go to the station, which holds the ambulance. Another EMT may be notified and may drive in a private vehicle directly to the scene. The data element entered should be the time that the ambulance actually leaves the station, not the time at which the other EMT drives to the scene in the private vehicle.

Business Rules: All records submitted must have a Unit Enroute date/time entered. Records with missing or an invalid entry will be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.OZ.

27. Unit Arrived on Scene Date/Time (Arrive Scene)

Name of Data Element:	Unit Arrived on Scene Date/Time (Arrive Scene)
Priority:	Essential
Definition:	Time EMS unit stops physical motion at scene.
National Element:	Yes
NHTSA 2:	E05_06
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The time/date the EMS unit stops physical motion at scene, last place that the unit or vehicle stops prior to assessing the patient.

Discussion and Justification: Permits measurement of the time required for the response vehicle to go from the station to the scene. This data element refers to the physical motion of the responding EMS vehicle. If an individual EMT arrives at the scene by private vehicle that is NOT the value to be entered in this field. Otherwise, system delays in having an equipped vehicle at the scene will fail to be identified.

Business Rules: All records submitted must have a Unit Arrived on Scene date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

28. Arrived at Patient Date/Time (Arrive Patient)

Name of Data Element:	Arrived at Patient Date/Time (Arrive Patient)
Priority:	Essential
Definition:	The date/time the responding unit arrived at the patient's side
National Element:	Yes
NHTSA 2:	E05_07
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The date/time response personnel establish direct contact with patient.

Discussion and Justification: Desirable in certain situations in which there may be a significant delay between the time at which a response unit arrives at the scene and the time at which the personnel can access the patient. For example, if the EMTs are prevented because of fire or adverse conditions from approaching the patient, this time will be useful. Search and rescue operations will also note delays between arrival at the overall scene and the actual patient contact.

Business Rules: All records submitted must have a Arrived at Patient date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

29. Unit Left Scene Date/Time (Depart Scene)

Name of Data Element:	Unit Left Scene Date/Time (Depart Scene)
Priority:	Essential
Definition:	Time when the response unit begins physical motion from scene.
National Element:	Yes
NHTSA 2:	E05_09
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The date/time when the response unit begins physical motion from scene.

Discussion and Justification: Permits calculation of scene time by subtracting the time of arrival at scene from the time unit left scene.

Business Rules: All records submitted must have a Unit Left Scene date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

30. Time Arrival at Facility/Destination Date/Time (Arrive Destination)

Name of Data Element:	Time Arrival at Facility/Destination Date/Time (Arrive Dest.)
Priority:	Essential
Definition:	Time when patient arrives at destination or transfer point.
National Element:	Yes
NHTSA 2:	E05_10
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The date/time when patient arrives at destination or transfer point.

Discussion and Justification: Permits calculation of the time required to go from the scene to the destination of the response unit. If the patient is transferred from one EMS responder vehicle to another, then the time of arrival at destination for the first responder is the time of arrival or patient contact (or both) for the second agency.

Business Rules: All records submitted must have a Time Arrival at Facility date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

31. Unit Back In Service Date/Time (Available)

Name of Data Element:	Unit Back In Service Date/Time (Available)
Priority:	Mandatory
Definition:	Time response unit back in service and available for response.
National Element:	Yes
NHTSA 2:	E05_11
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes

Content: The date/time the unit back was back in service and available for response, finished with call, but not necessarily back in home location.

Discussion and Justification: Allows planning of EMS resources. Permits assessment of the delay between arrival at destination and availability of the response unit.

Business Rules: All records submitted must have a Unit Back in Service date/time entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

32. Unit Back at Home Location

Name of Data Element:	Unit Back at Home Location
Priority:	Mandatory
Definition:	The date/time the responding unit was back in their service area. In agencies who utilized Agency Status Management, home location means the service area as assigned through the agency status management protocol.
National Element:	Yes
NHTSA 2:	E05_13
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>Date Time</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: The date/time the responding unit was back in their service area. In agencies who utilized Agency Status Management, home location means the service area as assigned through the agency status management protocol.

Discussion and Justification: Allows planning of EMS resources. Allows data to be sorted based on EMS agency time. Allows data to describe EMS agency time intervals.

Business Rules: All records submitted must have a Unit Back at Home Location date/time entered. Records with missing or an invalid entry may be rejected and marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

33. Incident or Onset Date / Time

Name of Data Element:	Incident or Onset Date /Time
Priority:	Desired
Definition:	Estimated date / time of injury or onset of medical symptoms either by EMS personnel or reported to EMS personnel by patient or bystander.
National Element:	No
NHTSA 2:	E05_01
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: No

Content: The patient or provider's estimated date/time of injury or symptom onset.

Discussion and Justification: Necessary to measure impact of injury time on treatment provided by EMS staff as well as receiving trauma care facility.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules or not submitted.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

34. Type of Dispatch Delay

Name of Data Element:	Type of Dispatch Delay		
Priority:	Essential		
Definition:	The dispatch delays, if any, associated with the dispatch of the EMS unit to the patient encounter.		
National Element:	Yes		
NHTSA 2:	E02_06		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfDispatchDelay</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	80	Caller (Uncooperative)
85	High Call Volume	90	Language Barrier
95	Location (Inability to obtain)	100	No Units Available
105	None	110	Other
115	Scene Safety (Not Secure for EMS)	120	Technical Failure (Computer, Phone, etc.)

Content: The dispatch delays, if any, associated with the dispatch of the EMS unit to the patient encounter.

Discussion and Justification: Allows data to describe the status of Dispatch issues.

Business Rules: All records submitted must have a Type of Dispatch Delay entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it was unnecessary to document a delay if none occurred.

35. Type of Response Delay

Name of Data Element:	Type of Response Delay		
Priority:	Essential		
Definition:	The response delays, if any, of the unit associated with the patient encounter		
National Element:	Yes		
NHTSA 2:	E02_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfResponseDelay</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	125	Crowd
130	Directions	135	Distance
140	Diversions	145	Hazmat
150	None	155	Other
160	Safety	165	Staff Delay
170	Traffic	175	Vehicle Crash
180	Vehicle Failure	185	Weather

Content: The response delays, if any, of the unit associated with the patient encounter

Discussion and Justification: Allows data describing Vehicle Failures and Vehicle Crashes, Allows data to describe the status of Response issues

Business Rules: All records submitted must have a Type of Response Delay entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it was unnecessary to document a delay if none occurred.

36. Type of Scene Delay

Name of Data Element:	Type of Scene Delay		
Priority:	Essential		
Definition:	The scene delays, if any, of the unit associated with the patient encounter		
National Element:	Yes		
NHTSA 2:	E02_08		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfSceneDelay</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	190	Crowd
195	Directions	200	Distance
205	Diversions	210	Extrication > 20 Min.
215	Hazmat	220	Language Barrier
225	None	230	Other
235	Safety	240	Staff Delay
245	Traffic	250	Vehicle Crash
255	Vehicle Failure	260	Weather

Content: The scene delays, if any, of the unit associated with the patient encounter

Discussion and Justification: Allows data describe Vehicle Failures and Vehicle Crashes. Allows data to describe the status of Scene issues

Business Rules: All records submitted must have a Type of Scene Delay entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it was unnecessary to document a delay if none occurred.

37. Type of Transport Delay

Name of Data Element:	Type of Transport Delay		
Priority:	Essential		
Definition:	The transport delays, if any, of the unit associated with the patient encounter		
National Element:	Yes		
NHTSA 2:	E02_09		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfTransportDelay</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	165	Crowd
270	Directions	275	Distance
280	Diversions	285	Hazmat
290	None	295	Other
300	Safety	305	Staff Delay
310	Traffic	315	Vehicle Crash
320	Vehicle Failure	325	Weather

Content: The transport delays, if any, of the unit associated with the patient encounter.

Discussion and Justification: Allows data describing Vehicle Failures and Vehicle Crashes. Allows data to describe the status of Transport issues.

Business Rules: All records submitted must have a Type of Transport Delay entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it was unnecessary to document a delay if none occurred.

38. Type of Turn-around Delay

Name of Data Element:	Type of Turn-around Delay		
Priority:	Essential		
Definition:	The turn-around delays, if any, associated with the EMS unit associated with the patient encounter		
National Element:	Yes		
NHTSA 2:	E02_10		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfTurnAroundDelay</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	165	Crowd
270	Directions	275	Distance
280	Diversions	285	Hazmat
290	None	295	Other
300	Safety	305	Staff Delay
310	Traffic	315	Vehicle Crash
320	Vehicle Failure	325	Weather

Content: The turn-around delays, if any, associated with the EMS unit associated with the patient encounter.

Discussion and Justification: Allows data describing ED overcrowding and Vehicle Failure. Allows data to describe the status of call time issues.

Business Rules: All records submitted must have a Type of Turn-around Delay entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it was unnecessary to document a delay if none occurred

39. Response Mode to Scene (Lights or Sirens to Scene)

Name of Data Element:	Response Mode to Scene (Lights or Sirens to Scene)		
Priority:	Essential		
Definition:	The use of lights or sirens enroute to scene.		
National Element:	Yes		
NHTSA 2:	E02_20		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ResponseModeToScene</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
380	Initial Lights and Sirens, Downgraded	385	Initial No Lights or Sirens, Upgraded
390	No Lights and Sirens	395	Lights and Sirens

Content: Indication whether or not lights and/or sirens were used on the vehicle on the way to the scene.

Discussion and Justification: To allow system administrators to know the frequency with which responder vehicles are using lights and sirens. Such usage carries explicit risks and EMS managers are responsible to assure that lights and sirens are used appropriately.

Business Rules: All records submitted must have a Response Mode to Scene entered. Records with missing or an invalid entry will be rejected and marked as non-compliant by the system.

40. Transport Mode From Scene (Lights or sirens used from scene)

Name of Data Element:	Transport Mode From Scene (Lights or sirens from scene)		
Priority:	Essential		
Definition:	Use of lights and/or sirens from the scene.		
National Element:	Yes		
NHTSA 2:	E20_14		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TransportModeFromScene</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
4955	Initial Lights and Sirens, Downgraded	4960	Initial No Lights or Sirens, Upgraded
4970	No Lights and Sirens	4965	Lights and Sirens

Content: Indication whether or not lights and/or sirens were used on the vehicle while leaving scene.

Discussion and Justification: Allow system administrators to know the frequency with which responder vehicles are using lights and sirens. Such usage carries explicit risks and EMS managers are responsible to assure that lights and sirens are used appropriately.

Business Rules: All records submitted must have a Transport Mode to Scene entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element should be submitted with one of the above listed NEMSIS Section E00 (Common Null) field values.

Technical Comments:

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it is unnecessary to document transport mode if the incident and the incident disposition demonstrates that the incident did not warrant a transport mode.

41. Incident Address

Name of Data Element:	Incident Address			
Priority:	Mandatory			
Definition:	The street address where the unit responded or patient was found.			
National Element:	No			
NHTSA 2:	E08_11			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>StreetAddress</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 50 (30)			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant value

Content: The actual or best approximation of the street address where the patient was found, or, if no patient, the address to which the unit responded.

Discussion and Justification: Provides street address to better pinpoint incidents and allow mapping. Important for grouping or comparing data by Scene location that also allows data to be sorted by geographic response areas in many agencies. Provides information on overall response patterns and times for agency configuration and evaluation. Field may be used for local city reports, permitting local understanding of the impact of EMS.

Business Rules: All records submitted must have an Incident Address entered. The address can be entered or submitted with one of the above listed NEMSIS Section E00 (Common Null) field values. Records with a missing or an invalid entry will be rejected by the system.

Technical Comment: This is to be used to allow the HDOHEMS to interface with state geocoding systems to build location based on the street address and zip code. The maximum constraint has been increased from NEMSIS standard to allow more accurate and complete address collection.

42. Incident City FIPS

Name of Data Element:	Incident City FIPS			
Priority:	Mandatory			
Definition:	City or township (if applicable) where patient was found or to which unit responded (or best approximation).			
National Element:	No, required for Hawaii			
NHTSA 2:	E08_12			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>City</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 8			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant value
Refer to Appendix C				
(Hawaii City FIPS List)				

Content: The civil district's FIPS code that the unit was dispatched to or encountered the incident in.

Discussion and Justification: Provides city location of incident, which can be used to determine the appropriate level of EMS resources for specific areas. In addition, this field may facilitate probabilistic linkage to crash reports from the same city, or to hospitals within the same city. Field may be used for local city reports, permitting local understanding of the impact of EMS.

Business Rules: All records submitted must have an Incident City FIPS entered. The FIPS number must be from the approved FIPS list as published by the Hawaii Department of Health, Division of EMS or with one of the above listed NEMSIS Section E00 (Common Null) field values. Records with a missing or an invalid entry will be rejected by the system.

Technical Comment: Stored as a five (5)-digit field, coded using the FIPS system, wherein each city is encoded as a five (5)-digit number place code. City FIPS codes are only unique within a state. Refer to the approved Hawaii City FIPS list in the appendix.

43. Incident County FIPS

Name of Data Element:	Incident County FIPS			
Priority:	Mandatory			
Definition:	County or Parish where patient was found or to which unit responded (or best approximation).			
National Element:	Yes,			
NHTSA 2:	E08_13			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>County</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 8			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant value
Refer to Appendix E				
(Hawaii County FIPS List)				

Content: The county or parish's FIPS code that the unit was dispatched to or encountered the incident in.

Discussion and Justification: Provides county location of incident, which can be used to determine the appropriate level of EMS resources for specific areas. In addition, this field may facilitate probabilistic linkage to crash reports from the same city, or to hospitals within the same city. Field may be used for local city reports, permitting local understanding of the impact of EMS.

Business Rules: All records submitted must have an Incident County FIPS entered. The FIPS number must be from the approved FIPS list as published by the Hawaii Department of Health, Division of EMS or with one of the above listed NEMSIS Section E00 (Common Null) field values. Records with a missing or an invalid entry will be rejected by the system.

Technical Comment: Stored as an five (5)-digit FIPS code (combining the state and county code) to take into account agencies may serve more than one state and counties are often named the same from state to state. Refer to the approved Hawaii County FIPS list in the appendix.

44. Incident Zip Code

Name of Data Element:	Incident Zip Code		
Priority:	Mandatory		
Definition:	Zip code of incident.		
National Element:	Yes		
NHTSA 2:	E08_15		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>Zip</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 10		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		The appropriate digits for Zip Code

Content: The ZIP code of the dispatched or actual incident location.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the geographic location of the EMS Incident. Allows data to describe geographic location of the EMS Incident. Zip codes cross county and civil districts thereby requiring the City/County FIPS code collection along with Zip Code for billing purposes.

Business Rules: All records submitted must have an Incident Zip Code entered. Records with missing or an invalid entry will be rejected by the system

Technical Comments: Only the United State Postal Service zip codes are accepted.

45. Incident GPS Location

Name of Data Element:	Incident GPS Location
Priority:	Desired
Definition:	The GPS coordinates of the incident
National Element:	No
NHTSA 2:	E08_10
XML:	XSD Data Type: <i>xs:decimal</i> XSD Domain (Simple Type): <i>GPSLocation</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: No XSD Attributes: Latitude and Longitude are each stored as a separate attribute

Content: The GPS coordinates associated with the scene.

Discussion and Justification: Provides precise coordinates of incidents and improves mapping. Important for grouping or comparing data by Scene location that also allows data to be sorted by geographic response areas in many agencies. Provides information on overall response patterns and times for agency configuration and evaluation. Field may be used for local city reports, permitting local understanding of the impact of EMS.

Business Rules: This field is not required for submission and only requested from agencies with the capability to provide GPS information. Records with an invalid entry will be marked as non-compliant by the system. If not reporting this information the entry should not be submitted in the XML file.

Technical Comment: This is to be used to allow the HDOHEMS to interface with state geocoding systems to build location based on the GPS coordinates. Must adhere to the NEMESIS GPS submission standards to be considered proper format.

46. Incident Type

Name of Data Element:	Incident Type			
Priority:	Critical			
Definition:	The primary type of the incident.			
National Element:	No			
NHTSA 2:	Not in NEMSIS			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>IncidentType</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes			
Field Values:				
	2	Trauma	7	Medical
	77	Other	-10	Unknown

Content: The primary type of incident that the EMS provider determined this event to be.

Discussion and Justification: This is a list of the general incident types to allow the EMS provider to categories the primary type of service. This is to be completed on all incidents and is based upon the information provided at dispatch or upon the EMS provider's assessment of what category the event fit in. Incident type is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources.

Business Rules: All records submitted must have an Incident Type entered, Records with missing or an invalid Incident Type will be rejected a by the system.

Technical Comments:*Medical*

Refers to direct response to the scene of a Medical Incident.

Trauma

Refers to direct response to the scene of a Trauma Incident.

Not Known

Is to be used if the provider did not arrive on scene and could not determine the type of incident from the dispatch information.

Not Available

Is to be used if the appropriate type is not available to be selected from the list.

47. Location Type

Name of Data Element:	Location Type		
Priority:	Mandatory		
Definition:	Type of location of incident		
National Element:	Yes, modified		
NHTSA 2:	E08_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>IncidentLocationType</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1135	Home/Residence
1140	Farm	1145	Mine or Quarry
1150	Industrial Place and Premise	1155	Place of Recreation or Sport
1160	Street or Highway	2	Traffic Way 55+ mph
3	Other Traffic Way	21	Off Road
18	School/University		Public Building
9	Bar/Restaurants	12	Office/Business
14	Hospital/Acute Care Facility	15	Clinic /Dr. Office
23	Mental Health Facility	24	Speciality Care Facility
16	Extended Care Facility	22	Correctional Facility
1185	Ocean	6	Waterway
1190	Other Location	7	Wilderness

Content: Location type data items are coded in terms of the (ICD-9) E849 place of occurrence codes. This location refers to the location where the injury occurred, not necessarily the origin of the transport.

Discussion and Justification: Location type of the incident is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources. Allows data to be sorted based on the Incident Location and Type. Allows data to describe the Incident Location and the distribution of EMS events.

Business Rules: All records submitted must have a Location Type entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: If responders do not arrive on scene they are to approximate the incident location based on dispatch information

****Note this list encompasses more than the NEMSIS list of location type. These exceptions allow for more defined coding of established or unique locations inherent to Hawaii that are not addressed in NEMSIS but important for state planning.**

48. Destination Transferred To Code (Receiving Agency)

Name of Data Element:	Destination Transferred To, Code (Receiving Agency)		
Priority:	Essential		
Definition:	Specific Health Care Facility or Prehospital Agency that received patient from EMS provider providing this record.		
National Element:	Yes		
NHTSA 2:	E20_02		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>DestinationTransferredToCode</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 5 (50)		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		The appropriate digits agency
<p>Refer to Appendix B { 5 digit Health Facility Number }</p> <p>Refer to Appendix A { 5 digit EMS Agency Number }</p>			

Content: This element consists of the unique 5-digit number as assigned by the Hawaii Department of Health, Division of EMS for approved health care facilities and EMS agencies.

Business Rules: Records submitted with an Incident Disposition involving EMS transport or care transferred must have a Destination Transferred To value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules. Records with missing or an invalid entry will be rejected by the system

Technical Comments: None.

-10 *Not Known*

This code should be used when the specific facility number or EMS agency number is not known.

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it is unnecessary to document destination transferred to if the incident and the incident disposition demonstrates that the incident did not warrant a transport mode.

49. Destination Zip Code

Name of Data Element:	Destination Zip Code		
Priority:	Essential		
Definition:	The destination zip code in which the patient was delivered or transferred to		
National Element:	Yes		
NHTSA 2:	E20_07		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>Zip</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 10		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		The appropriate digits for Zip Code

Content: The ZIP code of the incident location

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the destination location. Allows data to describe patient's geographic destination. Important for grouping or comparing data by Destination location and type which also allows data to be sorted by geographic areas in many agencies. Provides information on overall service area, patterns and times for agency configuration and evaluation.

Business Rules: All records must have a Destination Zip Code value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: Only the United State Postal Service zip codes are accepted.

50. Destination Type

Name of Data Element:	Destination Type		
Priority:	Essential		
Definition:	The type of destination the patient was delivered or transferred to.		
National Element:	Yes		
NHTSA 2:	E20_17		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>TypeOfDestination</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	7270	Home
7280	Hospital	7290	Medical Office/Clinic
7300	Morgue	7320	Nursing Home
7330	Other	7340	Other EMS Responder (air)
7350	Other EMS Responder (ground)	7360	Police/Jail

Content: The type of the destination the patient was delivered or transferred to.

Discussion and Justification: Allows reporting by destination facilities, and allows linking when a patient is transferred between EMS responder agencies. Not applicable would be selected when there is no patient.

It is anticipated that each region or state will codify its list of hospitals in an internally consistent manner, permitting reports by facility. For purposes of the uniform data set, the first 8 categories have been defined above. For purposes of export to a larger data set, such as a national data set, all hospital destinations would be collapsed down into a single code for Hospital.

This data element is very valuable for probabilistic linkage. For instance, when an EMS responder indicates a specific hospital identifier, this can greatly facilitate linkage to outpatient and inpatient facility records.

Business Rules: All records must have a Destination Type value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

51. Destination Determination

Name of Data Element:	Destination Determination		
Priority:	Essential		
Definition:	Reason a transport destination was selected.		
National Element:	Yes		
NHTSA 2:	E20_16		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ReasonForChoosingDestination</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	4990	Closest Facility
4995	Diversion	5000	Family Choice
5005	Insurance Status	5010	Lawn Enforcement Choice
5015	On-Line Medical Direction	5020	Other
5025	Patient Choice	5030	Patient's Physician Choice
5035	Protocol	5040	Specialty Resource Ctr.

Content: The reason used to determine the transfer location.

Discussion and Justification: Helps EMS managers to determine whether the choice of destination is appropriate. Items, which are defined as patient, physician, or family choice, are of interest to determine whether a trauma or referral system is functioning well, or is frequently overridden by non-medical issues.

Business Rules: All records must have a Destination Determination value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

52. CMS Service Level (Nature of Incident)

Name of Data Element:	CMS Service Level (Nature of Incident)		
Priority:	Mandatory		
Definition:	Type of care available/rendered by personnel regardless of level		
National Element:	Yes		
NHTSA 2:	E07_34		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CMSServiceLevel</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	990	BLS
995	BLS, Emergency	1000	ALS, Level 1
1005	ALS, Level 1 Emergency	1010	ALS, Level 2
1015	Paramedic Intercept	1020	Specialty Care Transport
1025	Fixed Wing (airplane)	1030	Rotary Wing (helicopter)

Content: Identified the highest type of care rendered at the incident.

Discussion and Justifications: The CMS service level for this EMS encounter. Allows data to be quantified and described based on the CMS Service Level. Allows data to be sorted based on the CMS Service Level. Important for EMS billing

Business Rules: All records must have a CMS Service Level value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: None.

53. Prior Aid

Name of Data Element:	Prior Aid		
Priority:	Essential		
Definition:	Any care which was provided to the patient prior to the arrival of this unit.		
National Element:	Yes		
NHTSA 2:	E09_01		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>PriorAid</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 30		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Field Values from Procedures & Medications

Content: Enter any care provided to patient prior to arrival of this reporting unit.

Discussion and Justification: Beneficial to planners and researchers in evaluating the skills and abilities of those first to arrive on the scene or witness emerging situations where medical or injuries are paramount. Allows data to be sorted based on the specific prior aid received or not received by the patient. Allows data to describe aid which was provided prior to EMS arrival. Used as a Quality Management tool to evaluate Bystander and First Responder involvement

Business Rules: All records must have a Prior Aid value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: Field value list created from Procedures (E19_03) and Medications (E18_03).

54. Prior Aid Performed By

Name of Data Element:	Prior Aid Performed By		
Priority:	Essential		
Definition:	The type of individual who performed the care prior to the arrival of this unit.		
National Element:	Yes		
NHTSA 2:	E09_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PriorAidPerformedBy</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1195	EMS Provider
1200	Law Enforcement	1205	Lay Person/Bystander
1210	Other Healthcare Provider	1215	Patient
23	Lifeguard Responder	13	Fire Responder
22	Security Responder	3	Family
17	Doctor's Office/Clinic	18	Hospital
19	Nursing Home	20	Other Medical Facility
7	Rapid Response Unit	9	Helicopter Service
8	Fixed Wing Service		

Content: Identify the type of the individual who performed the prior aid entered.

Discussion and Justification: Beneficial to planners and researchers in evaluating the skills and abilities of those first to arrive on the scene or witness emerging situations where medical or injuries are paramount. Allows data to be sorted based on the specific prior aid received or not received by the patient. A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on who provided specific prior aid. Allows data to describe who performed any aid which was provide prior to EMS arrival to the patient. Used as a Quality Management tool to evaluate Bystander and First Responder involvement

Business Rules: All records must have a Prior Aid Performed By value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: None.

55. Outcome of Prior Aid

Name of Data Element:	Outcome of Prior Aid		
Priority:	Essential		
Definition:	What was the outcome or result of the care performed prior to the arrival of the unit?		
National Element:	Yes		
NHTSA 2:	E09_03		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>OutcomeOfPriorAid</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1220	Improved
1225	Unchanged	1230	Worse

Content: Identifies the outcome of the aid performed prior to the unit arrival.

Discussion and Justification: Beneficial to planners and researchers in evaluating the skills and abilities of those first to arrive on the scene or witness emerging situations where medical or injuries are paramount. Allows data to be sorted based on the perceived outcome which resulted from specific prior aid received by the patient. Allows data to describe aid which was provided prior to EMS arrival . Used as a Quality Management tool to evaluate Bystander and First Responder involvement

Business Rules: All records must have an Outcome of Prior Aid value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: None.

56. Vital Signs Date/Time

Name of Data Element:	Vital Signs Date/Time
Priority:	Essential
Definition:	Date and Time that vital signs were obtained
National Element:	No
NHTSA 2:	E14_01
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes

Content: Date and time that the vital signs were obtained

Discussion and Justification: Desirable in certain situations in which there may be a significant delay between the time at which a response unit arrives at the scene and the time at which the personnel can access the patient. For example, if the EMTs are prevented because of fire or adverse conditions from approaching the patient, this time will be useful. Search and rescue operations will also note delays between arrival at the overall scene and the actual patient contact.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Vital Signs Date/Time entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.OZ.

57. Pulse Rate

Name of Data Element:	Pulse Rate		
Priority:	Essential		
Definition:	Patient's palpated or auscultated pulse rate expressed in number per minute.		
National Element:	No		
NHTSA 2:	E14_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PulseRate</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: -25 Maximum Constraint: 500		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		

Content: Patient's palpated or auscultated pulse rate expressed in number per minute.

Discussion and Justification: The pulse rate is a component of various triage-scoring systems, and permits a rough assessment of the severity of illness of the patient. This data element is based on the physical examination of the patient, and the pulse must be palpated or auscultated. An electrical rhythm is not sufficient, as the patient could have pulse less electrical activity (PEA). In this instance, the correct value of this data element is '000'.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Pulse Rate entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: It is recognized that it may be difficult to obtain an initial pulse rate during a minority of patient encounters. Use the following value to notate that it was decided to not or unable to obtain an initial pulse rate.

-5 Not Available

This is to be coded if a patient was encountered and no pulse was assessed. It is not to be used if

no patient was encountered or the incident does not require a pulse rate

58. Respiratory Rate

Name of Data Element:	Respiratory Rate		
Priority:	Essential		
Definition:	Unassisted patient respiratory rate expressed as number per minute.		
National Element:	No		
NHTSA 2:	E14_11		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>RespiratoryRate</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: -25 Maximum Constraint: 100		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		

Content: Unassisted patient respiratory rate expressed as number per minute.

Discussion and Justification: Component of several triage scoring systems and provides some assessment of severity of illness or injury. If a patient is not breathing and requires artificial ventilation, this data element should be coded as '000'.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Respiratory Rate entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: It is recognized that patient's encountered may have an initial respiratory rate greater than 100, however, planning and epidemiological studies do not need to differentiate individual numbers greater than the maximum setting. This should limit the submission of, as well as flag erroneous data. Null value should only be used when it is appropriate to not submit the data. Estimated respiratory rates should be collected on all patient encounters.

-5 Not Available

This is to be coded if a patient was encountered and no initial respiratory rate was assessed. It is not to be used if no patient was encountered or the incident does not require a pulse rate.

59. Systolic Blood Pressure

Name of Data Element:	Systolic Blood Pressure		
Priority:	Essential		
Definition:	Patient's systolic blood pressure		
National Element:	No		
NHTSA 2:	E14_04		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>SBP</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: -25 Maximum Constraint: 400		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		

Content: Patient's systolic blood pressure

Discussion and Justification: Important component of several scoring systems for triage, and permits some assessment of acuity of patient.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Systolic Blood Pressure entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: The coding of '0' should only be used if a blood pressure is attempted but not able to be determined due to poor perfusion. It is recognized that patient's encountered may have an initial systolic blood pressures greater than 400, however, planning and epidemiological studies do not need to differentiate individual number greater than the maximum setting. This should limit the submission of, as well as flag erroneous data. It is recognized that it may be difficult to obtain an initial systolic blood pressure during a minority of patient encounters. Use the following value to notate that it was decided to not or unable to obtain an initial pulse rate.

-5 Not Available

This is to be coded if a patient was encountered and no systolic blood pressure was assessed. It is not to be used if no patient was encountered or the incident does not require a systolic blood pressure.

60. Diastolic Blood Pressure

Name of Data Element:	Diastolic Blood Pressure		
Priority:	Essential		
Definition:	Patient's diastolic blood pressure		
National Element:	No		
NHTSA 2:	E14_05		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>DBP</i> Multiple Entry Configuration: No Accepts Null Values: Yes, but null value is blank or empty Required in XSD: Yes Minimum Constraint: -25 Maximum Constraint: 300		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		

Content: Patient's diastolic blood pressure

Discussion and Justification: Important component of several scoring systems for triage, and permits some assessment of acuity of patient.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Diastolic Blood Pressure entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: The coding of '0' should only be used if a blood pressure is attempted but not able to be determined due to poor perfusion. It is recognized that patient's encountered may have an initial diastolic blood pressures greater than 300, however, planning and epidemiological studies do not need to differentiate individual number greater than the maximum setting. This should limit the submission of, as well as flag erroneous data. It is recognized that it may be difficult to obtain an initial diastolic blood pressure during a minority of patient encounters. Use the following value to notate that it was decided to not or unable to obtain an initial diastolic blood pressure.

-5 Not Available

This is to be coded if a patient was encountered and no diastolic blood pressure was assessed. It is not to be used if no patient was encountered or the incident does not require a diastolic blood pressure.

61. Blood Pressure Method

Name of Data Element:	Blood Pressure Method			
Priority:	Essential			
Definition:	Indication of method of blood pressure procedure.			
National Element:	No			
NHTSA 2:	E14_06			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>MethodOfBloodPressure</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	3150	Arterial Line	3155	Automated Cuff
	3160	Manual Cuff	3165	Palpated Cuff
	3170	Venous Line		

Content: Indication of method of blood pressure procedure.

Discussion and Justification: Important component of several scoring systems for triage, and permits some assessment of acuity of patient.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Blood Pressure Method entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules.

62. Skin Assessment

Name of Data Element:	Skin Assessment		
Priority:	Essential		
Definition:	The assessment of the patient's skin on examination		
National Element:	No		
NHTSA 2:	E16_04		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>SkinAssessment</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	3420	Normal
3425	Not Done	3430	Clammy
3435	Cold	3440	Cyanotic
3445	Jaundiced	3450	Lividity
3455	Mottled	3460	Pale
3465	Warm		

Content: The assessment of the patient's skin on examination.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Skin Assessment entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

3425 Not Done

This is to be coded if a patient was encountered and no skin perfusion was assessed. It is not to be used if no patient was encountered or the incident does not require a skin perfusion assessment.

63. Glasgow Eye Opening Component

Name of Data Element:	Glasgow Eye Opening Component		
Priority:	Essential		
Definition:	Patient's eye opening component of the Glasgow coma scale.		
National Element:	No		
NHTSA 2:	E14_15		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>GCSEye</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimal Constraint = -25 Maximum Constraint = 4		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
1	Eyes Don't Open	2	Opens Eyes to Painful Stimulation
3	Open Eyes to Verbal Stimulation	4	Open Eyes Spontaneously

Content: Initial evaluation of the eye opening of the Glasgow coma scale assessment.

Discussion and Justification: One of three components of the Glasgow Coma Scale (GCS), which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems. The component by itself does not offer a true assessment of neurological status; therefore a complete GCS examination assessing all three components must be submitted for neurological evaluation purposes.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Glasgow Eye Opening Component entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: A judgment that the data element is not applicable should not be made at the responder level. Instead, this can be made by generating data reports for specific conditions in which the data element is considered relevant, and examining the field for valid values.

-5 Not Available

This is to be coded if a patient was encountered and GCS was not assessed. It is not to be used if no patient was encountered or the incident does not require a GCS assessment.

64. Glasgow Verbal Component

Name of Data Element:	Glasgow Verbal Component		
Priority:	Essential		
Definition:	Patient's verbal component of the Glasgow coma scale		
National Element:	No		
NHTSA 2:	E14_16		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>GCSVerbal</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimal Constraint = -25 Maximum Constraint = 5		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
	Patients 0 – 23 months	1	None
2	Persistent Cry	3	Inappropriate Cry
4	Cries, inconsolable	5	Smiles, coos, cries appropriately
	Patients 2 – 5 Years	1	None
2	Grunts	3	Cries and/or Screams
4	Inappropriate Words	5	Appropriate Words
	Patients > 5 Years	1	None
2	Non-specific Words	3	Inappropriate Words
4	Confused conversation or speech	5	Oriented and appropriate speech

Discussion and Justification: One of three components of the Glasgow Coma Scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems. The component by itself does not offer a true assessment of neurological status; therefore a complete GCS examination assessing all three components must be submitted for neurological evaluation purposes.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Glasgow Verbal Component entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to

not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the patient is intubated and deeply comatose, then this data element is coded as 1 for none, since there was no verbal response at the time of Intubation. However, if the patient is intubated but not deeply comatose, and there is a possibility of verbal response, it is difficult to apply the Glasgow coma scale. The EMS responder can ask questions and if the patient can nod his head or blink eyes, etc. appropriately, then this element is coded as 5. A judgment that the data element is not applicable should not be made at the responder level. Instead, this can be made by generating data reports for specific conditions in which the data element is considered relevant, and examining the field for valid values.

-5 Not Available

This is to be coded if a patient was encountered and GCS was not assessed. It is not to be used if no patient was encountered or the incident does not require a GCS assessment.

65. Glasgow Motor Component

Name of Data Element:	Glasgow Motor Component		
Priority:	Essential		
Definition:	Patient's motor component of the Glasgow coma scale.		
National Element:	No		
NHTSA 2:	E14_18		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>GCSMotor</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimal Constraint = -25 Maximum Constraint = 6		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
	Patients < 5 Years	1	None
2	Extensor posturing in response to painful stimulation	3	Flexor posturing in response to painful stimulation
4	General withdrawal in response to painful stimulation	5	Localization of painful stimulation
6	Spontaneous		
	Patients >5 Years	1	None
2	Extensor posturing in response to painful stimulation	3	Flexor posturing in response to painful stimulation
4	General withdrawal in response to painful stimulation	5	Localization of painful stimulation
6	Obeys Commands		

Discussion and Justification: One of three components of the Glasgow Coma Scale, which is widely used to assess neurological status. The score and its components are also parts of a

variety of triage scoring systems. The component by itself does not offer a true assessment of neurological status; therefore a complete GCS examination assessing all three components must be submitted for neurological evaluation purposes.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have a Glasgow Motor Component entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: This component cannot be assessed if the patient has received a muscle relaxant. However, information on patient's response prior to the muscle relaxant may be reported for this initial assessment. A judgment that the data element is not applicable should not be made at the responder level. Instead, this can be made by generating data reports for specific conditions in which the data element is considered relevant, and examining the field for valid values.

-5 Not Available

This is to be coded if a patient was encountered and GCS was not assessed. It is not to be used if no patient was encountered or the incident does not require a GCS assessment.

66. Initial Cardiac Rhythm

Name of Data Element:	Initial Cardiac Rhythm		
Priority:	Desirable		
Definition:	Initial monitored cardiac rhythm as interpreted by EMS personnel.		
National Element:	No		
NHTSA 2:	E14_03		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CardiacRhythm</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	3005	12 Lead ECG – Anterior Ischemia
3010	12 Lead ECG – Inferior Ischemia	3015	12 Lead ECG – Lateral Ischemia
3020	Agonal / Idioventricular	3025	Artifact
3030	Asystole	3035	Atrial Fibrillation / Flutter
3040	AV Block – 1 st Degree	3045	AV Block – 2 nd Degree Type 1
3050	AV Block – 2 nd Degree Type 2	3055	AV Block – 3 rd Degree Type 3
3060	Junctional	3065	Left Bundle Branch
3070	Normal Sinus Rhythm	3075	Other
3080	Paced Rhythm	3085	PEA
3090	Premature Atrial Contractions	3095	Premature Ventricular Contractions
3100	Right Bundle Branch Block	3105	Sinus Arrhythmia
3110	Sinus Bradycardia	3115	Sinus Tachycardia
3120	Supraventricular Tachycardia	3125	Torsades De Points
3130	Unknown AED Non-Shockable Rhythm	3135	Unknown AED Shockable Rhythm
3140	Ventricular Fibrillation	3145	Ventricular Tachycardia

Discussion and Justification: Provides the initial monitored rhythm, permitting reports generated according to initial rhythm. Such reports would be of use in assessing the survival rate after certain rhythms.

It is understood that some agencies collect data about cardiac rhythms with more detail than this list. For instance, many agencies expect EMS personnel to distinguish first, second, and third degree heart block. There is no intention to restrict the manner in which any agencies decide to code cardiac rhythms, but there is a necessity to be able to collapse those rhythms to a common definition, which can then be combined. For the examples of heart block mentioned, those would all collapse into AV Block.

Business Rules: Records submitted with an Incident Disposition involving EMS treatment or evaluation must have an Initial Cardiac Rhythm entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-5 Not Available

This is to be coded if a patient was encountered and initial cardiac rhythm was not assessed. It is not to be used if no patient was encountered or the incident does not require a cardiac rhythm assessment.

-15 Not Reporting

This is to be coded if the EMS responder is not an appropriate level provider to assess electrical rhythm, or if electrical monitoring is unavailable to the provider.

67. Final Cardiac Rhythm (at Destination)

Name of Data Element:	Final Cardiac Rhythm (at Destination)		
Priority:	Desirable		
Definition:	Monitored cardiac rhythm upon arrival at destination.		
National Element:	No		
NHTSA 2:	E11_11		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CardiacRhythmAtDestination</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2455	12 Lead ECG – Anterior Ischemia
2460	12 Lead ECG – Inferior Ischemia	2465	12 Lead ECG – Lateral Ischemia
2470	Agonal / Idioventricular	2475	Artifact
2480	Asystole	2485	Atrial Fibrillation / Flutter
2490	AV Block – 1 st Degree	2495	AV Block – 2 nd Degree Type 1
2500	AV Block – 2 nd Degree Type 2	2505	AV Block – 3 rd Degree Type 3
2510	Junctional	2515	Left Bundle Branch
2520	Normal Sinus Rhythm	2525	Other
2530	Paced Rhythm	2535	PEA
2540	Premature Atrial Contractions	2545	Premature Ventricular Contractions
2550	Right Bundle Branch Block	2555	Sinus Arrhythmia
2560	Sinus Bradycardia	2565	Sinus Tachycardia
2570	Supraventricular Tachycardia	2575	Torsades De Points
2580	Unknown AED Non-Shockable Rhythm	2585	Unknown AED Shockable Rhythm
2590	Ventricular Fibrillation	2595	Ventricular Tachycardia

Discussion and Justification: Captures the electrical rhythm at the time of arrival at a destination, as previously defined. Reports could examine whether this rhythm differs from the initial rhythm of the patient when encountered in the field, whether there was improvement or deterioration, etc. If an EMS responder is not equipped with electrical monitoring capability or is not of an appropriate level to assess rhythm, this field should be coded as not applicable.

Business Rules: Records submitted with an Incident Disposition involving EMS Transport must have a Final Cardiac Rhythm entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

68. Cardiac Arrest

Name of Data Element:	Cardiac Arrest			
Priority:	Essential			
Definition:	Indication of the presence of a cardiac arrest at any time associated with the EMS event.			
National Element:	Yes			
NHTSA 2:	E11_01			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CardiacArrest</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	0	No
	2240	Yes, Prior to EMS Arrival	2245	Yes, After EMS Arrival

Discussion and Justification: Indication of the presence of a cardiac arrest at any time associated with the EMS event. A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the occurrence of a cardiac arrest. Allows data to describe the number of cardiac arrests within the EMS patient population.

Business Rules: If answered 'Yes,...', all other data points in the Situation/CPR (E11) should be addressed.

Technical Comments: None.

69. Cardiac Arrest Etiology

Name of Data Element:	Cardiac Arrest Etiology		
Priority:	Essential		
Definition:	Indication of the etiology or cause of the cardiac arrest.		
National Element:	Yes		
NHTSA 2:	E11_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CardiacArrestEtiology</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2250	Presumed Cardiac
2255	Trauma	2260	Drowning
2265	Respiratory	2270	Electrocution
2275	Other		

Content: Indication of the etiology or cause of the cardiac arrest.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the occurrence of a cardiac arrest. Allows data to describe the number of cardiac arrests within the EMS patient population.

Business Rules: Complete only if Cardiac Arrest (E11_01) is 'Yes,'. Records received with a null will be marked as non-compliant if Cardiac Arrest (E11_01) is 'Yes,'. Null to be accepted when record is not appropriate.

Technical Comments: None.

70. Resuscitation Attempted

Name of Data Element:	Resuscitation Attempted		
Priority:	Essential		
Definition:	Indication of an attempt to resuscitate the patient who is in cardiac arrest.		
National Element:	Yes		
NHTSA 2:	E11_03		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ResuscitationAttempted</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2280	Attempted Defibrillation
2285	Attempted Ventilation	2290	Initiated Chest Compression
2295	Not Attempted – Considered Futile	2300	Not Attempted – DNR Orders
2305	Not Attempted – Signs of Circulation		

Content: Indication of an attempt to resuscitate the patient who is in cardiac arrest.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the type of resuscitation initiated during a cardiac arrest. Allows data to describe the number of cardiac arrests within the EMS patient population, which resulted in resuscitative efforts.

Business Rules: Complete only if Cardiac Arrest (E11_01) is ‘Yes,’. Records received with a null will be marked as non-compliant if Cardiac Arrest (E11_01) is ‘Yes,’. Null to be accepted when record is not appropriate.

Technical Comments: None.

71. Witnessed Cardiac Arrest

Name of Data Element:	Witnessed Cardiac Arrest			
Priority:	Desirable			
Definition:	Indication of who the cardiac arrest was witnessed by			
National Element:	No			
NHTSA 2:	E11_04			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ArrestWitnessedBy</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	2310	Witnessed by Healthcare Provider
	2315	Witnessed by Lay Person	2320	Not Witnessed

Content: Documents who the cardiac arrest was witnessed by.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the Witnessed or Un-Witnessed Arrest, which is a known key element, associated with Cardiac Arrest Outcome. Allows data to describe aid, which was provided prior to EMS arrival. Used as a Quality Management tool to evaluate Bystander and First Responder involvement

Business Rules: Complete only if Cardiac Arrest (E11_01) is 'Yes, ...'. Records received with a null will be marked as non-compliant if Cardiac Arrest (E11_01) is 'Yes, ...'. Null to be accepted when record is not appropriate.

Technical Comments: None.

72. Estimated Time of Arrest Prior to EMS Arrival

Name of Data Element:	Estimated Time of Arrest Prior to EMS Arrival		
Priority:	Desirable		
Definition:	The length of time the patient was down (estimated) before the responding unit arrived at the patient		
National Element:	No		
NHTSA 2:	E11_08		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ArrestWitnessedBy</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
2390	> 20 Minutes	2395	15-20 Minutes
2400	10-15 Minutes	2405	8-10 Minutes
2410	6-8 Minutes	2415	4-6 Minutes
2420	2-4 Minutes	2425	0-2 Minutes

Content: Documents the estimated time length from cardiac arrest to arrival of EMS.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows for evaluation of Cardiac Arrest data for Quality Improvement of patient care and agency response

Business Rules: Complete only if Cardiac Arrest (E11_01) is 'Yes, ...'. Records received with a null will be marked as non-compliant if Cardiac Arrest (E11_01) is 'Yes, ...'. Null to be accepted when record is not appropriate.

Technical Comments: Replaces HEMSIS 1.0 field of Estimated Time of Cardiac Arrest.

73. Time/Date Resuscitation Discontinued

Name of Data Element:	Time Resuscitation Discontinued
Priority:	Desirable
Definition:	The date/time the CPR was discontinued (or could be time of death).
National Element:	No
NHTSA 2:	E11_09
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>Date Time</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: No

Content: Time at which medical control or responding EMS unit terminated resuscitation efforts (chest compressions and CPR) in the field

Discussion and Justification: Provides information concerning the duration of CPR in the field in cases in which the patient was pronounced dead in the field.

Business Rules: Complete only if Cardiac Arrest (E11_01) is 'Yes,'. Null to be accepted when record is not appropriate.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z.

If resuscitation was not discontinued it is appropriate to not collect this data the software vendor may opt to not include the data type in the XML.

74. Any Return of Spontaneous Circulation

Name of Data Element:	Any Return of Spontaneous Circulation			
Priority:	Desirable			
Definition:	Indication whether or not there was any return of spontaneous circulation at any time during the EMS events.			
National Element:	No			
NHTSA 2:	E11_06			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ReturnOfSpontaneousCirculation</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	0	No
	2370	Yes, Prior to ED Arrival Only	2375	Yes, Prior to ED Arrival and at the ED

Content: Documents the return of spontaneous circulation during the EMS events.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the Return of Spontaneous Circulation associated with a cardiac arrest. Allows for evaluation of Cardiac Arrest data for Quality Improvement of patient care and agency response.

Business Rules: Complete only if Cardiac Arrest (E11_01) is 'Yes, ...'. Records received with a null will be marked as non-compliant if Cardiac Arrest (E11_01) is 'Yes, ...'. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: Replaces HEMSIS 1.0 field of Time Spontaneous Circulation

75. Possible Injury (Injury Present)

Name of Data Element:	Injury Present			
Priority:	Essential			
Definition:	Indicates that the reason for the EMS encounter was related to an injury or traumatic event.			
National Element:	Yes			
NHTSA 2:	E09_04			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>YesNoValue</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	0	No
	1	Yes		

Content: Indicates that the reason for the EMS encounter was related to an injury or traumatic event. This data element provides documentation to classify the EMS Reason for Encounter as either injury or non-injury related based on mechanism and not on actual injury.

Discussion and Justification: Indicates whether or not the patient sustained injury in association with the incident type. The use of this data element will allow injuries to be tracked for non-traumatic incident categories (syncopal episode with injuries from the fall) as well as traditional traumatic incidents (Motor vehicle accident, shootings, etc.). Allows EMS data at the national level to be sorted based on traumatic vs. non-traumatic despite the incident type or primary impression. Allows for the calculation of the "EMS Reason for Encounter" used to further describe the EMS patient population.

Business Rules: All records submitted must have an Injury Present entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: Can be used to determine which records should have Section E10: Situation/ Trauma completed. If Injury Present (E09_04) is "Yes", Section E10 should be completed.

-25 Not Applicable

This is coded when an incident's disposition did not involve a patient contact.

76. Cause of Injury

Name of Data Element:	Cause of Injury		
Priority:	Essential		
Definition:	External cause of injury.		
National Element:	Yes		
NHTSA 2:	E10_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>CauseOfInjury</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1885	Bites
9500	Aircraft Related Accident	9505	Bicycle Accident
9515	Chemical Poisoning	9520	Child Battering
9525	Drowning	9530	Drug Poisoning
9535	Electrocution (non-lighting)	9540	Excessive Cold
9545	Excessive Heat	9550	Falls
9555	Fire and Flames	9560	Firearm Assault
9565	Firearm Injury	9570	Firearm Self Inflicted
9575	Lightening	9580	Machinery Accident
9585	Mechanical Suffocation	9590	Motor Vehicle Non-traffic Accident
9595	Motor Vehicle Traffic Accident	9600	Motorcycle Accident
9605	Non-Motorized Accident	9610	Pedestrian Traffic Accident
9615	Radiation Exposure	9620	Rape
9625	Smoke Inhalation	9630	Stabbing / Cutting Accident
9635	Stabbing / Cutting Assault	9640	Stuck by Blunt / Thrown Object
9645	Venomous Stings	9650	Water Transport Accident
33	All Terrain Vehicle (ATV)	34	Animal Involvement

35	Blast/Explosion	41	Chocking
27	Hanging	42	MPC - Moped Collision
40	Natural Environmental Factor	32	Poisoning - Alcohol
8	Poisoning - Drug	29	Railway Related Accident
36	Roller blade	37	Skateboard
22	Sports Injury	47	Water Sports
44	Struck by Person	5	Burns - Thermal/Chemical

Content: Documents the injury cause.

Discussion and Justification: It is necessary to have a broad taxonomy for defining the external causes of injury, and this data element is coded according to the E codes in ICD-9. However, it is recognized that the entire E code list is too cumbersome for field use, and the element may be collapsed into the categories, which have been listed above.

When possible, the E code should be defined in as much detail as is present in the E code definitions. Such codes will always be collapsible to the categories defined here, but the added detail will provide additional value to injury prevention researchers. It has been traditional to attempt to assign a single E code to individual incidents. Multiple entries, however, aids in gathering better detail about injuries, and to eliminate confusion when the EMS provider must choose between two reasonable E codes.

Business Rules: All records with Possible Injury (E09_04) marked ‘Yes’ must have a Cause of Injury entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system.. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: Complete only if Possible Injury (E09_04) is ‘Yes’.

77. Height of Fall

Name of Data Element:	Height of Fall
Priority:	Desirable
Definition:	The distance in feet the patient fell, measured from the lowest point of the patient to the ground.
National Element:	No
NHTSA 2:	E15_11
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>HeightOfFall</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: No Minimum Constraint = 1 Maximum Constraint = 50,000

Content: Distance in feet that patient is estimated to have fallen.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Important component of an EMS Medical Record to identify issues of clinical care and agency performance and delivery. Used to better define injury cause and describe injury patterns within and EMS community.

Business Rules: Should be completed if records with Possible Injury (E09_04) marked ‘Yes’ and a fall (E15_01, value 9550) was documented. Records with an invalid entry will be marked as non-compliant by the system.

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML.

78. Intent of Injury

Name of Data Element:	Intent of Injury		
Priority:	Desirable		
Definition:	The intent of the individual inflicting the injury		
National Element:	No		
NHTSA 2:	E10_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>IntentOfInjury</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2020	Intentional, Other (Assault)
2025	Intentional, Self	2030	Unintentional (Accidental)

Content: The intent of the individual inflicting the injury.

Discussion and Justification: Identifies the intent of the injury to better determine the cause of the injury.

Business Rules: All records with Possible Injury (E09_04) marked 'Yes' must have an Intent of Injury entered. Records with missing or an invalid entry may be rejected or marked as non-compliant by the system.. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

79. Number of Patient at Scene

Name of Data Element:	Number of Patients at Scene			
Priority:	Essential			
Definition:	Indicator of how many total patients were at the scene.			
National Element:	Yes			
NHTSA 2:	E08_05			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NumberOfPatientsAtScene</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	1120	None
	1125	Single	1130	Multiple

Content: Indicator of how many total patients were at the scene.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the number of patients associated with the event and resources required. Allows data to describe the number of EMS events with multiple patient encounters

Business Rules: All records submitted must have a Number of Patients at Scene entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00)

Technical Comments: None.

80. Mass Casualty Incident

Name of Data Element:	Mass Casualty Incident			
Priority:	Essential			
Definition:	Indicator if this event would be considered a mass casualty incident (overwhelmed existing EMS resources)			
National Element:	Yes			
NHTSA 2:	E08_06			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NumberOfPatientsAtScene</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	1120	None
	1125	Single	1130	Multiple

Content: Indicator if this event would be considered a mass casualty incident (overwhelmed existing EMS resources).

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on a Mass Casualty Event. Allows data to describe the number of EMS events, which were declared a mass casualty event and is connected with disaster and domestic preparedness.

Business Rules: All records submitted must have a Mass Causality Incident entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00)

Technical Comments: None.

81. EMD Performed

Name of Data Element:	EMD Performed		
Priority:	Mandatory		
Definition:	Indication of whether EMD was performed for this EMS event.		
National Element:	Yes		
NHTSA 2:	E03_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>EMDPerformed</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	0	No
570	Yes, With Pre-Arrival Instructions	575	Yes, Without Pre-Arrival Instructions

Content: Indication of whether EMD was performed for this EMS event.

Discussion and Justification: Allows data to be sorted by the Dispatch Complaint. Allows data to describe Patient Complaint as reported by Dispatch.

Business Rules: All records submitted must have a EMD Performed entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments:

-25 Not applicable
This is to be coded if the dispatch center is known to not have an EMD program in use.

-5 Not Available
This is to be coded if the dispatch center is known to have an EMD program in use, but the provider is unaware if EMD was performed in the incident.

82. Complaint Reported by Dispatch

Name of Data Element:	Complaint Reported by Dispatch		
Priority:	Essential		
Definition:	The primary complaint reported to or received at dispatch		
National Element:	Yes		
NHTSA 2:	E03_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ComplaintReportedByDispatch</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	400	Abdominal
405	Allergies	410	Animal Bite
415	Assault	420	Back Pain
425	Breathing Problem	430	Burns
435	CO Poisoning/Hazmat	440	Cardiac Arrest
445	Chest Pain	450	Choking
455	Convulsions/Seizures	460	Diabetic Problem
465	Drowning	470	Electrocution
475	Eye Problem	480	Fall Victim
485	Headache	490	Heart Problem
495	Heat/Cold Exposure	500	Hemorrhage/Laceration
505	Industrial Accident/Inaccessible Incident/Other Entrapment (non-vehicle)	510	Ingestion/Poisoning
515	Pregnancy/Childbirth	520	Psychiatric Problem
525	Sick Problem	530	Stab/Gunshot Wound
535	Stroke/CVA	540	Traffic Accident
545	Traumatic Injury	550	Unconscious Fainting
555	Unknown Problem Man Down	560	Transfer/Interfacility/ Palliative Care
565	Mass Casualty Incident	4051	Skin Rash / Blister with Unknown Origin
4951	Cold exposure w/ symptoms	4952	Heat exposure w/ symptoms
4953	Hyperthermia/Fever		

Content: The primary complaint received by responding unit at dispatch.

Discussion and Justification: This data element is intended to capture the information provided to or obtained by the PSAP or dispatch center and transmitted to the EMS responder.

Business Rules: All records submitted must have a Complaint Reported by Dispatch entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments:

-10 *Not Known*

This is to be coded if no complaint was reported at dispatch or if the complaint was for an unknown problem. This is not to be used if self dispatched or alerted by other means and the reporter is aware of the type of problem they are responding to.

83. Primary Symptom

Name of Data Element:	Primary Symptom Present
Priority:	Essential
Definition:	Signs and symptoms reported to or observed by provider.
National Element:	Yes
NHTSA 2:	E09_13
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PrimarySymptom</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes

Field Values:

-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1405	Bleeding
1410	Breathing Problem	1415	Change in Responsiveness
1420	Choking	1425	Death
1430	Device/Equipment Failure	1435	Diarrhea
1440	Drainage / Discharge	1445	Fever
1450	Malaise	1455	Mass / Lesion
1460	Mental / Psych	1465	Nausea / Vomiting
1470	None	1475	Pain
1480	Palpitations	1485	Rash /Itching
1490	Swelling	1495	Transport Only
1500	Weakness	1505	Wound
78900	Abdominal Pain	72450	Back Pain
57810	Bloody Stool	999016	Cardiopulmonary Arrest
999017	Chest Pain	78001	Coma
46500	Cough, pneumonia, URI	82900	Deformity
78400	Dizziness	78810	Dysuria
38870	Ear Pain	37991	Eye Pain
78400	Headache	40190	Hypertension
99160	Hypothermia	78421	Neck Pain
34490	Paralysis	78270	Petechaie, non-traumatic ecchymosis
65990	Pregnancy/childbirth/m iscarriage	999022	Seizures/convulsions

78020	Syncope	62380	Vaginal Bleeding
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Content: The primary sign and symptom present or observed by the provider.

Discussion and Justification: This data element is intended to capture the information provided to or obtained by the EMS responder in order to assess the patient. It is intended that these signs and symptoms be correlated with the clinical impression of the responder. This would help EMS managers plan educational programs for the responders.

Business Rules: All records submitted must have a Primary Symptom Present entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: None.

84. Other Associated Symptoms

Name of Data Element:	Other Associated Symptoms
Priority:	Essential
Definition:	Other symptoms reported to or observed by provider.
National Element:	Yes
NHTSA 2:	E09_14
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>OtherAssociatedSymptoms</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes

Field Values:

-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1510	Bleeding
1515	Breathing Problem	1520	Change in Responsiveness
1525	Choking	1530	Death
1535	Device/Equipment Failure	1540	Diarrhea
1545	Drainage / Discharge	1550	Fever
1555	Malaise	1560	Mass / Lesion
1565	Mental / Psych	1570	Nausea / Vomiting
1575	None	1580	Pain
1585	Palpitations	1590	Rash /Itching
1595	Swelling	1600	Transport Only
1605	Weakness	1610	Wound
78900	Abdominal Pain	72450	Back Pain
57810	Bloody Stool	999016	Cardiopulmonary Arrest
999017	Chest Pain	78001	Coma
46500	Cough, pneumonia, URI	82900	Deformity
78400	Dizziness	78810	Dysuria
38870	Ear Pain	37991	Eye Pain
78400	Headache	40190	Hypertension
99160	Hypothermia	78421	Neck Pain
34490	Paralysis	78270	Petechaie, non-traumatic ecchymosis
65990	Pregnancy/childbirth/mi scarrage	999022	Seizures/convulsions
78020	Syncope	62380	Vaginal Bleeding

Content: List any other symptom present or observed by the provider

Discussion and Justification: This data element is intended to capture the information provided to or obtained by the EMS responder in order to assess the patient. It is intended that these signs and symptoms be correlated with the clinical impression of the responder. This would help EMS managers plan educational programs for the responders.

Business Rules: All records submitted must have an Other Associated Symptom entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: None.

85. Provider Impression

Name of Data Element:	Provider Primary Impression		
Priority:	Essential		
Definition:	Provider's clinical impression, which led to the management given to the patient (treatments, medications, procedures).		
National Element:	Yes		
NHTSA 2:	E09_15		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ProvidersPrimaryImpression</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1615	Abdominal pain / problem
1620	Airway Obstruction	1625	Allergic reaction
1630	Altered Level of Consciousness	1635	Behavior / Psychiatric disorder
1640	Cardiac Arrest	1645	Cardiac Rhythm Disturbance
1650	Chest Pain / Discomfort	1655	Diabetic symptoms (hypoglycemia)
1660	Electrocution	1665	Hyperthermia
1670	Hypothermia	1675	Hypovolemia / Shock
1680	Inhalation Injury (Toxic gas)	1685	Obvious Death
1690	Poisoning / drug ingestion	1695	Pregnancy / OB delivery
1700	Respiratory Distress	1705	Respiratory Arrest
1710	Seizure	1715	Sexual Assault / Rape
1720	Smoke Inhalation	1725	Stings / Venomous bites
1730	Stroke / CVA	1735	Syncope / Fainting
1740	Traumatic injury	1745	Vaginal Hemorrhage
999003	Abnormal Cardiac Rhythm	999004	Abnormal skin signs

9990043	Alcohol intoxication, drug overdose	999073	ALS Medical Condition
999021	Altered level of consciousness	999010	Animal bites/sting/envenomation - other
72450	Back Pain	999041	Back pain - non-traumatic, neurological
999072	Bed Confined	999078	BLS Medical Condition
999066	Burns	999020	Cold exposure - w/ symptoms
999022	Convulsions/seizures	999015	Difficulty breathing
78810	Dysuria	999071	Eye injuries
999028	Heat exposure - life threatening	999030	Hemorrhage - Severe
999032	Infectious diseases - isolation proc.	999068	Lightning
999056	Major Trauma	999081	Medical conditions - contraindicates
999055	Medical/legal	999070	Near Drowning
999054	Near syncope, weakness or dizziness	999058	Other Trauma - Major Bleeding
999057	Other Trauma – Mont/Maintain Airway	999039	Pain, acute and severe
999045	Post Op procedure complications	999092	Service not avail at originating facility
999080	Specialty care monitoring	999053	Unconscious, fainting, syncope

Content: The provider's impression of the patient's primary problem or most significant condition which led to the EMS management of the patient.

Discussion and Justification: This data element contains the single clinical assessment, which primarily drove the actions of the EMS responder. It should be possible to determine whether the treatments or medications provided match protocols, which relate to the clinical impression. When more than one choice is applicable to a patient, the responder should indicate the single most important clinical assessment that drove most of the plan of therapy and management.

It should be noted that this coding system differs from current systems. For instance, many EMS data sets include the entity, Animal Bite. In the uniform data set, such an entry should be coded in this field as a Traumatic Injury. The site of injury should be indicated in the injury field described later in this dictionary, showing the type (laceration or puncture) and site of the bite

itself. In addition, the Cause of Injury should be coded as E906.x as discussed under the data element, Cause of Injury. For another example, Sexual Assault is coded in this data element in the same manner as a Traumatic Injury, but the Cause of Injury would be coded as E960.1, and Injury Intent would be coded as intentional. The reason for using this approach is to avoid overlapping, duplicative codes, which are not attached to a general taxonomy such as ICD9. Such codes would become agency specific and would not be flexible enough to permit combining data from different agencies. This list is comprised of the Federal Register Condition Codes.

Business Rules: All records submitted must have an Provider Primary Impression entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: None.

86. Providers Secondary Impression

Name of Data Element:	Provider's Secondary Impression		
Priority:	Essential		
Definition:	The EMS personnel's impression of the patient's secondary problem or which led to the management given to the patient.		
National Element:	Yes		
NHTSA 2:	E09_16		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ProvidersSecondaryImpression</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1750	Abdominal pain / problem
1755	Airway Obstruction	1760	Allergic reaction
1765	Altered Level of Consciousness	1770	Behavior / Psychiatric disorder
1775	Cardiac Arrest	1780	Cardiac Rhythm Disturbance
1785	Chest Pain / Discomfort	1790	Diabetic symptoms (hypoglycemia)
1795	Electrocution	1800	Hyperthermia
1805	Hypothermia	1810	Hypovolemia / Shock
1815	Inhalation Injury (Toxic gas)	1820	Obvious Death
1825	Poisoning / drug ingestion	1830	Pregnancy / OB delivery
1835	Respiratory Distress	1840	Respiratory Arrest
1845	Seizure	1850	Sexual Assault / Rape
1855	Smoke Inhalation	1860	Stings / Venomous bites
1865	Stroke / CVA	1870	Syncope / Fainting
1875	Traumatic injury	1880	Vaginal Hemorrhage
999003	Abnormal Cardiac Rhythm	999004	Abnormal skin signs

	Rhythm		
9990043	Alcohol intoxication, drug overdose	999073	ALS Medical Condition
999021	Altered level of consciousness	999010	Animal bites/sting/envenomation - other
72450	Back Pain	999041	Back pain - non-traumatic, neurological
999072	Bed Confined	999078	BLS Medical Condition
999066	Burns	999020	Cold exposure - w/ symptoms
999022	Convulsions/seizures	999015	Difficulty breathing
78810	Dysuria	999071	Eye injuries
999028	Heat exposure - life threatening	999030	Hemorrhage - Severe
999032	Infectious diseases - isolation proc.	999068	Lightning
999056	Major Trauma	999081	Medical conditions - contraindicates
999055	Medical/legal	999070	Near Drowning
999054	Near syncope, weakness or dizziness	999058	Other Trauma - Major Bleeding
999057	Other Trauma – Mont/Maintain Airway	999039	Pain, acute and severe
999045	Post Op procedure complications	999092	Service not avail at originating facility
999080	Specialty care monitoring	999053	Unconscious, fainting, syncope

Content: The provider's impression of the patient's secondary problem or condition, which led to the EMS management of the patient.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the EMS personnel's clinical impression. Allows data to describe the EMS patient population based on EMS personnel impression of the EMS patient's problem.

Business Rules: All records submitted must have a Provider's Secondary Impression entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the

common null rules (E00).

Technical Comments: None.

87. Chief Complaint Anatomic Location

Name of Data Element:	Chief Complaint Anatomic Location		
Priority:	Essential		
Definition:	The primary anatomic location of the patient as identified by EMS personnel.		
National Element:	Yes		
NHTSA 2:	E09_11		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ComplaintAnatomicLocation</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1305	Abdomen
1310	Back	1315	Chest
1320	Extremity – Lower	1325	Extremity-Upper
1330	General/Global	1335	Genitalia
1340	Head	1345	Neck

Content: The primary anatomic location of the patient as identified by the EMS personnel.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on complaint location. Allows data to describe the patient's complaint location. A component of the EMS Medical Record: Patient Care Report. Allows for the calculation of the "EMS Reason for Encounter" used to further describe the EMS patient population.

Business Rules: All records submitted must have a Chief Complaint Anatomic Location entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: This is to be completed by EMS personnel without consideration to their certification level.

88. Chief Complaint Organ System

Name of Data Element:	Chief Complaint Organ System		
Priority:	Essential		
Definition:	The primary organ system of the patient injured or medically affected.		
National Element:	Yes		
NHTSA 2:	E09_12		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ComplaintOrganSystem</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	1350	Cardiovascular
1355	CNS/Neuro	1360	Endocrine/Metabolic
1365	GI	1370	Global
1375	Musculoskeletal	1380	OB/Gyn
1385	Psych	1390	Pulmonary
1395	Renal	1400	Skin

Content: The primary organ system of the patient injured or medically affected.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the number of patients associated with the event and resources required. Allows data to describe the number of EMS events with multiple patient encounters. A component of the EMS Medical Record: Patient Care Report. Allows for the calculation of the "EMS Reason for Encounter" used to further describe the EMS patient population. Possible Injury (E09_04), Chief Complaint Anatomic Location (E09_11), Chief Complaint Organ System (E09_12), and Primary Symptom (E09_13) are required to calculate the Reason for Encounter.

Business Rules: All records submitted must have a Chief Complaint Organ System entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: This is to be completed by EMS personnel with a minimum of an EMT-Paramedic level of credentialing.

-25 Not Applicable

At the time of the report documentation, information requested was “Not Applicable” to the incident. This indicates that it is unnecessary to document this element if the EMS personnel’s level of credentialing is not an EMT-Paramedic or higher .

89. Alcohol / Drug Use Indicators

Name of Data Element:	Alcohol / Drug Use Indicators		
Priority:	Essential		
Definition:	Indicator for the potential use of Alcohol or Drugs by the patient.		
National Element:	Yes		
NHTSA 2:	E12_19		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>AlcoholDrugUseIndicators</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
2985	Smell of Alcohol on Breath	2990	Patient Admits to Alcohol Use
2995	Patient Admits to Drug Use	1150	Industrial Place and Premise
1155	Place of Recreation or Sport	3000	Alcohol and/or Drug Paraphernalia at Scene

Content: Identifies if any indicators of Alcohol or Drug use was noted with the care of the patient or at the incident.

Discussion and Justification: Important data element for injury research, permitting reports of value to public health researchers and policy makers.

Business Rules: All records submitted must have a Alcohol/Drug Use Indicators entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: Should be coded as yes whenever the EMS responder suspect's alcohol or drug use by the patient may have contributed to the incident. The uses of drugs or alcohol in isolation have been coded individually for epidemiological purposes and specific use should be coded appropriately when possible.

-10 Not Known

Not known documents that there was an attempt to obtain information but it was unknown by all parties involved.

-25 Not Applicable

Not applicable should be used when there is no patient, such as in a standby response. If alcohol or drugs are totally unrelated to the incident, this field should be coded as no.

90. Barriers to Patient Care

Name of Data Element:	Barriers to Patient Care		
Priority:	Essential		
Definition:	Indication of whether or not there were any patient specific barriers to serving the patient at the scene		
National Element:	Yes		
NHTSA 2:	E12_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>BarriersToPatientCare</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2600	Developmentally Impaired
2605	Hearing Impaired	2610	Language
2615	None	2620	Physically Impaired
2625	Physically Restrained	2630	Speech Impaired
2635	Unattended or Unsupervised (including minors)	2640	Unconscious

Content: Indication of whether or not there were any patient specific barriers to serving the patient at the scene

Discussion and Justification: A component of the EMS Medical Record. Allows data to be sorted based on any barriers to patient care. Allows data to describe any barriers to care within the EMS agency, which is important to many federal initiatives

Business Rules: All records submitted must have Barriers to Patient Care entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: None

91. Injury Matrix External / Skin

Name of Data Element:	NTHSA Injury Matrix External /Skin		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the external body/Skin (including burns)		
National Element:	No		
NHTSA 2:	E15_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the external body or skin.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

This is a crucial data element, which will enable EMS planners to know what types of injuries are incurred by patients using the EMS system. The data element will also be of value in assessing the correspondence between injury assessment in the field and actual injuries as evaluated in medical facilities. A major reason for using ISS related body sites is the ability to compare the hospital inpatient ISS areas with those indicated by the prehospital provider.

It is understood that various levels of providers will be permitted to make injury assessments at different levels of sophistication. For example, the diagnosis of fracture is considered out of

scope for many prehospital responders. In this case, a term might be added for swelling, or some other marker by which an EMS responder is supposed to suspect a fracture or dislocation. It is stressed that this data element is supposed to reflect the clinical impression of injury by the EMS responder, not necessarily the final, correct medical diagnosis.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

92. Injury Matrix Head

Name of Data Element:	NTHSA Injury Matrix Head		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Head (excluding face, neck, cervical spine, and ear)		
National Element:	No		
NHTSA 2:	E15_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the head.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

93. Injury Matrix Face

Name of Data Element:	NTHSA Injury Matrix Face		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Face (including ear).		
National Element:	No		
NHTSA 2:	E15_03		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the face.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

94. Injury Matrix Neck

Name of Data Element:	NTHSA Injury Matrix Neck		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Neck		
National Element:	No		
NHTSA 2:	E15_04		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the neck.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

95. Injury Matrix Thorax

Name of Data Element:	NTHSA Injury Matrix Thorax		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Thorax (excluding the thoracic spine)		
National Element:	No		
NHTSA 2:	E15_05		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the thorax.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

96. Injury Matrix Abdomen

Name of Data Element:	NTHSA Injury Matrix Abdomen		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Abdomen (excluding the lumbar spine)		
National Element:	No		
NHTSA 2:	E15_06		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the abdomen.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

97. Injury Matrix Spine

Name of Data Element:	NTHSA Injury Matrix Spine		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Spine		
National Element:	No		
NHTSA 2:	E15_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the spine.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

98. Injury Matrix Upper Extremities

Name of Data Element:	NTHSA Injury Matrix Upper Extremities		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Upper Extremities		
National Element:	No		
NHTSA 2:	E15_08		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the upper extremities.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

99. Injury Matrix Pelvis

Name of Data Element:	NTHSA Injury Matrix Pelvis		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Pelvis		
National Element:	No		
NHTSA 2:	E15_09		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the pelvis.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

100. Injury Matrix Lower Extremities

Name of Data Element:	NTHSA Injury Matrix Lower Extremities		
Priority:	Desirable		
Definition:	Type of injury identified and associated with the Lower Extremities		
National Element:	No		
NHTSA 2:	E15_10		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on the lower extremities.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

101. Injury Matrix Unspecified

Name of Data Element:	NTHSA Injury Matrix Unspecified		
Priority:	Desirable		
Definition:	Type of injury identified and associated with Unspecified		
National Element:	No		
NHTSA 2:	E15_11		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NTHSAInjuryMatrix</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
3320	Amputation	3330	Bleeding Uncontrolled
3335	Burn	3340	Crush
3345	Dislocation / Fracture	3350	Gunshot
3355	Laceration	3360	Pain w/o Swelling/Bruising
3365	Puncture / Stab	3370	Soft Tissue - Closed
3325	Soft Tissue - Open	3375	Blunt

Content: Matrix of injuries noted on a previously unspecified area.

Discussion and Justification: Part of an EMS Medical Record. Provides documentation of Assessment and Care. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: Records with an invalid entry will be marked as non-compliant by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

102. Safety Devices

Name of Data Element:	Safety Devices (Use of Occupant Safety Equipment)		
Priority:	Essential		
Definition:	Safety equipment in use by patient at time of injury.		
National Element:	No		
NHTSA 2:	E10_08		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>UseOfOccupantSafetyEquipment</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
2170	Child Restraint	2175	Eye Protection
2180	Helmet Worn	2185	Lap Belt
2187	None	2190	Other
2195	Personal Flotation Device	2200	Protective Clothing
2205	Protective Non-Clothing Gear	2210	Shoulder Belt
12	Respiratory Protection	10	Harness

Content: List the safety equipment used by the patient at time of injury.

Discussion and Justification: Provides important information about safety device use in motor vehicle accidents, boating accidents, and industrial accidents with eye injuries. Data will be of use for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments: If the EMS responder knows that no safety device was employed, then the data element should be coded as none. If none of the indicated devices was used, the element

should also be coded as none.

-25 *Not Applicable*

This is to be coded when no safety devices were indicated based on the nature of the call. This is not to be used if no patient contact was made.

103. Airbag Deployment

Name of Data Element:	Airbag Deployment		
Priority:	Essential		
Definition:	Indication of airbag deployment during the motor vehicle crash.		
National Element:	No		
NHTSA 2:	E10_09		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>AirBagDeployment</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2215	No Airbag Present
2220	No Airbag Deployed	2225	Airbag Deployed Front
2230	Airbag Deployed Side	2235	Airbag Deployed Other

Content: Documents the deployment of airbags in the patient vehicle during a motor vehicle crash.

Discussion and Justification: Provides important information about airbag use and deployment in motor vehicle accidents. Data will be of use for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments: If the EMS responder knows that no airbag device was present, then the data element should be coded as No Airbag Present. If the airbag was present but not deployed then the element should be coded as No Airbag Deployed.

-25 Not Applicable

This is to be coded when Possible Injury is 'Yes' and no airbag deployment were indicated based on the nature of the call. This is not to be used if Possible Injury is 'No'.

104. Motor Vehicle Impact

Name of Data Element:	Motor Vehicle Impact (Area of Vehicle Impacted by Collision)		
Priority:	Essential		
Definition:	Motor Vehicle Impact site during collision.		
National Element:	No		
NHTSA 2:	E10_05		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>AreaOfVehicleImpact</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2100	Center Front
2105	Center Rear	2110	Left Front
2115	Left Rear	2120	Left Side
2125	Right Front	2130	Right Rear
2135	Right Side	2140	Roll Over

Content: Documents the site of impact during a motor vehicle collision.

Discussion and Justification: This data element provides information about the site of collision during a Motor Vehicle Impact, which can be used to predict injury patterns and define injury cause. Data will be used for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments:

-25 Not Applicable

This is to be coded when Possible Injury is 'Yes' and no Motor Vehicle Impact were indicated based on the nature of the call. This is not to be used if Possible Injury is 'No'.

105. Injury Indicators

Name of Data Element:	Injury Indicators		
Priority:	Essential		
Definition:	The kind of risk factor predictors associated with the vehicle involved in the incident.		
National Element:	No		
NHTSA 2:	E10_04		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>VehicularInjuryIndicators</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2055	Dash Deformity
2060	DOA Same Vehicle	2065	Ejection
2070	Fire	2075	Rollover / Roof Deformity
2080	Side Post Deformity	2085	Space Intrusion >1 foot
2090	Steering Wheel Deformity	2095	Windshield Spider/Star

Content: This data element is coded as a 2-position field that provides risk factor predictors present at the incident. Up to 3 Injury Indicators can be selected.

Discussion and Justification: This data element provides information about the Injury Indicators during a motor vehicle collision, which can be used to predict injury patterns and define injury cause. Data will be used for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments:

-25 *Not Applicable*

This is to be coded when Possible Injury is 'Yes' and no Injury Indicators applied. This is not to be used if the field is not appropriate for the incident.

106. Seat Row Location of Patient in Vehicle

Name of Data Element:	Seat Row Location of Patient in Vehicle
Priority:	Desirable
Definition:	The seat row location of the patient in vehicle at the time of the crash with the front seat numbered as 1.
National Element:	No
NHTSA 2:	E10_07
XML:	<p>XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>SeatRowLocation</i> Multiple Entry Configuration: No Accepts Null Values: no Required in XSD: No Minimum Constraint: 1 Maximum Constraint: 50</p> <p>If a value of 50 is passed, the location is designated "Cargo Area".</p>

Content: The seat row location of the patient in vehicle at the time of the crash with the front seat numbered as 1.

Discussion and Justification: This data element provides information about the location of a patient during a motor vehicle collision, which can be used to predict injury patterns and define injury cause. Data will be used for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments: Complete only if Possible Injury (E09_04) is "Yes". Numbered to take into account large vehicles such as buses or vans (1 = Front) or (Cargo Area = 50).

-25 *Not Applicable*

This is to be coded when Possible Injury is 'Yes' and no Seat Row Location applied. This is not to be used if the field is not appropriate for the incident.

107. Position of Patient in the Seat of the Vehicle

Name of Data Element:	Position of Patient in the Seat of the Vehicle		
Priority:	Desirable		
Definition:	The position of the patient in seat of the vehicle at the time of the crash.		
National Element:	No		
NHTSA 2:	E10_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PositionOfPatientInSeat</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	2145	Driver
2150	Left (non-driver)	2155	Middle
2160	Other	2165	Right

Content: Documents the seat position a patient was in during a collision.

Discussion and Justification: This data element provides information about the seat location of a patient during a motor vehicle collision, which can be used to predict injury patterns and define injury cause. Data will be used for corroboration of police reports concerning crashes.

Business Rules: Complete only if Possible Injury (E09_04) is 'Yes'. Records received with a null will be marked as non-compliant if Possible Injury was marked 'Yes'. Null to be accepted when record is not appropriate.

Technical Comments:

-25 *Not Applicable*

This is to be coded when Possible Injury is 'Yes' and no Seat Position applied. This is not to be used if the field is not appropriate for the incident.

108. Procedure – Date/Time Performed

Name of Data Element:	Procedure – Date/Time Performed
Priority:	Desirable
Definition:	The date and time the procedure was performed on the patient.
National Element:	No
NHTSA 2:	E19_01
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: No

Content: Time and date the procedure was performed.

Discussion and Justification: Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Procedure Successful value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.0Z

109. Procedure – Crewmember Certification Number

Name of Data Element:	Procedure Crewmember Certification Number			
Priority:	Essential			
Definition:	The statewide assigned certification / licensure number of the EMS crewmember performing the procedure on the patient.			
National Element:	No			
NHTSA 2:	E19_09			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>CrewMemberID</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes, via structure Required in XSD: No Minimum Constraint = 2 Maximum Constraint = 15			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant value

Content: The crewmember's certification/license number who performed the skill

Discussion and Justification: Part of an EMS Medical Record and to document the Procedure performance. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Procedure Crewmember Certification Number value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure. The Procedure Crewmember Certification Number entered must be present in the record in section E04_01.

110. Procedure or Treatment Name

Name of Data Element:	Procedure or Treatment Name		
Priority:	Essential		
Definition:	Identification of crewmember position and the procedure they attempted or performed on patient.		
National Element:	Yes		
NHTSA 2:	E19_03		
XML:	XSD Data Type: <i>xs:decimal</i> XSD Domain (Simple Type): <i>Procedure</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 1 Maximum Constraint: 1000		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	77.000	Not Listed
89.820	12 Lead EKG	93.930	Airway-Bagged
93.931	Airway-BVM	97.230	Airway-Change Tracheotomy Tube
98.130	Airway-Cleared	96.051	Airway-Combitube
93.900	Airway-CPAP	96.030	Airway-EOA/EGTA
96.991	Airway-Intubation Confirm CO2	96.992	Airway-Intubation Confirm Esophageal Bulb
96.052	Airway-Laryngeal Mask	96.010	Airway-Nasal
96.041	Airway-Nasotracheal Intubation	93.940	Airway-Nebulizer Treatment
31.110	Airway-Needle Cricothyrotomy	96.020	Airway-Oral
96.040	Airway-Orotracheal Intubation	96.790	Airway-PEEP
96.042	Airway-Rapid Sequence Induction	93.910	Airway-Respirator Operation (BLS)
98.150	Airway-Suctioning	31.120	Airway-Surgical Cricothyrotomy
96.700	Airway-Ventilator Operation	96.701	Airway-Ventilator with PEEP
38.910	Arterial Blood Draw	89.610	Arterial Line Maintenance

89.700	Assessment-Adult	89.701	Assessment-Pediatric
38.995	Blood Glucose Analysis	89.391	Capnography
89.510	Cardiac Monitor	99.624	Cardiac Pacing-External
99.626	Cardiac Pacing- Transvenous	99.623	Cardioversion
99.640	Carotid Massage	34.041	Chest Decompression
34.042	Chest Tube Placement	73.590	Childbirth
1.181	CNS Catheter-Epidural Maintenance	1.182	CNS Catheter-Intraventricular Maintenance
99.600	CPR	99.601	CPR by External Automated Device
86.280	Decontamination	99.621	Defibrillation-Automated (AED)
99.622	Defibrillation-Manual	99.625	Defibrillation-Placement for Monitoring/Analysis
100.200	Extrication	99.290	Injections-SQ/IM
37.611	Intra-Aortic Balloon Pump	93.580	MAST
96.070	Nasogastric Tube Insertion	89.590	Orthostatic Blood Pressure Measurement
89.702	Pain Measurement	89.392	Pulse Oximetry
100.100	Rescue	99.841	Restraints-Pharmacological
99.842	Restraints-Physical	93.591	Spinal Immobilization
93.540	Splinting-Basic	93.450	Splinting-Traction
89.703	Temperature Measurement	89.704	Thrombolytic Screen
57.940	Urinary Catheterization	38.990	Venous Access-Blood Draw
89.620	Venous Access-Central Line Maintenance	39.997	Venous Access-Discontinue
38.991	Venous Access-Existing Catheter	38.993	Venous Access-External Jugular Line
38.992	Venous Access-Extremity	38.994	Venous Access-Femoral Line
39.995	Venous Access-Internal Jugular Line	41.920	Venous Access-Intraosseous Adult
41.921	Venous Access- Intraosseous Pediatric	39.996	Venous Access-Subclavian Line
89.640	Venous Access-Swan Ganz Maintenance	93.057	Wound Care
1301	Abdominal Thrust	1302	Back Blow
2101	Bandage	2110	Bleeding Controlled
1210	Blood Product Administration	2102	Burn Care
2104	Cold Pack	1602	Demand Valve
400	EKG	205	Intubation – multi-lumen
2107	Irrigation	103	IV Saline Lock
1611	Oxygen Administered	1671	PATI Protocol

2120	Tourniquet		
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Content: The procedure performed on the patient.

Discussion and Justification: Allows data to be sorted based on the medical treatment. Allows data to describe the procedures that are performed by EMS. Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Intended to provide planners and educators with information about which procedures are conducted in the field, by whom, and for what indications. Procedures are defined here as anything done by way of assessment or treatment of the patient. Thus, application of a cervical collar is a treatment, use of a cardiac monitor is a tool of assessment, and drawing blood tubes is neither a specific treatment nor a means of field assessment. All of these would be considered procedures for purposes of this data element.

The Hawaii Department of Health, Division of EMS derived this list to track recognized procedures and treatments occurring in the field. Agencies should identify other procedures not listed as 'Other'.

Business Rules: All records must have a Procedure value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure.

77.000 Other

This is to be coded when a crewmember does a procedure not listed in the data item list.

-25 Not Applicable

This is to be coded if a patient was encountered and did not receive any procedures or treatment. This is not to be used if no patient was encountered or the incident does not require entry of a procedure or treatment. When used this should be the only code submitted in the field.

111. Procedure Successful

Name of Data Element:	Procedure Successful			
Priority:	Essential			
Definition:	Indication of whether or not the procedure performed on the patient was successful			
National Element:	Yes			
NHTSA 2:	E19_06			
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>YesNoValue</i> Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes Required in XSD: Yes			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available	0	No
	1	Yes		

Content: Documents if a procedure was completed successfully.

Discussion and Justification: Allows data to be sorted based on the medical treatment. Allows data to describe the procedures performed by EMS with respect to numbers and success rates. Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Procedure Successful value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure.

-25 Not applicable
This is to be coded if a procedure performed is such that Successfulness cannot be identified.

112. Number of Procedure Attempts

Name of Data Element:	Number of Procedure Attempts		
Priority:	Essential		
Definition:	The number of attempts taken to complete a procedure or intervention regardless of success.		
National Element:	Yes		
NHTSA 2:	E19_05		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>NumberOfProcedureAttempts</i> Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	0-100	Actual Number

Content: The number of attempts taken to complete a procedure or intervention regardless of success

Discussion and Justification: Allows data to describe the procedures, which are performed by EMS. Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Number of Procedure Attempts value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure.

-25 Not applicable
This is to be coded if a procedure performed is such that Attempts are not documented.

113. Procedure Complications

Name of Data Element:	Procedure Complications		
Priority:	Essential		
Definition:	Any complication associated with the performance of the procedure on the patient by EMS.		
National Element:	Yes		
NHTSA 2:	E19_07		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ProcedureComplication</i> Multiple Entry Configuration: Yes, via structure. Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	4500	None
4505	Altered Mental Status	4510	Apnea
4515	Bleeding	4520	Bradycardia
4525	Diarrhea	4530	Esophageal Intubation – immediately
4535	Esophageal Intubation-other	4540	Extravasation
4545	Hypertension	4550	Hyperthermia
4555	Hypotension	4560	Hypoxia
4565	Injury	4570	Itching/Urticaria
4575	Nausea	4580	Other
4585	Respiratory Distress	4590	Tachycardia
4595	Vomiting		

Content: Any complication associated with the performance of the procedure on the patient by EMS.

Discussion and Justification: Allows data to be sorted based on procedure complication. Allows data to describe procedure complications, which occur as a result of EMS treatment as part of a federal initiative to identify and reduce medical errors. Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance

Business Rules: All records must have a Procedure Complications value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure.

-25 Not applicable

This is to be coded if a procedure performed is such that Procedure Complications are not documented.

114. Procedure Authorization

Name of Data Element:	Procedure Authorization		
Priority:	Desirable		
Definition:	The type of procedure authorization obtained		
National Element:	No		
NHTSA 2:	E19_10		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): Procedure Authorization Multiple Entry Configuration: Yes, via structure. Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
4615	On-Line	4620	On Scene
4625	Protocol (Standing Order)	4630	Written Orders (Patient Specific)

Content: Documents the type of authorization obtained to perform the procedure

Discussion and Justification: Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance

Business Rules: All records must have a Procedure Authorization value entered for any procedure reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E19_01_0 Procedure Structure.

-25 Not applicable

This is to be coded if a procedure performed is such that Procedure Authorization is not documented.

115. Medication – Date/Time Administered

Name of Data Element:	Medication – Date/Time Administered
Priority:	Desirable
Definition:	The date/time medication administered to the patient
National Element:	No
NHTSA 2:	E18_01
XML:	XSD Data Type: <i>xs:datetime</i> XSD Domain (Simple Type): <i>DateTime</i> Multiple Entry Configuration: No Accepts Null Values: Yes, null value is blank or empty Required in XSD: No

Content: Time and date the medication was administered.

Discussion and Justification: Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Medication – Date/Time Administered value entered for any medication administration reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: Date and times are to be transmitted using Greenwich Meantime (ref: NHTSA Dataset and XSD change log 2.2.1, March 31, 2006). Format example, 2006-04-04T08:05:00.OZ

116. Medication – Crewmember Certification Number

Name of Data Element:	Medication Crewmember Certification Number			
Priority:	Essential			
Definition:	The statewide assigned ID number of the EMS crew member giving the treatment to the patient			
National Element:	No			
NHTSA 2:	E18_09			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>CrewMemberID</i> Multiple Entry Configuration: Yes Accepts Null Values: Yes, via structure Required in XSD: No Minimum Constraint = 2 Maximum Constraint = 15			
Field Values:				
	-25	Not Applicable	-20	Not Recorded
	-15	Not Reporting	-10	Not Known
	-5	Not Available		Relevant value

Content: The crewmember's certification/license number who administered the medication.

Discussion and Justification: Part of an EMS Medical Record and to document the medication administration. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Medication Crewmember Certification Number value entered for any medication administration reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system

Technical Comments: XSD Structure: Members of E18 Medication Structure. The Procedure Crewmember Certification Number entered must be present in the record in section E04_01.

117. Medication Name

Name of Data Element:	Medication Name		
Priority:	Essential		
Definition:	The medication given to the patient.		
National Element:	Yes, modified		
NHTSA 2:	E18_03		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>MedicationGiven</i> Multiple Entry Configuration: Yes, via structure. Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint = 2 Maximum Constraint = 30		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		Relevant indexes from Appendix D
Refer to Appendix D			

Content: Document the medication administered to the patient.

Discussion and Justification: Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Intended to provide planners and educators with information about which drugs are administered in the field, by whom, and for what indications. It is likely that each responder agency will have its own list of drugs, which are carried by the response vehicles, and this list should be used for the data collection efforts of that agency. The Hawaii Department of Health, Division of EMS derived this list to track recognized the current state approved list of medications being used in the field. It is not expected that every agency will permit its providers to use or carry all these drugs. Agencies that administer medications not listed should mark those as 'Other'.

Business Rules: All records must have a Medication Name value entered. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be rejected by the system.

Technical Comments: At this time a national drug index or coding scheme, which would allow for a single code to be assigned to a single drug, does not exist. The Drug List may contain any generic or trade name of a drug approved by the FDA and administered by EMS. The transmission of a drug name as a string presents to be problematic in the proper collection of data. NEMSIS failed to provide a proper medication numbering schema for the accurate collection of medication data.

****The Hawaii Department of Health, Division of EMS derived this medication list with indexes to improve the reporting capability. It is expected that software vendors submit the corresponding medication index value and not send the medication name. The XML/XSD schema will not change, it will allow for the substitution of index value instead of name for this element.**

77 Other

This is to be coded for the medication when a crewmember administers a medication not listed in the data item list.

-25 Not Applicable

This is to be coded if an incident was encountered and there was no need to administer any medications.

118. Medication Complications

Name of Data Element:	Medication Complications		
Priority:	Essential		
Definition:	Any complication (abnormal effect on the patient) associated with the administration of the medication to the patient by EMS.		
National Element:	Yes		
NHTSA 2:	E18_08		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>MedicationComplication</i> Multiple Entry Configuration: Yes, via structure. Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	4390	None
4395	Altered Mental Status	4400	Apnea
4405	Bleeding	4410	Bradycardia
4415	Diarrhea	4420	Extravasation
4425	Hypertension	4430	Hyperthermia
4435	Hypotension	4440	Hypoxia
4445	Injury	4450	Itching/Urticaria
4455	Nausea	4460	Other
4465	Respiratory Distress	4470	Tachycardia
4475	Vomiting		

Content: Any complication (abnormal effect on the patient) associated with the administration of the medication to the patient by EMS.

Discussion and Justification: Allows data to be sorted based on medication complication. Allows data to describe medication complications, which occur as a result of EMS treatment. Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance.

Business Rules: All records must have a Medication Complications value entered for any medication administration reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an

invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E18 Medication Structure.

-25 Not applicable

This is to be coded if a medication administered is such that Medication Complications are not documented.

119. Medication Authorization

Name of Data Element:	Medication Authorization		
Priority:	Desirable		
Definition:	The type of medication administration authorization obtained		
National Element:	No		
NHTSA 2:	E18_10		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): MedicationAuthorization Multiple Entry Configuration: Yes, via structure. Accepts Null Values: Yes Required in XSD: No		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available		
4480	On-Line	4485	On Scene
4490	Protocol (Standing Order)	4495	Written Orders (Patient Specific)

Content: Documents the type of authorization obtained to administer the medication.

Discussion and Justification: Part of an EMS Medical Record. Reports on Medications and Skills performed along with Protocols used provide key performance evaluation tools. Used in Quality Management for the evaluation of Care and EMS Agency Performance

Business Rules: All records must have a Medication Authorization value entered for any medication reported. If the incident is appropriate to not report this data element, then this element would be submitted following the null rules (E00). Records with missing or an invalid entry will be marked as non-compliant by the system.

Technical Comments: XSD Structure: Members of E18 Medication Structure.

-25 Not applicable

This is to be coded if a procedure performed is such that Medication Authorization is not documented.

120. Primary Method of Payment

Name of Data Element:	Primary Method of Payment		
Priority:	Essential		
Definition:	The primary method of payment or type of insurance associated with this EMS encounter.		
National Element:	Yes		
NHTSA 2:	E07_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>PrimaryMethodOfPayment</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	720	Insurance
725	Medicaid	730	Medicare
735	Not Billed (for any reason)	740	Other Government
745	Self Pay	750	Workers Compensation

Content: The primary method of payment or type of insurance associated with this EMS encounter.

Discussion and Justification: A component of the EMS Medical Record: Patient Care Report. Allows data to be sorted based on the payer mix. Allows data to describe the EMS patient population's payer mix. Maybe collected electronically through linkage with a pre-existing Patient Care Report or hospital database.

Business Rules: All records submitted must have a Primary Method of Payment entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: If the provider or submitting software is unaware of this information then the element should be submitted with one of the above listed NEMSIS Section E00 (Common Null) field values.

121. Condition Code Number

Name of Data Element:	Condition Code Number		
Priority:	Essential		
Definition:	The condition codes are used to better describe the service and patient care delivery by an EMS service. Please consult CMS documentation for detailed descriptions of these condition codes and their use.		
National Element:	Yes		
NHTSA 2:	E07_35		
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>ConditionCodeNumber</i> Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 30		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	8001	Severe Abdominal Pain
8002	Abdominal Pain (ALS-789.00)	8003	Abnormal Cardiac Rhythm/Cardiac Dysrhythmia (ALS-427.9)
8004	Abnormal Skin Signs (ALS-780.8)	8005	Abnormal Vital Signs (ALS-796.4)
8006	Allergic Reaction (ALS-995.0)	8007	Allergic Reaction (BLS-692.9)
8008	Blood Glucose (ALS-790.21)	8009	Respiratory Arrest (ALS-799.1)
8010	Difficulty Breathing (ALS-786.05)	8011	Cardiac Arrest-Resuscitation in Progress (ALS-427.5)
8012	Chest Pain (non-traumatic) (ALS-786.50)	8013	Choking Episode (ALS-784.9)
8014	Cold Exposure (ALS-991.6)	8015	Cold Exposure (BLS-991.9)
8016	Altered Level of Consciousness (non-traumatic) (ALS-780.01)	8017	Convulsions/Seizures (ALS-780.39)
8018	Eye Symptoms (non-traumatic) (BLS-379.90)	8019	Non Traumatic Headache (ALS-437.9)
8020	Cardiac Symptoms other than Chest Pain (palpitations) (ALS-785.1)	8021	Cardiac Symptoms other than Chest Pain (atypical pain) (ALS-536.2)
8022	Heat Exposure (ALS-992.5)	8023	Heat Exposure (BLS-992.2)

8024	Hemorrhage (ALS-459.0)	8025	Infectious Diseases requiring Isolation/Public Health Risk (BLS-038.9)
8026	Hazmat Exposure (ALS-987.9)	8027	Medical Device Failure (ALS-996.0)
8028	Medical Device Failure (BLS-996.3)	8029	Neurologic Distress (ALS-436.0)
8030	Pain (Severe) (ALS-780.99)	8031	Back Pain (non-traumatic possible cardiac or vascular) (ALS-724.5)
8032	Back Pain (non-traumatic with neurologic symptoms) (ALS-724.9)	8033	Poisons (all routes) (ALS-977.9)
8034	Alcohol Intoxication or Drug Overdose (BLS-305.0)	8035	Severe Alcohol Intoxication (ALS-977.3)
8036	Post-Operative Procedure Complications (BLS-998.9)	8037	Pregnancy Complication/Childbirth/Labor (ALS-650.0)
8038	Psychiatric/Behavioral (abnormal mental status) (ALS-292.9)	8039	Psychiatric/Behavioral (threat to self or others) (BLS-298.9)
8040	Sick Person-Fever (BLS-036.9)	8041	Severe Dehydration (ALS-787.01)
8042	Unconscious/Syncope/Dizziness (ALS-780.02)	8043	Major Trauma (ALS-959.8)
8044	Other Trauma (need for monitor or airway) (ALS-518.5)	8045	Other Trauma (major bleeding) (ALS-958.2)
8046	Other Trauma (fracture/dislocation) (BLS-829.0)	8047	Other Trauma (penetrating extremity) (BLS-880.0)
8048	Other Trauma (amputation digits) (BLS-886.0)	8049	Other Trauma (amputation other) (ALS-887.4)
8050	Other Trauma (suspected internal injuries) (ALS-869.0)	8051	Burns-Major (ALS-949.3)
8052	Burns-Minor (BLS-949.2)	8053	Animal Bites/Sting/Envenomation (ALS-989.5)
8054	Animal Bites/Sting/Envenomation (BLS-879.8)	8055	Lightning (ALS-994.0)
8056	Electrocution (ALS-994.8)	8057	Near Drowning (ALS-994.1)
8058	Eye Injuries (BLS-921.9)	8059	Sexual Assault (major injuries) (ALS-995.83)
8060	Sexual Assault (minor injuries) (BLS-995.8)	8061	Cardiac/Hemodynamic Monitoring Required (ALS-428.9)
8062	Advanced Airway Management (ALS-518.81)	8063	IV Meds Required (ALS-No ICD code provided))
8064	Chemical Restraint (ALS-	8065	Suctioning/Oxygen/IV fluids

	293.0)		required (BLS-496.0)
8066	Airway Control/Positioning Required (BLS-786.09)	8067	Third Party Assistance/Attendant Required (BLS-496.0)
8068	Patient Safety (restraints required) (BLS-298.9)	8069	Patient Safety (monitoring required) (BLS-293.1)
8070	Patient Safety (seclusion required) (BLS-298.8)	8071	Patient Safety (risk of falling off stretcher) (BLS-781.3)
8072	Special Handling (Isolation) (BLS-041.9)	8073	Special Handling (orthopedic device required) (BLS-907.2)
8074	Special Handling (positioning required) (BLS-719.45)		

Content: CMS condition codes.

Discussion and Justification: Allows data to be quantified and described based on the Condition Code. Allows data to be sorted based on the Condition Code. Important for EMS billing. A list of 95 Condition Codes which are mapped to ICD-9 Codes. The number of the Condition Code should be stored in this field. From the Center for Medicare and Medicaid Services (CMS) Ambulance Fee Schedule Condition Based Coding

Business Rules: All records submitted must have a Condition Code Number entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: If the provider or submitting software is unaware of this information then the element should be submitted with one of the above listed NEMESIS Section E00 (Common Null) field values.

122. Emergency Department Disposition

Name of Data Element:	Emergency Department Disposition		
Priority:	Essential		
Definition:	The known disposition of the patient from the Emergency Department (ED).		
National Element:	Yes		
NHTSA 2:	E22_01		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>EmergencyDepartmentDisposition</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	5335	Admitted to Hospital Floor
5340	Admitted to Hospital ICU	5345	Death
5350	Not Applicable (Not Transported to ED)	5355	Released
5360	Transferred		

Content: The known disposition of the patient from the Emergency Department (ED).

Discussion and Justification: Allows data to be sorted based on the EMS patient outcome. Allows data to describe EMS patient outcome. Could be collected by EMS Administration or electronically provided through linkage with hospital databases

Business Rules: All records submitted must have an Emergency Department Disposition entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: If the provider or submitting software is unaware of this information then the element should be submitted with one of the above listed NEMESIS Section E00 (Common Null) field values.

123. Hospital Disposition

Name of Data Element:	Hospital Disposition		
Priority:	Essential		
Definition:	Indication of how the patient was dispositioned from the hospital, if admitted.		
National Element:	Yes		
NHTSA 2:	E22_02		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>HospitalDisposition</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	5365	Death
5370	Discharged	5375	Transfer to Hospital
5380	Transfer to Nursing Home	5385	Transfer to Other
5390	Transferred to Rehabilitation Facility		

Content: Indication of the patient's disposition at the hospital, if admitted.

Discussion and Justification: Allows data to be sorted based on the EMS patient outcome. Allows data to describe EMS patient outcome. Could be collected by EMS Administration or electronically provided through linkage with hospital databases

Business Rules: All records submitted must have a Hospital Disposition entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: If the provider or submitting software is unaware of this information then the element should be submitted with one of the above listed NEMSIS Section E00 (Common Null) field values.

124. Research Survey Field

Name of Data Element:	Research Survey Field
Priority:	None
Definition:	A customizable field to be used by local agencies for additional documentation or research.
National Element:	No
NHTSA 2:	E23_09
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>ResearchField</i> Multiple Entry Configuration: Yes, via structure Accepts Null Values: No Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 30

Content: A customizable field used to hold the value of data collected for additional documentation or research activity approved by or in conjunction with the Hawaii Department of Health, Division of EMS.

Discussion and Justification: The use of the research survey fields allow for the collection of data or documentation of issues related to research or short term evaluation

Business Rules: None.

Technical Comments: Submission should only be for data or documentation under the directive of the Hawaii Department of Health, Division of EMS. Data or documentation should be in the format identified at the time of the directive.

125. Research Survey Field Title

Name of Data Element:	Research Survey Field Title
Priority:	None
Definition:	A customizable field to be used by local agencies for additional documentation or research.
National Element:	No
NHTSA 2:	E23_11
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>ResearchTitle</i> Multiple Entry Configuration: Yes, via structure Accepts Null Values: No Required in XSD: No Minimum Constraint: 2 Maximum Constraint: 30

Content: A customizable field used to identify the source or title of the data collected in E23_09.

Discussion and Justification: The use of the research survey fields allow for the collection of data or documentation of issues related to research or short term evaluation.

Business Rules: None

Technical Comments: Submission should only be for data or documentation under the directive of the Hawaii Department of Health, Division of EMS. Data or documentation should be in the format identified at the time of the directive.

126. Patient Condition On Scene

Name of Data Element:	Condition of Patient On Scene		
Priority:	Essential		
Definition:	The condition of the patient prior to care from EMS		
National Element:	No		
NHTSA 2:	Not a NEMESIS element		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ConditionOfPatientOnScene</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	3	Minor
7	Serious	8	Critical
10	DOA		

Content: The condition of the patient prior to care from EMS.

Discussion and Justification: Describes the apparent condition of the patient upon initial assessment at the scene. Used for quality management to categorize the patient for evaluation of care, agency performance and outcome.

Business Rules: All records submitted must have a Patient Condition On Scene entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: Definitions as in the State of Hawaii, Department of Health, Emergency Medical Services Branch, Instruction Manual for Completion of Ambulance Report Form, ©1993.

127. Patient Condition at Destination

Name of Data Element:	Condition of Patient at Destination		
Priority:			
Definition:	The condition of patient after care by EMS		
National Element:	No		
NHTSA 2:	E20_15		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>ConditionOfPatientAtDestination</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes		
Field Values:			
-25	Not Applicable	-20	Not Recorded
-15	Not Reporting	-10	Not Known
-5	Not Available	4975	Improved
4980	Unchanged	4985	Worse

Content: The condition of patient after care by EMS.

Discussion and Justification: Describes the apparent condition of the patient upon final assessment at the receiving facility. Provides an outcome indicator. Used for quality management to categorize the patient for evaluation of care and agency performance.

Business Rules: All records submitted must have a Patient Condition At Destination entered. Records with missing or an invalid entry will be rejected by the system. If the incident is appropriate to not report this data element, then this element would be submitted following the common null rules (E00).

Technical Comments: If the incident is appropriate to not collect this data the software vendor may opt to not include the data type in the XML, or submit Null values, or submit the common null values (E00).

128. Software Creator

Name of Data Element:	Software Creator
Priority:	Mandatory
Definition:	The name of the software vendor by whom the data collection software was developed
National Element:	Yes
NHTSA 2:	E01_02
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>SoftwareCreatedBy</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 3 Maximum Constraint: 32

Content: Simply the certified software vendor that collected the data and created the XML export.

Discussion and Justification: Important for grouping or comparing the accuracy of software used by EMS agencies in data collection.

Business Rules: All records submitted must have NEMSIS Silver compliant or greater certified Software Creator entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

129. Software Name

Name of Data Element:	Software Name
Priority:	Mandatory
Definition:	The name of the software package with which the data was collected by the agency.
National Element:	Yes
NHTSA 2:	E01_03
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>SoftwareName</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 3 Maximum Constraint: 30

Content: Simply the name of the certified software package that collected the data and created the XML export.

Discussion and Justification: Important for grouping or comparing the accuracy of software used by EMS agencies in data collection.

Business Rules: All records submitted must have NEMSIS Silver compliant or greater certified Software Name entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed

130. Software Version

Name of Data Element:	Software Version
Priority:	Mandatory
Definition:	The version of the software used by the agency to collect the data
National Element:	Yes
NHTSA 2:	E01_04
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>SoftwareVersion</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 3 Maximum Constraint: 30

Content: Simply the version number of the software package that collected the data and created the XML export.

Discussion and Justification: This should correspond to the NEMSIS certified version listed on the NEMSIS website. Important for grouping or comparing the accuracy of software used by EMS agencies in data collection.

Business Rules: All records submitted must have NEMSIS Silver compliant or greater certified Software Version entered. Records with missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed

Demographic Dataset

EMS Agency and typically only documented once then verified and updated yearly or when changed.

131. EMS Agency Number

Name of Data Element:	EMS Agency Number
Priority:	Mandatory
Definition:	The state-assigned provider number of the responding agency.
National Element:	Yes
NHTSA 2:	D01_01
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>EMSAgencyNumber</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 7 Maximum Constraint: 7
Field Values:	Refer to Appendix A (EMS Agency List) for Agency Number

Content: This element consists of the State assigned agency number or affiliate number of the responding agency.

Discussion and Justification: The state-assigned provider number of the responding agency. All EMS Agency demographic information is associated with the EMS agency number. A unique value must be provided to create a unique record ID within a database. The same as EMS Agency Number (E02_01). This could be used to auto fill E02_01 on the Patient Care Report. This data element is unique and is typically sequential

Business Rules: All demographic dataset submitted must have an EMS Agency Number entered. The Agency number must be from the approved agency list as published by the Hawaii Department of Health, Division of EMS. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: The first 2 numbers are the island number as assigned by the Hawaii Department of Health, Division of EMS with a left justified zero to increase the size to 2 (Oahu = 01). The last three digit is the unique agency number for that island (Honolulu City & County = 001). Not nullable.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

132. EMS Agency State

Name of Data Element:	EMS Agency State
Priority:	Mandatory
Definition:	The state in which the Agency provides services.
National Element:	Yes
NHTSA 2:	D01_03
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>AgencyState</i> Multiple Entry Configuration: Yes Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 2
Field Values:	Refer to Appendix F 2 digit State FIPS Codes

Content: This element consists of the state primarily serviced or licensed in of the responding agency.

Discussion and Justification: For national submission to NEMESIS. Combines with Agency number (E02_01), agency state (D01_03), unit call sign (E02_12), patient number (E01_01) and date (E05_04) to create a unique identifier. Allows national reporting based on state.

Business Rules: All demographic dataset submitted must have an EMS Agency State entered. The State FIPS number must be from the approved State FIPS list as published by the Hawaii Department of Health, Division of EMS. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Consists of the 2-digit FIPS numeric code, not the State abbreviation. A unique value must be provided to create a unique record ID within a database.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

133. EMS Agency County

Name of Data Element:	EMS Agency County
Priority:	Mandatory
Definition:	The county(s) for which the agency formally provides service.
National Element:	Yes
NHTSA 2:	D01_04
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>AgencyCounty</i> Multiple Entry Configuration: Yes Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 2 Maximum Constraint: 5
Field Values:	Refer to Appendix E 2 digit County FIPS Code

Content: This element consists of the county(s) primarily serviced by the responding agency.

Discussion and Justification: For national submission to NEMSIS. Allows national reporting for coverage based on state and county.

Business Rules: All demographic dataset submitted must have one EMS Agency County entered. The County FIPS number must be from the approved FIPS list as published by the Hawaii Department of Health, Division of EMS. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Consists of the 5-digit FIPS numeric code, not the County name or abbreviation. A unique value must be provided to create a unique record ID within a database. Stored as an 5-digit FIPS code (combining the state and county code) to take into account agencies may serve more than one state and counties are often named the same from state to state.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

134. Level of Service

Name of Data Element:	Level of Service														
Priority:	Mandatory														
Definition:	The highest credentialed personnel's level of service which the agency provides for every EMS encounter if requested.														
National Element:	Yes														
NHTSA 2:	D01_07														
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): <i>DemographicStateCertificationLicensureLevels</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes														
Field Values:															
<table border="1"> <tr> <td>6090</td> <td>EMT-Basic</td> <td>6100</td> <td>EMT-Intermediate</td> </tr> <tr> <td>6110</td> <td>EMT-Paramedic</td> <td>6111</td> <td>Nurse</td> </tr> <tr> <td>6112</td> <td>Physician</td> <td>6120</td> <td>First Responder</td> </tr> </table>				6090	EMT-Basic	6100	EMT-Intermediate	6110	EMT-Paramedic	6111	Nurse	6112	Physician	6120	First Responder
6090	EMT-Basic	6100	EMT-Intermediate												
6110	EMT-Paramedic	6111	Nurse												
6112	Physician	6120	First Responder												

Content: The highest credentialed personnel's level of service, which the agency provides for every EMS encounter if requested. In a tiered response system, this is the highest level of service, which could be sent to any specific call.

Discussion and Justification: Allows data to be sorted based on an agency's level of service. Provides description of EMS Personnel. Provides descriptive information when combined with an EMS Agency's Billing Status.

Business Rules: All demographic dataset submitted must have one Level of Service entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Consists of the field value corresponding to the appropriate level.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

135. Organizational Type

Name of Data Element:	Organizational Type			
Priority:	Mandatory			
Definition:	The organizational structure from which EMS services are delivered (fire, hospital, county, etc.)			
National Element:	Yes			
NHTSA 2:	D01_08			
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): OrganizationalType Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes			
Field Values:				
	5810	Community, Non-Profit	5820	Fire Department
	5830	Governmental, Non-Fire	5840	Hospital
	5850	Private, Non_Hospital	5860	Tribal

Content: Documents the organizational type of the EMS agency.

Discussion and Justification: Allows data to be sorted based on an agency's organizational structure. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have an Organization Type entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

136. Organizational Status

Name of Data Element:	Organizational Status		
Priority:	Mandatory		
Definition:	The primary organizational status of the agency. The definition of Volunteer or Non-Volunteer is based on state or local terms.		
National Element:	Yes		
NHTSA 2:	D01_09		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): OrganizationalStatus Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes		
Field Values:			
5870	Mixed	5880	Non-Volunteer
5890	Volunteer		

Content: Documents the organizational type of the EMS agency.

Discussion and Justification: Allows data to be sorted based on an agency's organizational status. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have an Organization Status entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

137. Statistical Year

Name of Data Element:	Statistical Year
Priority:	Mandatory
Definition:	The year to which the information pertains
National Element:	Yes
NHTSA 2:	D01_10
XML:	XSD Data Type: <i>xs:gYear</i> XSD Domain (Simple Type): StatisticalYear Multiple Entry Configuration: Yes, via structure Accepts Null Values: No Required in XSD: Yes

Content: Documents the organizational type of the EMS agency.

Discussion and Justification: Multiple entry configurations to allow statistical data to be entered yearly. Used to identify the year to which the data pertains. Associates a year with statistical data to improve reporting capabilities.

Business Rules: All demographic dataset submitted must have a Statistical Year entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Format as YYYY.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

138. Total Service Size Area

Name of Data Element:	Total Service Size Area
Priority:	Mandatory
Definition:	The total square miles in the agency's service area.
National Element:	Yes
NHTSA 2:	D01_12
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): TotalServiceSizeArea Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: Documents the EMS agency's service area in total square miles.

Discussion and Justification: Allows data to be sorted based on an agency's area size. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have a Total Service Size Area entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Multiple entry configurations to allow statistical data to be entered yearly.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

139. Total Service Area Population

Name of Data Element:	Total Service Area Population
Priority:	Mandatory
Definition:	The total population in the agency's service area based on year 2000 census data (if possible).
National Element:	Yes
NHTSA 2:	D01_13
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): TotalServiceAreaPopulation Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: The total population in the agency's service area based on year 2000 census data (if possible). This number does not include population changes associated with daily work flow or seasonal movements

Discussion and Justification: Allows data to be sorted based on an agency's service area population. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have a Total Service Area Population entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Baseline data should be taken from the 2000 Census data if possible. Multiple entry configurations to allow statistical data to be entered yearly.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

140. 911 Call Volume Per Year

Name of Data Element:	911 Call Volume Per Year
Priority:	Mandatory
Definition:	The number of 911 EMS calls for the calendar year
National Element:	Yes
NHTSA 2:	D01_14
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): CallVolumeYear911 Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: Documents the EMS agency's number of 911 EMS calls for the calendar year.

Discussion and Justification: Allows data to be sorted based on an agency's 911 call volume per year. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have a 911 Call Volume Per Year entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

141. EMS Dispatch Volume Per Year

Name of Data Element:	EMS Dispatch Volume Per Year
Priority:	Mandatory
Definition:	The number of EMS dispatches for the calendar year
National Element:	Yes
NHTSA 2:	D01_15
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): EMSDispatchVolumeYear Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: Documents the EMS agency's number of EMS dispatches for the calendar year.

Discussion and Justification: Allows data to be sorted based on an agency's dispatch volume per year. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have an EMS Dispatch Volume Per Year entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

142. EMS Transport Volume Per Year

Name of Data Element:	EMS Transport Volume Per Year
Priority:	Mandatory
Definition:	The number of EMS transport for the calendar year
National Element:	Yes
NHTSA 2:	D01_16
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): EMSTransportVolumeYear Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: Documents the EMS agency's number of EMS transport for the calendar year.

Discussion and Justification: Allows data to be sorted based on an agency's transport volume per year. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have an EMS Transport Volume Per Year entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed..

143. EMS Patient Contact Volume Per Year

Name of Data Element:	EMS Patient Contact Volume Per Year
Priority:	Mandatory
Definition:	The number of EMS patient contacts for that calendar year
National Element:	Yes
NHTSA 2:	D01_17
XML:	XSD Data Type: <i>xs:positiveinteger</i> XSD Domain (Simple Type): EMSPatientContactVolumeYear Multiple Entry Configuration: Yes, via structure Accepts Null Values: Yes, null value is blank or empty Required in XSD: Yes Minimum Constraint = 1 Maximum Constraint = 100,000,000

Content: Documents the EMS agency's number of EMS patient contact for the calendar year.

Discussion and Justification: Allows data to be sorted based on an agency's patient contact volume per year. Provides description of EMS agencies across the nation.

Business Rules: All demographic dataset submitted must have an EMS Patient Contact Volume Per Year entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

144. EMS Agency Time Zone

Name of Data Element:	EMS Agency Time Zone		
Priority:	Mandatory		
Definition:	The time zone for the EMS Agency.		
National Element:	Yes		
NHTSA 2:	D01_19		
XML:	XSD Data Type: <i>xs:integer</i> XSD Domain (Simple Type): EMSAgencyTimeZone Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes		
Field Values:			
5900	GMT – 11:00 Midway Island, Samoa	5910	GMT – 10:00 Hawaii
5920	GMT –09:00 Alaska	5930	GMT – 08:00 Pacific
5940	GMT – 07:00 Mountain	5950	GMT – 06:00 Central
5960	GMT – 05:00 Eastern	5970	GMT – 04:00 Atlantic

Content: Documents the time zone of the EMS agency.

Discussion and Justification: Allows data to be tracked in comparison to other systems and times to better correlate in any analysis.

Business Rules: All demographic dataset submitted must have an EMS Agency Time Zone entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: EMS Agency and typically only documented once then verified and updated yearly or when changed.

145. National Provider Identifier

Name of Data Element:	National Provider Identifier
Priority:	Mandatory
Definition:	The National Provider Identifier associated with National Provider System (NPS) .
National Element:	Yes
NHTSA 2:	D01_21
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>NationalProviderIdentifier</i> Multiple Entry Configuration: No Accepts Null Values: Yes Required in XSD: Yes Minimum Constraint: 3 Maximum Constraint: 10

Content: The National Provider Identifier associated with National Provider System (NPS) and used in all standard HIPAA transactions such as electronic claim filing.

Discussion and Justification: For national submission to NEMESIS. Important for HIPAA related transactions such as electronic claims processing. The National Provider Identifier is associated with the EMS agency number.

Business Rules: All demographic dataset must have a National Provider Identifier entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Generated by the National Provider System within the United States Department of Health and Human Services. Collected by the EMS agency or auto-generated by the EMS agency specific software.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

146. Agency Contact Zip Code

Name of Data Element:	Agency Contact Zip Code
Priority:	Essential
Definition:	The ZIP code of the Agency contact's mailing address.
National Element:	Yes
NHTSA 2:	E02_07
XML:	XSD Data Type: <i>xs:string</i> XSD Domain (Simple Type): <i>DemographicZip</i> Multiple Entry Configuration: No Accepts Null Values: No Required in XSD: Yes Minimum Constraint: 5 Maximum Constraint: 10

Content: The ZIP code of the Agency contact's mailing address.

Discussion and Justification: Allows data to be sorted into a geographical area. Component of the EMS Agency Contact Information/Address.

Business Rules: All demographic dataset must have an Agency Contact Zip Code entered. Records with a missing or an invalid entry will be rejected by the system.

Technical Comments: Only the United State Postal Service zip codes are accepted. Can be a 5 or 9 digits Zip Code.

EMS Agency and typically only documented once then verified and updated yearly or when changed.

Appendixes

Appendix A EMS Agency List

Agency No	Agency Name
	Oahu
01001	City and County of Honolulu
01201	American Medical Response
01301	Pearl Harbor
01302	Hickam Fire
	Hawaii
02002	Hawaii County Fire
02202	American Medical Response

Agency No	Agency Name
	Kuai
03204	American Medical Response
	Maui
04203	American Medical Response
	Air Services
01400	Hawaii Air
01401	Air Med International
99001	M.A.S.T

Appendix B Health Facility List

ID	Name
	Oahu
91001	Castle Memorial Hospital
91002	Kahuku Community Hospital
91003	Kaiser Foundation Hospital
91004	Kapiolani-Children's Medical Center
91005	Kuakini Medical Center
91006	Queen's Medical Center
91007	St. Francis Hospital
91008	Straub Clinic and Hospital
91009	Tripler Army Medical Center
91010	Wahiawa General Hospital
91011	Waianae Comprehensive Health Center
91012	St. Francis West
91014	Pali Momi
91015	Kaiser Clinic
	Hawaii
92001	Hilo Hospital
92002	Honokaa Hospital
92003	Kau Hospital

ID	Name
	Kau Hospital
92004	Kohala Hospital
92005	Kona Hospital
9440047	Henry County Health Center
92006	North Hawaii Community Hosp
	Kuai
93001	Wilcox Memorial Hospital
93002	Kauai Veterans Memorial
93003	Samuel Mahelona Memorial Hospital
	Maui
94001	Maui Memorial Hospital
94002	Hana Clinic
94003	Kula Hospital
	Molokai
95001	Molokai General Hospital
	Lani
96001	Lanai Community Hospital

ID	Name
	Other Destinations
99001	M.A.S.T Evacuation
99003	Air ambulance
99500	Law Enforcement/Police
99501	Long Term Care Facility
99502	Residence

ID	Name
99503	Other Acute Care Medical Facility
99504	Morgue/Funeral Home/Coroner
99505	Clinic/Doctor's Office
99506	Other EMS Entity
99999	Unspecified

**Appendix C
Hawaii City FIPS**

FIPS ID	Name
	Hawaii County
00075	Ahole Heiau
00100	Ahualoa (Ahualoa Homesteads)
00250	Ahualoa Homesteads
00325	Ahuena Heiau
01085	Ainaloa
01100	Ainapo

FIPS ID	Name
	Honolulu County
00400	Ahuimanu
00550	Aiea

NEED HDOH to map CENSUS Tracts to FIPS, so we can continue to use CENSUS tracts but send FIPS to NEMSIS

	Out of State
99999999	Not listed

Appendix D Medication List

ID	Name
950	10% D5W
951	25% D5W
8030	2-PAM Chloride Auto Injector
4000	Acetaminophin
4002	Acetaminophin Elixar
4001	Acetaminophin Supp
6020	Activated Charcoal
100	Adenosine
4020	Afrin
200	Albuterol
201	Albuterol Inhaler metered
202	Albuterol Sulfate 2.5mg/3cc
300	Aminophylline
2010	Amiodarone (Cordarone)
7001	Amyl Nitrate
4010	ASA
400	Atropine
600	Bretylium
700	Calcium
4030	Cardizem
4040	Cordarone

ID	Name
4050	Cyanide Antidote
900	D50
901	D5W IV Solution
800	Dexameth
7004	Dexamethasone (Decadron)
1000	Diazepam (Valium)
7002	Digoxin (Lanoxin)
7003	Diltiazem (Cardizem)
1100	Diphenhydramine (Benedryl)
1200	Dobutamine
1300	Dopamine
1400	Epinephrine
1401	Epinephrine 1:10,000
1402	Epinephrine 1:1000
4060	Etomidate
4070	Fentanyl
2301	Fentanyl (Sublimaze)
4080	Flumazaniil
1500	Furosemide (Lasix)
1600	Glucagon
7005	Haloperidol (Haldol)

ID	Name
1700	Heparin
7006	Hydralazine (Apresoline)
1800	Hydrocortisone
4090	Inapsine (Droperidol)
6050	Insulin (Humulin, Novolin)
6010	Ipecac
5000	Ipratropium (Atrovent)
1900	Isoproterenol
7018	Labetalol
2000	Lidocaine
2005	Lidocaine Lubricant
2003	Lidocaine pre-mix bag
1051	Lorazepam (Ativan)
5010	Magnesium Sulfate
7008	Mannitol (Osmitrol)
2100	Meperidine
2200	Metoprolol (Alupent)
7007	Metoprolol (Lopressor)
1050	Midazolam (Versed)
2300	Morphine Sulfate
5020	Nalbuphine (Nubain)
2400	Naloxone (Narcan)
7009	Nifedipine (Procardia)

ID	Name
2502	Nitroglycerin Infusion
2600	Nitroglycerin Paste
2501	Nitroglycerin Spray
2500	Nitroglycerine Tabs
7050	Nitroprusside (Nipride)
2700	Nitrous Oxide
7010	Nitrous Oxide (Nitronox)
7011	Norepinephrine (Levophed)
6001	Normal Saline IV Solution
910	Oral Glucose
8000	Oxygen
2800	Oxytocin
7013	Pancuronium (Pavulon)
5030	Phenylephrine (Neo-Synephrine)
7017	Phenytoin (Dilantin)
2900	Procainamide
5040	Prochlorperazine (Compazine)
5050	Promethazine HCL (Phenergran)
5060	Proparacaine (Alcaine)
3101	Propranolol (Inderal)
5070	Racemic Epinephrine
7015	Rapacuronium (Rapion)
7060	Retavase

ID	Name
7016	Rocuronium (Zemuron)
6000	Saline
500	Sodium Bicarbonate
6002	Sodium Chloride Flush
7064	Sodium Pentothol
8020	Sodium Thiosulfate
5080	Solu-Medro (Methylprednisone Succinate)
6030	Sterile Water
7062	Streptokinase (Streptase)
7014	Succinylcholine (Anectine)

ID	Name
7063	Tenecteplase (TNKase)
3000	Terbutaline
5090	Thiamine
7061	Tissue Plasminogen Activator
7090	Total Parenteral Nutrition (TPN)
7012	Vecuronium (Norcuron)
3100	Verapamil
77	Other

Note: This list is currently listed and numbered alphabetically. This order may change with the addition or deletion of medications. Numbers will stay assigned as listed with new numbers issued for future additions.

Appendix E

Hawaii State/County FIPS Codes

County Name	FIPS Code	Census Tract Code
Hawaii	15001	02
Honolulu	15003	01
Kalawao	15005	
Kauai	15007	03
Maui	15009	04

Appendix F

State FIPS Codes

FIPS ID	State Name	FIPS ID	State Name
01	Alabama	17	Illinois
02	Alaska	18	Indiana
60	American Samoa	19	Iowa
04	Arizona	86	Jarvis Island
05	Arkansas	67	Johnston Atoll
81	Baker Island	20	Kansas
06	California	21	Kentucky
08	Colorado	89	Kingman Reef
09	Connecticut	22	Louisiana
10	Delaware	23	Maine
11	District of Columbia	68	Marshall Islands
12	Florida	24	Maryland
64	Federated States of Micronesia	25	Massachusetts
13	Georgia	26	Michigan
66	Guam		Midway Islands
15	Hawaii	27	Minnesota
84	Howland Island	28	Mississippi
16	Idaho	29	Missouri

FIPS ID	State Name	FIPS ID	State Name
30	Montana	72	Puerto Rico
76	Navassa Island	44	Rhode Island
31	Nebraska	45	South Carolina
32	Nevada	46	South Dakota
33	New Hampshire	47	Tennessee
34	New Jersey	48	Texas
35	New Mexico	74	U.S. Minor Outlying Islands
36	New York	49	Utah
37	North Carolina	50	Vermont
38	North Dakota	51	Virginia
69	Northern Mariana Islands	78	Virgin Islands of the U.S.
39	Ohio	79	Wake Island
40	Oklahoma	53	Washington
41	Oregon	54	West Virginia
70	Palau	55	Wisconsin
95	Palmyra Atoll	56	Wyoming
42	Pennsylvania		